

United States Treaties and Other International Agreements



VOLUME 23

IN FOUR PARTS

Part 2

1972

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under the direction
of the Secretary of State*

The Act approved September 23, 1950, Ch. 1001, § 2, 64 Stat. 979, 1 U.S.C. 112a, provides in part as follows:

" United States Treaties and Other International Agreements shall be legal evidence of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and agreements, therein contained, in all the courts of the United States, the several States, and the Territories and insular possessions of the United States."

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BRAZIL
Trade in Cotton Textiles

*Agreement amending and extending the agreement of
October 23, 1970.*

*Effectuated by exchange of notes
Signed at Washington May 9, 1972;
Entered into force May 9, 1972.*

The Secretary of State to the Brazilian Ambassador

DEPARTMENT OF STATE
WASHINGTON

MAY 9, 1972

EXCELLENCY:

I have the honor to refer to the cotton textile agreement between our two Governments effected by exchange of notes on October 23, 1970.^[1] As a result of discussions between representatives of our Governments, I have the honor to propose that the aforementioned agreement be amended and extended as provided in the following paragraphs:

A. The first sentence of paragraph 1 is amended to read as follows: "The term of this agreement shall be from October 1, 1970 through September 30, 1977";

B. Paragraph 3 is amended to read as follows: "Within the aggregate limit, the following group limits shall apply for the third and succeeding agreement years (subject to the provisions of paragraph 8):

	<u>In Square Yards Equivalent</u>
Group I (Categories 1-4)	33,075,000
Group II (Categories 5-27)	41,297,500
Group III (Categories 28-64)	6,615,000"

C. Paragraph 4 is amended to delete the specific limit provided for Category 24 for the third and succeeding agreement years.

¹ TIAS 7071; 22 UST 380.

If the foregoing is acceptable to your Government, this note and Your Excellency's note of acceptance on behalf of the Government of Brazil shall constitute an amendment and extension of the cotton textile agreement effected by exchange of notes of October 23, 1970.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

WILLIS C. ARMSTRONG

His Excellency

JOAO AUGUSTO DE ARAUJO CASTRO,
Ambassador of Brazil.

The Brazilian Ambassador to the Secretary of State

EMBAIXADA DOS ESTADOS UNIDOS DO BRASIL

Nº. 127/845.2(22)(42)

WASHINGTON, D.C., em 09 de maio de 1972.

EXCELÊNCIA,

Tenho a honra de acusar o recebimento da Nota de 9 de maio de 1972 pela qual o Governo dos Estados Unidos da América, em decorrência das consultas recentemente realizadas em Washington, propõe emendas e prorrogação do Acordo Bilateral sobre Têxteis de Algodão, e cujos termos, traduzidos para o português, transcrevo a seguir:

"Excellência:

Tenho a honra de referir-me ao acordo sobre têxteis de algodão entre nossos dois Governos, realizado por troca de Notas em 23 de outubro de 1970. Em decorrência das discussões entre representantes de nossos Governos, tenho a honra de propor que o referido acordo seja emendado e prorrogado como disposto nos seguintes parágrafos.

A. O primeiro período do parágrafo 1, emendado, passará a ter a seguinte redação: "A duração deste acordo será de 1º de outubro de 1970 até 30 de setembro de 1977";

B. O parágrafo 3, emendado, passará a ter a seguinte redação: "Dentro do limite agregado, os seguintes limites de grupo aplicar-se-ão ao terceiro ano e aos anos seguintes do acordo (sujeitos às disposições do parágrafo 8):

	<u>Equivalente em jardas quadradas</u>
Grupo I (Categorias 1-4)	33.075.000
Grupo II (Categorias 5-27)	41.297.500
Grupo III (Categorias 28-64)	6.615.000

C. O parágrafo 4 emendado não conterá menção ao limite específico para a Categoria 24 para o terceiro ano e anos seguintes do acôrdo.

Se a proposta acima for aceitável por seu Govêrno, esta Nota e a Nota de Vossa Excelência de confirmação, em nome do Govêrno brasileiro, constituirão emenda e prorrogação do acordo sobre têxteis de algodão realizado por troca de notas em 23 de outubro de 1970.

Queira Vossa Excelência aceitar os protestos de minha alta consideração.”.

2. Em resposta, tenho a honra de comunicar a Vossa Excelência que o Govêrno da República Federativa do Brasil está de acôrdo com a proposta apresentada na Nota de Vossa Excelência e que a Nota de Vossa Excelência e esta de resposta constituem emenda e prorrogação do Acordo sobre Têxteis de Algodão realizado por troca de Notas em 23 de outubro de 1970 entre o Govêrno da República Federativa do Brasil e o Govêrno dos Estados Unidos da América.

Aproveito a oportunidade para renovar a Vossa Excelência os protestos de minha mais alta consideração.

JOÃO AUGUSTO DE ARAÚJO CASTRO

João Augusto de Araújo Castro
Embaixador do Brasil

À Sua Excelência o Senhor WILLIAM P. ROGERS,
Secretário de Estado dos Estados Unidos da América.

Translation

EMBASSY OF THE UNITED STATES OF BRAZIL

No. 127/845.2(22)(42)

WASHINGTON, D C., May 9, 1972

Excellency:

I have the honor to acknowledge receipt of the note of May 9, 1972, in which, as a result of discussions recently held in Washington, the Government of the United States of America proposes that the bilateral cotton textile agreement be amended and extended, the terms of which note, translated into Portuguese, I transcribe, as follows:

[For the English language text, see p. 1181.]

2. In reply I have the honor to inform Your Excellency that the Government of the Federative Republic of Brazil concurs in the proposal made in your note and agrees that your note and this reply shall constitute an amendment and extension of the cotton textile

agreement effected by an exchange of notes on October 23, 1970, between the Government of the Federative Republic of Brazil and the Government of the United States of America.

Accept, Excellency, the renewed assurances of my highest consideration.

JOÃO AUGUSTO DE ARAÚJO CASTRO

João Augusto de Araújo Castro
Ambassador of Brazil

His Excellency

WILLIAM P. ROGERS,

*Secretary of State of the
United States of America.*

BELGIUM
Mutual Defense Assistance

*Agreement amending annex B to the agreement of
January 27, 1950.*

*Effectuated by exchange of notes
Signed at Brussels June 13 and 21, 1972;
Entered into force June 21, 1972.*

The American Ambassador to the Belgian Minister of Foreign Affairs

No. 71

BRUSSELS, June 13, 1972.

EXCELLENCY:

I have the honor to refer to this Embassy's Note No. 38 of March 16, 1972, and to the Note dated June 6, 1972, [¹] from the Ministry of Foreign Affairs regarding a revision of Annex B to the Mutual Defense Assistance Agreement between the United States of America and Belgium [²] to provide for funds for administrative expenses in connection with the Mutual Defense Assistance Program during the year ending June 30, 1972. It was agreed by this exchange of notes that Annex B would be amended to cover the period July 1, 1971 to June 30, 1972 and the text changed to reflect the actual administrative expenses foreseen in connection with carrying out the Mutual Defense Assistance Agreement. It is accordingly proposed that the text of Annex B be amended to read as follows:

"In implementation of paragraph 1 of Article V of the Mutual Defense Assistance Agreement the Government of Belgium in conjunction with the Government of Luxembourg, will deposit Belgian and Luxembourg francs at such times as requested in an account designated by the United States Embassy at Brussels and the United States Embassy at Luxembourg, not to exceed in total 8,950,040 Belgian and Luxembourg francs, for their use on behalf of the Government of the United States for administrative expenditures within Belgium and Luxembourg in connection with carrying out that Agreement for the period July 1, 1971-June 30, 1972."

¹ Not printed.

² TIAS 2010, 7140; 1 UST 1; 22 UST 809.

Upon receipt of a note from Your Excellency indicating that the foregoing text is acceptable to the Belgian Government, the Government of the United States of America will consider that this note and the reply thereto constitute an agreement between the two Governments on this subject which shall enter into force on the date of Your Excellency's note.

Accept, Excellency, the renewed assurances of my highest consideration.

R. STRAUSZ-HUPE

His Excellency

PIERRE HARMEL,

Minister of Foreign Affairs,

Brussels.

*The Belgian Minister of Foreign Affairs to the
American Ambassador*

MINISTERE
DES
AFFAIRES ETRANGERES
ET DU
COMMERCE EXTERIEUR
DIRECTION GENERALE DE LA POLITIQUE

P 08-98.03/02-4313

BRUXELLES 1, le 21-6-1972

MONSIEUR L'AMBASSADEUR,

J'ai l'honneur d'accuser la réception de la lettre de Votre Excellence du 13 juin 1972, n° 71, ayant pour objet la modification pour l'exercice fiscal 1971-72 de l'annexe B de l'Accord pour la défense mutuelle entre la Belgique et les Etats-Unis d'Amérique.

Je tiens à marquer à Votre Excellence l'accord du Gouvernement belge sur le texte suivant:

"En exécution du paragraphe 1 de l'article V de l'Accord d'aide pour la défense mutuelle, le Gouvernement belge, conjointement avec le Gouvernement luxembourgeois, déposera, lorsqu'il en sera prié, à un compte désigné par l'Ambassade des Etats-Unis à Bruxelles et l'Ambassade des Etats-Unis à Luxembourg, à l'usage de ces dernières, au nom du Gouvernement des Etats-Unis, des francs belges et luxembourgeois, dont le total ne dépassera pas 8.950.040 francs belges et luxembourgeois, en vue du règlement des dépenses administratives en Belgique et au Luxembourg résultant de l'exécution de cet Accord pour la période du 1er juillet 1971 au 30 juin 1972."

Je marque également mon accord pour considérer que la note de Votre Excellence en date du 13 juin 1972 et la présente réponse, constituent un accord entre les deux Gouvernements à ce sujet, qui entrera en vigueur à la date de ce jour.

Je saisir cette occasion, Monsieur l'Ambassadeur, de renouveler à Votre Excellence l'assurance de ma très haute considération.

P HARMEL

P. Harmel

A Son Excellence

Monsieur R. STRAUSZ-HUPE,
Ambassadeur des Etats-Unis d'Amérique
à BrUXELLES.

Translation

MINISTRY OF FOREIGN AFFAIRS AND FOREIGN TRADE
POLITICAL BUREAU

P 08-98.03/02-4313

BRUSSELS, June 21, 1972

MR. AMBASSADOR:

I have the honor to acknowledge receipt of your note No. 71 of June 13, 1972, concerning the revision for the fiscal year 1971-72 of Annex B to the Mutual Defense Assistance Agreement between Belgium and the United States of America.

I wish to inform Your Excellency of the approval of the Belgian Government of the following text:

[For the English language text, see p. 1185.]

I also agree to consider Your Excellency's note of June 13, 1972, and this reply as constituting an agreement between our two Governments on this subject, which will enter into force from this date.

I avail myself of this opportunity, Mr. Ambassador, to renew to you the assurance of my very high consideration.

P. HARMEL

P. Harmel

His Excellency

MR. R. STRAUSZ-HUPE,
Ambassador of the United States of America
at Brussels.

EL SALVADOR
Trade: Meat Imports

*Agreement effected by exchange of notes
Signed at San Salvador March 15 and April 13, 1972;
Entered into force April 13, 1972.*

The American Ambassador to the Salvadoran Minister of Foreign Affairs

No. 110

SAN SALVADOR, March 15, 1972

EXCELLENCY:

I have the honor to refer to discussions between representatives of our two governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the tariff schedules of the United States) and fresh, chilled or frozen meat of goats and sheep, except lambs (Item 106.20 of the tariff schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, constituting the 1971 restraint program concerning shipments of such meats to the United States.

With the understanding that similar agreements also will be concluded for the calendar year 1972 with the governments of all of the countries that participated in the 1971 restraint program, and in addition with the Government of El Salvador, I have the honor to propose the following agreement between our two governments:

1. On the basis of the foregoing, and subject to Paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1155 million pounds and the government of El Salvador and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into, the United States.

2. The Government of El Salvador shall limit exports of the aforementioned meats so that the quantity of such meats originating in El Salvador and during the calendar year 1972 entered, or withdrawn from warehouse, for consumption in the United States does not exceed three million pounds or such higher figure as may result from adjustments pursuant to Paragraph 4.

3. The Government of the United States of America may limit imports of such meats of Salvadoran origin, whether by direct or indirect shipments, through issuance of regulations governing the entry or withdrawal from warehouse, for consumption in the United States, provided that:

(a) Such regulations shall not be employed to govern the timing of entry, or withdrawal from warehouse, for consumption of such meat from El Salvador; and

(b) Such regulations shall be issued only after consultation with the Government of El Salvador pursuant to Paragraph 6, and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry, or withdrawal from warehouse for consumption, in the calendar year 1972 will exceed the quantity specified in Paragraph 2, as it may be increased pursuant to Paragraph 4.

4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for El Salvador, such increase or estimated shortfall shall be allocated to El Salvador, in the proportion that three million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in the 1972 restraint program.

5. The Government of the United States of America shall separately report meats rejected as unacceptable for human consumption under United States inspection standards, and such meats will not be regarded as part of the quantity described in Paragraph 2.

6. The Government of El Salvador and the Government of the United States of America shall consult promptly upon the request of either government regarding any matter involving the application, interpretation or implementation of this agreement, and regarding increase in the total quantity permissible under the restraint program and allocation of shortfall.

7. In the event that quotas on imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for El Salvador shall not include the period between October 1, 1968 and December 31, 1972.

I have the honor to propose that, if the foregoing is acceptable to the Government of El Salvador, this note together with Your Excellency's confirmatory reply constitute an agreement between

our two governments which shall enter into force on the date of your reply.

Accept, Excellency, the renewed assurances of my highest consideration.

HENRY E. CATTE

His Excellency

WALTER BENEKE

*Minister of Foreign Affairs
San Salvador*

*The Salvadoran Acting Secretary of Foreign Affairs to
the American Ambassador*

MINISTERIO DE RELACIONES EXTERIORES
REPUBLICA DE EL SALVADOR, C.A.
DIRECCION DE ASUNTOS AMERICANOS

A 869.12 D 3391

SAN SALVADOR, 13 de abril de 1972.

SEÑOR EMBAJADOR:

Me refiero a su nota de fecha 15 de marzo del presente año, por medio de la cual Vuestra Excelencia hace alusión a las conversaciones llevadas a cabo por representantes de nuestros Gobiernos, relacionadas con las importaciones a los Estados Unidos, para consumo de carne fresca, refrigerada o congelada de ganado vacuno (Rubro 106.10 del cuadro de tarifas de los Estados Unidos) y de carne fresca, refrigerada o congelada de ganado ovino y caprino, salvo corderos (Rubro 106.20 del cuadro de tarifas de los Estados Unidos), durante el año civil de 1972 y a los acuerdos entre los Estados Unidos y otros países que constituyen el programa de restricciones para 1971 en relación con los envíos de tales carnes a los Estados Unidos.

Sobre el particular, me complace comunicarle que el Gobierno de El Salvador acepta totalmente los términos especificados en su honorable propuesta inicial de 3.0 millones, permitiéndome aclarar que nuestra solicitud original de 9 millones de libras de carne fue determinada con base a estudios técnico-económicos de nuestra producción, consumo interno y exportación actual de ganado en pie, a fin de mantener un adecuado equilibrio entre las necesidades de exportación y del consumo interno.

Por lo antes expuesto, la cuota que nos ha sido asignada deja un suficiente margen para que su Ilustado Gobierno pueda reconsiderar en un futuro próximo el incremento de la cuota recientemente establecida para nuestro país, con la seguridad que la exportación de carne procesada a precios remunerativos permitirá el desarrollo de la ganadería nacional y por consiguiente nuestro desarrollo social y económico, al que en reiteradas ocasiones nos hemos comprometido impulsar al máximo.

No omito manifestarle que el Gobierno de El Salvador, mantendrá una firme política de regulación en la exportación de carne procesada, tal como lo ha hecho efectivo en el ganado en pie, con el propósito de abastecer adecuadamente la demanda de nuestro mercado interno.

Al aceptar la cuota antes mencionada, como punto de partida para negociaciones futuras, y al agradecerle a Vuestra Excelencia y a su Cuerpo de Asesores las gestiones para lograr que nuestro país figure en la lista de países exportadores de carne a los Estados Unidos de América, me complace reiterarle las muestras de mi especial consideración y estima.

GUILLERMO PAZ LARIN

Guillermo Paz Larin
Subsecretario de Relaciones Exteriores
Encargado del Despacho

Excelentísimo Señor HENRY CATTO JR.,
Embajador de los Estados Unidos de América
Presente.

Translation

REPUBLIC OF EL SALVADOR
MINISTRY OF FOREIGN AFFAIRS
BUREAU OF AMERICAN AFFAIRS

A 860.12 D 6391

SAN SALVADOR, April 13, 1972

MR. AMBASSADOR:

I have the honor to refer to Your Excellency's note of March 15, 1972, in which you refer to the discussions between representatives of our Governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the tariff schedules of the United States), and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the tariff schedules of the United States), during the calendar year 1972 and to the agreements between the United States and other countries, constituting the 1971 restraint program concerning shipments of such meats to the United States.

In this connection, I have the pleasure of informing you that the Government of El Salvador fully accepts the terms specified in your initial proposal of three million pounds, while taking the liberty of explaining that our original request of nine million pounds of meat was determined on the basis of technical-economic studies of our production, domestic consumption, and present exportation of live cattle, in order to maintain a proper balance between export and domestic consumption needs.

TIAS 7382

In view of the foregoing, the quota assigned to us leaves sufficient margin for your Government to be able to reconsider in the near future an increase in the quota recently established for our country, with the certainty that the exportation of processed meat at remunerative prices will make possible the development of the national livestock industry and, consequently, our economic and social development, which on many occasions we have pledged ourselves to encourage to the maximum.

I wish also to state that the Government of El Salvador will maintain a firm policy of regulation of processed meat exports, as it has done in the case of live cattle, in order adequately to satisfy the demand of our domestic market.

In accepting the above-mentioned quota, as a point of departure for future negotiations, and thanking Your Excellency and your advisers for your efforts to ensure that our country has a place on the list of those countries which export meat to the United States of America, I am happy to renew to you the assurances of my special consideration and esteem.

GUILLERMO PAZ LARIN

Guillermo Paz Larin
Acting Secretary of Foreign Affairs

His Excellency

HENRY CATTO JR.,
*Ambassador of the United States of America,
San Salvador.*

WORLD HEALTH ORGANIZATION

World Health Organization: Facilities, Services, Privileges and Immunities for the Twenty-third Session of the Western Pacific Regional Committee

*Agreement signed at Manila June 19, 1972;
Entered into force June 19, 1972.*

AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE WORLD HEALTH ORGANIZATION RELATING TO THE FACILITIES, SERVICES AND PRIVILEGES AND IMMUNITIES AFFORDED TO THE ORGANIZATION ON THE OCCASION OF THE HOLDING IN GUAM OF THE 23RD SESSION OF THE REGIONAL COMMITTEE OF THE WESTERN PACIFIC

The World Health Organization (hereinafter referred to as "the Organization"), and

The Government of the United States of America (hereinafter referred to as "the Government")

Desiring to give effect to the invitation of the Government to hold the 23rd session of the Regional Committee for the Western Pacific in Guam commencing on 27 September 1972;

Desiring to conclude an agreement for the purpose of determining the facilities and services and the privileges and immunities afforded to the Organization on the occasion of the holding of the 23rd session of the Regional Committee for the Western Pacific;

HAVE AGREED AS FOLLOWS:

ARTICLE I: Obligations of the Organization

The Organization shall provide at its own expense such personnel, equipment and supplies as are specified in Annex 1.

ARTICLE II: Expenses reimbursable to the Organization by the
Government

The Government shall arrange for the Government of Guam to assume or reimburse to the Organization the expenses over and above those normally incurred when meetings are held at Regional Headquarters.

ARTICLE III : Facilities, Services, Space and Equipment

(a) The Government shall arrange with the local authorities in Guam to make available without charge to the Organization for the duration of the 23rd session of the Regional Committee such personnel, meeting and office space, fixtures, furniture, equipment and supplies as are specified in Annex 2.

(b) The Government shall arrange with the local authorities in Guam to provide, without charge to WHO, suitably equipped offices for those officials of the Organization whose presence in Guam before the opening of the Session and after its termination is considered necessary by the Regional Director of the Organization for the work of the Session.

ARTICLE IV : Hotels, Post Office etc.

(a) The Government shall arrange with the local authorities in Guam for accommodation in hotels for delegates, members of the WHO Secretariat and members of their families.

(b) The WHO Regional Office shall inform the local authorities of the actual hotel accommodation requirements in good time.

(c) Postal and news stand services are available in the Guam Hilton Hotel where the Regional Committee Meeting is to be held.

ARTICLE V : Transport

(a) The Government shall arrange with the local authorities in Guam to facilitate the arrival and the departure of all persons who are participating in an official capacity in the work of the Session.

(b) The Government shall arrange with the local authorities in Guam to place at the disposal of the Organization, without charge to WHO, the necessary vehicles for local transport of equipment, materials and documents throughout the whole duration of the Session. They shall be responsible for all expenses connected with such transport, such as the provision of petrol and servicing of vehicles.

(c) Further, the local authorities in Guam shall organize and place at the disposal of the Organization, without charge to WHO, any transport service required for field visits which may be organized by the local authorities in connexion with the Technical Discussions.

ARTICLE VI: Telecommunications

(a) The Government shall assume responsibility for the whole of the telephone system required for the effective functioning of the Session as well as the charge for official local calls of the Organization.

(b) The Government shall provide the telegraphic or radio communications required for the effective functioning of the Session at the commercial rates available to Government agencies.

(c) Press cards for reduced press rates will be issued in the names of the WHO Public Information Officer and Conference Officer as soon as they arrive in Guam.

ARTICLE VII: Privileges and Immunities

(a) For the purpose of this agreement the Government shall apply without reservations the provisions of the International Organizations Immunities Act, Public Law 291, 79th Congress, [¹] as amended. The Government affirms that the legislative provisions necessary to permit the successful conduct of the annual meeting of the Regional Committee of the World Health Organization for the Western Pacific are contained in Public Law 291, 79th Congress, Public Law 414, 82nd Congress, [²] Executive Order No. 10025 of the President of the United States dated December 30th, 1948, [³] as well as the Constitution of the Organization. [⁴] The United States authorities are ready to make every effort to provide to WHO and to all persons convened or invited in an official capacity all the facilities which may be afforded within the limits of the above-mentioned laws and instruments.

(b) The Government undertakes to the extent of the provisions of Public Law 79-291 to hold WHO and its staff immune from suit and legal process relating to acts performed by them in their official capacity, and falling within their functions as officers and employees of the Organization.

ARTICLE VIII: Inviolability and protection of the premises placed at the disposal of the Organization

(a) The premises placed at the disposal of the Organization in connexion with this Regional Committee session shall be placed under the control and authority of the Organization which shall have the exclusive right to authorize or prohibit entry thereto of any person and may also cause any person to be removed therefrom.

(b) The local authorities in Guam shall take appropriate measures to ensure that these premises are not disturbed by the entry of unauthorized persons or groups of persons, by disorder or any kind of noise in the immediate vicinity thereof, particularly any noise which may result from traffic. To this end they shall station outside these premises the necessary police protection and take any other measure they may deem necessary.

(c) At the request of the Chairman of the Regional Committee or of the Regional Director, or of their authorized representatives, the local authorities in Guam shall provide the necessary police forces to

^¹ 59 Stat. 669; 22 U.S.C. § 288 note.

^² 66 Stat. 163, 168; 8 U.S.C. § 1101a(15)(G)(i).

^³ 13 Fed. Reg. 9361; 3 CFR, 1943-1948 Comp., p. 1063.

^⁴ TIAS 1808; 62 Stat. 2679.

give assistance for maintaining order, if need arises, within these premises, and to expel any person who may disturb it and the said authorities shall provide general security services within the premises.

ARTICLE IX: Official Receptions

The Government shall arrange with the local authorities in Guam to enable the Organization to purchase liquor exempt from customs and other duties for its official receptions.

ARTICLE X: Third Party Liability

It is mutually agreed that any contract for services negotiated by the Government, the local authorities in Guam or the Organization shall include a provision requiring the firm which provides the services to be adequately insured against third-party liability arising out of the services provided.

ARTICLE XI: Final Provisions

The present agreement shall enter into force upon its signature.

IN FAITH WHEREOF the present agreement was done and signed at Manila, Republic of the Philippines on the nineteenth day of June 1972 in duplicate originals in English, of which one original was handed to the representative of the Government of the United States of America and the remaining original to the Regional Director of the World Health Organization.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA

HENRY A. BYROADE

Ambassador

FOR THE WORLD HEALTH
ORGANIZATION

FRANCISCO J. DY

ANNEX 1

1. PERSONNEL

In addition to the Secretariat required in the conduct of the business of the Regional Committee Meeting, WHO will provide the following staff to help service the meeting:

- (2) Conference Officers
- (3) Interpreters
- (3) Translators
- (5) Precis writers
- (1) Typing Pool Supervisor
- (2) English Language Secretary/Typists
- (3) French Language Secretary/Typists
- (1) Sound and Interpretation Equipment Technician

2. EQUIPMENT

- (1) complete set Simultaneous Interpretation Equipment
 - (6) IBM electric typewriters—with WHO keyboard
 - (18) flags of the Members of the Western Pacific Region
 - (1) WHO flag
- WHO stationery and similar supplies not available locally.

ANNEX 2**1. LOCAL PERSONNEL**

- (2) Conference Officers
 - (2) Document Distribution staff
 - (7) Document Reproduction staff
 - (4) Messengers
 - (1) Conference Room Clerk
 - (1) Sound Equipment Technician
 - (2) Sound Equipment Clerks
 - (2) Conference Room Janitors
 - (1) Transport Officer
 - (3) Secretaries
 - (4) Typists
- Other, as considered necessary by the Government.

2. EQUIPMENT

- (2) Stencil Duplicating Machines
 - (1) Collating machine (if available)
 - (7) Typewriters IBM Standard electric
 - (1) Paper-cutting machine
 - (1) Spirit duplicator
 - (1) Public Address Equipment
 - (1) Slide Projector
 - (1) Copying machine
 - (15) Public Information Display Panels, 4 x 3 feet
 - (2) Blackboards
 - (19) Flagpoles
- Stationery and other office supplies locally available.
- (1) Portable Interpreters' booth
 - (5) Tape recorders

3. MEETING AND OFFICE SPACE

The Guam Hilton Convention Room

Two (2) sections of the Marianas ballroom for sub-committee meetings

Seventeen (17) offices

One (1) big room for Documents Reproduction

Sufficient and suitable furniture for meetings and office space

Eight (8) passenger vehicles

Buses, depending on requirements

JAPAN

**Mutual Defense Assistance: Cash Contribution
by Japan**

*Arrangement relating to the agreement of March 8, 1954.
Effectuated by exchange of notes
Signed at Tokyo July 13, 1971;
Entered into force July 13, 1971.*

千九百七十一年七月十三日に東京で

外務大臣臨時代理

國務大臣

木村徳太

木村徳太

木村徳太

木村徳太

アメリカ合衆国特命全権大使
アーミン・H・マイヤー閣下

四十七年三月三十一日までの日本国の会計年度において日本国政府が提供すべき金銭負担の額を、同年度に同政府が使用に供する金銭以外のものによる負担を考慮に入れて、二千五百四十五万三千円（二五、四五三、〇〇〇円）をこえないものとすることを提案する光榮を有します。

貴国政府が前記の提案を受諾されるときは、この書簡及び受諾を表明される閣下の返簡は、日本国の昭和四十六会計年度において日本国政府が提供すべき金銭負担の額に関する両政府の間の取極を構成するものと認めることいたします。

本大臣は、以上を申し進めるに際し、ここに閣下に向かつて敬意を表します。

*The Japanese Minister for Foreign Affairs ad interim
to the American Ambassador [¹]*

書簡をもつて啓上いたします。本大臣は、千九百五十四年三月八日に東京で署名された日本国とアメリカ合衆国との間の相互防衛援助協定に言及する光栄を有します。

同協定第七条2の規定は、日本国政府が、同協定の実施に関するアメリカ合衆国政府の行政事務費及びこれに関連がある経費として、アメリカ合衆国政府に隨時円資金を提供すべきことを定めています。

また、同協定附属書G3の規定は、日本国の毎会計年度において日本国政府が提供すべき金銭負担としての日本円の価額について、同政府が使用に供する金銭以外のものによる負担を考慮に入れたうえ、両政府の間で合意すべきことを定めています。

よつて、本大臣は、さらに、昭和四十六年四月一日から昭和

¹ For the English language translation, see p. 1202.

*The American Ambassador to the Japanese Minister for Foreign
Affairs ad interim*

No. 399

TOKYO, July 13, 1971

EXCELLENCY:

I have the honor to refer to Your Excellency's Note of July 13, 1971, which reads as follows:

"I have the honor to refer to the Mutual Defense Assistance Agreement between Japan and the United States of America signed at Tokyo on March 8, 1954. [¹]

Article VII, paragraph 2 of this Agreement provides that the Government of Japan will make available, from time to time, to the Government of the United States of America funds in yen for the administrative and related expenses of the latter Government in connection with carrying out such Agreement.

Paragraph 3 of Annex G of the said Agreement provides that in consideration of the contributions in kind to be made available by the Government of Japan, the amount of yen to be made available as a cash contribution by the Government of Japan for any Japanese fiscal year shall be as agreed upon between the two Governments.

Accordingly, I have further the honor to propose that, in consideration of the contributions in kind to be made available by the Government of Japan during the Japanese fiscal year from April 1, 1971 to March 31, 1972, the amount of the cash contribution to be made available by the Government of Japan for such fiscal year shall not exceed twenty five million and four hundred fifty three thousand yen (¥25,453,000).

If the foregoing proposal is acceptable to your Government, this Note and your reply of acceptance shall be considered as constituting an arrangement between our two Governments on the amount of cash contribution to be made available by the Government of Japan for the Japanese fiscal year 1971."

I have further the honor to inform Your Excellency that the above proposal of the Government of Japan is acceptable to the Government of the United States of America and that Your Excellency's Note and this reply are considered as an arrangement between our two Govern-

¹ TIAS 2957; 5 UST 661.

ments on the amount of the cash contribution to be made available by the Government of Japan for the Japanese fiscal year 1971.

Accept, Excellency, the assurances of my most distinguished consideration.

ARMIN H. MEYER

His Excellency

TOSHIO KIMURA,

Minister for Foreign Affairs

ad interim, Minister of

State of Japan.

JAPAN

Mutual Defense Assistance: Cash Contribution by Japan

*Arrangement relating to the agreement of March 8, 1954.
Effectuated by exchange of notes
Signed at Tokyo June 20, 1972;
Entered into force June 20, 1972.*

千九百七十二年六月二十日に東京で

日本国外務大臣



アメリカ合衆国特命全権大使

ロバート・S・インガソル閣下



四十八年三月三十一日までの日本国の会計年度において日本国政府が提供すべき金銭負担の額を、同年度に同政府が使用に供する金錢以外のものによる負担を考慮に入れて、二千五百二十七万六千円（二五、二七六、〇〇〇円）をこえないものとすることを提案する光榮を有します。

貴国政府が前記の提案を受諾されるとときは、この書簡及び受諾を表明される閣下の返簡は、日本国の昭和四十七会計年度において日本国政府が提供すべき金銭負担の額に関する両政府の間の取極を構成するものと認めることいたします。

本大臣は、以上を申し進めるに際し、ここに閣下に向かつて敬意を表します。

*The Japanese Minister for Foreign Affairs to the
American Ambassador [1]*

書簡をもつて啓上いたします。本大臣は、千九百五十四年三月八日に東京で署名された日本国とアメリカ合衆国との間の相互防衛援助協定に言及する光榮を有します。

同協定第七条2の規定は、日本国政府が、同協定の実施に関するアメリカ合衆国政府の行政事務費及びこれに関連がある経費として、アメリカ合衆国政府に隨時円資金を提供すべきことを定めています。

また、同協定附属書G3の規定は、日本国の毎会計年度において日本国政府が提供すべき金銭負担としての日本円の価額について、同政府が使用に供する金銭以外のものによる負担を考慮に入れたらえ、両政府の間で合意すべきことを定めています。

よつて、本大臣は、さらに、昭和四十七年四月一日から昭和

¹ For the English language translation, see p. 1208.

*The American Ambassador to the Japanese Minister for
Foreign Affairs*

No. 324

TOKYO, June 20, 1972.

EXCELLENCY:

I have the honor to refer to Your Excellency's Note of June 20, 1972, which reads as follows:

"I have the honor to refer to the Mutual Defense Assistance Agreement between Japan and the United States of America signed at Tokyo on March 8, 1954. [¹]

Article VII, paragraph 2 of this Agreement provides that the Government of Japan will make available, from time to time, to the Government of the United States of America funds in yen for the administrative and related expenses of the latter Government in connection with carrying out such Agreement.

Paragraph 3 of Annex G of the said Agreement provides that, in consideration of the contributions in kind to be made available by the Government of Japan, the amount of yen to be made available as a cash contribution by the Government of Japan for any Japanese fiscal year shall be as agreed upon between the two Governments.

Accordingly, I have further the honor to propose that, in consideration of the contributions in kind to be made available by the Government of Japan during the Japanese fiscal year from April 1, 1972, to March 31, 1973, the amount of the cash contribution to be made available by the Government of Japan for such fiscal year shall not exceed twenty five million and two hundred seventy six thousand yen (¥25,276,000).

If the foregoing proposal is acceptable to your Government, this Note and your reply of acceptance shall be considered as constituting an arrangement between our two Governments on the amount of the cash contribution to be made available by the Government of Japan for the Japanese fiscal year 1972."

I have further the honor to inform Your Excellency that the above proposal of the Government of Japan is acceptable to the Government of the United States of America and that Your Excellency's Note and this reply are considered as an arrangement between our two Governments on the amount of the cash contribution to be made available by the Government of Japan for the Japanese fiscal year 1972.

Accept, Excellency, the assurances of my highest consideration.

ROBERT S. INGERSOLL

His Excellency

TAKEO FUKUDA,

*Minister for Foreign Affairs,
Tokyo.*

¹ TIAS 2957, 7384; 5 UST 661; *ante*, p. 1198.

FEDERAL REPUBLIC OF GERMANY

Education: Financing of Exchange Programs

*Agreement supplementing the agreement of November 20, 1962,
as supplemented.*

Effectuated by exchange of notes

*Dated at Bonn and Bonn-Bad Godesberg June 7 and 9, 1972;
Entered into force June 9, 1972.*

*The Foreign Office of the Federal Republic of Germany
to the American Embassy*

AUSWÄRTIGES AMT

IV 5-83.73/1-0

Verbalnote

Das Auswärtige Amt beeindruckt sich, die Verbalnote der Botschaft der Vereinigten Staaten von Amerika Nr. 257 vom 29. Dezember 1971 zum Abkommen zwischen der Regierung der Bundesrepublik Deutschland und der Regierung der Vereinigten Staaten von Amerika über die Durchführung von Austauschvorhaben zum Zwecke der Aus- und Weiterbildung vom 20. November 1962 zu bestätigen.

Das Auswärtige Amt schlägt vor, dieses Abkommen, dessen Finanzierung in Artikel 8 und dem durch Notenwechsel am 15. März 1971 in Kraft getretenen Zusatz zu Artikel 8 bis zum 31. März 1972 geregelt ist, wie folgt zu ergänzen:

“Die Regierung der Vereinigten Staaten von Amerika ist bereit, für die Finanzierung des Abkommens im Programmjahr 1972/1973 420.000 Dollar in deutscher Währung beizutragen. Die Regierung der Bundesrepublik Deutschland ist ihrerseits bereit, sich für dasselbe Jahr mit einem Zuschuss in Höhe von 3,5 Millionen Deutsche Mark an der Finanzierung des Programms zu beteiligen. Die Bereitstellung der Mittel erfolgt unter der Voraussetzung, daß die Kommission ihre Eigenmittel dazu benutzt, die Beiträge der beiden Regierungen um den Betrag zu erhöhen, der für die Durchführung des im Haushaltsvoranschlag der Kommission vorgesehenen Gesamtprogramms erforderlich ist.

Im Hinblick auf die noch ausstehende Verabschiedung des Bundeshaushalts durch die parlamentarischen Körperschaften stellt die Regierung der Bundesrepublik Deutschland im Rahmen der vorläufigen Haushaltsführung des Bundes zunächst einen Betrag von 1,6 Millionen Deutsche Mark bereit.

Für die Zahlung des Beitrages der Regierung der Vereinigten Staaten von Amerika und des von der Regierung der Bundesrepublik Deutschland bereitgestellten Betrages in Höhe von 1,6 Millionen Deutsche Mark gilt als Fälligkeitstermin der 1. Juli 1972. Die Fälligkeit des noch offen stehenden Beitrages der Regierung der Bundesrepublik Deutschland wird nach Verabschiedung des Bundeshaushalts durch die parlamentarischen Körperschaften festgelegt."

Das Auswärtige Amt wäre für eine Bestätigung des Zusatztextes dankbar und erlaubt sich vorzuschlagen, diese Note and die Antwortnote der Botschaft der Vereinigten Staaten von Amerika hierauf als viertes Zusatzabkommen der beiden Regierungen zum Abkommen über die Durchführung von Austauschvorhaben zum Zwecke der Aus- und Weiterbildung vom 20. November 1962 anzusehen, das mit dem Datum der dortigen Antwortnote in Kraft treten soll.

Das Auswärtige Amt benutzt diesen Anlaß, die Botschaft der Vereinigten Staaten von Amerika erneut seiner ausgezeichneten Hochachtung zu versichern.

BONN, 7. Juni 1972

[SEAL]

AN DIE
BOTSCHAFT DER VEREINIGTEN
STAATEN VON AMERIKA

Translation

THE FOREIGN OFFICE

IV 5-83.73/1-0

Note Verbale

The Foreign Office has the honor to acknowledge receipt of Note Verbale Nr. 257 of the Embassy of the United States of America, dated December 29, 1971, [^] regarding the "Agreement Between the Federal Republic of Germany and the Government of the United

¹ Not printed.

States of America for Conducting Certain Educational Exchange Programs", dated November 20, 1962. [¹]

The Foreign Office proposes to supplement this Agreement, the financing of which has been provided for until March 31, 1972 by Article 8 and the addendum thereto which entered into force on March 15, 1971 pursuant to an Exchange of Notes, [²] as follows:

"The Government of the United States of America is prepared to contribute \$420,000 in German currency for the financing of the Agreement for the program year 1972/73. The Government of the Federal Republic of Germany, for its part, is prepared to share in the financing of the program for the same year by contributing the sum of DM 3.5 million. The funds will be made available with the provision that the Commission will use its own funds to supplement the contributions of both Governments by the amount required to implement the entire program as envisaged in the budget proposal of the Commission.

"In view of the fact that the Federal budget is still awaiting passage by Parliament, the Government of the Federal Republic of Germany will at this time, on the basis of its interim budget, make available the sum of DM 1.6 million.

"The due date for payment of the contribution of the Government of the United States of America and of the sum of DM 1.6 million, made available by the Government of the Federal Republic of Germany, shall be July 1, 1972. The due date for the balance of the contribution of the Federal Republic of Germany will be set after the Federal budget has been passed by Parliament."

The Foreign Office would appreciate receiving confirmation of this addendum and takes the liberty of proposing that this Note and the Note of the Embassy of the United States of America in reply thereto be considered the fourth supplement of both Governments to the Agreement for Conducting Certain Educational Exchange Programs of November 20, 1962, to enter into force on the date of the Embassy's reply.

The Foreign Office avails itself of this opportunity to renew to the Embassy of the United States of America the assurance of its distinguished consideration.

BONN, June 7, 1972

[SEAL]

THE EMBASSY OF THE
UNITED STATES OF AMERICA.

¹ TIAS 5518; 15 UST 78.

² TIAS 7086; 22 UST 481.

The American Embassy to the Foreign Office of the Federal Republic of Germany

No. 93

The Embassy of the United States of America has the honor to acknowledge receipt of the Foreign Office's Note of June 7, 1972, regarding the "Agreement Between the Governments of the United States of America and the Federal Republic of Germany for Conducting Certain Educational Exchange Programs," dated November 20, 1962.

The Embassy of the United States herewith accepts the proposed wording for the fourth supplement to Article 8 of said Agreement, as provided in the Foreign Office Note of June 7, 1972, and regards it as having entered into force as of this date.

EMBASSY OF THE UNITED STATES OF AMERICA
Bonn-Bad Godesberg, June 9, 1972

VENEZUELA

Trade

*Agreement terminating in part the agreement of November 6, 1939,
as supplemented.*

*Effectuated by exchange of notes
Signed at Caracas June 26, 1972;
Entered into force June 26, 1972.*

The American Ambassador to the Venezuelan Minister of Foreign Affairs

No. 338

CARACAS, June 26, 1972

EXCELLENCY:

I have the honor to refer to your note of December 31, 1971, relating to the amended reciprocal trade agreement [] between our two countries and to our recent discussions concerning that agreement.

We understand that the foregoing note results in the termination of Schedule I of the amended reciprocal trade agreement on June 30, 1972, and that the contents of Article 10 of that agreement shall remain in force subject to the exceptions permitted by Article 15.

Further in conformity with our discussions, the Government of the United States gives notice of termination effective June 30, 1972, of Schedule II of the agreement, with the exception of the following concessions, which will remain in effect in concordance with the part of Article 2 relating to said concessions: crude petroleum (including reconstituted crude petroleum); topped crude petroleum; crude shale oil; and distillate and residual fuel oils (including blended fuel oils) derived from petroleum, shale, or both, with or without additives:

TSUS 475.05 testing under 25 degrees A.P.I. 0.125 cents per gallon

TSUS 475.10 testing 25 degrees A.P.I. or more 0.25 cents per gallon

The tariff rates listed above are identical with those at present in force.

I would appreciate your confirmation that the foregoing is acceptable to your Government.

OREGON

¹ EAS 180, TIAS 2565, 5302; 54 Stat. 2375; 2 UST 4195; 14 UST 1901.

(1213)

TIAS 7387

LIBRARY

I avail myself of the opportunity to renew to Your Excellency the assurances of my highest and most distinguished consideration.

ROBERT MCCLINTOCK

His Excellency

DR. ARÍSTIDES CALVANI,
Minister of Foreign Affairs,
Caracas.

*The Venezuelan Minister of Foreign Affairs to the
American Ambassador*

REPUBLICA DE VENEZUELA
MINISTERIO DE RELACIONES EXTERIORES

No. 501

CARACAS, 26 de junio de 1972

EXCELENCIA:

Tengo el honor de referirme a su nota del 26 de junio de 1972, en contestación a la nuestra del 31 de diciembre de 1971, referente al modificado Convenio de Recíprocidad Comercial entre nuestros dos países.

El Gobierno de Venezuela acepta cuanto en ella se expresa de acuerdo con los términos contenidos en la misma. Se observa, por otra parte, que el entendimiento establecido por el presente intercambio de notas conservará su aplicabilidad hasta seis meses después de la fecha en que uno de los dos Gobiernos avisare, por escrito, al otro de su intención de poner término al mismo.

Válgame de la ocasión para renovar a Vuestra Excelencia las seguridades de mi más alta y distinguida consideración.

ARÍSTIDES CALVANI
Arístides Calvani

Al Excelentísimo Señor

ROBERT MCCLINTOCK,
*Embajador Extraordinario y Plenipotenciario de los
Estados Unidos de América.
Ciudad.-*

MOJOSIO
PAUCO CAMPURIO
VILLA OGLI

Translation

REPUBLIC OF VENEZUELA
MINISTRY OF FOREIGN AFFAIRS

No. 501

CARACAS, June 26, 1972

EXCELLENCY:

I have the honor to refer to your note of June 26, 1972, in reply to our note of December 31, 1971, relating to the amended reciprocal trade agreement between our two countries.

The Government of Venezuela accepts the contents of the note as stated therein. Moreover, it is noted that the understanding established by this exchange of notes shall continue to be applicable until six months after the date on which either Government gives the other written notice of its intention to terminate the same.

I avail myself of this occasion to renew to Your Excellency the assurances of my highest and most distinguished consideration.

ARÍSTIDES CALVANI

Arístides Calvani

His Excellency

ROBERT McCINTOCK,
*Ambassador Extraordinary and Plenipotentiary
of the United States of America,
Caracas.*

ECUADOR
Agricultural Commodities

*Agreement amending the agreements of June 30, 1969, and
June 30, 1971.*

Effectuated by exchange of notes

Signed at Quito May 18 and June 23, 1972;

Entered into force June 23, 1972.

*The American Chargé d'Affaires ad interim to the Ecuadorean Minister
of Foreign Relations*

EMBASSY OF THE UNITED STATES OF AMERICA

No. 38

QUITO, May 18, 1972

EXCELLENCY:

I have the honor to refer to the agricultural commodities Agreements between our two Governments signed June 30, 1969, and June 30, 1971, [^] and propose amendments as follows:

- A. In Part II - Particular Provisions, Article 6 - Usual Marketing Table of the June 30, 1969, Agreement, reduce the Usual Marketing Requirement for Unmanufactured tobacco/tobacco products for the Import Period (United States Fiscal Year) 1970 from 865 metric tons (from the United States of America) to 650 metric tons (from the United States of America).
- B. In Part II - Particular Provisions, Item III - Usual Marketing Table of the June 30, 1971, Agreement, reduce the Usual Marketing Requirement for Tobacco for the Import Period (Calendar Year) 1971 from 865 metric tons (all from the United States of America) to 664 metric tons (all from the United States of America).

All other terms and conditions of these two Agreements remain the same.

If the foregoing amendments are acceptable to your Government, I propose that this note and your reply thereto constitute an agreement between our two Governments to enter into force on the date of your note in reply.

¹ TIAS 6867, 7179; 21 UST 1107; 22 UST 1561.

Please accept, Excellency, the renewed assurances of my highest and most distinguished consideration.

MAXWELL CHAPLIN

Chargé d'Affaires ad interim

His Excellency

DR. ANTONIO JOSÉ LUCIO PAREDES
Minister of Foreign Relations
Quito

*The Ecuadorean Acting Minister of Foreign Relations to the
American Ambassador*

REPUBLICA DEL ECUADOR
MINISTERIO DE RELACIONES EXTERIORES

No. 87 DCP.

QUITO, a 23 de junio de 1972.

SEÑOR EMBAJADOR:

Tengo a honra avisar recibo de la Nota de Vuestra Excelencia número 38, de 18 de mayo del año en curso, relativa a los Convenios sobre Productos Agrícolas suscritos entre los Gobiernos del Ecuador y de los Estados Unidos de América el 30 de junio de 1969 y el 30 de junio de 1971, mediante la cual Vuestra Excelencia se digna proponer las siguientes enmiendas:

- "A. En el Capítulo II – Disposiciones Particulares, Artículo 6 – Cuadro de Comercialización Usual del Convenio de junio 30, 1969, redúzcase el Requisito Usual de Comercialización para Tabaco no manufacturado/productos de tabaco en el Período de Importación (Año Fiscal de los Estados Unidos) 1970 de 865 toneladas métricas (de los Estados Unidos de América) a 650 toneladas métricas (de los Estados Unidos de América).
- B. En la Parte II – Disposiciones Particulares, Sección III – Cuadro de Comercialización Usual del Convenio de junio 30, 1971, redúzcase el Requisito Usual de Comercialización para Tabaco en el Período de Importación (Año de Calendario) 1971, de 865 toneladas métricas (todas de los Estados Unidos de América) a 664 toneladas métricas (todas de los Estados Unidos de América). Todos los otros términos y condiciones de estos dos Convenios permanecen iguales".

De la misma manera, tengo a honra expresarle que el Gobierno del Ecuador acepta las enmiendas propuestas y, por lo tanto, estoy de acuerdo en que la Nota de Vuestra Excelencia y la presente,

constituyan un convenio entre nuestros dos Gobiernos con vigencia a partir de la presente fecha.

Hago propicia la oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más distinguida consideración.

J. MONCAYO G.

Jaime Moncayo G.,
Ministro Interino de Relaciones Exteriores.

Al Excelentísimo Señor Don FINDLEY BURNS,
Embajador Extraordinario y Plenipotenciario de los Estados Unidos de América.
Presente.

Translation

REPUBLIC OF ECUADOR
MINISTRY OF FOREIGN RELATIONS

No. 87 DCP

QUITO, June 23, 1972

MR. AMBASSADOR:

I have the honor to acknowledge receipt of Your Excellency's note No. 38 of May 18, 1972, concerning the agricultural commodities agreements between the Governments of Ecuador and the United States, signed June 30, 1969 and June 30, 1971, and proposing the following amendments:

[For the English language text, see p. 1216.]

I have the further honor to inform you that the Government of Ecuador accepts the proposed amendments, and consequently I agree that your note and this reply shall constitute an agreement between our two Governments which shall enter into force on this date.

I avail myself of this opportunity to renew to Your Excellency the assurances of my most distinguished consideration.

J. MONCAYO G.

Jaime Moncayo G.
Acting Minister of Foreign Relations

His Excellency

FINDLEY BURNS,
*Ambassador Extraordinary and Plenipotentiary
of the United States of America, Quito.*

AFGHANISTAN

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Kabul May 24 and June 29, 1972;
Entered into force June 29, 1972;
Effective May 24, 1972.*

*The American Deputy Chief of Mission to the Afghan Minister of
Foreign Affairs*

EMBASSY OF THE
UNITED STATES OF AMERICA

No. 54

KABUL, May 24, 1972

EXCELLENCY:

I have the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971, [¹] which includes a provision requiring payment to the United States Government in Afghan currency of ten percent of the value of grant military assistance by the United States to the Royal Government of Afghanistan.

In accordance with that provision, it is proposed that the Royal Government of Afghanistan will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in the country of Afghanistan for Afghanis on the date deposits are made, the following amounts of Afghanis:

An amount equal to ten percent of each grant of military assistance. The Royal Government of Afghanistan will be notified quarterly of each grant military assistance and the values thereof. Deposits to the account of the United States Government will be due upon notification of such deliveries.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Afghanis.

¹ 86 Stat. 26; 22 U.S.C. § 2321 g.

If the foregoing is acceptable to the Royal Government of Afghanistan, please signify your concurrence below by countersigning this letter. The agreement will be effective from the date of this letter.

Accept, Excellency, the renewed assurances of my highest consideration.

S. W. L.

His Excellency

MOHAMMED MUSA SHAFIQ,
*Minister of Foreign Affairs,
 Kabul.*

The Afghan Minister of Foreign Affairs to the American Ambassador

[¹] دَوْلَةِ افْغَانِیَّةٍ، وزَارُوتِ خَارِجَةٍ

No. 1753

KABUL, June 29, 1972

EXCELLENCY:

I have the honor to acknowledge with thanks your note of May 24, 1972 regarding the United States Foreign Assistance Act of 1971, which includes a provision requiring payment to the United States Government in Afghan currency of ten percent of the value of grant military assistance by the United States to the Royal Government of Afghanistan.

In accordance with that provision, it is proposed that the Royal Government of Afghanistan will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in the country of Afghanistan for Afghanis on the date deposits are made, the following amounts of Afghanis:

An amount equal to ten percent of each grant of military assistance. The Royal Government of Afghanistan will be notified quarterly of each grant military assistance and the values thereof. Deposits to the account of the United States Government will be due upon notification of such deliveries.

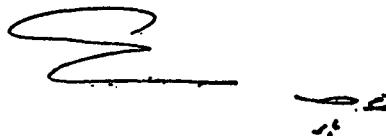
It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Afghanis.

On behalf of the Royal Government of Afghanistan, I have the honor to confirm the foregoing arrangement, and Your Excellency's

¹ Ministry of Foreign Affairs

note and my note in reply shall be regarded as constituting an agreement between our two Governments to enter into force as specified in your note.

Accept, Excellency, the renewed assurances of my highest consideration.



Mohammad Moosa Shafiq
Minister of Foreign Affairs
Kabul

His Excellency MR. ROBERT G. NEUMANN
Ambassador Extraordinary and Plenipotentiary
of the United States of America
Kabul

BRAZIL

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Brasilia February 28 and June 27, 1972
Entered into force June 27, 1972;
Effective February 7, 1972.*

The American Embassy to the Brazilian Ministry of Foreign Affairs

No. 71

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Government of the Federative Republic of Brazil and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971,[¹] which includes a provision concerning payment to the United States Government in cruzeiros of ten percent of the value of grant military assistance provided by the United States to the Brazilian Government.

In accordance with that provision, it is proposed that the Brazilian Government deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in Brazil for cruzeiros on the date deposits are made, in an amount in cruzeiros equal to ten percent of each grant of military assistance to the Brazilian Government. The Brazilian Government will be notified quarterly of the rendering of defense services and the value thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification of deliveries.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in cruzeiros, including but not limited to all costs relating to the financing of international educational and cultural exchange activities

¹ 86 Stat. 26; 22 U.S.C. § 2321 g.

under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961. [1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Brazilian Government shall, together with this note, constitute an agreement between our Governments on this subject effective from and after February 7, 1972, and applicable to the rendering of defense services funded or agreed to and rendered on or subsequent to that date.

The Embassy takes the opportunity to renew to the Ministry the assurance of its highest consideration.

[SEAL]

EMBASSY OF THE UNITED STATES OF AMERICA
Brasilia, February 28, 1972

The Brazilian Ministry of Foreign Affairs to the American Embassy

MINISTERIO DAS RELAÇÕES EXTERIORES

DAS/DAI/83/N620.1(B13)(B46)

O Ministério das Relações Exteriores cumprimenta a Embaixada dos Estados Unidos da América e tem a honra de acusar recebimento da nota nº 71, de 28 de fevereiro do corrente ano, cujo teor, em português, é o seguinte:

“A Embaixada dos Estados Unidos da América cumprimenta o Ministério das Relações Exteriores do Governo da República Federativa do Brasil e tem a honra de se referir aos recentes entendimentos relativos ao United States Foreign Assistance Act of 1971, que contem uma cláusula concernente ao pagamento ao Governo dos Estados Unidos, em cruzeiros, de 10% do valor da concessão de assistência militar que for prestada pelos Estados Unidos ao Governo brasileiro.

De acordo com aquela cláusula, propõe-se que o Governo brasileiro efetue um depósito, em conta a ser especificada pelo Governo dos Estados Unidos, a uma taxa de câmbio não menos favorável ao Governo dos Estados Unidos do que a melhor taxa oficial pela qual os dólares dos Estados Unidos da América forem vendidos, em cruzeiros, por agentes autorizados, no Brasil, na data em que os depósitos forem efetuados, de uma quantia em cruzeiros correspondente a 10% do valor de cada concessão de assistência militar ao Governo brasileiro. O Governo brasileiro será notificado trimestralmente sobre a prestação dos serviços de defesa e de seu respectivo valor. As quantias a serem creditadas em favor do Governo dos Estados Unidos da América serão devidas e pagáveis mediante solicitação do Governo dos Estados Unidos da América, solicitação essa que, se ocorrer, deverá

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

ser feita dentro do prazo de **um** ano a contrar da notificação acima mencionada.

Propõe-se, além disso, que as quantias a serem depositadas poderão ser utilizadas para a cobertura de todos os gastos oficiais do Governo dos Estados Unidos da América, pagáveis em cruzeiros, inclusive, entre outros, os relativos ao financiamento das atividades de intercâmbio internacional nos campos educacional e cultural previstas em programas autorizados pela Lei de Intercâmbio Educacional e Cultural Mútuo dos Estados Unidos da América, de 1961.

Finalmente, propõe-se que a resposta do Ministério segundo a qual o que precede é aceitável pelo Governo brasileiro, passe a constituir, juntamente com esta nota, um Acordo entre nossos Governos sobre a matéria, o qual produzirá efeito a partir de 7 de fevereiro de 1972, e será aplicável à prestação de serviços de defesa já financiados ou a serem financiados e em execução naquela data ou a serem executados posteriormente".

2. Em resposta, o Ministério das Relações Exteriores comunica à Embaixada dos Estados Unidos da América que concorda com os termos da nota acima transcrita, a qual, juntamente com a presente, passam a constituir Acordo entre o Governo da República Federativa do Brasil e o Governo dos Estados Unidos da América.

BRASÍLIA, em 27 de junho de 1972.

Translation

MINISTRY FOR FOREIGN AFFAIRS

DAS/DAI/83/N620.1(B13)(B46)

The Ministry of Foreign Affairs presents its compliments to the Embassy of the United States of America and has the honor to acknowledge receipt of note No. 71 of February 20, 1972, which, translated into Portuguese, reads as follows:

[For the English language text, see p. 1222.]

In reply, the Ministry of Foreign Affairs informs the Embassy of the United States of America that it accepts the terms of the note transcribed above, which, together with this note, shall constitute an agreement between the Government of the Federative Republic of Brazil and the Government of the United States of America.

[Initialed]

BRASILIA, June 27, 1972

IRAN

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Tehran May 8 and 29, 1972;
Entered into force May 29, 1972;
Effective February 7, 1972.*

*The American Embassy to the Iranian Ministry of Foreign Affairs
No. 317*

The Embassy of the United States of America presents its compliments to the Imperial Ministry of Foreign Affairs of the Government of Iran and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971 [1] which includes in Section 514 of the Act a provision requiring payment to the United States Government in rials of ten percent of the value of grant military assistance provided by the United States to the Government of Iran.

In accordance with this provision, it is proposed that the Government of Iran deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in Iran for rials on the date deposits are made, an amount equal to ten percent of each grant of military assistance to the Government of Iran. The Government of Iran will be notified quarterly of the rendering of grant military assistance services and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification.

It is further proposed that the amounts to be deposited be used to pay any official costs of the United States Government payable in rials, including but not limited to any costs relating to the financing of international educational and exchange activities under programs

¹ 86 Stat. 26; 22 U.S.C. § 2321 g.

authorized by the United States Mutual Educational and Cultural Exchange Act of 1961. [1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of Iran, shall, together with this note, constitute an agreement between our Governments on this subject effective from and after February 7, 1972 and applicable to rendering of defense services funded or agreed to and rendered on or subsequent to that date.

The Embassy avails itself of this opportunity to renew to the Imperial Ministry of Foreign Affairs of the Government of Iran the assurances of its highest consideration.

EMBASSY OF THE UNITED STATES OF AMERICA

Tehran, May 8, 1972.

The Iranian Ministry of Foreign Affairs to the American Embassy

IMPERIAL MINISTRY
OF FOREIGN AFFAIRS

No. 1362/18

The Imperial Ministry of Foreign Affairs presents its compliments to the Embassy of the United States of America and has the honour to acknowledge the Embassy's note of May 8, 1972 which reads as follows:

"No. 317

The Embassy of the United States of America presents its compliments to the Imperial Ministry of Foreign Affairs of the Government of Iran and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971 which includes in Section 514 of the Act a provision requiring payment to the United States Government in rials of ten percent of the value of grant military assistance provided by the United States to the Government of Iran.

In accordance with this provision, it is proposed that the Government of Iran deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in Iran for rials on the date deposits are made, an amount equal to ten percent of each grant of military assistance to the Government of Iran. The Government of Iran will be notified quarterly

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

of the rendering of grant military assistance services and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification.

It is further proposed that the amounts to be deposited be used to pay any official costs of the United States Government payable in rials, including but not limited to any costs relating to the financing of international educational and exchange activities under programs authorized by the United States Mutual Educational and Cultural Exchange Act of 1961.

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of Iran, shall, together with this note, constitute an agreement between our Governments on this subject effective from and after February 7, 1972 and applicable to rendering of defense services funded or agreed to and rendered on or subsequent to that date.

The Embassy avails itself of this opportunity to renew to the Imperial Ministry of Foreign Affairs of the Government of Iran the assurances of its highest consideration.

Embassy of the United States of America
Tehran, May 8, 1972."

and to concur thereto.

The Ministry avails itself of this opportunity to renew to the Embassy the assurances of its highest consideration.

TEHRAN, 29th May 1972

[SEAL]

THE EMBASSY OF THE UNITED STATES OF AMERICA
Tehran

NICARAGUA

Prevention of Foot-and-Mouth Disease and Rinderpest

Agreement effected by exchange of notes

Signed at Managua March 24 and April 13, 1972;

Entered into force April 13, 1972.

*With cooperative agreement between the United States Department
of Agriculture and the Nicaraguan Ministry of Agriculture
and Livestock*

Signed at Managua March 24, 1972.

*The American Ambassador to the Nicaraguan Minister
of Foreign Relations*

EMBASSY OF THE UNITED STATES OF AMERICA

No. 19

MANAGUA, March 24, 1972

EXCELLENCY:

I have the honor to inform your Excellency that the Government of the United States confirms the Cooperative Agreement between the United States Department of Agriculture, Animal and Plant Health Service, and the Ministry of Agriculture and Livestock of the Republic of Nicaragua through its Animal Health Control Department, signed at Managua March 24, 1972. I propose that the present note and your note in reply constitute confirmation of the Cooperative Agreement by our two Governments.

Accept, Excellency, the renewed assurances of my highest consideration.

TURNER B. SHELTON

Your Excellency,

DR. LORENZO GUERRERO,

*Minister of Foreign Relations,
Managua, D.N.*

*The Nicaraguan Minister of Foreign Relations
to the American Ambassador*

REPUBLICA DE NICARAGUA
AMERICA CENTRAL
MINISTERIO DE RELACIONES EXTERIORES

SECRETARIA GENERAL
SECCION DIPLOMATICA

CME. No. 109

13 DE ABRIL DE 1972.

SEÑOR EMBAJADOR:

Tengo el honor de dar aviso de recibo de la atenta comunicación de Vuestra Excelencia No. 19 del 24 de Marzo próximo pasado, por medio de la cual me informa que su Ilustrado Gobierno confirma el Convenio Cooperativo entre el Departamento de Agricultura de los Estados Unidos, Servicio de Salud Animal y de Plantas, y el Ministerio de Agricultura y Ganadería de Nicaragua, Departamento de Control de la Salud Animal, firmado en esta Capital el 24 de Marzo próximo pasado.

Finalmente Vuestra Excelencia propone que su nota y la nota de respuesta de la Cancillería constituyan la confirmación del Convenio Cooperativo antes mencionado.

En respuesta me complace manifestar a Vuestra Excelencia que mi Gobierno da su confirmación al Convenio Cooperativo en referencia.

Válgame complacido de la oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más alta consideración,

LORENZO GUERRERO

Excelentísimo Señor

TURNER B. SHELTON,
*EmbaJador Extraordinario y Plenipotenciario
de los Estados Unidos de América,
Managua, D.N.*

Translation

REPUBLIC OF NICARAGUA
CENTRAL AMERICA
MINISTRY OF FOREIGN RELATIONS

SECRETARIAT
DIPLOMATIC SECTION

CME. No. 109

APRIL 13, 1972

MR. AMBASSADOR:

I have the honor to acknowledge receipt of your note No. 19 of March 24, 1972, in which you inform me that your Government confirms the Cooperative Agreement between the United States

Department of Agriculture, Animal and Plant Health Service, and the Ministry of Agriculture and Livestock of the Republic of Nicaragua, Animal Health Control Department, signed at Managua on March 24, 1972.

In concluding, you propose that your note and this Ministry's reply constitute confirmation of the Cooperative Agreement.

In reply, I am pleased to inform you that my Government confirms the Cooperative Agreement.

I avail myself of this opportunity to renew to you, Mr. Ambassador, the assurances of my highest consideration.

LORENZO GUERRERO

His Excellency

TURNER B. SHELTON,

*Ambassador Extraordinary and Plenipotentiary
of the United States of America,
Managua, D.N.*

**Cooperative Agreement Between the Ministry of Agriculture and
Livestock of the Republic of Nicaragua Through its Animal
Health Control Section and the United States Department of
Agriculture, Animal and Plant Health Service**

The object of this Agreement is to establish a cooperative program in the Republic of Nicaragua to prevent the entrance into the Republic of Nicaragua of foot-and-mouth disease and rinderpest; to quickly detect the diseases should they gain entrance; and to provide for their eradication should outbreaks occur.

The Ministry of Agriculture and Livestock of the Republic of Nicaragua through its Animal Health Control Section, and the United States Department of Agriculture, through its Animal and Plant Health Service shall accomplish this Agreement in accordance with the laws of the Republic of Nicaragua. Public Law 92-152 (21 U.S.C. 114b) authorizes the Secretary of Agriculture of the United States to cooperate with the Governments of Mexico, Guatemala, El Salvador, Costa Rica, Honduras, Nicaragua, British Honduras, Panama, Colombia, and Canada in the prevention, control, and eradication of foot-and-mouth disease, rinderpest, and other communicable diseases of animals.

Under the authority of Public Law 92-152, the Animal and Plant Health Service will conduct cooperative work with the Ministry of Agriculture of the Republic of Nicaragua. The Government of the Republic of Nicaragua shall provide annual appropriations to enable the Ministry of Agriculture of the Republic of Nicaragua to carry out its part of the Agreement. The United States Department of Agriculture through the Animal and Plant Health Service, and

subject to the availability of appropriations, shall annually provide funds to enable carrying out its portion of the Agreement.

General Organization and Functions

1. There is established a Cooperative Agreement between the Ministry of Agriculture and Livestock of the Republic of Nicaragua and the Department of Agriculture of the United States for the Prevention of Foot-and-Mouth Disease and Rinderpest in the Republic of Nicaragua.

2. The Ministry of Agriculture and Livestock of the Republic of Nicaragua will provide the services of at least one veterinarian to be assigned exclusively to the cooperative activities in the Republic of Nicaragua under this Agreement. The Department of Agriculture of the United States, subject to the availability of appropriations, will provide the services of at least one veterinarian who will be assigned exclusively to the cooperative program to prevent foot-and-mouth disease and rinderpest in Central America and Panama. The United States veterinarian will divide his time between the Republic of Nicaragua and the other countries cooperating in the program. The field work in the Republic of Nicaragua will be conducted by a veterinary team or teams consisting of one veterinarian from the Republic of Nicaragua and one United States veterinarian. The selection of veterinarians assigned to work in the cooperative program in the Republic of Nicaragua will be subject to mutual approval of the Nicaraguan Animal Health Control Section and the U.S. Animal and Plant Health Service.

Cooperative activities will include:

- A. Continuing surveillance for vesicular diseases and rinderpest;
- B. Investigating reports of vesicular diseases and rinderpest;
- C. Collecting diagnostic materials for laboratory examination. (Diagnostic materials from animals suspected of having foot-and-mouth disease or rinderpest shall be submitted for examination to a jointly recognized laboratory.);
- D. Participating in organizing livestock owners into vigilance committees to report evidence of vesicular diseases and rinderpest;
- E. Developing practical plans for the immediate eradication of foot-and-mouth disease and rinderpest;
- F. Training of Nicaraguan veterinarians and others in the practical application of foot-and-mouth disease and rinderpest eradication plans.
- G. Developing and distributing informational material to inform livestock owners about foot-and-mouth disease and rinderpest;
- H. Providing technical assistance and advice to promote effective legislation in the Republic of Nicaragua that will allow the Republic of Nicaragua to act promptly to eradicate foot-and-mouth disease and rinderpest;

- I. Assisting in developing or improving import procedures for the Republic of Nicaragua; however, United States representatives will limit their assistance to technical advice in formulating and improving laws, regulations, and procedures for the importation of animals, animal byproducts, and associated materials;
 - J. Conducting other appropriate activities associated with foot-and-mouth disease and rinderpest prevention in the Republic of Nicaragua, such as assessing, revising and evaluating periodically any prevention program for these diseases which may be put into effect by the Ministry of Agriculture and Livestock of the Republic of Nicaragua.
3. Salaries and expenses for personnel employed by the Republic of Nicaragua and assigned to work on the cooperative program will be paid by the Government of the Republic of Nicaragua. Salaries and expenses for personnel employed by the U.S. Department of Agriculture and assigned to work on the cooperative program will be paid by the U.S. Department of Agriculture.
4. The Nicaragua Animal Health Control Section and the U.S. Animal and Plant Health Service will arrange for the appointment of an advisory committee consisting of such persons as they may deem appropriate. The advisory committee will provide advice in formulating and improving laws, regulations, and procedures to prevent the entrance into the Republic of Nicaragua of foot-and-mouth disease and rinderpest; to quickly detect the diseases should they gain entrance; and to provide for their eradication should outbreaks occur.
5. The Republic of Nicaragua will pay all expenses which may be incurred by the National Guard of Nicaragua, and other persons for quarantine, patrol, and other enforcement duties as may be required.
6. The Nicaragua Animal Health Control Section will furnish adequate clerical assistance and adequate office and other space, to personnel of the Ministry of Agriculture of the Republic of Nicaragua and of the U.S. Department of Agriculture, for administrative work under this Agreement.
7. The Republic of Nicaragua will facilitate the entry into, exit from, and travel within the Republic of Nicaragua by United States personnel participating in the cooperative program.
8. Officials and employees of the United States Department of Agriculture participating in the cooperative program will enjoy the privileges and immunities accorded to diplomatic personnel of the Embassy of the United States of America in Nicaragua in respect to immunity from the criminal jurisdiction of the Republic of Nicaragua. Such officials and employees will enjoy immunity from the civil and administrative jurisdiction of the Republic of Nicaragua in respect to acts performed in the exercise of their functions under this Agreement.
9. The Republic of Nicaragua will permit the duty-free entry and the disposal of personal effects, household goods, and vehicles of United States personnel participating in the cooperative program and

of their immediate household in accordance with the same practices and regulations as are applied by the Government of Nicaragua to diplomatic personnel of the United States Embassy in Nicaragua.

10. Salaries and income derived from sources outside of the Republic of Nicaragua by United States personnel participating in the cooperative program will not be subject to Nicaraguan taxes.

11. The Republic of Nicaragua will provide for duty-free entry and export of materials such as equipment and supplies needed to conduct the necessary activities under the cooperative program. Equipment purchased by each participating country will remain the property of the country that purchased the equipment.

12. The Government of the Republic of Nicaragua will provide free mailing privileges for correspondence and literature issued under the cooperative program.

13. Communications, regulations, and instructions pertaining to operations under this Agreement shall be issued jointly by the Nicaragua Animal Health Control Section and the U.S. Department of Agriculture's Animal and Plant Health Service.

14. Neither the Republic of Nicaragua nor the United States will carry out studies or experiments with foot-and-mouth disease or rinderpest virus in the Republic of Nicaragua.

15. The Government of the Republic of Nicaragua agrees to actively seek whatever legislation is necessary to develop (a) an effective foot-and-mouth disease and rinderpest prevention program and (b) an effective eradication program should foot-and-mouth disease or rinderpest occur.

16. The Government of the Republic of Nicaragua agrees to actively seek cooperation from individuals and organizations such as livestock breeders, livestock organizations, Ministry of Defense, and other Government and private individuals and organizations in order to more effectively accomplish the object of this Agreement.

17. This Agreement may be amended to provide for joint action in the prevention, control, and eradication of specific communicable diseases other than foot-and-mouth disease and rinderpest by an exchange of correspondence and mutual concurrence between the Ministers or Secretaries of Agriculture of the two countries. Such an amendment shall be confirmed by an exchange of diplomatic notes between the two Governments. This Agreement may be amended in other matters by an exchange of correspondence between the Ministers or Secretaries of Agriculture of the two countries, confirmed by an exchange of diplomatic notes between the two Governments.

18. This Agreement shall remain in force until 120 days after either government shall have given written notice to the other of a desire to terminate the Agreement.

19. This Agreement shall enter into force on the date upon which notes are exchanged between the two Governments confirming its provisions.

March 24, 1972

Date

LOVO CORDERO

TURNER B. SHELTON

HONDURAS

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Tegucigalpa April 4 and June 26, 1972;
Entered into force June 26, 1972;
Effective February 7, 1972.*

The American Embassy to the Honduran Ministry of Foreign Relations

No. 43

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Relations of the Republic of Honduras and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971, [1] which includes a provision requiring payment to the United States Government in lempiras of ten percent of the value of grant military assistance and of excess defense articles provided by the United States to the Government of Honduras.

In accordance with that provision, it is proposed that the Government of Honduras will deposit in an account to be specified by the United States Government at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in the country of Honduras for lempiras on the date the deposits are made, the following amounts in lempiras:

- (A) In the case of any excess defense article given to the Government of Honduras, an amount equal to ten percent of the fair value of that article, as determined by the United States Government, and
- (B) In the case of a grant of military assistance to the Government of Honduras, an amount equal to ten percent of each grant.

The Government of Honduras will be notified quarterly of deliveries of defense articles and rendering of defense services and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification of deliveries.

¹ 86 Stat. 26; 22 U.S.C. § 2321 g.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in lempiras, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961.^[1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of Honduras shall, together with this note, constitute an agreement between our governments on this subject effective from and after February 7, 1972 and applicable to deliveries of defense articles and rendering of defense services funded or agreed to and delivered or rendered on or subsequent to that date.

The Embassy of the United States of America avails itself of this opportunity to renew to the Ministry of Foreign Relations the assurances of its highest and most distinguished consideration.

EMBASSY OF THE UNITED STATES OF AMERICA

Tegucigalpa, D. C., April 4, 1972

The Honduran Ministry of Foreign Relations to the American Embassy

SECRETARIA DE RELACIONES EXTERIORES
DE LA
REPUBLICA DE HONDURAS

Oficio No. 1202

ORGANISMOS INTERNACIONALES

El Ministerio de Relaciones Exteriores de Honduras saluda muy atentamente a la Honorable Embajada de los Estados Unidos de América y tiene el honor de referirse a su Nota No. 43 de fecha 4 de 1972, en la que se refiere al cargo del diez por ciento (10%) que el Congreso de los Estados Unidos de América, ha impuesto a los suministros servicios y asistencia técnica que ese país había suministrado al nuestro sin recargo alguno en los programas de ayuda mútua.

Dicho recargo viene a constituir para nosotros un verdadero problema, pero aún así aceptamos dichas condiciones del cargo del diez por ciento a suministros, servicios y asistencia técnica.

El Ministerio de Relaciones Exteriores de Honduras reitera a esa Honorable Embajada las muestras de su más alta y distinguida consideración.

TEGUCIGALPA, D.C., 26 de junio de 1972

A LA HONORABLE EMBAJADA
DE LOS ESTADOS UNIDOS DE AMÉRICA,
Ciudad.



¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

*Translation***MINISTRY OF FOREIGN RELATIONS
OF THE
REPUBLIC OF HONDURAS**

Official communication No. 1202

INTERNATIONAL ORGANIZATIONS

The Ministry of Foreign Relations of Honduras presents its compliments to the Embassy of the United States of America and has the honor to refer to Embassy note No. 43 of [April] 4, 1972 concerning the ten percent charge which the Congress of the United States of America has placed on supplies, services and technical assistance which the United States had been rendering to our country without any charge under the mutual aid programs.

This new charge will constitute a genuine problem for us, but we nevertheless accept the conditions of the ten percent charge for supplies, services, and technical assistance.

The Ministry of Foreign Affairs of Honduras renews to the Embassy the expression of its highest and most distinguished consideration.

TEGUCIGALPA, D.C., *June 26, 1972*

[SEAL]

[Initialed]

EMBASSY OF THE UNITED STATES OF AMERICA,
Tegucigalpa.

KHMER REPUBLIC
Agricultural Commodities

*Agreement amending the agreement of January 13, 1972.
Effectuated by exchange of notes
Signed at Phnom Penh June 23, 1972;
Entered into force June 23, 1972.*

The American Chargé d'Affaires ad interim to the Khmer Prime Minister and Minister of Foreign Affairs

No. 349

PHNOM PENH, June 23, 1972

EXCELLENCY,

I have the honor to refer to the Agreement for Sales of Agricultural Commodities signed by the representatives of our two Governments on January 13, 1972, [¹] and propose that Part II, Particular Provisions, be amended by deleting the current Item I, Commodity Table, and substituting the following:

<u>Commodity</u>	<u>Supply Period U.S. Calendar Year</u>	<u>Approximate Maximum Quantity</u>	<u>Maximum Export Market Value (Thousands)</u>
Cotton	1972 plus first 6 months of 1973	27,600 Bales	\$4,600
Cotton Yarn	1972 plus first 6 months of 1973	7.5 million Lbs	6,442
Tobacco	1972 plus first 6 months of 1973	1,750 M/T	4,525
Vegetable Oil	1972 plus first 6 months of 1973	3,000 M/T	1,067
Wheat/Wheat Flour (Wheat Basis)	1972 plus first 6 months of 1973	50,000 M/T	3,218
		TOTAL	\$19,852

¹ TIAS 7269; *ante*, p. 14.

All other terms and conditions of the January 13, 1972 Agreement remain the same.

If the foregoing is acceptable to Your Government, I propose that this note and Your reply thereto constitute an Agreement between our two Governments effective the date of Your note in reply.

Accept, Excellency, the renewed assurances of my highest consideration.

THOMAS O. ENDERS
Chargé d'Affaires ad interim

His Excellency
MR SON NGOC THANH
*Prime Minister and Minister of Foreign Affairs
Phnom Penh*

The Khmer Prime Minister and Minister of State Charged with Foreign Affairs to the American Chargé d'Affaires ad interim

REPUBLIQUE KHEMERE
MINISTÈRE DES AFFAIRES ETRANGERES

N° ——/DGE/AE

PHNOM PENH, June 23, 1972

EXCELLENCY,

I have the honor to acknowledge the receipt of Your Excellency's note of today's date which reads as follows:

"Excellency

I have the honor to refer to the agreement for Sales of Agricultural Commodities signed by the representatives of our two Governments on January 13, 1972, and propose that Part II, Particular Provisions, be amended by deleting the current Item I, Commodity Table, and substituting the following:

Commodity	Supply Period U.S. Calendar Year	Approximate Maximum Quantity	Maximum Export Market Value (Thou- sands)
Cotton	1972 plus first 6 months of 1973	27,600 Bales	\$4,600
Cotton Yarn	1972 plus first 6 months of 1973	7.5 million Lbs	6,442
Tobacco	1972 plus first 6 months of 1973	1,750 M/T	4,525
Vegetable Oil	1972 plus first 6 months of 1973	3,000 M/T	1,067
Wheat/Wheat Flour (Wheat Basis)	1972 plus first 6 months of 1973	50,000 M/T	3,218
		TOTAL	\$19,852

TIAS 7394

All other terms and conditions of the January 13, 1972 Agreement remain the same.

If the foregoing is acceptable to Your Government, I propose that this note and Your reply thereto constitute an Agreement between our two Governments effective the date of Your note in reply.

Accept, Excellency, the renewed assurances of my highest consideration".

I have further the honor to confirm on behalf of my Government the foregoing arrangements and to agree that Your Excellency's note and this note shall be regarded as constituting an Agreement between the two Governments, which will enter into effect on the date of their signature.

I avail myself of this opportunity to renew to Your Excellency, the assurance of my highest consideration.

THANH

Son Ngoc Thanh
*Prime Minister and Minister of
State Charged with Foreign
Affairs*

His Excellency THOMAS O. ENDERS
*Charge d'Affaires, a.i.
Embassay of the United States
of America*

ISRAEL
Agricultural Commodities

*Agreement amending the agreement of January 13, 1972.
Effectuated by exchange of notes
Signed at Washington July 18, 1972;
Entered into force July 18, 1972.*

The Secretary of State to the Israeli Ambassador

DEPARTMENT OF STATE
WASHINGTON

JULY 18, 1972

EXCELLENCY:

I have the honor to refer to the Agricultural Commodities Agreement between our two Governments signed on January 13, 1972 [¹] and to propose that in Part II, Item I, the Commodity Table be amended as follows: (A) for wheat/wheat flour, to reduce the approximate maximum quantity from 235,000 metric tons to 210,000 metric tons and the maximum export marketing value from \$14.2 million to \$12.7 million; and (B) for edible vegetable oil, to increase the approximate maximum quantity from 15,000 metric tons to 20,300 metric tons and the maximum export marketing value from \$4.2 million to \$5.7 million. The total maximum export marketing value remains unchanged at \$54.4 million.

All other terms and conditions of the January 13, 1972 Agreement remain the same.

If the foregoing is acceptable to your Government, I have the honor to propose that this note and your reply concurring therein constitute an agreement between our two Governments to enter into force on the date of your note in reply.

¹ TIAS 7268; *ante*, p. 11.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

RODGER P. DAVIES

His Excellency
Lieutenant General YITZHAK RABIN,
Ambassador of Israel.

The Israeli Ambassador to the Secretary of State

EMBASSY OF ISRAEL
WASHINGTON, D.C.

שגרירות ישראל
ושינגטון

AO/336

18 JULY 1972

SIR:

I have the honor to refer to the Department Note of today's date in which an amendment to the Agricultural Commodities Agreement between our two Governments signed on January 13, 1972, is proposed as follows:

(A) for wheat/wheat flour, to reduce the approximate maximum quantity from 235,000 metric tons to 210,000 metric tons and the maximum export marketing value from \$14.2 million to \$12.7 million; and (B) for edible vegetable oil, to increase the approximate maximum quantity from 15,000 metric tons to 20,300 metric tons and the maximum export marketing value from \$4.2 million to \$5.7 million. The total maximum export marketing value remains unchanged at \$54.4 million.

All other terms and conditions of the January 13, 1972 Agreement remain the same.

The foregoing amendment is acceptable to the Government of Israel and we concur that this constitutes an agreement between our two Governments to enter into force on this date.

Accept, Sir, the renewed assurances of my highest consideration.

Y. RABIN

Y. Rabin, Lt. Gen. (Res.)
Ambassador

The Honorable
WILLIAM P. ROGERS
The Secretary of State
Washington, D.C.

PORUGAL
Agricultural Commodities

*Agreement signed at Lisbon June 30, 1972;
Entered into force June 30, 1972.*

**AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED
STATES OF AMERICA AND THE GOVERNMENT OF PORTU-
GAL FOR SALES OF AGRICULTURAL COMMODITIES**

The Government of the United States of America and the Government of Portugal,

Recognizing the desirability of expanding trade in agricultural commodities between the United States of America (hereinafter referred to as the exporting country) and Portugal (hereinafter referred to as the importing country) and with other friendly countries in a manner that will not displace usual marketings of the exporting country in these commodities or unduly disrupt world prices of agricultural commodities or normal patterns of commercial trade with friendly countries;

Recognizing the policy of the exporting country to use its agricultural productivity to encourage friendly countries to improve their own agricultural production, and to assist them in their economic development;

Recognizing the determination of the importing country to improve its own production, storage, and distribution of agricultural food products, including the reduction of waste in all stages of food handling;

Desiring to set forth the understandings that will govern the sales of agricultural commodities to the importing country pursuant to Title I of the Agricultural Trade Development and Assistance Act, as amended [¹] (hereinafter referred to as the Act), and the measures that the two Governments will take individually and collectively in furthering the above-mentioned policies;

Have agreed as follows:

¹ 80 Stat. 1526; 7 U.S.C. § 1701 *et seq.*

PART I - GENERAL PROVISIONS**ARTICLE I**

A. The Government of the exporting country undertakes to finance the sale of agricultural commodities to purchasers authorized by the Government of the importing country in accordance with the terms and conditions set forth in this agreement, including the applicable annex which is an integral part of this agreement.

B. The financing of the agricultural commodities listed in Part II of this agreement will be subject to:

1. the issuance by the Government of the exporting country of purchase authorizations and their acceptance by the Government of the importing country; and

2. the availability of the specified commodities at the time of exportation.

C. Application for purchase authorizations will be made within 90 days after the effective date of this agreement, and, with respect to any additional commodities or amounts of commodities provided for in any supplementary agreement, within 90 days after the effective date of such supplementary agreement. Purchase authorizations shall include provisions relating to the sale and delivery of such commodities, and other relevant matters.

D. Except as may be authorized by the Government of the exporting country, all deliveries of commodities sold under this agreement shall be made within the supply periods specified in the commodity table in Part II.

E. The value of the total quantity of each commodity covered by the purchase authorizations for a specified type of financing authorized under this agreement shall not exceed the maximum export market value specified for that commodity and type of financing in Part II. The Government of the exporting country may limit the total value of each commodity to be covered by purchase authorizations for a specified type of financing as price declines or other marketing factors may require, so that the quantities of such commodity sold under a specified type of financing will not substantially exceed the applicable approximate maximum quantity specified in Part II.

F. The Government of the exporting country shall bear the ocean freight differential for commodities the Government of the exporting country requires to be transported in United States flag vessels (approximately 50 percent by weight of the commodities sold under the agreement). The ocean freight differential is deemed to be the amount, as determined by the Government of the exporting country, by which the cost of ocean transportation is higher (than would otherwise be the case) by reason of the requirement that the commodities be transported in United States flag vessels. The Government of the importing country shall have no responsibility to reimburse the Government of the

exporting country or to deposit any local currency of the importing country for the ocean freight differential borne by the Government of the exporting country.

G. Promptly after contracting for United States flag shipping space to be used for commodities required to be transported in United States flag vessels, and in any event not later than presentation of vessel for loading, the Government of the importing country or the purchasers authorized by it shall open a letter of credit, in United States dollars, for the estimated cost of ocean transportation for such commodities.

H. The financing, sale, and delivery of commodities under this agreement may be terminated by either Government if that Government determines that because of changed conditions the continuation of such financing, sale, or delivery is unnecessary or undesirable.

ARTICLE II

A. Initial Payment

The Government of the importing country shall pay, or cause to be paid, such an initial payment as may be specified in Part II of this agreement. The amount of this payment shall be that proportion of the purchase price (excluding any ocean transportation costs that may be included therein) equal to the percentage specified for initial payment in Part II and payment shall be made in United States dollars in accordance with the applicable purchase authorization.

B. Type of Financing

Sales of the commodities specified in Part II shall be financed in accordance with the type of financing indicated therein, and special provisions relating to the sale are also set forth in Part II and in the applicable annex.

C. Deposit of Payments

The Government of the importing country shall make, or cause to be made, payments to the Government of the exporting country in the currencies, amounts, and at the exchange rates specified elsewhere in this agreement as follows:

1. Payments in the local currency of the importing country (hereinafter referred to as local currency), shall be deposited to the account of the Government of the United States of America in interest bearing accounts in banks selected by the Government of the United States of America in the importing country.

2. Dollar payments shall be remitted to the Treasurer, Commodity Credit Corporation, United States Department of Agriculture, Washington, D.C. 20250, unless another method of payment is agreed upon by the two Governments.

ARTICLE III

A. World Trade

The two Governments shall take maximum precautions to assure that sales of agricultural commodities pursuant to this agreement will not displace usual marketings of the exporting country in these commodities or unduly disrupt world prices of agricultural commodities or normal patterns of commercial trade with countries the Government of the exporting country considers to be friendly to it (referred to in this agreement as friendly countries). In implementing this provision the Government of the importing country shall:

1. insure that total imports from the exporting country and other friendly countries into the importing country paid for with the resources of the importing country will equal at least the quantities of agricultural commodities as may be specified in the usual marketing table set forth in Part II during each import period specified in the table and during each subsequent comparable period in which commodities financed under this agreement are being delivered. The imports of commodities to satisfy these usual marketing requirements for each import period shall be in addition to purchases financed under this agreement.
2. take all possible measures to prevent the resale, diversion in transit, or transshipment to other countries or the use for other than domestic purposes of the agricultural commodities purchased pursuant to this agreement (except where such resale, diversion in transit, transshipment or use is specifically approved by the Government of the United States of America) ; and
3. take all possible measures to prevent the export of any commodity of either domestic or foreign origin which is the same as, or like, the commodities financed under this agreement during the export limitation period specified in the export limitation table in Part II (except as may be specified in Part II or where such export is otherwise specifically approved by the Government of the United States of America).

B. Private Trade

In carrying out this agreement, the two Governments shall seek to assure conditions of commerce permitting private traders to function effectively.

C. Self-Help

Part II describes the program the Government of the importing country is undertaking to improve its production, storage, and distribution of agricultural commodities. The Government of the importing country shall furnish in such form and at such time as may be requested by the Government of the exporting country, a statement of the progress the Government of the importing country is making in carrying out such self-help measures.

D. Reporting

In addition to any other reports agreed upon by the two Governments, the Government of the importing country shall furnish at least quarterly for the supply period specified in Item I, Part II of this agreement and any subsequent comparable period during which commodities purchased under this agreement are being imported or utilized:

1. the following information in connection with each shipment of commodities received under the agreement: the name of each vessel; the date of arrival; the port of arrival; the commodity and quantity received; the condition in which received; the date unloading was completed; and the disposition of the cargo, i.e., stored, distributed locally, or, if shipped where shipped;
2. a statement by it showing the progress made toward fulfilling the usual marketing requirements;
3. a statement of the measures it has taken to implement the provisions of sections A. 2 and 3 of this article; and
4. statistical data on imports and exports by country of origin or destination of commodities which are the same as or like those imported under the agreement.

E. Procedures for Reconciliation and Adjustment of Accounts

The two Governments shall each establish appropriate procedures to facilitate the reconciliation of their respective records of the amounts financed with respect to the commodities delivered during each calendar year. The Commodity Credit Corporation of the exporting country and the Government of the importing country may make such adjustments in the credit accounts as they mutually decide are appropriate.

F. Definitions

For the purposes of this agreement:

1. delivery shall be deemed to have occurred as of the on-board date shown in the ocean bill of lading which has been signed or initialed on behalf of the carrier,
2. import shall be deemed to have occurred when the commodity has entered the country, and passed through customs, if any, of the importing country, and
3. utilization shall be deemed to have occurred when the commodity is sold to the trade within the importing country without restriction on its use within the country or otherwise distributed to the consumer within the country.

G. Applicable Exchange Rate

For the purposes of this agreement, the applicable exchange rate for determining the amount of any local currency to be paid to the

Government of the exporting country shall be a rate which is not less favorable to the Government of the exporting country than the highest of exchange rates legally obtainable in the importing country and which is not less favorable to the Government of the exporting country than the highest of exchange rates obtainable by any other nation. With respect to local currency:

1. As long as a unitary exchange rate system is maintained by the Government of the importing country, the applicable exchange rate will be the rate at which the central monetary authority of the importing country, or its authorized agent, sells foreign exchange for local currency.
2. If a unitary rate system is not maintained, the applicable rate will be the rate (as mutually agreed by the two Governments) that fulfills the requirements of the first sentence of this section G.

H. Consultation

The two Governments shall, upon request of either of them, consult regarding any matter arising under this agreement, including the operation of arrangements carried out pursuant to this agreement.

I. Identification and Publicity

The Government of the Importing country shall undertake such measures as may be mutually agreed prior to delivery for the identification of food commodities at points of distribution in the importing country, and for publicity as provided for in subsection 103(1) of the Act.

PART II - PARTICULAR PROVISIONS

Item I. Commodity Table

Commodity	Supply Period (Calendar Year)	Approximate Maximum Quantity (Metric Tons)	Maximum Export Market Value (\$1,000)
Corn/Grain Sorghums	1972	277, 000	\$15, 000
Corn/Grain Sorghums	1973	277, 000	15, 000
TOTAL			\$30, 000

Item II. Payment Terms

Dollar Credit

1. Initial Payment - 5 percent
2. Currency Use Payment - 10 percent of the dollar amount of the financing by the Government of the exporting country under this agreement is payable upon demand by the Government of the exporting country in amounts as it may determine and in accordance with paragraph 6 of the Dollar Credit Annex applicable to this

agreement. No requests for payment will be made by the Government of the exporting country prior to the first disbursement by the Commodity Credit Corporation under this agreement.

3. Number of Installment Payments – 15
4. Amount of Each Installment Payment – approximately equal annual installments
5. Due Date of First Installment Payment – one year from date of last delivery of commodities in each calendar year
6. Interest Rate – 4½ percent

Item III. Usual Marketing Table

<u>Commodity</u>	<u>Import period</u> (Calendar Year)	<u>Usual Marketing Requirements</u> (Metric Tons)
Corn/Grain Sorghums	1972	255,000
Corn/Grain Sorghums	1973	255,000

Item IV. Export Limitations

A. The export limitation period shall be Calendar Years 1972 and 1973 or any subsequent year during which commodities delivered under this agreement are imported and utilized.

B. For purposes of Part I, Article III A 3 of the agreement, commodities considered the same as or like the commodities financed under this agreement are: for corn/grain sorghums—corn, cornmeal, barley, grain sorghums, rye, oats and any other feedgrain, including mixed feeds containing predominantly such grains.

Item V. Self-Help Measures

The Government of the importing country agrees to:

A. Pursue measures to increase agricultural production productivity through:

1. the support of farmer associations in the development and expansion of small-scale irrigation works;

2. the improvement of vineyards by replanting and by the use of mechanization appropriate to the planned scale of operations;

3. the development of livestock by investing in grassland improvement and farm structures and by high levels of range and herd management.

B. Take steps to increase the economic and technical efficiency of its agricultural marketing by:

1. expanding the network of slaughter and refrigerated distribution centers for livestock;

2. increasing the capacity of storage and merchandising facilities for other agricultural products.

C. Undertake programs of reforestation in order to increase the out-

put of forest products and contribute to other programs of soil and water conservation.

D. Attack problems of rural land tenure, including the problem of fragmented holdings.

E. Increase the rate of investment in rural infrastructures such as farm-to-market roads and rural electrification systems.

F. Institute a program of technical assistance in the Atlantic islands of Portugal.

G. Promote basic and applied research for agriculture in the physical, biological, and social sciences. Such research should be particularly supportive of the above-listed development projects and should be aimed at higher incomes and greater opportunities for remunerative employment for rural people.

Item VI. Economic Development Purposes for Which Proceeds Accruing to Importing Country Are to Be Used

For purposes specified in Item V and for other economic development purposes as may be mutually agreed upon.

Item VII. Ocean Freight Financing

The Government of the exporting country shall bear the cost of ocean freight differential for commodities it requires to be carried in United States flag vessels but, notwithstanding the provisions of paragraph 1 of the Dollar Credit Annex, it shall not finance the balance of the cost of ocean transportation of such commodities.

Item VIII. Other Provisions

A. The currency use payment under Part II, Item II. 2., of this agreement shall be credited against (a) the amount of each year's interest payment due during the period prior to the due date of the first installment payment, starting with the first year, plus (b) the combined payments of principal and interest starting with the first installment payment, until value of the currency use payment has been offset.

B. Notwithstanding paragraph 4 of the Dollar Credit Annex, the Government of the importing country may withhold from deposit in the special account referred to in such paragraph or may withdraw from amounts deposited therein so much of the proceeds accruing to it from the sale of commodities financed under this agreement as is equal to the amount of the currency use payments made by the Government of the importing country.

C. Notwithstanding any other provision of this agreement or the Dollar Credit Annex, the Government of the exporting country will accept only United States dollars for (1) the currency use payment to be made under Part II, Item II. 2. of this agreement and (2) installment payments of principal and interest under Part II, Item II of this agreement.

PART III—FINAL PROVISIONS

A. This agreement may be terminated by either Government by notice of termination to the other Government. Such termination will not reduce any financial obligations the Government of the importing country has incurred as of the date of termination.

B. This agreement shall enter into force upon signature.

IN WITNESS WHEREOF, the respective representatives, duly authorized for the purpose, have signed the present agreement.

DONE at Lisbon, in duplicate, this 30th day of June 1972.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

RIDGWAY B. KNIGHT

Ridgway B. Knight
Ambassador

FOR THE GOVERNMENT OF
PORTUGAL:

RUI PATRICIO

Rui Patricio
Minister of Foreign Affairs

Dollar Credit Annex to the Agreement Between the Government of the United States of America and the Government of Portugal for Sales of Agricultural Commodities

The following provisions apply with respect to the sales of commodities financed on dollar credit terms:

1. In addition to bearing the cost of ocean freight differential as provided in Part I, Article I F of this agreement, the Government of the exporting country will finance on credit terms the balance of the costs for ocean transportation of those commodities that are required to be carried in United States flag vessels. The amount for ocean transportation (estimated) included in any commodity table specifying credit terms does not include the ocean freight differential to be borne by the Government of the exporting country and is only an estimate of the amount that will be necessary to cover the ocean transportation costs to be financed on credit terms by the Government of the exporting country. If this estimate is not sufficient to cover these costs, additional financing on credit terms shall be provided by the Government of the exporting country to cover them.

2. With respect to commodities delivered in each calendar year under this agreement, the principal of the credit (hereinafter referred to as principal) will consist of:

a. The dollar amount disbursed by the Government of the exporting country for the commodities (not including any ocean transportation costs) less any portion of the initial payment payable to the Government of the exporting country, and

b. The ocean transportation costs financed by the Government of the exporting country in accordance with paragraph 1 of this annex (but not the ocean freight differential).

This principal shall be paid in accordance with the payment schedule in Part II of this agreement. The first installment payment shall be due and payable on the date specified in Part II of this agreement. Subsequent installment payments shall be due and payable at intervals of one year thereafter. Any payment of principal may be made prior to its due date.

3. Interest on the unpaid balance of the principal due the Government of the exporting country for commodities delivered in each calendar year under this agreement shall begin on the date of last delivery of these commodities in such calendar year. Interest shall be paid not later than the due date of each installment payment of principal, except that if the date of the first installment is more than a year after such date of last delivery, the first payment of interest shall be made not later than the anniversary date of such date of last delivery and thereafter payment of interest shall be made not later than the due date of each installment payment of principal. For the period from the date the interest begins to the due date for the first installment payment, the interest shall be computed at the initial interest rate specified in Part II of this agreement. Thereafter, the interest shall be computed at the continuing interest rate specified in Part II of this agreement.

4. The Government of the importing country shall deposit the proceeds accruing to it from the sale of commodities financed under this agreement (upon the sale of the commodities within the importing country) in a special account in its name that will be used for the sole purpose of holding the proceeds covered by this paragraph. Withdrawals from this account shall be made for the economic development purposes specified in Part II of this agreement in accordance with procedures mutually satisfactory to the two Governments. The total amount deposited under this paragraph shall not be less than the local currency equivalent of the dollar disbursement by the Government of the exporting country in connection with the financing of the commodities including the related ocean transportation costs other than the ocean freight differential. The exchange rate to be used in calculating this local currency equivalent shall be the rate at which the central monetary authority of the importing country, or its authorized agent, sells foreign exchange for local currency in connection with the commercial import of the same commodities. Any such accrued proceeds that are loaned by the Government of the importing country to private or nongovernmental organizations shall be loaned at rates of interest approximately equivalent to those charged for comparable loans in the importing country. The Government of the importing country shall furnish, in such form and at such times as may be requested by the Government of the exporting country, but

not less frequently than on an annual basis, reports containing relevant information concerning the accumulation and use of these proceeds, including information concerning the programs for which these proceeds are used, and, when the proceeds are used for loans, the prevailing rate of interest for comparable loans in the importing country.

5. The computation of the initial payment under Part I, Article II A of this agreement and all computations of principal and interest under numbered paragraphs 2 and 3 of this annex shall be made in United States dollars.

6. All payments shall be in United States dollars, or, if the Government of the exporting country so elects,

a. The payments shall be made in local currency at the applicable exchange rate specified in Part I, Article III G of this agreement in effect on the date of payment and shall, at the option of the Government of the exporting country, be converted to United States dollars at the same rate, or used by the Government of the exporting country for payment of its obligations in the importing country, or

b. The payments shall be made in readily convertible currencies of third countries at a mutually agreed rate of exchange and shall be used by the Government of the exporting country for payment of its obligations.

POLISH PEOPLE'S REPUBLIC

Fisheries in the Western Region of the Middle Atlantic Ocean

*Agreement extending the agreement of June 13, 1970, as extended,
and the voluntary enforcement scheme of October 5 and De-
cember 31, 1971.*

*Effectuated by exchange of notes
Dated at Warsaw June 28 and 30, 1972;
Entered into force June 30, 1972.*

The Polish Ministry of Foreign Affairs to the American Embassy [¹]

DPT 2112-5-72

Ministerstwo Spraw Zagranicznych Polskiej Rzeczypospolitej Ludowej przesyła wyrazy szacunku Ambasadzie Stanów Zjednoczonych Ameryki w Warszawie i w nawiązaniu do rozmów przeprowadzonych miedzy przedstawicielami Ambasady oraz przedstawicielami Ministerstwa Żeglugi Polskiej Rzeczypospolitej Ludowej ma zaszczyst zaproponować przedłużenie na okres do dnia 30 czerwca 1973 roku ważność Porozumienia miedzy Rządem Polskiej Rzeczypospolitej Ludowej a Rządem Stanów Zjednoczonych Ameryki w sprawie rybołówstwa w zachodniej części Środkowego Oceanu Atlantyckiego, sporządzonego w Waszyngtonie w dniu 13 czerwca 1970 roku, z tym, że na prośbe kłtoregokolwiek z Rządów, przedłożoną co najmniej na sześćdziesiąt dni z góry, przedstawiciele obu Rządów spotkają się w miejscu, które bedzie ustalone przez drugi Rząd, celem zrewidowania, przedłużenia lub zakończenia Porozumienia.

Ministerstwo Spraw Zagranicznych rozumie, że w przypadku przedłużenia na okres do dnia 30 czerwca 1973 roku wspomnianego wyżej Porozumienia, przedłużona zostanie na ten sam okres ważność uzgodnień zawartych w listach, które w związku z podpisaniem tego Porozumienia zostały wymienione w Waszyngtonie w dniu 13 czerwca 1970 roku pomiędzy przewodniczącym delegacji Rządu Polskiej Rzeczypospolitej Ludowej i przewodniczącym delegacji Rządu Stanów Zjednoczonych Ameryki oraz w podpisany przez nich w tym samym dniu dokumencie pod nazwą "Agreed Minutes".

Ministerstwo Spraw Zagranicznych rozumie ponadto, że system dobrowolnej wspólnej kontroli określony w załączniku do Noty Ambasady Nr 66 z dnia 5 października 1971 roku i Noty Ministerstwa

^¹ For the English language text, see p. 1255.

Spraw Zagranicznych z dnia 31 grudnia 1971 roku, będzie również obowiązywał przez okres ważności Porozumien.

Ministerstwo Spraw Zagranicznych proponuje, aby w przypadku wyrażenia przez Ambasadę zgody na powyższe, niniejsza nota wraz z odpowiedzią na nią stanowiły Porozumienie, które wejdzie w życie w dniu otrzymania noty będącej odpowiedzią.

Ministerstwo Spraw Zagranicznych korzysta z okazji, aby ponownie Ambasadzie wyrazić wysokiego poważania.

WARSZAWA, dnia 28 czerwca 1972 roku.

[SEAL]

Ambasada

STANÓW ZJEDNOCZONYCH AMERYKI
w Warszawie

The American Embassy to the Polish Ministry of Foreign Affairs

No. 47

The Embassy of the United States of America acknowledges receipt of the Ministry of Foreign Affairs' note of June 28, 1972, which reads as follows in translation:

"The Ministry of Foreign Affairs of the Polish People's Republic presents its compliments to the Embassy of the United States of America in Warsaw and, with reference to the talks conducted between representatives of the Embassy and representatives of the Ministry of Shipping of the Polish People's Republic, has the honor to propose an extension for the period until June 30, 1973, of the validity of the Agreement between the Government of the Polish People's Republic and the Government of the United States of America regarding Fisheries in the Western Region of the Middle Atlantic Ocean, concluded in Washington on the 13th day of June, 1970, [] provided that at the request of either government, made at least sixty days in advance, representatives of the two governments will meet at a site to be determined by the other government to revise, extend, or terminate the Agreement.

"The Ministry of Foreign Affairs understands that in the case of an extension for the period until June 30, 1973, of the validity of the above-mentioned Agreement, the validity of the understandings contained in the letters which, in connection with the signing of that Agreement, were exchanged in Washington on the 13th day of June, 1970, between the Chairman of the delegation of the Polish People's Republic and the Chairman of the delegation of the United

¹ TIAS 6890, 7264; 21 UST 1335; 22 UST 2190.

States of America, as well as in the document signed by them on the same day under the title "Agreed Minutes," will be extended for the same period.

"The Ministry of Foreign Affairs understands further that the voluntary scheme of joint enforcement set forth in the enclosure to the Embassy's note no. 66 of October 5, 1971, and to the Ministry of Foreign Affairs note of December 31, 1971,^[1] shall likewise remain in effect for the period of validity of the Agreement.

"The Ministry of Foreign Affairs proposes that if the Embassy agrees to the above, the Note, together with the reply to it, shall constitute an Agreement, which will enter into force on the day of the receipt of the Note constituting such reply.

"The Ministry of Foreign Affairs avails itself of the occasion to renew to the Embassy its expressions of high consideration. Warsaw, June 28, 1972."

The Embassy of the United States confirms the above understandings on behalf of the Government of the United States of America and agrees that the Ministry's note and this reply shall constitute an Agreement between the two governments.

EMBASSY OF THE UNITED STATES OF AMERICA,
WARSAW, June 30, 1972.

¹ TIAS 7264; 22 UST 2194.

SPAIN
Air Transport Services

*Provisional agreement effected by exchange of notes
Dated at Madrid June 28 and 30, 1972;
Entered into force June 30, 1972.*

The Spanish Ministry of Foreign Affairs to the American Embassy [1]

MINISTERIO DE ASUNTOS EXTERIORES

Nota Verbal

Nºm 200

El Ministerio de Asuntos Exteriores saluda atentamente a la Embajada de los Estados Unidos en España y tiene la honra de referirse a las Notas Verbales nº 180 del Ministerio y nº 345 de la Embajada relativas ambas al tema de la concesión a la Compañía IBERIA por parte de las autoridades de Estados Unidos de una contrapartida adecuada para que las autoridades españolas, a su vez, prorroguen provisionalmente, durante la actual temporada de verano, la autorización a la Compañía Panamerican World Airways para operar la ruta Miami-San Juan-Lisboa-Madrid-Roma.

Con el fin de examinar esta situación se han celebrado conversaciones en Madrid, como sabe esa Embajada, los días 25, 26 y 27 de mayo último entre una delegación de Estados Unidos y otra de España.

Estas conversaciones han permitido llegar a un acuerdo para un intercambio provisional de rutas sobre los puntos siguientes:

1º.- Las autoridades españolas otorgarán a la Compañía Panamerican World Airways la oportuna autorización para continuar operando, bajo las mismas condiciones de capacidad que las operaciones actuales, dos frecuencias semanales en la ruta Miami-San Juan-Lisboa-Madrid-Roma, con derechos de tráfico en los tramos correspondientes a Lisboa y Roma.

2º.- Las autoridades de Estados Unidos otorgarán a la Compañía IBERIA las autorizaciones necesarias para operar una nueva ruta Madrid-Lisboa-San Juan-Miami y puntos más allá en Nicaragua, Honduras y Costa Rica con derechos de tráfico en Lisboa para San Juan y Miami y más allá y en Miami con respecto a los

¹ For the English language text, see p. 1259.

mismos puntos. Queda entendido que todos los vuelos que sirvan Miami en cualquier dirección harán escala, además, en San Juan, mientras así opere Panamerican World Airways, y que todos los vuelos que sirvan puntos en América Central también servirán Miami.

3º.-Las Autoridades de Estados Unidos permitirán a la Compañía IBERIA continuar operando la ruta Las Palmás-Nueva York y viceversa en las condiciones presentes.

4º.-Las Autoridades de Estados Unidos otorgarán a la Compañía IBERIA derechos de "stop over" en San Juan respecto a Miami, en ambos sentidos.

5º.-Excepto en los casos mencionados en el apartado 2º, los puntos en cualquiera de las rutas descritas más arriba pueden ser suprimidos en todos los vuelos a opción de la Compañía aérea transportista.

6º.-En razón de la demanda actualmente existente en el mercado Miami-San Juan-Madrid, ambas delegaciones reconocen la necesidad de establecer inmediatamente una tercera frecuencia que atienda a las necesidades del público que desea viajar por dicha ruta. Esta tercera frecuencia será realizada por IBERIA tan pronto esté dispuesta a iniciar sus operaciones en la citada ruta. Entretanto, las Autoridades españolas otorgarán a la Compañía Panamerican World Airways, las autorizaciones correspondientes para operar esta tercera frecuencia en la citada ruta en las mismas condiciones de capacidad de las dos frecuencias que se le otorgan en el apartado 1º anterior.

7º.-Con el fin de garantizar a la Compañía IBERIA la posibilidad de operar esta tercera frecuencia, las Autoridades de Estados Unidos—inmediatamente después de recibir la solicitud de dicha Compañía para obtener la oportuna autorización—concederán tal autorización con carácter urgente y expeditivo. Queda entendido que Panamerican World Airways e IBERIA pueden utilizar equipo similar.

8º.-En el caso de que IBERIA decidiese operar mas de dos frecuencias semanalmente, las autoridades españolas otorgarán al mismo tiempo a Panamerican World Airways la autorización correspondiente para operar un número de frecuencias iguales a las operadas por IBERIA, quedando entendido que Panamerican World Airways e IBERIA pueden utilizar equipo similar.

9º.-Queda entendido que las respectivas concesiones de las autoridades de ambos países serán otorgadas al margen del vigente Acuerdo de Transporte Aéreo de 2 de diciembre de 1944 y sus enmiendas. Sin embargo, los servicios previstos en estas autorizaciones serán operados de conformidad con las disposiciones de dicho Acuerdo. Queda igualmente entendido que los acuerdos a que se refiere esta Nota Verbal son provisionales, sin perjuicio de las posiciones previamente expresadas por cada parte sobre los temas en discusión, y serán válidos hasta el 31 de octubre de 1972, a no ser que se acordara de otra manera.

En el caso de que la Embajada de los Estados Unidos estuviese de acuerdo con los términos de la presente Nota Verbal, el Ministerio de Asuntos Exteriores tiene la honra de proponer que esta Nota y la de contestación de la Embajada a la misma constituyan un acuerdo entre nuestros dos Gobiernos que entrará en vigor en la fecha de la Nota de respuesta de la Embajada.

El Ministerio de Asuntos Exteriores aprovecha la ocasión para reiterar a esa Embajada el testimonio de su alta consideración.

MADRID, 28 de Junio de 1972.

P.M.

The American Embassy to the Spanish Ministry of Foreign Affairs

No. 479

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs and has the honor to refer to the Ministry's Note Verbale No. 269 of June 28, 1972, which reads as follows:

"The Ministry of Foreign Affairs presents its compliments to the Embassy of the United States and has the honor to refer to the Ministry's Note Verbale No. 180 and to the Embassy's Note Verbale No. 345, [^] both relating to the subject of a concession to Iberia by the United States authorities of an adequate counterpart so that the Spanish authorities, in turn, may provisionally extend, during the present summer season, authorization to Pan American to operate the route Miami-San Juan-Lisbon-Madrid-Rome.

"In order to examine this situation, there have been held, as the Embassy knows, conversations in Madrid on May 25, 26, and 27, 1972, between delegations of the United States and Spain. These conversations permitted reaching an agreement for the provisional exchange of routes over the following points:

"1) The Spanish authorities will grant to Pan American timely authorization to continue operating, under the same conditions of capacity as in the present operations, two weekly frequencies on the Miami-San Juan-Lisbon-Madrid-Rome route, with traffic rights on sectors corresponding to Lisbon and Rome.

"2) The authorities of the United States will grant to Iberia the necessary authorizations to operate a new route, Madrid-Lisbon-San Juan-Miami and points beyond in Nicaragua, Honduras, and Costa Rica, with traffic rights at Lisbon for San Juan and Miami and beyond and at Miami with respect to the same points. It is understood that all flights that serve Miami in any direction will also call at San Juan, while Pan American thus

¹ Not printed.

operates, and that all flights that serve points in Central America will also serve Miami.

"3) The authorities of the United States will permit Iberia to continue operating the Las Palmas-New York route and vice versa in present conditions.

"4) The authorities of the United States will grant Iberia "stopover" rights at San Juan with respect to Miami, in both directions.

"5) Except as provided in paragraph 2, the points on any of the routes described above may be omitted on all flights, at the option of the air carrier company.

"6) By reason of the demand presently existing in the Miami-San Juan-Madrid market, both parties recognize the necessity of establishing immediately a third frequency to attend to the needs of the public that wishes to travel on such route. This third frequency will be carried out by Iberia as soon as it is ready to initiate its operations on the cited route. In the meantime, the Spanish authorities will grant Pan American corresponding authorizations to operate this third frequency on the cited route, under the same conditions of capacity as those of the two frequencies which are granted to it under paragraph 1 above.

"7) In order to guarantee to Iberia the possibility of operating this third frequency, the United States authorities—immediately after receiving a request from that company to obtain timely authorization—will grant such an authorization on an urgent and expeditious basis. It is understood that Pan American and Iberian can utilize comparable equipment.

"8) In the event that Iberia should decide to operate more than two frequencies a week, the Spanish authorities will grant, at the same time, to Pan American the corresponding authorization to operate a number of frequencies equal to those operated by Iberia, it being understood that Pan American and Iberia can utilize comparable equipment.

"9) It is understood that respective concessions by the authorities of both countries will be granted independently of the existing Air Transport Agreement of December 2, 1944 and amendments thereto. [1] However, the services foreseen in these authorizations will be operated in conformity with the provisions of such Agreement. It is likewise understood that the agreements to which this Note Verbale refers are provisional, without prejudice to the positions previously expressed by each party regarding subjects under discussion, and which will be valid through October 31, 1972, unless otherwise agreed.

¹ EAS 432, TIAS 2131, 2132, 2140, 3022, 7105; 58 Stat. 1473; 62 Stat. 4078, 4081; 1 UST 732; 5 UST 1483; 22 UST 578.

"In the event that the Embassy should be in agreement with the terms of the present Note Verbale, the Ministry of Foreign Affairs has the honor of proposing that this Note and the Embassy's reply thereto constitute an agreement between our two governments, which will become effective on the date of the Embassy's reply Note."

The Embassy has the honor to inform the Ministry that the Government of the United States concurs in the foregoing arrangements and considers that the Ministry's Note and this reply constitute an agreement between the two governments.

The Embassy of the United States of America wishes to take this opportunity to reiterate to the Ministry of Foreign Affairs the assurances of its highest consideration.

EMBASSY OF THE UNITED STATES OF AMERICA,
Madrid, June 30, 1972.

HONDURAS

Trade: Meat Imports

*Agreement effected by exchange of notes
Signed at Tegucigalpa March 2 and May 3, 1972;
Entered into force May 3, 1972.*

*The American Ambassador to the Honduran Minister of
Economy and Commerce*

No. 39

TEGUCIGALPA, HONDURAS, March 2, 1972

EXCELLENCY:

I have the honor to refer to discussions between representatives of our two governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the Tariff Schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the Tariff Schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including Honduras, constituting the 1971 restraint program concerning shipments of such meats to the United States.

With the understanding that similar agreements also will be concluded for the calendar year 1972 with the governments of all the countries that participated in the 1971 restraint program, I have the honor to propose the following agreement between our two governments:

1. On the basis of the foregoing, and subject to paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1,155 million pounds and the Government of Honduras and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into the United States.
2. The Government of Honduras shall limit exports of the aforementioned meats so that the quantity of such meats originating in Honduras and during the calendar year 1972 entered, or withdrawn from warehouse, for consumption in the United States does not exceed 16.7 million pounds or such higher figure as may result from adjustments pursuant to paragraph 4. Such regulation shall not prevent any excess meat of Honduran origin from being deposited

in United States warehouses under the system known as "in bond" as long as adequate storage facilities are not available in Honduras.

3. The Government of the United States of America may limit imports of such meats of Honduran origin, whether by direct or indirect shipments, through issuance of regulations governing the entry, or withdrawal from warehouse, for consumption in the United States, provided that:

(a) such regulations shall not be employed to govern the timing of entry, or withdrawal from warehouse, for consumption of such meat from Honduras; and

(b) such regulations shall be issued only after consultation with the Government of Honduras pursuant to paragraph 6, and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry, or withdrawal from warehouse for consumption, in the calendar year 1972 will exceed the quantity specified in paragraph 2, as it may be increased pursuant to paragraph 4.

4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for Honduras, such increase or estimated shortfall shall be allocated to Honduras in the proportion that 16.7 million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in the 1972 restraint program.

5. The Government of the United States of America shall separately report meats rejected as unacceptable for human consumption under United States inspection standards, and such meats will not be regarded as part of the quantity described in paragraph 2.

6. The Government of Honduras and the Government of the United States of America shall consult promptly upon the request of either government regarding any matter involving the application, interpretation, or implementation of this agreement, and regarding increase in the total quantity permissible under the restraint program and allocation of shortfall.

7. In the event that quotas on imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for Honduras shall not include the period between October 1, 1968 and December 31, 1972.

I have the honor to propose that, if the foregoing is acceptable to the Government of Honduras, this note together with your Excellency's confirmatory reply constitute an agreement between our two governments which shall enter into force on the date of your reply.

Accept, Excellency, the renewed assurances of my highest consideration.

HEWSON A. RYAN

His Excellency

Lic. RUBÉN MONDRAGÓN

Minister of Economy and Commerce

Tegucigalpa, D. C.

The Honduran Minister of Economy to the American Ambassador

SECRETARIA DE ECONOMIA

REPÚBLICA DE HONDURAS

Nº SE/76

TEGUCIGALPA, D.C., 3 de mayo de 1972

SEÑOR EMBAJADOR:

Tengo el honor de referirme a su nota relacionada con la importación los Estados Unidos de carne fresca, refrigerada o congelada de ganado vacuno (rubro 106.10 del Arancel de los Estados Unidos) y carne fresca, refrigerada o congelada de ganado ovino, caprino, salvo corderos (rubro 106.20 del Arancel de los Estados Unidos) durante el año civil de 1972 y cuyo texto en idioma español es el siguiente:

"Excellencia: Tengo el honor de referirme a las conversaciones entre representantes de nuestros dos gobiernos relacionadas con las importaciones a los Estados Unidos, para consumo de carne fresca, refrigerada o congelada de ganado vacuno (rubro 106.10 del Cuadro de Tarifas de los EE.UU.) y carne fresca, refrigerada o congelada de ganado ovino y caprino, salvo corderos (rubro 106.20 del Cuadro de Tarifas de los EE.UU.) durante el año civil de 1972, y a los acuerdos entre los Estados Unidos y otros países, incluyendo Honduras, que constituyen el programa de restricciones para 1971 en relación con los envíos de tales carnes a los Estados Unidos.

Con el entendimiento de que acuerdos similares se concertarán también para el año civil de 1972 con los gobiernos de todos los países que participaron en el programa de restricciones para 1971, tengo el honor de proponer el siguiente acuerdo entre nuestros dos gobiernos:

1.—Con base en lo anterior, y conforme a lo indicado en el párrafo 4, la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972, por parte

de países que participen en el programa de restricciones será de 1,155 millones de libras y el Gobierno de Honduras y el Gobierno de los Estados Unidos de América asumirán respectivamente las obligaciones que se indican a continuación para reglamentar las exportaciones e importaciones a los Estados Unidos.

2.—El Gobierno de Honduras limitará las exportaciones de las carnes antes señaladas con el fin de que la cantidad de dichas carnes cuyo origen es Honduras y que durante el año de 1972 hayan tenido entrada o salida de almacén para el consumo en los Estados Unidos no exceda de 16.7 millones de libras, o la cantidad mayor que pueda resultar de los ajustes realizados en virtud del párrafo 4.

Esta disposición no impedirá que el exceso de carne de origen hondureño se deposite en almacenes de los Estados Unidos bajo la forma "IN BOND" mientras en Honduras no se tengan las facilidades del almacenamiento adecuado.

3.—El Gobierno de los Estados Unidos de América podrá limitar las importaciones de tales carnes cuyo origen es Honduras, bien sea en envíos por vía directa o indirecta, por medio de la promulgación de reglamentos que gobiernen la entrada o salida de almacén de las carnes para consumo en los Estados Unidos, siempre que:

(A) Tales reglamentos no se empleen para gobernar las fechas o momento de entrada o salida de almacén para el consumo de tales carnes de Honduras; y

(B) Tales reglamentos se promulguen solamente después de que se hayan celebrado consultas con el Gobierno de Honduras conforme al párrafo 6, y solamente bajo circunstancias en las que es obvio, después de celebrarse tales consultas, que la cantidad de tales carnes que probablemente se presentará para su entrada o salida de almacén para el consumo en el año civil de 1972, excederá la cantidad que se especifica en el párrafo 2, en la medida en que pueda ser aumentada en virtud del párrafo 4.

4.—El Gobierno de los Estados Unidos de América podrá aumentar la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972 de países que participen en el programa de restricciones, o podrá adjudicar cualquier déficit calculado en una parte de la cantidad del programa de restricciones, o en los cálculos iniciales de importaciones de países que no participen en el programa de restricciones seguidamente, si no se ha calculado un déficit para Honduras, tal aumento o déficit calculado será adjudicado a Honduras en la proporción que 16.7 millones de libras tienen con el total de participaciones iniciales de todos los países participantes en el programa de restricciones y que se calcula no tendrán déficit en el año civil de 1972. La adjudicación anterior no se aplicará a cualesquiera aumentos en el cálculo de importaciones de países que no participen en el programa de restricciones para el año de 1972.

5.—El Gobierno de los Estados Unidos de América rendirá informes por separado, acerca de carnes rechazadas por no ser aptas para el consumo humano conforme a las normas de inspección de los Estados Unidos, y tales carnes no se considerarán como parte de la cantidad que se indica en el párrafo 2.

6.—El Gobierno de Honduras y el Gobierno de los Estados Unidos de América celebrarán consultas lo antes posible después de que uno de los gobiernos las solicite, en relación con cualquier asunto sobre la aplicación, interpretación o puesta en práctica del presente acuerdo, y sobre aumentos de la cantidad total permitida conforme el programa de restricciones y la adjudicación del déficit.

7.—En el caso en que sea necesario implantar cuotas para las importaciones de tales carnes, el período representativo que el Gobierno de los Estados Unidos de América empleará para calcular la cuota de Honduras no incluirá el período entre el primero de octubre de 1968 y el 31 de diciembre de 1972.

Tengo el honor de proponer que si lo anterior es aceptable para el Gobierno de Honduras, la presente nota, junto con la nota de respuesta de Vuestra Excelencia confirmando lo antedicho, constituyan un acuerdo entre nuestros dos Gobiernos que entrará en vigor en la fecha de la respuesta de Vuestra Excelencia.

Aprovecho esta oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más alta consideración (f) HEWSON A. RYAN, Embajador. Su Excelencia Lic. Rubén Mondragón, Ministro de Economía y Comercio, Tegucigalpa, D.C.”.

En contestación a la nota en referencia, me complace expresarle que el Gobierno de Honduras está de acuerdo con lo propuesto por el Gobierno de los Estados Unidos de América, pero que dicho acuerdo de ninguna manera significa que Honduras acepta como cuota básica de participación en el mercado norteamericano de carne de ganado vacuno, la contenida en el mismo.

Reiteradamente hemos manifestado que ésta es insuficiente, y que no se ha dado a nuestro país un trato adecuado, puesto que, en ningún momento se ha considerado su capacidad real productora de carne exportable; lo cual, ha quedado plenamente demostrado al pasar de 14.0 millones de libras en 1968 a 30.7 millones en 1971. Para el presente año se estima que la exportación total de carne de Honduras será de 40.0 millones de libras, y que con la cuota asignada no se cubre ni el 50% de la capacidad exportable del país.

El aumento de exportación de carne para el presente año se debe a mayores inversiones realizadas por la mayoría de las empacadoras de carne que han ampliado sus instalaciones con equipo moderno de refrigeración, cortadoras eléctricas, básculas, etc. Además en el Sur de la República se está terminando de construir una nueva empacadora de carne a la cual ya se le asignó cuota para el presente año.

Consideramos que la asignación de cuota de carne por parte de los Estados Unidos hacia Honduras en el presente año, no se ha tomado en cuenta la capacidad real de producción de carne exportable, tal como lo demuestran las cifras mencionadas anteriormente.

Asimismo, nuestro Gobierno cree conveniente informar al Gobierno de los Estados Unidos, que considera que el sistema de asignación de déficit, y el período histórico de exportación escogido para aplicar eventualmente el sistema de cuotas, afectan negativamente la posición ya desfavorable de nuestro país, en cuanto al monto de la cuota básica; pues no toman en cuenta las exportaciones recientes efectuadas durante 1971.

De usted con toda consideración y respeto.

[SEAL]

EFRÁN RECONCO MURILLO

Efraín Reconco Murillo
Ministro de Economía por la Ley

Excelentísimo Señor

HEWSON A. RYAN

Embajador de los Estados Unidos

Su Despacho

Translation

DEPARTMENT OF ECONOMY
REPUBLIC OF HONDURAS

No. SE/76

TEGUCIGALPA, D.C., May 3, 1972

Mr. AMBASSADOR:

I have the honor to refer to your note relating to the importation into the United States of fresh, chilled, or frozen cattle meat (Item 106.10 of the Tariff Schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the Tariff Schedules of the United States) during the calendar year 1972, the Spanish text of which is as follows:

[For the English language text, see p. 1262.]

In reply to the note in reference I am happy to inform you that the proposal of the Government of the United States of America is acceptable to the Government of Honduras, but the aforesaid agreement in no way signifies that Honduras accepts the quota contained therein as a basic quota of participation in the United States market of cattle meat.

We have repeatedly stated that the quota is insufficient and that our country has not received an adequate arrangement inasmuch as its real productive capacity of exportable meat has at no time been

considered; this is fully demonstrated by an increase from 14 million pounds in 1968 to 30.7 million pounds in 1971. It is estimated that total meat exports from Honduras this year will be 40 million pounds and that the assigned quota does not cover even 50 percent of the country's export capacity.

The increase in the export of meat this year is due to greater investments by the majority of the meat packers who have expanded their facilities with modern refrigeration equipment, electric cutting tools, scales, etc. Further, a new meat packing plant is being completed in the southern part of the Republic which has already been assigned a quota for this year.

We consider that, in assigning a meat quota to Honduras this year, the United States has not taken into account Honduras' real capacity to produce exportable meat as shown by the figures cited above.

At the same time our Government thinks it proper to inform the United States Government that it considers the system of allocating shortfalls and the export period chosen for possibly applying the quota system have a negative effect on the already unfavorable position of our country with respect to the amount of the basic quota since they do not take into account the exports made during 1971.

I remain, with all consideration and respect,

[SEAL]

EFRÁN RECONCO MURILLO

Efraín Reconco Murillo
Minister of Economy

His Excellency

HEWSON A. RYAN,

*Ambassador of the United States,
Tegucigalpa.*

AUSTRALIA

Trade: Meat Imports

*Agreement effected by exchange of notes
Signed at Washington May 17, 1972;
Entered into force May 17, 1972.*

The Secretary of State to the Australian Ambassador

DEPARTMENT OF STATE
WASHINGTON

MAY 17, 1972

EXCELLENCY:

I have the honor to refer to discussions between representatives of our two Governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the Tariff Schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the Tariff Schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including Australia, constituting the 1971 restraint program concerning shipments of such meats to the United States.

I have the honor to inform you that the Governments of all of the countries that participated in the 1971 restraint program have agreed to enter into similar agreements for the calendar year 1972. These agreements are being embodied in exchanges of notes between the Government of the United States of America and the Governments of the respective countries.

I have the honor to propose that the agreement between our two Governments should provide as follows:

1. On the basis of the foregoing, and subject to paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1,155 million pounds and the Government of Australia and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into, the United States.

2. The Government of Australia shall limit the quantity of such meats exported from Australia as direct shipments on a through bill of lading to the United States for entry or withdrawal from warehouse for consumption during the calendar year 1972 to 600.4 million pounds or such higher figure as may result from adjustments pursuant to paragraph 4.
3. The Government of the United States of America may limit imports of such meats of Australian origin, whether by direct or indirect shipments, through issuance of regulations governing the entry, or withdrawal from warehouse, for consumption in the United States, provided that, with respect to imports which are direct shipments from Australia: (a) such regulations shall not be employed to govern the timing of entry or withdrawal from warehouse for consumption of such meat from Australia; and (b) such regulations shall be issued only after consultation with the Government of Australia pursuant to paragraph 6 and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry or withdrawal from warehouse for consumption in the calendar year 1972 will exceed the quantity specified in paragraph 2, as it may be increased pursuant to paragraph 4.
4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for Australia, such increase or estimated shortfall shall be allocated to Australia in the proportion that 600.4 million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in the 1972 restraint program.
5. The Government of the United States of America shall separately report meats which have been refused entry because of failure to meet appropriate standards prescribed pursuant to the Federal Meat Inspection Act, as amended, [1] and such meats will not be regarded as part of the quantity described in paragraph 2.
6. The Government of Australia and the Government of the United States of America shall consult promptly upon the request of either Government regarding any matter involving the application, interpretation or implementation of this agreement, and re-

¹34 Stat. 1260; 81 Stat. 584; 21 U.S.C. § 603 et seq.

garding increase in the total quantity permissible under the restraint program and allocation of shortfall. In particular, consultations regarding these matters and the market situation shall be held before the beginning of each calendar quarter.

7. In the event that quotas on the imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for Australia shall not include the period between October 1, 1968 and December 31, 1972.
8. (a) To enable both Governments to follow progress under this agreement, the Government of the United States of America shall provide to the Government of Australia as soon as possible after the end of each month:
 - (i) Details from all supplying countries of imports into the United States to that date.
 - (ii) An estimate of the expected supply/shipment position by country and in total.

(b) As soon as possible after the end of each month the Government of Australia shall provide to the Government of the United State of America details of scheduled arrivals to December 31, 1972, ship by ship and port by port, based on actual loadings in Australia.

I have the honor to propose that, if the foregoing is acceptable to the Government of Australia, this note together with Your Excellency's confirmatory reply, shall constitute an agreement between our two Governments which shall enter into force on the date of your reply.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

WILLIS C. ARMSTRONG

His Excellency

SIR JAMES PLIMSOLL, C.B.E.,
Ambassador of Australia.

The Australian Ambassador to the Secretary of State

Note No. 185/72

MAY 17, 1972

SIR,

I have the honour to refer to your note of today's date which reads as follows:

"I have the honor to refer to discussions between representatives of our two Governments relating to the importation into the United

TIAS 7400

States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the Tariff Schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the Tariff Schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including Australia, constituting the 1971 restraint program concerning shipments of such meats to the United States.

"I have the honor to inform you that the Governments of all of the countries that participated in the 1971 restraint program have agreed to enter into similar agreements for the calendar year 1972. These agreements are being embodied in exchanges of notes between the Government of the United States of America and the Governments of the respective countries.

"I have the honor to propose that the agreement between our two Governments should provide as follows:

1. On the basis of the foregoing, and subject to paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1155 million pounds and the Government of Australia and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into, the United States.
2. The Government of Australia shall limit the quantity of such meats exported from Australia as direct shipments on a through bill of lading to the United States for entry or withdrawal from warehouse for consumption during the calendar year 1972 to 600.4 million pounds or such higher figure as may result from adjustments pursuant to paragraph 4.
3. The Government of the United States of America may limit imports of such meats of Australian origin, whether by direct or indirect shipments, through issuance of regulations governing the entry, or withdrawal from warehouse, for consumption in the United States, provided that, with respect to imports which are direct shipments from Australia:
 - (a) such regulations shall not be employed to govern the timing of entry or withdrawal from warehouse for consumption of such meat from Australia; and
 - (b) such regulations shall be issued only after consultation with the Government of Australia pursuant to paragraph 6, and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry or withdrawal from warehouse for consumption in the calendar year 1972 will exceed the quantity specified in paragraph 2, as it may be increased pursuant to paragraph 4.

4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for Australia, such increase or estimated shortfall shall be allocated to Australia in the proportion that 600.4 million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in 1972 restraint program.
5. The Government of the United States of America shall separately report meats which have been refused entry because of failure to meet appropriate standards prescribed pursuant to the Federal Meat Inspection Act, as amended, and such meats will not be regarded as part of the quantity described in paragraph 2.
6. The Government of Australia and the Government of the United States of America shall consult promptly upon the request of either Government regarding any matter involving the application, interpretation or implementation of this agreement, and regarding increase in the total quantity permissible under the restraint program and allocation of shortfall. In particular, consultations regarding these matters and the market situation shall be held before the beginning of each calendar quarter.
7. In the event that quotas on the imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for Australia shall not include the period between October 1, 1968 and December 31, 1972.
8. (a) To enable both Governments to follow progress under this agreement, the Government of the United States of America shall provide to the Government of Australia as soon as possible after the end of each month:
 - (i) Details from all supplying countries of imports into the United States to that date.
 - (ii) An estimate of the expected supply/shipment position by country and in total.

(b) As soon as possible after the end of each month the Government of Australia shall provide to the Government of the United States of America details of scheduled arrivals to De-

cember 31, 1972, ship by ship and port by port, based on actual loadings in Australia.

"I have the honor to propose that, if the foregoing is acceptable to the Government of Australia, this note together with your Excellency's confirmatory reply, shall constitute an agreement between our two Governments which shall enter into force on the date of your reply."

I have the honour to confirm that the foregoing is acceptable to the Government of the Commonwealth of Australia which agrees that your note together with this reply shall constitute an agreement between our two Governments on this matter.

Accept, Sir, the renewed assurances of my highest consideration.

J. PLIMSOLL

(J. Plimsoll)
Ambassador

The Honourable WILLIAM P. ROGERS,
Secretary of State

LIBERIA
Agricultural Commodities

*Agreement signed at Monrovia April 26, 1972;
Entered into force April 26, 1972.*

**AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED
STATES OF AMERICA AND THE GOVERNMENT OF THE
REPUBLIC OF LIBERIA FOR SALES OF AGRICULTURAL
COMMODITIES**

The Government of the United States of America and the Government of the Republic of Liberia have agreed to the sales of agricultural commodities specified below. This Agreement shall consist of the Preamble, Parts I and III, and the Dollar Credit Annex of the October 23, 1967 Agreement, [¹] and the following Part II:

PART II - PARTICULAR PROVISIONS

Item I. Commodity Table:

<u>Commodity</u>	<u>Supply Period</u> (United States Fiscal Year)	<u>Approximate Maximum Quantity</u> (Metric Tons)	<u>Maximum Export Market Value</u> (1,000)
Rice	1972	7, 500	\$1, 281
		TOTAL	\$1, 281

Item II. Payment Terms:

Dollar Credit

1. Initial Payment - 7.5 percent
2. Currency Use Payment - 5 percent of the dollar amount of the financing by the Government of the exporting country under this agreement is payable upon demand by the Government of the exporting country in amounts as it may determine and in accordance with paragraph 6 of the Dollar Credit Annex applicable to

¹ TIAS 6363; 18 UST 2777.

this agreement. No requests for payment will be made by the Government of the exporting country prior to the first disbursement by the Commodity Credit Corporation under this agreement.

3. Number of Installment Payments - 19
4. Amount of Each Installment Payment - approximately equal annual amounts
5. Due Date of First Installment Payment - 2 years after the date of last delivery of commodities in each calendar year
6. Initial Interest Rate - 2 percent
7. Continuing Interest Rate - 3 percent

Item III. Usual Marketing Table:

<u>Commodity</u>	<u>Import Period</u> (United States Fiscal Year)	<u>Usual Marketing Requirements</u>
Rice	1972	41,000 metric tons (of which at least 35,000 metric tons shall be imported from the U.S.A.)

Item IV. Export Limitations:

- A. The export limitation period shall be United States Fiscal Year 1972 or any subsequent United States Fiscal Year during which said commodity financed under this agreement is being imported or utilized.
- B. For the purposes of Part I, Article III A 3 of the agreement, the commodities considered to be the same as or like the commodities imported under this agreement are: for rice—paddy, brown rice, and milled rice.

Item V. Self-Help Measures:

- A. Continue to give high priority to the agricultural development portion of the annual budget. Eighty-five percent of the funds generated from the sale of PL 480 rice will be devoted to the development programs of the Ministry of Agriculture. These funds are in addition to and not part of the increased rice development fund provided by the Government of Liberia. Further, proceeds of PL 480 sales will be placed in segregated account at the Treasury for use of the Ministry of Agriculture.
- B. Continue to implement the newly established rice marketing program which provides:
 1. minimum price at a level adequate to provide incentive for increased production.
 2. milling centers in more productive areas.
 3. GOL or representative will be prepared to buy rough rice throughout Liberia at the minimum price.
- C. Continue to increase crop research and varietal trials. Research and trials include food crops suitable for rotation with rice.

D. Continue support to the soil survey program with emphasis on training students and Ministry of Agriculture employees in soil analysis to determine areas best suited for crop production.

Item VI. Economic Development Purposes for Which Proceeds Accruing to the Importing Country are to be Used:

For the purposes specified in Item V and for other economic development purposes as may be mutually agreed upon.

Item VII. Other Provisions:

A. The Government of the exporting country shall bear the cost of ocean freight differential for commodities it requires to be carried in United States flag vessels but, notwithstanding the provisions of paragraph 1 of the Dollar Credit Annex, it shall not finance the balance of the cost of ocean transportation of such commodities.

B. The currency use payment under Part II, Item 2 of this agreement shall be credited against (a) the amount of each year's interest payment due during the period prior to the due date of the first installment payment, starting with the first year, plus (b) the combined payments of principal and interest starting with the first installment payment, until value of the currency use payment has been offset.

C. Notwithstanding paragraph 4 of the Dollar Credit Annex, the Government of the exporting country may withhold from deposit in the special account referred to in such paragraph or may withdraw from amounts deposited therein so much of the proceeds accruing to it from the sale of commodities financed under this agreement as is equal to the amount of the currency use payments made by the Government of the importing country.

IN WITNESS WHEREOF, the respective representatives, duly authorized for the purpose, have signed the present agreement.

Done at Monrovia, Liberia, in duplicate, this Twenty-Sixth day of April, 1972.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

Samuel Z. Westerfield, Jr.
SAMUEL Z. WESTERFIELD JR.
*Ambassador of the United States
of America to Liberia*

FOR THE GOVERNMENT OF THE
REPUBLIC OF LIBERIA:

James T. Phillips
JAMES T. PHILLIPS
Minister of Agriculture
Stephen A. Tolbert
STEPHEN TOLBERT
Minister of Finance

DENMARK

Fisheries: Conservation of Atlantic Salmon

*Agreement effected by exchange of notes
Signed at Washington July 6, 1972;
Entered into force July 6, 1972.*

*The Danish Chargé d'Affaires ad interim to the Acting Secretary
of State*

DANISH EMBASSY
WASHINGTON, D.C.

JULY 6, 1972

SIR,

I have the honor to refer to the proposal adopted by the International Commission for the Northwest Atlantic Fisheries in Washington, D.C. on June 2nd regarding Conservation of Atlantic Salmon. The proposal which incorporated the substance of the understanding reached at the U.S.-Danish talks on February 5, 1972, implies inter alia that the catch of Atlantic salmon will be regulated in 1972 (and subsequent years). In spite of the efforts of the member states to have the proposal put into effect at an earlier date than provided under article VIII of the International Convention for the Northwest Atlantic Fisheries, [1] it seems unlikely that the proposal will come into effect in the immediate future.

I have, therefore, been instructed to propose that, pending the coming into effect of the said proposal adopted by ICNAF, our two Governments agree as follows:

A. Denmark will phase out by December 31, 1975 all of their fisheries for Atlantic salmon off Greenland, except those carried out by local fishermen of Greenland. Such a phase out will be accomplished by appropriate measures at the discretion of the Danish Government and designed to limit the round weight of their non-Greenland salmon catch in the Northwest Atlantic in the calendar years of 1972, 1973, 1974, and 1975 to an approximate level of 800, 600, 550 and 500 metric tons respectively.

¹ TIAS 2089, 6011, 6840, 6841, 7432; 1 UST 482; 17 UST 636; 21 UST 568, 577; post, p. 1504.

Failure to achieve these catch objectives in any of the four years will be followed by an adjustment in the following year's catch.

B. The annual salmon catch by local Greenland fishermen will be at the approximate level of the average of the annual catches measured from 1964 through 1971, which is estimated to be 1100 metric tons.

C. The United States will endeavour to ensure the application of appropriate conservation measures applicable to the 12 mile zone of the United States which would correspond in effect to the measures taken by Denmark (i.e. using the catch levels of 1969 as a base).

If the proposal as set forth above is agreeable to the Government of the United States of America, the Government of Denmark will be pleased to consider this note and your reply concurring therein as constituting an agreement between our two Governments, which shall enter into force on the date of your affirmative reply.

Accept, Sir, the assurances of my highest consideration.

HANS J. CHRISTENSEN

Hans J. Christensen
Chargé d'Affaires a.i.

The Honorable

U. ALEXIS JOHNSON

*The Acting Secretary of State of
the United States of America
Washington*

*The Acting Secretary of State to the Danish Chargé d'Affaires
ad interim*

DEPARTMENT OF STATE
WASHINGTON

JULY 6, 1972

SIR:

I have the honor to acknowledge receipt of your note dated July 6, 1972, which reads as follows:

"Sir,

"I have the honor to refer to the proposal adopted by the International Commission for the Northwest Atlantic Fisheries in Washington, D.C. on June 2nd regarding Conservation of Atlantic Salmon. The proposal which incorporated the substance of the understanding reached at the U.S.-Danish talks on February 5, 1972, implies inter alia that the catch of Atlantic salmon will be

regulated in 1972 (and subsequent years). In spite of the efforts of the member states to have the proposal put into effect at an earlier date than provided under article VIII of the International Convention for the Northwest Atlantic Fisheries, it seems unlikely that the proposal will come into effect in the immediate future.

"I have, therefore, been instructed to propose that, pending the coming into effect of the said proposal adopted by ICNAF, our two Governments agree as follows:

A. Denmark will phase out by December 31, 1975 all of their fisheries for Atlantic salmon off Greenland, except those carried out by local fishermen of Greenland. Such a phase out will be accomplished by appropriate measures at the discretion of the Danish Government and designed to limit the round weight of their non-Greenland salmon catch in the Northwest Atlantic in the calendar years of 1972, 1973, 1974, and 1975 to an approximate level of 800, 600, 550 and 500 metric tons respectively.

"Failure to achieve these catch objectives in any of the four years will be followed by an adjustment in the following year's catch.

B. The annual salmon catch by local Greenland fishermen will be at the approximate level of the average of the annual catches measured from 1964 through 1971, which is estimated to be 1100 metric tons.

C. The United States will endeavour to ensure the application of appropriate conservation measures applicable to the 12 mile zone of the United States which would correspond in effect to the measures taken by Denmark (i.e. using the catch levels of 1969 as a base).

"If the proposal as set forth above is agreeable to the Government of the United States of America, the Government of Denmark will be pleased to consider this note and your reply concurring therein as constituting an agreement between our two Governments, which shall enter into force on the date of your affirmative reply.

"Accept, Sir, the assurances of my highest consideration."

I have further the honor to confirm the above understandings on behalf of the Government of the United States of America and to agree that your note and this reply shall be regarded as constituting an agreement between the two Governments.

Accept, Sir, the renewed assurances of my high consideration.

For the Acting Secretary of State:

BURDICK H. BRITTIN

The Honorable

HANS J. CHRISTENSEN,

*Charge d'Affaires ad interim
of Denmark.*

TURKEY

Loan of Vessel: U.S.S. *Hugh Purvis*

*Agreement effected by exchange of notes
Signed at Ankara July 1, 1972;
Entered into force July 1, 1972.*

*The American Ambassador to the Turkish Secretary General, Ministry
of Foreign Affairs*

No. 308

ANKARA, July 1, 1972.

EXCELLENCY:

I have the honor to refer to recent conversations between the representatives of our two governments concerning the loan of the destroyer USS *Hugh Purvis* (DD-709) by the Government of the United States of America to the Government of Turkey. In response to the Ministry's Aide Memoire dated January 24, 1969, requesting the loan of this destroyer, I have the further honor to inform you that the Government of the United States agrees to transfer the USS *Hugh Purvis* (DD-709) on loan to the Government of Turkey for a period of five years under the following conditions specified below in pursuance of the existing cooperation between our two governments, the principle of which is stated in Article III of the North Atlantic Treaty: [¹]

1. The Government of Turkey will retain possession of, and will use, the vessel subject to the terms and conditions contained in this note, agreement on aid to Turkey between our two Governments signed July 12, 1947, [²] and an agreement between our two Governments effected by an exchange of notes signed January 7, 1952. [³]

2. The loan shall remain in effect for the period of five years unless terminated earlier by the Government of Turkey. However, the United States Government may terminate the loan if such action is necessitated by the occurrence of either of the contingencies set forth in United States Public Law 92-270. [⁴]

¹ TIAS 1964, 2390; 63 Stat. 2242, 3 UST 43.

² TIAS 1629; 61 Stat. 2953.

³ TIAS 2621; 3 UST 4660.

⁴ 86 Stat. 118; 50 U.S.C. app. § 1878zz-4-8.

3. The vessel together with its available on-board spares and allowances, including consumable stores and fuel, will be delivered to the Government of Turkey at a place and time to be mutually agreed upon, each delivery to be evidenced by a delivery certificate. The Government of Turkey shall have the use of all outfittings, equipment, appliances, fuel, consumable stores, and spares and replacement parts on board the vessel at the time of its delivery.

4. While the Government of Turkey may place the vessel under the Turkish Flag, title to the vessel and appurtenances enumerated in Paragraph 3 of this note, except fuel, consumable stores, spares and replacement parts, shall remain in the Government of the United States. The Government of Turkey shall not, without the consent of the Government of the United States, relinquish physical possession of the vessel or any such appurtenances.

5. The Government of Turkey renounces all claims which might arise against the Government of the United States in connection with the transfer, use or operation of vessel, and will save the Government of the United States harmless from any claim asserted by third parties in such connection.

6. Upon expiration or termination of the loan, as provided in Paragraph 2 of this note, the vessel, unless lost, shall be returned to the place and time to be specified by the Government of the United States in substantially the same condition, fair wear and tear excepted, as it was when transferred to the Government of Turkey. Any appurtenances of the type enumerated in Paragraph 3 of this note on board the vessel at the time of return shall, if they are not already property of the Government of the United States, become property of the Government of the United States. Should the vessel sustain damage from any cause, such as to render it, in the opinion of the Government of Turkey, a total loss, the Government of Turkey shall consult with the Government of the United States before declaring it to be a total loss. If the vessel is lost, or if it is not substantially in the same condition upon return as it was when originally transferred, the Government of Turkey agrees to pay the Government of the United States fair and reasonable compensation as may be agreed upon, taking into consideration whether such loss or damage was caused through action by a hostile force.

If the foregoing is acceptable to the Government of Turkey, I have the further honor to propose that this note and Your Excellency's reply to that effect shall constitute an agreement between the two governments which shall become effective on the date of Your Excellency's reply and applicable to the loan of the USS *Hugh Purvis* (DD-709) on the date pursuant to the conditions stated above.

Accordingly, the transfer date and the termination date of the proposed loan will be as follows: Name of vessel, USS *Hugh Purvis* (DD-709); date of delivery, July 1, 1972; termination, June 30, 1977.

Accept, Excellency, the renewed assurances of my highest consideration.

WILLIAM J. HANDLEY

His Excellency

ISMAIL EREZ.

Secretary General,

*Ministry of Foreign Affairs,
Ankara.*

The Turkish Ambassador, Secretary General of the Ministry of Foreign Affairs, to the American Ambassador

TÜRKİYE CUMHURİYETİ [1]
DİŞİŞLERİ BAKANLIĞI

No: 2906

JULY 1, 1972.

EXCELLENCY,

I have the honor to acknowledge the receipt of your Note No. 368, dated July 1, 1972 which reads as follows:

“Excellency,

I have the honor to refer to recent conversations between the representatives of our two Governments concerning the loan of the destroyer USS *Hugh Purvis* (DD-709) by the Government of the United States of America to the Government of Turkey. In response to the Ministry's Aide Mémoire dated January 24, 1969, requesting the loan of this destroyer, I have the further honor to inform you that the Government of the United States agrees to transfer the USS *Hugh Purvis* (DD-709) on loan to the Government of Turkey for a period of five years under the following conditions specified below in pursuance of the existing cooperation between our two Governments, the principle of which is stated in Article III of the North Atlantic Treaty:

1. The Government of Turkey will retain possession of, and will use, the vessel subject to the terms and conditions contained in this note, agreement on aid to Turkey between our two Governments signed July 12, 1947, and an agreement between our two Governments affected by an exchange of notes signed January 7, 1952.

2. The loan shall remain in effect for the period of five years unless terminated earlier by the Government of Turkey. However, the United States Government may terminate the loan if such action is necessitated by the occurrence of either of the contingencies set forth in the United States Public Law 92-270.

¹ Turkish Republic
Ministry of Foreign Affairs

3. The vessel, together with its available on-board spares and allowances, including consumable stores and fuel, will be delivered to the Government of Turkey at a place and time to be mutually agreed upon, each delivery to be evidenced by a delivery certificate. The Government of Turkey shall have the use of all outfittings, equipment, appliances, fuel, consumable stores, and spares and replacement parts on board the vessel at the time of its delivery.

4. While the Government of Turkey may place the vessel under the Turkish Flag, title to the vessel and appurtenances enumerated in Paragraph 3 of this note, except fuel, consumable stores, spares and replacement parts, shall remain in the Government of the United States. The Government of Turkey shall not, without consent of the Government of the United States relinquish physical possession of the vessel or any such appurtenances.

5. The Government of Turkey renounces all claims which might arise against the Government of the United States in connection with the transfer, use or operation of vessel, and will save the Government of the United States harmless from any claim asserted by third parties in such connection.

6. Upon expiration or termination of the loan, as provided in Paragraph 2 of this Note, the vessel, unless lost, shall be returned at the place and time to be specified by the Government of the United States in substantially the same condition, fair wear and tear excepted, as it was when transferred to the Government of Turkey. Any appurtenances of the type enumerated in Paragraph 3 of this Note on board the vessel at the time of return shall, if they are not already property of the Government of the United States, become property of the Government of the United States. Should the vessel sustain damage from any cause, such as to render it, in the opinion of the Government of Turkey, a total loss, the Government of Turkey shall consult with the Government of the United States before declaring it to be a total loss. If the vessel is lost, or if it is not substantially in the same condition upon return as it was when originally transferred, the Government of Turkey agrees to pay the Government of the United States fair and reasonable compensation as may be agreed upon, taking into consideration whether such loss or damage was caused through action by hostile force.

If the foregoing is acceptable to the Government of Turkey, I have the further honor to propose that this Note and Your Excellency's reply to that effect shall constitute an agreement between the two Governments which shall become effective on the date of Your Excellency's reply and applicable to the loan of the USS *Hugh Purvis* (DD-709) on the date pursuant to the conditions stated above.

Accordingly the transfer date and the termination date of the proposed loan will be as follows: Name of vessel, USS *Hugh Purvis* (DD-709); date of delivery; July 1, 1972; termination, June 30, 1977.)

Accept Excellency, the renewed assurances of my highest consideration.

I have the honor to inform you that my Government is in agreement with the foregoing.

I avail myself of this opportunity to reiterate to Your Excellency the assurances of my highest consideration.

ISMAIL EREZ

Ismail Erez

*Ambassador, Secretary General
of the Ministry of Foreign Affairs*

His Excellency

WILLIAM J. HANDLEY

*Ambassador of the United States of America
Ankara*

MEXICO

Colorado River Salinity

Agreement effected by minute no. 241 of the International Boundary and Water Commission, United States and Mexico Adopted at El Paso July 14, 1972; Entered into force July 14, 1972.

INTERNATIONAL BOUNDARY
AND WATER COMMISSION
UNITED STATES AND
MEXICO
El Paso, Texas,
July 14, 1972.

COMISION INTERNACIONAL DE
LIMITES Y AGUAS ENTRE
MEXICO Y ESTADOS UNIDOS
El Paso, Texas,
14 de julio de 1972.

MINUTE NO. 241

ACTA NUM. 241.

RECOMMENDATIONS TO IMPROVE
IMMEDIATELY THE QUALITY OF
COLORADO RIVER WATERS GOING
TO MEXICO.

RECOMENDACIONES PARA MEJORAR INMEDIATAMENTE LA CALIDAD DE LAS AGUAS DEL RIO COLORADO QUE LLEGAN A MEXICO.

The Commission met in the offices of the United States Section, in El Paso, Texas, at 12:00 o'clock noon on July 14, 1972, in accordance with the instructions which the two Governments issued to their respective Commissioners pursuant to the understanding between President Richard Nixon and President Luis Echeverria expressed in their Joint Communique of June 17, 1972, [1] which, with respect to the salinity problem, states:

"Regarding the problem of the salinity of the Colorado

La Comisión se reunió en las oficinas de la Sección de los Estados Unidos, en El Paso, Texas, a las 12:00 horas del 14 de julio de 1972, de acuerdo con las instrucciones que los dos Gobiernos dieron a sus respectivos Comisionados en virtud del compromiso contraído por el Presidente Luis Echeverría, y el Presidente Richard Nixon en su Comunicado Conjunto del 17 de junio de 1972, el cual, en relación con el problema de la salinidad, a la letra dice:

"En torno al problema de la salinidad del Río Colorado, el

¹ Department of State Bulletin, July 10, 1972, p. 66.

River, President Echeverria told President Nixon that Mexico reiterates its position as regards receiving its assignment of original waters from the Colorado River, to which the Treaty of February 3, 1944 [1] refers, and therefore, with the same quality as those derived from Imperial Dam.

"To this, President Nixon replied that this was a highly complex problem that needed careful examination of all aspects. He was impressed by the presentation made by President Echeverria and would study it closely. It was his sincere desire to find a definitive, equitable and just solution to this problem at the earliest possible time because of the importance both nations attach to this matter.

"As a demonstration of this intent and of the goodwill of the United States in this connection, he was prepared to:

- (a) undertake certain actions immediately to improve the quality of water going to Mexico;
- (b) designate a special representative to begin work immediately to find a permanent, definitive and just solution of this problem;
- (c) instruct the special representative to submit a report to him by the end of this year;

Presidente Echeverría manifestó al Presidente Nixon que México reitera su posición en el sentido de recibir la asignación a que se refiere el Tratado del 3 de febrero de 1944, de aguas originales del Río Colorado, y en consecuencia, con la misma calidad de las que derivan de la Presa Imperial.

A esto, el Presidente Nixon contestó que éste es un problema muy complicado que requiere un minucioso examen de todos sus aspectos. Que estaba impresionado por la exposición hecha por el Presidente Echeverría y que la estudiaría detenidamente. Que era su deseo sincero el encontrar una definitiva, equitativa y justa solución a este problema, a la brevedad posible, por la importancia que ambas naciones dan a este asunto. Que, como una demostración de su propósito y de la buena disposición de Estados Unidos de América en relación a esta materia, estaba dispuesto a:

- A) Tomar inmediatamente determinadas medidas para mejorar la calidad de las aguas que vayan a México.
- B) Designar a un representante especial para comenzar inmediatamente la tarea de encontrar a este problema una solución definitiva, justa y permanente.
- C) Impartir instrucciones a este representante especial para que le someta un informe antes de fin de año.

¹ TS 994; 59 Stat. 1219.

- (d) submit this proposal, once it has the approval of this Government to President Echeverria for his consideration and approval.

"President Echeverria said that he recognized the good-will of President Nixon and his interest in finding a definitive solution to this problem at the earliest possible time. He added that based on two recent trips to the Mexicali Valley and his talks with farmers there, his Government, while reserving its legal rights, had decided to stop using waters from the Wellton-Mohawk project for irrigation purposes while waiting for receipt of the United States proposal for a definitive solution.

"Both Presidents agreed to instruct their Water and Border Commissioners to prepare and sign a Minute containing the above program and commitments as soon as possible."

The Commission, on the basis of the understandings expressed in the Joint Communiqué, adopts, subject to the approval of the two Governments, the following

Resolution:

1. That, commencing on the date of the approval of the present Minute, the United States take the measures described in points 2 and 3 of this resolution, to improve the quality of the waters of the Colorado River made available to

- D) Transmitir esta propuesta, una vez que haya sido aprobada por su Gobierno, al Presidente Echeverría para su consideración y aprobación.

El Presidente Echeverría manifestó que reconocía la buena disposición del Presidente Nixon y su interés por encontrar una solución definitiva a este problema a la mayor brevedad posible. Añadió que, en vista de sus dos recientes viajes al Valle de Mexicali y en sus pláticas con los campesinos de la región, su Gobierno, reservando sus derechos, había resuelto dejar de utilizar en el riego las aguas de Wellton-Mohawk, en espera de recibir la propuesta de Estados Unidos de América para una solución definitiva.

Ambos Presidentes acordaron instruir a sus Comisionados de Límites y Aguas a fin de que, a la mayor brevedad posible, levanten y suscriban el Acta que contenga el plan y los compromisos arriba mencionados".

La Comisión, basada en los acuerdos expresados en el Comunicado Conjunto, adopta, sujeta a la aprobación de los dos Gobiernos, la siguiente

Resolucion:

1. Que, principiando en la fecha de aprobación de la presente Acta, los Estados Unidos tomen las medidas descritas en los apartados 2 y 3 de la presente resolución, para mejorar la calidad de las aguas del Río Colorado que se pongan a

- Mexico at the Northerly Boundary, which it is estimated will reduce the salinity of such waters by at least 100 parts per million as an annual mean, compared with the mean annual salinity of the waters made available to Mexico at the Northerly Boundary in calendar year 1971, under Minute No. 218; [¹] such improvement to be independent of the improvement in quality which may be achieved by discharging to the Colorado River below Morelos Dam the part of the drainage waters from the Wellton-Mohawk District described in point 5 of this resolution.
2. That the United States continue to operate and maintain, at its expense, the extension of the Wellton-Mohawk District's drainage water conveyance channel and its control structures, constructed pursuant to Recommendation 1 of Minute No. 218.
3. That, commencing on the date of approval of the present Minute, the United States discharge to the Colorado River downstream from Morelos Dam volumes of drainage waters from the Wellton-Mohawk District at the annual rate of 118,000 acre-feet (145,551,000 cubic meters) and substitute therefor equal volumes of disposición de México en el Lindero Norte, las cuales se estima que reducirán la salinidad de dichas aguas cuando menos en cien partes por millón, en promedio anual, en comparación con la salinidad media anual de las aguas que se pusieron a disposición de México, en el Lindero Norte, en el año civil de 1971, de conformidad con el Acta Núm. 218; esa mejoría será independiente de la mejoría de la calidad que se logre descargando al Río Colorado, aguas abajo de la Presa Morelos, la parte de las aguas de drenaje del Distrito de Wellton-Mohawk a que se refiere el apartado 5 de la presente resolución.
2. Que los Estados Unidos continúen operando y manteniendo, a sus expensas, la prolongación del canal de conducción de las aguas de drenaje del Distrito de Wellton-Mohawk y sus estructuras de control, construidas de conformidad con la Recomendación 1 del Acta Núm. 218.
3. Que, principiando en la fecha de aprobación de la presente Acta, los Estados Unidos descarguen al Río Colorado, aguas abajo de la Presa Morelos, volúmenes de las aguas de drenaje del Distrito de Wellton-Mohawk a razón de 145,551,000 metros cúbicos (118,000 acres-pies) anuales y los sustituyan con volúmenes iguales

¹ TIAS 6988, 7214; 21 UST 2481; 22 UST 1769.

other waters, to be discharged to the Colorado River above Morelos Dam, with the understanding that during the second six months of 1972, the United States discharge the volume of 73,000 acre-feet (90,044,000 cubic meters) of drainage waters from the Wellton-Mohawk District downstream from Morelos Dam and substitute therefor an equal volume of other waters to be discharged above Morelos Dam.

4. That Mexico's requests for deliveries in the limnophore reach of the Colorado River be not less than 900 cubic feet (25.5 cubic meters) per second, excluding the flows charged as part of Mexico's allotment under the Water Treaty of February 3, 1944, in accordance with Minute No. 240,^[1] for emergency deliveries to the City of Tijuana.
5. That, pursuant to the decision of President Echeverría, expressed in the Joint Communique, the United States discharge to the Colorado River downstream from Morelos Dam, the remaining volume of drainage waters of the Wellton-Mohawk District, which do not form part of the volume of the drainage waters referred to in point 3 of this resolution, with the understanding that this remain-

de otras aguas, que serán descargados al Río Colorado, aguas arriba de la Presa Morelos; entendido que durante el segundo semestre de 1972 los Estados Unidos descargarán un volumen de 90,044,000 metros cúbicos (73,000 acres-pies) de las aguas de drenaje del Distrito de Wellton-Mohawk, aguas abajo de la Presa Morelos, y lo sustituirán con un volumen igual de otras aguas que se descargará aguas arriba de la Presa Morelos.

4. Que los pedidos de agua de México en el tramo limítrofe del Río Colorado no sean menores de 25.5 metros cúbicos (900 pies cúbicos) por segundo, excluyendo los gastos que se carguen al volumen asignado a México por el Tratado de Aguas del 3 de febrero de 1944, de conformidad con el Acta Núm. 240, para las entregas de emergencia a la ciudad de Tijuana.
5. Que, de conformidad con la decisión del Presidente Echeverría, expresada en el Comunicado Conjunto, los Estados Unidos descarguen al Río Colorado, aguas abajo de la Presa Morelos, el volumen restante de las aguas de drenaje del Distrito de Wellton-Mohawk, el cual no forma parte del volumen de las aguas de drenaje a que se refiere el apartado 3 de la presente resolución; entendido que

¹ Not printed.

- ing volume will not be replaced by substitution waters.
6. That, subject to the reservations of point 9 of this resolution, the Commission account for the drainage waters of the Wellton-Mohawk District referred to in points 3 and 5 of this resolution as a part of those described in the provisions of Article 10 of the Water Treaty of February 3, 1944.
 7. That the present Minute remain in effect until December 31, 1972.
 8. That the present Minute be expressly approved by both Governments and enter into force upon such approval.^[1]
 9. That the provisions of the present Minute not constitute any precedent, recognition or acceptance affecting the rights of either country with respect to the Water Treaty of February 3, 1944, and the general principles of law.
 10. That the life of Minute No. 218 of the International Boundary and Water Commission, as extended by exchange of notes dated November 15, 1971, terminate on the date that the present Minute enters into force.
- The meeting adjourned.
- ese volumen restante no sería reemplazado por otras aguas de sustitución.
6. Que, bajo las reservas del apartado 9 de la presente resolución, la Comisión contabilice las aguas de drenaje del Distrito de Wellton-Mohawk a que se refieren los apartados 3 y 5 de la presente resolución como parte de las que se describen en las estipulaciones del Artículo 10 del Tratado de Aguas del 3 de febrero de 1944.
 7. Que la presente Acta permanezca en vigor hasta el 31 de diciembre de 1972.
 8. Que la presente Acta sea expresamente aprobada por ambos Gobiernos y entre en vigor al ser aprobada por ellos.
 9. Que las estipulaciones de la presente Acta no constituyan precedente, reconocimiento ni aceptación que afecte los derechos de uno u otro país por cuanto respecta al Tratado de Aguas del 3 de febrero de 1944 y a los principios generales de derecho.
 10. Que la vigencia del Acta Núm. 218 de la Comisión Internacional de Límites y Aguas, prorrogada por intercambio de notas fechadas el 15 de noviembre de 1971, concluya en la fecha en que la presente Acta entre en vigor.

Se levantó la sesión.

¹ July 14, 1972.

<p>J. F. FRIEDKIN <i>Commissioner of the United States</i></p> <p>D HERRERA J <i>Commissioner of Mexico</i></p> <p>FRANK P. FULLERTON <i>Acting Secretary of the United States Section</i></p> <p>FERNANDO RIVAS S <i>Secretary of the Mexican Section</i></p>	<p>D HERRERA J <i>Comisionado de México</i></p> <p>J. F. FRIEDKIN <i>Comisionado de los Estados Unidos</i></p> <p>FERNANDO RIVAS S <i>Secretario de la Sección de México</i></p> <p>FRANK P. FULLERTON <i>Secretario en Funciones de la Sección de los Estados Unidos</i></p>
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CANADA
**Defense: Leased Areas in Goose Bay,
Newfoundland**

*Agreement extending the agreement of December 5, 1952.
Effectuated by exchange of notes
Signed at Ottawa July 13, 1972;
Entered into force July 13, 1972.*

*The American Ambassador to the Canadian Secretary of State for
External Affairs*

No. 122

OTTAWA, July 13, 1972

SIR:

I have the honor to refer to the discussions which have taken place between the authorities of the United States and Canadian Governments concerning the extension of the Agreement between Canada and the United States of America regarding the Leasing of Certain Lands Situated Within R.C.A.F. Station Goose Bay, Newfoundland, effected by the Exchange of Notes of December 5, 1952. [1]

As a result of the above discussions, Aides Memoire dated May 8 and May 31, 1972, [2] were exchanged concerning the extension of the term of the lease agreement in respect of the United States Air Force Base at Goose Bay until June 30, 1973, and the negotiation by September 30, 1972, of a new agreement regarding future use of the base by the United States Air Force.

Therefore, I have the honor to propose that this Note and your reply to that effect shall constitute the agreement between our two Governments to extend, under the same terms and conditions, the term of the Agreement regarding the Leasing of Certain Lands Situated Within R.C.A.F. Station Goose Bay of December 5, 1952, until June 30, 1973; such agreement to take effect on the date of your reply.

¹ TIAS 2730, 6627; 3 UST 5295; 20 UST 10.

² Not printed.

Accept, Sir, the renewed assurances of my highest consideration.

ADOLPH W. SCHMIDT

The Honorable
MITCHELL SHARP, P.C.,
*Secretary of State
for External Affairs,
Ottawa.*

*The Canadian Secretary of State for External Affairs
to the American Ambassador*

DEPARTMENT OF EXTERNAL
AFFAIRS

MINISTÈRE DES AFFAIRES
EXTÉRIEURES

CANADA

N° DFR-1174

OTTAWA, July 13, 1972.

EXCELLENCY,

I have the honour to refer to your Note No. 122 of July 13, 1972, concerning the extension of the Agreement regarding the Leasing of Certain Lands Situated Within R.C.A.F. Station Goose Bay effected by the Exchange of Notes of December 5, 1952, to June 30, 1973.

I am pleased to inform you that my Government concurs in the proposal set out in your Note, and further agrees that your Note and this reply, which is authentic in English and French, shall constitute an agreement between our two Governments effective today.

Accept, Excellency, the assurances of my highest consideration.

MITCHELL SHARP

Mitchell Sharp

His Excellency

The Honourable ADOLPH W. SCHMIDT,
*Ambassador of the United States of America,
Ottawa.*

French Text of Canadian Note

DEPARTMENT OF EXTERNAL
AFFAIRS

MINISTÈRE DES AFFAIRES
EXTÉREURES

CANADA

N° DFR-1174

OTTAWA, le 13 juillet 1972.

MONSIEUR L'AMBASSADEUR,

J'ai l'honneur de me référer à votre Note n° 122, en date du 13 juillet 1972, concernant la prorogation, jusqu'au 30 juin 1973, d'un Accord relatif à la location de certains terrains situés dans les limites de la Station du Corps d'aviation royale canadien à Goose-Bay, intervenu par un échange de Notes signées le 5 décembre 1952.

Je suis heureux de vous faire savoir que mon Gouvernement approuve la proposition énoncée dans votre Note et convient en outre que ladite Note et la présente réponse, dont les versions font également foi en anglais et en français, constituent un accord entre nos deux Gouvernements à compter d'aujourd'hui.

Veuillez agréer, Monsieur l'Ambassadeur, les assurances de ma très haute considération.

Mitchell Sharp

MITCHELL SHARP

Son Excellence

Monsieur ADOLPH W. SCHMIDT,
Ambassadeur des Etats-Unis d'Amérique,
Ottawa.

GUINEA
Agricultural Commodities

Agreement amending the agreement of June 17, 1971.

Effectuated by exchange of notes

Signed at Conakry May 15 and 23, 1972;

Entered into force May 23, 1972.

*The American Chargé d'Affaires ad interim to the Guinean Minister of the
Domain of Commerce and Communications*

EMBASSY OF THE
UNITED STATES OF AMERICA

CONAKRY May 15, 1972

EXCELLENCY,

I have the honor to refer to the Agricultural Commodities Agreement signed by representatives of our two governments on June 17, 1971^[1] and propose amendments as follows: under the appropriate columns of the commodity table, increase wheat flour to 15,700 metric tons and \$1,381,000; increase soybean oil/cottonseed oil to 2,100 metric tons and \$683,000. Also increase the total export market value of the Agreement to \$5,140,000. In lieu of this increase, Purchase Authorizations for cotton will not be issued under this agreement.

All other terms and conditions of the June 17, 1971 Agreement remain unchanged.

If the foregoing is acceptable to your government, I propose that this note and your reply thereto constitute agreement between our two governments effective on the date of your note in reply.

^[1] TIAS 7182; 22 UST 1574.

Accept, Excellency, the renewed assurances of my highest consideration.

DONALD R. NORLAND

Donald R. Norland
Chargé d'Affaires, a.i.
Embassy of the United
States of America

His Excellency

Doctor ALPHA OUMAR BARRY

Minister of the Domain of Commerce and Communications

The Guinean Secretary of State, Ministry of Foreign Affairs, to the American Embassy

RÉPUBLIQUE DE GUINÉE

MINISTÈRE D'ÉTAT
CHARGÉ DU DOMAINE
DES AFFAIRES EXTÉRIEURES

LE MINISTRE D'ÉTAT
CHARGÉ DES AFFAIRES EXTÉRIEURES

N° 792/MEAF/COOP/CT/72

CONAKRY, le mai 23, 1972

Note

Le Ministère d'Etat Chargé du Domaine des Affaires Extérieures de la République de Guinée présente ses compliments à l'Ambassade des Etats-Unis d'Amérique à Conakry et a l'honneur d'accuser réception de sa Note n° 30 en date du 15 Mai 1972 par laquelle l'Ambassade a bien voulu informer le Ministère du Domaine des Echanges de l'accord de son Gouvernement pour la reconversion du crédit relatif à l'achat de 3.000 tonnes de farine et 600 tonnes d'huile de salade livrables avant fin juin 1972.

Le Ministère d'Etat salue ici l'action personnelle de l'Ambassade dans la réalisation de cette reconversion et espère que l'Ambassade mènera la même action pour le programme 1972/1973.

Le Ministère d'Etat saisit cette occasion pour renouveler à l'Ambassade les assurances de sa haute considération.

[SEAL] Le Secretaire d'Etat,
CAMARA DAMANTANG
Camara Damantang

*A L'Ambassade Des
Etats Unis D'Amérique
à Conakry*

Translation

REPUBLIC OF GUINEA

MINISTRY OF FOREIGN AFFAIRS

The Minister of Foreign Affairs

No. 792/MEAF/COOP/CT/72

CONAKRY, May 23, 1972

The Ministry of Foreign Affairs of the Republic of Guinea presents its compliments to the Embassy of the United States of America at Conakry and has the honor to acknowledge the receipt of its note No. 30, [1] of May 15, 1972, in which the Embassy informed the Ministry of Trade that the United States Government agrees to the conversion of the loan for the purchase of 3,000 tons of flour and 600 tons of salad oil deliverable by the end of June 1972.

The Ministry of State expresses its gratitude for the personal action taken by the Embassy to obtain this conversion and hopes that the Embassy will do the same for the 1972-1973 program.

The Ministry avails itself of this occasion to renew to the Embassy the assurances of its high consideration.

[SEAL]

CAMARA DAMANTANG

Camara Damantang

The Secretary of State

*Embassy of the United States of America,
Conakry.*

¹ The United States note on p. 1296 is the enclosure to note no. 30 (not printed) addressed to the Guinean Ministry of State for External Affairs.

TURKEY

Loan of Vessels: U.S.S. *Entemedor* and U.S.S. *Threadfin*

*Agreement effected by exchange of notes
Signed at Ankara July 28, 1972;
Entered into force July 28, 1972.*

*The American Ambassador to the Turkish Secretary General,
Ministry of Foreign Affairs*

No. 464

ANKARA, July 28, 1972.

EXCELLENCY:

I have the honor to refer to recent conversations between the representatives of our two governments concerning the loan of the submarines USS Entemedor (SS 340) and USS Threadfin (SS 410) by the Government of the United States of America to the Government of Turkey. In response to the Ministry's Aide-Memoire dated January 24, 1969,[¹] requesting the loan of these vessels, I have the further honor to inform you that the Government of the United States agrees to transfer the USS Entemedor (SS 340) and the USS Threadfin (SS 410) on loan to the Government of Turkey for a period of five years under the following conditions specified below in pursuance of the existing cooperation between our two governments, the principle of which is stated in Article III of the North Atlantic Treaty:[²]

1. The Government of Turkey will retain possession of, and will use, the vessels subject to the terms and conditions contained in this note, agreement on aid to Turkey between our two Governments signed July 13, 1947,[³] and an agreement between our two Governments effected by an exchange of notes signed January 7, 1952.[⁴]
2. The loans shall remain in effect for the period of five years unless terminated earlier by the Government of Turkey. However, the United States Government may terminate the loans if such action is neces-

¹ Not printed.

² TIAS 1964, 2390; 63 Stat. 2242; 3 UST 43.

³ Should read "July 12, 1947.". TIAS 1629; 61 Stat. 2953.

⁴ TIAS 2621; 3 UST 4660.

sitated by the occurrence of either of the contingencies set forth in United States Public Law 92-270.^[1]

3. The vessels, together with their available on-board spares and allowances, including consumable stores and fuel, will be delivered to the Government of Turkey at a place and time to be mutually agreed upon, each delivery to be evidenced by a delivery certificate. The Government of Turkey shall have the use of all outfittings, equipment, appliances, fuel, consumable stores, and spares and replacement parts on board the vessels at the time of their delivery.

4. While the Government of Turkey may place the vessels under the Turkish Flag, title to the vessels and appurtenances enumerated in Paragraph 3 of this note, except fuel, consumable stores, spares and replacement parts, shall remain in the Government of the United States. The Government of Turkey shall not, without the consent of the Government of the United States, relinquish physical possession of the vessels or any such appurtenances.

5. The Government of Turkey renounces all claims which might arise against the Government of the United States in connection with the transfer, use or operation of vessels, and will save the Government of the United States harmless from any claim asserted by third parties in such connection.

6. Upon expiration or termination of the loans, as provided in Paragraph 2 of this note, the vessels, unless lost, shall be returned at the place and time to be specified by the Government of the United States in substantially the same condition, fair wear and tear excepted, as they were when transferred to the Government of Turkey. Any appurtenances of the type enumerated in Paragraph 3 of this note on board the vessels at the time of return shall, if they are not already property of the Government of the United States, become property of the Government of the United States. Should either vessel sustain damage from any cause, such as to render it, in the opinion of the Government of Turkey, a total loss, the Government of Turkey shall consult with the Government of the United States before declaring it to be a total loss. If either vessel is lost, or if it is not substantially in the same condition upon return as it was when originally transferred, the Government of Turkey agrees to pay the Government of the United States fair and reasonable compensation as may be agreed upon, taking into consideration whether such loss or damage was caused through action by a hostile force.

The transfer dates and termination dates of the proposed loans will be as follows: Name of vessel, USS Entemedor (SS 340); date of delivery, July 31, 1972; termination, July 30, 1977. Name of vessel, USS Threadfin (SS 410); date of delivery, August 18, 1972; termination, August 17, 1977.

¹ 86 Stat. 118; 50 U.S.C. app. § 1878zz-4 - S.

If the foregoing is acceptable to the Government of Turkey, I have the further honor to propose that this note, and Your Excellency's reply to that effect shall constitute an agreement between the two governments which shall become effective on the date of Your Excellency's reply and applicable to the loans of the USS Entemedor (SS 340) and the USS Threadfin (SS 410) on the dates pursuant to the conditions stated above.

Accept, Excellency, the renewed assurances of my highest consideration.

WILLIAM J. HANDLEY

His Excellency

ISMAIL EREZ,

Secretary General,

Ministry of Foreign Affairs,

Ankara.

The Turkish Ambassador, Secretary General of the Ministry of Foreign Affairs, to the American Ambassador

TÜRKİYE CUMHURİYETİ [¹]

DIŞİŞLERİ BAKANLIĞI

No. 3338

JULY 28, 1972.

Excellency,

I have the honor to acknowledge the receipt of your Note No: 464, dated July 28, 1972 which reads as follows:

“Excellency,

I have the honor to refer to recent conversations between the representatives of our two Governments concerning the loan of the submarines USS Entemedor (SS 340) and USS Threadfin (SS 410) by the Government of the United States of America to the Government of Turkey. In response to the Ministry's Aide-Memoire dated January 24, 1969, requesting the loan of these vessels, I have the further honor to inform you that the Government of the United States agrees to transfer the USS Entemedor (SS 340) and the USS Threadfin (SS 410) on loan to the Government of Turkey for a period of five years under the following conditions specified below in pursuance of the existing cooperation between our two Governments, the principle of which is stated in Article III of the North Atlantic Treaty:

¹ Turkish Republic
Ministry of Foreign Affairs.

1. The Government of Turkey will retain possession of, and will use, the vessels subject to the terms and conditions contained in this note, agreement on aid to Turkey between our two Governments signed July 13, 1947, and an agreement between our two Governments effected by an exchange of notes signed January 7, 1952.

2. The loans shall remain in effect for the period of five years unless terminated earlier by the Government of Turkey. However, the United States Government may terminate the loans if such action is necessitated by the occurrence of either of the contingencies set forth in United States Public Law 92-270.

3. The vessels, together with their available on-board spares and allowances, including consumable stores and fuel, will be delivered to the Government of Turkey at a place and time to be mutually agreed upon, each delivery to be evidenced by a delivery certificate. The Government of Turkey shall have the use of all outfitting, equipment, appliances, fuel, consumable stores, and spares and replacement parts on board the vessels at the time of their delivery.

4. While the Government of Turkey may place the vessels under the Turkish Flag, title to the vessels and appurtenances enumerated in paragraph 3 of this note, except fuel, consumable stores, spares and replacement parts, shall remain in the Government of the United States. The Government of Turkey shall not, without the consent of the Government of the United States, relinquish physical possession of the vessels or any such appurtenances.

5. The Government of Turkey renounces all claims which might arise against the Government of the United States in connection with the transfer, use or operation of vessels, and will save the Government of the United States harmless from any claim asserted by third parties in such connection.

6. Upon expiration or termination of the loans, as provided in Paragraph 2 of this note, the vessels, unless lost, shall be returned at the place and time to be specified by the Government of the United States in substantially the same condition, fair wear and tear excepted, as they were when transferred to the Government of Turkey. Any appurtenances of the type enumerated in Paragraph 3 of this note on board the vessels at the time of return shall, if they are not already property of the Government of the United States, become property of the Government of the United States. Should either vessel sustain damage from any cause, such as to render it, in the opinion of the Government of Turkey, a total loss, the Government of Turkey shall consult with the Government of the United States before declaring it to be a total loss. If either vessel is lost, or if it is not substantially in the same condition upon return as it was when originally transferred, the Government of Turkey agrees to pay the Government of the United States fair and reasonable compensation as may be agreed upon, taking into consideration whether such loss or damage was caused through action by a hostile force.

The transfer dates and termination dates of the proposed loans will be as follows: Name of vessel, USS Entemedor (SS 340); date of delivery, July 31, 1972; termination, July 30, 1977. Name of vessel, USS Threadfin (SS 410); date of delivery, August 18, 1972; termination, August 17, 1977.

If the foregoing is acceptable to the Government of Turkey, I have the further honor to propose that this note, and Your Excellency's reply to that effect shall constitute an agreement between the two Governments which shall become effective on the date of Your Excellency's reply and applicable to the loans of the USS Entemedor (SS 340) and the USS Threadfin (SS 410) on the dates pursuant to the conditions stated above.

Accept, Excellency, the renewed assurances of my highest consideration."

I have the honor to inform you that my Government is in agreement with the foregoing.

I avail myself of this opportunity to reiterate to Your Excellency, the assurances of highest consideration.

ISMAIL EREZ

Ismail Erez

*Ambassador, Secretary General
of the Ministry of Foreign Affairs*

His Excellency WILLIAM J. HANDLEY

*Ambassador of the United States of America
Ankara*

TIAS 7407

CANADA

Saint Lawrence Seaway: Tariff of Tolls

Agreement amending the agreement of March 9, 1959, as amended.

Effectuated by exchange of notes

Signed at Washington July 27, 1972;

Entered into force July 27, 1972.

The Secretary of State to the Canadian Ambassador

DEPARTMENT OF STATE
WASHINGTON

JULY 27, 1972

EXCELLENCY:

I have the honor to refer to the Agreement between the Government of the United States of America and the Government of Canada dated March 9, 1959, which incorporated the Memorandum of Agreement and Tariff of Tolls respecting the St. Lawrence Seaway as amended by the Agreements of June 30, 1964, and March 31, 1967. [¹]

Representatives of the St. Lawrence Seaway Development Corporation and the St. Lawrence Seaway Authority have agreed to a further amendment to the Memorandum of Agreement and Tariff of Tolls, which would have the effect of excluding from the definition of "cargo", as set forth in Section 2(c) thereof, empty containers and the tare weight of loaded containers with a capacity of 640 cubic feet or more. Such agreement is set forth in the Memorandum of Amendment dated May 19, 1972, signed by the Administrator of the St. Lawrence Seaway Development Corporation and the President of the St. Lawrence Seaway Authority, which is enclosed with this note.

I have the honor to propose that if the Government of Canada concurs, this note and the Memorandum of Amendment enclosed herewith, together with your reply shall constitute an Agreement between the two Governments, amending the Agreement of March 9, 1959, as amended, with effect from the date of your reply.

¹ TIAS 4192, 5117, 5608, 6236; 10 UST 323; 13 UST 1763; 15 UST 1390; 18 UST 321.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

GEORGE S. SPRINGSTEEN

Enclosure: Memorandum of Amendment
dated May 19, 1972.

His Excellency
MARCEL CADIEUX,
Ambassador of Canada.

MEMORANDUM OF AMENDMENT respecting the St. Lawrence Seaway Tariff of Tolls; made this 19th day of May, one thousand nine hundred and seventy-two

BETWEEN :

THE ST. LAWRENCE SEAWAY AUTHORITY,
(hereinafter called "the Authority")

and

The SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION, (hereinafter called "the Corporation")

WITNESSETH

WHEREAS the Authority and the Corporation have previously exempted empty containers having a cubic capacity of 640 feet or more, when carried aboard vessels, from toll assessment under the St. Lawrence Seaway Tariff of Tolls;

AND WHEREAS the Authority and the Corporation now deem it desirable to also exempt the tare weight of cargo containers, having a cubic capacity of 640 feet or more, when carried aboard vessels, from toll assessment under the St. Lawrence Seaway Tariff of Tolls;

AND WHEREAS Clause 4 of the 1959 Agreement respecting the said Tariff, between the Authority and the Corporation and their respective Governments, provides that such changes as "will be compatible with the general terms of the Tariff" may be made by the Authority and the Corporation.

NOW THEREFORE, the parties hereto agree, subject to confirmation of their respective Governments, that Section 2(c) of the said Tariff is repealed and the following substituted therefor:

2. In this Tariff –

* * * * *

(c) "cargo" means all goods aboard a vessel whether carried as revenue or non-revenue freight or carried for the vessel's owner, except empty containers and the tare weight of loaded containers, all such containers having a cubic capacity of 640 feet or more, ship's fuel, ballast or stores, and crew or passengers' personal effects; . . .

THE SAINT LAWRENCE SEAWAY AUTHORITY

P CAMU

President

SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION

DAVID W. OBERLIN

Administrator

The Canadian Ambassador to the Secretary of State

CANADIAN EMBASSY

AMBASSADE DU CANADA

NO. 243

WASHINGTON, D.C., July 27, 1972.

MR. SECRETARY,

I have the honour to refer to your Note of July 27, regarding the Memorandum of Amendment dated May 19, between The St. Lawrence Seaway Authority and The St. Lawrence Seaway Development Corporation, proposing certain arrangements to govern tolls on the St. Lawrence Seaway.

The terms and conditions set forth in your Note and the Memorandum of Amendment attached thereto, respecting the St. Lawrence Seaway tariff of tolls are acceptable to the Government of Canada.

I therefore concur that your Note together with the Memorandum of Amendment attached thereto and this reply, which is authentic in English and French, shall constitute an agreement between our two governments amending the Agreement of March 9, 1959, as amended, with effect from the date of this reply.

Accept, Mr. Secretary, the assurances of my highest consideration.

M CADIEUX

M. Cadieux,
Ambassador.

The Honourable

WILLIAM P. ROGERS,
Secretary of State,
Washington, D.C.

French Text of Canadian Note

CANADIAN EMBASSY

AMBASSADE DU CANADA

N° 243

WASHINGTON, D.C., le 27 juillet 1972.

MONSIEUR LE SECRÉTAIRE D'ETAT,

J'ai l'honneur de me référer à votre Note du 27 juillet concernant le Mémorandum de Modification du 19 mai entre l'Administration de la Voie Maritime du Saint-Laurent et la Saint Lawrence Seaway Development Corporation, qui proposait certaines dispositions régissant le péage sur la dite Voie Maritime.

Les conditions énoncées dans votre Note et dans le Mémorandum de Modification y annexé concernant le tarif de péage de la Voie Maritime du Saint-Laurent sont jugées acceptables par le Gouvernement du Canada.

J'accepte donc que votre Note, ainsi que le Mémorandum de Modification qui y est annexé et la présente réponse dont les versions anglaise et française font également foi constituent, entre nos deux gouvernements, un accord modifiant l'accord du 9 mars 1959 à compter de la date de la présente réponse.

Veuillez agréer, Monsieur le Secrétaire d'Etat, les assurances de ma très haute considération.

M. Cadieux,
Ambassadeur

M CADIEUX

L'Honorable

WILLIAM P. ROGERS,
Secrétaire d'Etat,
Washington, D.C.

MULTILATERAL

Atomic Energy: Application of Safeguards Pursuant to the Non-Proliferation Treaty

Protocol suspending the agreement of August 20, 1969.

Signed at Vienna September 21, 1971;

Entered into force July 23, 1972.

PROTOCOL SUSPENDING THE AGREEMENT BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY, THE REPUBLIC OF AUSTRIA AND THE UNITED STATES OF AMERICA FOR THE APPLICATION OF SAFEGUARDS AND PROVIDING FOR THE APPLICATION OF SAFEGUARDS PURSUANT TO THE NON-PROLIFERATION TREATY

The International Atomic Energy Agency (hereinafter referred to as the "Agency"), the Republic of Austria, and the United States of America;

RECOGNIZING that the Agency has been applying safeguards in accordance with the provisions of the Agreement between the International Atomic Energy Agency, the Republic of Austria, and the United States of America for the Application of Safeguards signed on 20 August 1969 [¹] (hereinafter referred to as the "Safeguards Transfer Agreement") to materials, equipment and facilities required to be safeguarded under the Agreement for Co-operation between the United States of America and the Republic of Austria concerning Civil Uses of Atomic Energy signed on 11 July 1969 [²] (hereinafter referred to as the "Agreement for Co-operation") to ensure so far as it is able that they will not be used in such a way as to further any military purpose;

RECOGNIZING that the Republic of Austria, as a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons [³] (hereinafter referred to as the "Treaty"), has concluded with the Agency an Agreement for the Application of Safeguards (hereinafter referred to as the "Treaty Safeguards Agreement") pursuant to paragraph 1 of Article III of the Treaty;

^¹ TIAS 6816; 21 UST 56.

^² TIAS 6815; 21 UST 10.

^³ TIAS 6839; 21 UST 483.

RECOGNIZING that Article 23 of the Treaty Safeguards Agreement provides for the suspension of Agency safeguards applied pursuant to other safeguards agreements with the Agency;

RECOGNIZING that under Article XI of the Agreement for Co-operation the Government of the Republic of Austria has guaranteed that no source or special nuclear material received by the Government of the Republic of Austria or any person under its jurisdiction from the United States of America, or utilized in, recovered from, or produced in, the items listed in paragraph B(2) of Article XII of the Agreement for Co-operation will be employed for any military purpose;

HAVE AGREED:

1. The Treaty Safeguards Agreement shall be applied as therein provided and the Safeguards Transfer Agreement shall be deemed to be suspended during the time and to the extent that the Treaty Safeguards Agreement is in force, and safeguards specified in the Treaty Safeguards Agreement are being applied by the Agency.
2. In the event that the Republic of Austria intends to exercise its discretion in accordance with Article 14 of the Treaty Safeguards Agreement to use any nuclear material required to be safeguarded under that Agreement in a military activity not proscribed by the Treaty, the Government of the Republic of Austria will satisfy the Agency and the Government of the United States of America that such material is not subject to the guarantees made to the Government of the United States of America by the Government of the Republic of Austria in Article XI of the Agreement for Co-operation, and that no materials, equipment or facilities transferred from the United States of America to the Republic of Austria under the Agreement for Co-operation are involved in such use.
3. This Protocol shall be signed by or for the Director General of the Agency and by the authorized representatives of the Republic of Austria and of the United States of America and shall enter into force on the date on which the Agency receives from the Republic of Austria written notification that its constitutional requirements for entry into force of the Treaty Safeguards Agreement and of this Protocol have been met. [1]

DONE in Vienna, this 21 day of September 1971, in triplicate in the English language.

FOR THE INTERNATIONAL ATOMIC
ENERGY AGENCY:

SIGVARD EKLUND

FOR THE REPUBLIC OF AUSTRIA:

RUDOLF KIRCHSCHLAGER

FOR THE UNITED STATES OF
AMERICA:

T KEITH GLENNAN

¹ July 23, 1972.

GHANA

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Accra April 13 and May 29, 1972;
Entered into force May 29, 1972;
Effective February 7, 1972.*

The American Embassy to the Ghanaian Ministry of Foreign Affairs

No. 62

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Republic of Ghana and has the honor to refer to Congressional approval of the United States Foreign Assistance Act of 1971,[¹] which includes a provision requiring payment to the United States Government in cedis of ten percent of the value of grant military assistance provided by the United States to the Government of Ghana.

In accordance with that provision, it is proposed that the Government of Ghana will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government, than the best legal rate at which United States dollars are sold by authorized dealers in Ghana for cedis on the date deposits are made, an amount in cedis equal to ten percent of each Military Assistance Grant (training) provided by the United States Government to the Government of Ghana. The Government of Ghana will be notified quarterly of grant military assistance and the value thereof. Deposits to the account of the Government of the United States of America will be due and payable upon the request of the Government of the United States, which request shall be made, if at all, within one year following the aforesaid notification.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in cedis, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under pro-

¹ 86 Stat. 26; 22 U.S.C. § 2321g.

grams authorized by the United States Mutual Education and Cultural Exchange Act of 1961.^[1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of the Republic of Ghana shall, together with this note, constitute an agreement between our Governments on this subject effective from and after February 7, 1972, the date on which the United States Congress enacted the Foreign Assistance Act of 1971.

In order to ensure the continuation of the Military Assistance Program (training), it will be necessary for the Government of Ghana to indicate its acceptance of the proposal, in writing, prior to April 21, 1972.

The Embassy of the United States of America avails itself of this opportunity to renew to the Ministry of Foreign Affairs of the Republic of Ghana the assurances of its highest consideration.

FLH

EMBASSY OF THE UNITED STATES OF AMERICA,
Accra, April 13, 1972

The Ghanaian Ministry of Foreign Affairs to the American Embassy

REPUBLIC OF GHANA
MINISTRY OF FOREIGN AFFAIRS
GHANA

No. SCR.TA/US/Vol.2

The Ministry of Foreign Affairs of the Republic of Ghana presents its compliments to the Embassy of the United States of America and with further reference to the latter's Note No. 62 dated 13th April, 1972, has the honour to inform it that the payment of an amount in Cedis equivalent to ten per cent (10%) of the value of "grant military assistance" provided by the Government of the United States of America is acceptable to the Government of Ghana.

The Ministry of Foreign Affairs of the Republic of Ghana avails itself of this opportunity to renew to the Embassy of the United States of America the assurances of its highest consideration.



ACCRA,
29th May, 1972.

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

VENEZUELA

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Signed at Caracas July 19, 1972;
Entered into force July 19, 1972;
Effective February 7, 1972.*

The American Ambassador to the Venezuelan Minister of Foreign Affairs

EMBASSY OF THE UNITED STATES OF AMERICA
No. 413 CARACAS, July 19, 1972

EXCELLENCY:

I have the honor to refer to recent discussions regarding amendments made February 7, 1972, to the United States Foreign Assistance Act of 1971 [¹] which included a provision requiring payment to the account of the Government of the United States in local currency of 10 percent of the value of all forms of military training provided by the United States as grant military assistance to the Government of Venezuela. The provisions of the new law are applied equally to all countries to which the United States provides military assistance.

In accordance with that provision, it is proposed that the Government of Venezuela will deposit in bolivars in an account to be specified by the Government of the United States of America, at a rate of exchange (dollars-bolivars) which is not less favorable to the Government of the United States than the best legal rate at which United States dollars are sold by authorized dealers in the country of Venezuela for bolivars on the date deposits are made. The Government of Venezuela will be notified quarterly of the military training acquired to date and the value thereof. Deposits to the account of the Government of the United States will be due and payable upon request by the Government of the United States, which request shall be made, if at all, within one year following the aforesaid notification of deliveries.

¹ 86 Stat. 26; 22 U.S.C. § 2321g.

It is further proposed that the amounts to be deposited may be used to pay official costs of the Government of the United States of America payable in bolivars, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961. [¹]

It is finally proposed that Your Excellency's reply stating that the foregoing is acceptable to the Government of Venezuela shall, together with this note, constitute an agreement between our Governments on this subject effective from and after February 7, 1972, and shall be applicable to the military training acquired, financed, or granted subsequent to that date.

Accept, Excellency, the renewed assurances of my highest consideration.

ROBERT MCCLINTOCK

His Excellency

DR. ARISTIDES CALVANI,
Minister of Foreign Affairs,
Caracas.

*The Venezuelan Minister of Foreign Affairs to the
American Ambassador*

REPUBLICA DE VENEZUELA
MINISTERIO DE RELACIONES EXTERIORES

Nº 563.-

CARACAS, 19 de julio de 1972

SEÑOR EMBAJADOR:

Tengo a honra responder a su atenta nota de fecha 19 del presente mes, relativa a las modificaciones introducidas el 7 de febrero último a la Ley de 1971 de los Estados Unidos sobre "Ayuda al Exterior".

El Gobierno de Venezuela está de acuerdo con los términos de su comunicación en referencia y, por consiguiente, su nota y la presente respuesta constituyen un convenio entre los Gobiernos de Venezuela y de los Estados Unidos de América, vigente a partir del 7 de febrero de 1972.

Válgame de la ocasión para reiterar a Vuestra Excelencia las seguridades de mi más alta y distinguida consideración.

ARISTIDES CALVANI
Arístides Calvani

Al Excelentísimo Señor

ROBERT MCCLINTOCK,
EmbaJador Extraordinario y
Plenipotenciario de los
Estados Unidos de América.
Presente.-

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

Translation

MINISTRY OF FOREIGN AFFAIRS
REPUBLIC OF VENEZUELA

No. 563

CARACAS, July 19, 1972

MR. AMBASSADOR:

I have the honor to reply to your note of July 19, 1972, regarding the amendments made February 7, 1972, in the United States Foreign Assistance Act of 1971.

The Government of Venezuela concurs in the terms of your note referred to above and therefore your note and this reply shall constitute an agreement between the Governments of Venezuela and the United States of America, effective from and after February 7, 1972.

I avail myself of this opportunity to renew to Your Excellency the assurances of my highest and most distinguished consideration.

ARÍSTIDES CALVANI
Arístides Calvani

His Excellency

ROBERT MCCLINTOCK,

*Ambassador Extraordinary and Plenipotentiary
of the United States of America,
Caracas.*

LUXEMBOURG

Mutual Defense Assistance

Agreement amending annex B to the agreement of January 27, 1950.

Effectuated by exchange of notes

*Signed at Luxembourg June 15 and July 25, 1972;
Entered into force July 25, 1972.*

*The American Ambassador to the Luxembourg Minister of
Foreign Affairs*

No. 26

LUXEMBOURG, 15 June 1972

EXCELLENCY:

I have the honor to refer to this Embassy's Note No. 17 of April 12, 1972 and to the Note dated April 28, 1972 [¹] from the Ministry of Foreign Affairs regarding a revision of Annex B to the Mutual Defense Assistance Agreement [²] between the United States of America and Luxembourg to provide for funds for administrative expenses in connection with the Mutual Defense Assistance Program during the year ending June 30, 1972. It was agreed by this exchange of notes that Annex B would be amended to cover the period July 1, 1971 to June 30, 1972 and the text changed to reflect the actual administrative expenses foreseen in connection with carrying out the Mutual Defense Assistance Agreement. It is accordingly proposed that the text of Annex B be amended to read as follows:

"In implementation of paragraph 1 of Article V of the Mutual Defense Assistance Agreement the Government of Luxembourg in conjunction with the Government of Belgium, will deposit Luxembourg and Belgian francs at such times as requested in an account designated by the United States Embassy at Luxembourg and the United States Embassy at Brussels, not to exceed in total 8,950,040 Luxembourg and Belgian francs, for their use on behalf of the

¹ Not printed.

² TIAS 2014, 7162; 1 UST 69; 22 UST 1473.

Government of the United States for administrative expenditures within Luxembourg and Belgium in connection with carrying out that Agreement for the period July 1, 1971–June 30, 1972."

Upon receipt of a note from Your Excellency indicating that the foregoing text is acceptable to the Luxembourg Government, the Government of the United States of America will consider that this note and the reply thereto constitute an agreement between the two Governments on this subject which shall enter in force on the date of Your Excellency's note.

Accept, Excellency, the renewed assurance of my highest consideration.

KINGDON GOULD, JR.

His Excellency

GASTON THORN

Minister of Foreign Affairs

Grand Duchy of Luxembourg

The Luxembourg Minister of Foreign Affairs to the American Ambassador

MINISTÈRE
DES AFFAIRES ÉTRANGÈRES

N° 31.11.221

LUXEMBOURG, le 25 juillet 1972

MONSIEUR L'AMBASSADEUR,

J'ai l'honneur d'accuser réception de la lettre de Votre Excellence du 15 juin 1972, no 26, ayant pour objet la modification pour l'exercice fiscal 1971-1972 de l'annexe B de l'Accord d'Aide pour la Défense Mutuelle entre le Luxembourg et les Etats-Unis d'Amérique.

Je tiens à marquer à Votre Excellence l'accord du Gouvernement luxembourgeois sur le texte suivant:

"En exécution du paragraphe 1 de l'article V de l'Accord d'Aide pour la Défense Mutuelle, le Gouvernement luxembourgeois, conjointement avec le Gouvernement belge, déposera, lorsqu'il en sera prié, à un compte désigné par l'Ambassade des Etats-Unis à Bruxelles et l' Ambassade des Etats-Unis à Luxembourg, à l'usage de ces dernières, au nom du Gouvernement des Etats-Unis, des francs belges et luxembourgeois dont le total ne dépassera pas 8.950.040 francs belges et luxembourgeois, en vue du règlement des dépenses administratives en Belgique et au Luxembourg résultant de l'exécution de cet Accord pour la période du 1er juillet 1971 au 30 juin 1972".

Je marque également mon accord pour considérer que la lettre de Votre Excellence, en date du 15 juin et la présente réponse, constituent un accord entre les deux Gouvernements à ce sujet, qui entrera en vigueur à la date de ce jour.

Je saisirai cette occasion, Monsieur l'Ambassadeur, pour renouveler à Votre Excellence les assurances de ma très haute considération.

Le Ministre des Affaires Etrangères,

GASTON THORN

Son Excellence

MONSIEUR KINGDON GOULD JR.

*Ambassadeur des Etats-Unis d'Amérique
à
Luxembourg*

Translation

MINISTRY OF FOREIGN AFFAIRS

No. 31.11.221

LUXEMBOURG, July 25, 1972

MR. AMBASSADOR:

I have the honor to acknowledge receipt of your note No. 26 of June 15, 1972, concerning a revision for the fiscal year 1971-1972 of Annex B of the Mutual Defense Assistance Agreement between Luxembourg and the United States of America.

I wish to inform you that the Luxembourg Government agrees to the following text:

[For the English language text, see p. 1315.]

I likewise wish to inform you that I agree that your note of June 15 and this reply shall constitute an agreement between the two Governments in this matter, which will enter into force on this date.

I avail myself of this opportunity, Mr. Ambassador, to renew to you the assurances of my very high consideration.

The Minister of Foreign Affairs
GASTON THORN

His Excellency

KINGDON GOULD, JR.,

*Ambassador of the United States of America,
Luxembourg.*

NICARAGUA

Trade: Meat Imports

*Agreement effected by exchange of notes
Dated at Managua March 14 and April 24, 1972;
Entered into force April 24, 1972.*

The American Embassy to the Nicaraguan Ministry of Foreign Relations

EMBASSY OF THE
UNITED STATES OF AMERICA

No. 16

MANAGUA, March 14, 1972

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Relations of the Republic of Nicaragua and has the honor to refer to discussions between representatives of our two governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (item 106.10 of the tariff schedules of the United States) and fresh, chilled or frozen meat of goats and sheep, except lambs (item 106.20 of the tariff schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including Nicaragua constituting the 1971 restraint program concerning shipments of such meats to the United States. With the understanding that similar agreements also will be concluded for the calendar year 1972 with the governments of all of the countries that participated in the 1971 restraint program, the Embassy of the United States of America has the honor to propose the following agreement between our two governments:

1. On the basis of the foregoing, and subject to paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1155 million pounds and the Government of Nicaragua and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into the United States.

2. The Government of Nicaragua shall limit exports of the aforementioned meats so that the quantity of such meats originating in Nicaragua and during the calendar year 1972 entered, or withdrawn from warehouse, for consumption in the United States does not exceed

44.8 million pounds or such higher figure as may result from adjustments pursuant to paragraph 4.

3. The Government of the United States of America may limit imports of such meats of Nicaraguan origin, whether by direct or indirect shipments, through issuance of regulations governing the entry, or withdrawal from warehouse, for consumption in the United States, provided that: (A) Such regulations shall not be employed to govern the timing of entry, or withdrawal from warehouse, for consumption of such meat from Nicaragua; and (B) Such regulations shall be issued only after consultation with the Government of Nicaragua pursuant to paragraph 6, and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry, or withdrawal from warehouse for consumption, in the calendar year 1972 will exceed the quantity specified in paragraph 2, as it may be increased pursuant to paragraph 4.

4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for Nicaragua, such increase or estimated shortfall shall be allocated to Nicaragua in the proportion that 44.8 million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in the 1972 restraint program.

5. The Government of the United States of America shall separately report meats rejected as unacceptable for human consumption under United States inspection standards, and such meats will not be regarded as part of the quantity described in paragraph 2.

6. The Government of Nicaragua and the Government of the United States of America shall consult promptly upon the request of either government regarding any matter involving the application, interpretation or implementation of this agreement, and regarding increase in the total quantity permissible under the restraint program and allocation of shortfall.

7. In the event that quotas on imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for Nicaragua shall not include the period between October 1, 1968 and December 31, 1972.

The Embassy of the United States of America has the honor to propose that, if the foregoing is acceptable to the Government of Nicaragua, this note together with the Government of Nicaragua's con-

firmatory reply constitute an agreement between our two governments which shall enter into force on the date of your reply.

The Embassy of the United States of America avails itself of this opportunity to renew to the Ministry of Foreign Relations the assurances of its highest consideration.

EMBASSY OF THE UNITED STATES OF AMERICA,
Managua, March 14, 1972

The Nicaraguan Minister of Foreign Relations to the American Embassy

REPUBLICA DE NICARAGUA
AMERICA CENTRAL
MINISTERIO
DE
RELACIONES EXTERIORES

SECRETARIA GENERAL
SECCION DIPLOMATICA

CME. No. 161

MANAGUA, D.N., 24 de Abril de 1972.

SEÑOR EMBAJADOR:

Tengo el honor de dar aviso de recibo de la atenta nota de Vuestra Excelencia No. 16 del 14 de Marzo próximo pasado, por medio de la cual al referirse a conversaciones entre Representantes de nuestros dos Gobiernos relacionadas con la importación a los Estados Unidos para consumo de carne fresca, refrigerada o congelada de ganado vacuno, (rubro 106.10 del Cuadro de Tarifas de los Estados Unidos) y carne fresca, refrigerada o congelada de ganado ovino y caprino, salvo cordero (rubro 106.20 del Cuadro de Tarifas de los Estados Unidos) durante el año civil de 1972, y a los acuerdos entre los Estados Unidos y otros países incluyendo Nicaragua, que constituyen el Programa de Restricciones para 1971, en relación con los envíos de tales carnes a los Estados Unidos.

Con el entendimiento de que acuerdos similares se concertarán también para el año civil de 1972 con los Gobiernos de todos los países que participaron en el Programa de Restricciones para 1971, propone a mi Gobierno la concertación de un acuerdo mediante un intercambio de notas en los siguientes términos:

"1. Con base en lo anterior, y con sujeción a lo indicado en el Párrafo 4, la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972, por parte de países que participen en le Programa de Restricciones será de 1155 millones de libras y el Gobierno de Nicaragua y el Gobierno de los Estados Unidos de América asumirán respectivamente las

obligaciones que se indican a continuación para reglamentar las exportaciones e importaciones a los Estados Unidos.

2. El Gobierno de Nicaragua limitará las exportaciones de las carnes antes señaladas con el fin de que la cantidad de dichas carnes cuyo origen es Nicaragua y que durante el año civil de 1972 hayan tenido entrada o salida de almacén para el consumo en los Estados Unidos no exceda de 44.8 millones de libras o la cantidad mayor que pueda resultar de los ajustes realizados en virtud del Párrafo 4.

3. El Gobierno de los Estados Unidos de América podrá limitar las importaciones de tales carnes cuyo origen es Nicaragua, bien sea en envíos por vía directa o indirecta, por medio de la promulgación de reglamentos que determinen la entrada o salida de almacén de las carnes para consumo en los Estados Unidos, siempre que: (A) Tales reglamentos no se empleen para determinar las fechas o momentos de entrada o salida de almacén para el consumo de tales carnes de Nicaragua; y (B) Tales reglamentos se promulguen sólamente después de que se hayan celebrado consultas con el Gobierno de Nicaragua conforme al Párrafo 6, y sólamente bajo circunstancias en las que es obvio, después de celebrarse tales consultas, que la cantidad de tales carnes que probablemente se presentará para su entrada o salida de almacén para el consumo en el año civil de 1972, excederá la cantidad que se especifica en el Párrafo 2, en la medida en que pueda ser aumentada en virtud del Párrafo 4.

4. El Gobierno de los Estados Unidos de América podrá aumentar la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972 de países que participen en el Programa de Restricciones o podrá adjudicar cualquier déficit calculado en una parte de la cantidad del Programa de Restricciones o en los cálculos iniciales de importaciones de países que no participen en el Programa de Restricciones. Seguidamente, si no se ha calculado un déficit para Nicaragua, tal aumento o déficit calculado será adjudicado a Nicaragua en la proporción que 44.8 millones de libras tienen con el total de participaciones iniciales de todos los países participantes en el Programa de Restricciones y que se calcula no tendrán déficit en el año civil de 1972. La adjudicación anterior no se aplicará a cualesquiera aumentos en el cálculo de importaciones de países que no participen en el Programa de Restricciones para el año de 1972.

5. El Gobierno de los Estados Unidos de América rendirá informes, por separado, acerca de carnes rechazadas por no ser aptas para el consumo humano conforme a las normas de inspección de los Estados Unidos, y tales carnes no se considerarán como parte de la cantidad que se indica en el Párrafo 2.

6. El Gobierno de Nicaragua y el Gobierno de los Estados Unidos de América celebrarán consultas lo antes posible después de que uno de los Gobiernos las solicite, en relación con cualquier asunto sobre la aplicación, interpretación o puesta en práctica del presente

acuerdo, y sobre aumentos de la cantidad total permitida conforme al Programa de Restricciones y la adjudicación del déficit.

7. En el caso en que sea necesario implantar cuotas para las importaciones de tales carnes, el período representativo que el Gobierno de los Estados Unidos de América empleará para calcular la cuota de Nicaragua no incluirá el período entre el 1 de Octubre de 1968 y el 31 de Diciembre de 1972.

La Embajada de los Estados Unidos de América tiene el honor de proponer que si lo anterior es aceptable al Gobierno de Nicaragua, la presente nota, junto con la nota de respuesta confirmatoria del Gobierno de Nicaragua, constituyan un acuerdo entre nuestros dos Gobiernos que entrará en vigor en la fecha de la respuesta de su Gobierno."

En respuesta, me complazco manifestar a Vuestra Excelencia que mi Gobierno acepta las cláusulas que traducidas al español se dejan trascritas, constituyendo la nota de Vuestra Excelencia y esta contestación un Acuerdo entre nuestros dos Gobiernos, que entrará en vigor a partir de esta fecha.

Aprovecho complacido esta oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más alta y distinguida consideración,

LORENZO GUERRERO

Excelentísimo Señor

TURNER B. SHELTON,

*Embajador Extraordinario y Plenipotenciario
de los Estados Unidos de América,
Managua, D.N.*

Translation

REPUBLIC OF NICARAGUA
CENTRAL AMERICA
MINISTRY OF FOREIGN AFFAIRS

GENERAL SECRETARIAT
DIPLOMATIC SECTION

CME No. 161

MANAGUA, D.N., April 24, 1972

MR. AMBASSADOR:

I have the honor to acknowledge receipt of Your Excellency's courteous note No. 16 of March 14 last, referring to conversations between representatives of our two governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (item 106.10 of the tariff schedules of the United States) and fresh, chilled or frozen meat of goats and sheep, except

lambs (item 106.20 of the tariff schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including Nicaragua constituting the 1971 restraint program concerning shipments of such meats to the United States.

With the understanding that similar agreements also will be concluded for the calendar year 1972 with the governments of all the countries that participated in the 1971 restraint program, proposes to my government that an agreement be concluded by an exchange of notes in the following terms:

[For the English language text, see p. 1318.]

In reply, I take pleasure in informing Your Excellency that my Government agrees to the terms that, translated into Spanish, are transcribed above, and that Your Excellency's note and this reply constitute an Agreement between our two Governments, which will enter into force on today's date.

I avail myself of this opportunity to renew to Your Excellency the assurances of my highest and most distinguished consideration.

LORENZO GUERRERO

His Excellency

TURNER B. SHELTON,

Ambassador Extraordinary and Plenipotentiary

of the United States of America,

Managua, Nicaragua.

ARGENTINA

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Buenos Aires April 4 and June 8, 1972;
Entered into force June 8, 1972.*

*The American Embassy to the Argentine Ministry of Foreign Affairs
and Worship*

No. 44

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs and Worship of the Argentine Republic and has the honor to refer to the United States Foreign Assistance Act of 1971, [¹] which includes a provision requiring payment to the United States Government in Argentine pesos of ten percent of the value of Grant Military Assistance provided by the United States to the Government of Argentina. In order to comply with this mandatory provision, it is proposed that the Government of Argentina will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which U.S. dollars are sold by authorized dealers in Argentina for Argentine pesos on the date deposits are made, an amount in Argentine pesos equal to ten percent of each Grant of Military Assistance to the Government of Argentina. The Government of Argentina will be notified quarterly of deliveries of defense articles and rendering of defense services and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification of services rendered. It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Argentine pesos, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961.[²]

^¹ 86 Stat. 26; 22 U.S.C. § 2321g.

^² 75 Stat. 527; 22 U.S.C. § 2451 note.

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of Argentina shall, together with this note, constitute an agreement between our governments on this subject effective from and after February 7, 1972 and applicable to the rendering of defense services funded or agreed to and rendered on or subsequent to that date.

The Embassy takes this opportunity to renew to the Ministry assurances of its highest consideration.

MVK

EMBASSY OF THE UNITED STATES OF AMERICA,
BUENOS AIRES, April 4, 1972.

*The Argentine Ministry of Foreign Affairs and Worship to the
American Embassy*

MINISTERIO DE RELACIONES EXTERIORES Y CULTO

El Ministerio de Relaciones Exteriores y Culto presenta sus atentos saludos a la Embajada de los Estados Unidos de América y con referencia a su nota N° 44 de fecha 4 de abril último, le es grato comunicarle que, tras haber realizado las consultas del caso, el Gobierno de la República Argentina toma nota de la disposición de la Ley de Ayuda Exterior de los Estados Unidos de América para el año 1972, que prevé el pago al Gobierno de dicho país, en pesos argentinos del diez por ciento (10%) del valor de la asistencia militar proporcionada bajo el concepto de entrenamiento del Programa de Ayuda Militar (P.A.M.).

Entiende el Gobierno argentino que los pagos que habría de efectuar en este concepto, estarán relacionados al valor de los elementos y servicios de defensa cuyo suministro está previsto durante el curso del año fiscal estadounidense, iniciado el 1º de julio de 1971 y que termina el 30 de los corrientes.

Considera el Gobierno argentino que esta disposición comienza el día 5 de abril de 1972, fecha en la cual la Cancillería fue notificada oficialmente por la Embajada según nota de referencia, de acuerdo a lo que prescribe el artículo I, párrafo 4 del Memorándum de Entendimiento suscripto en el año 1964 cuyo texto reza: "La asistencia a prestarse entre las partes bajo este acuerdo estará sujeta a los respectivos preceptos constitucionales y a los términos y condiciones de las leyes aplicables que estén en vigor en cada uno de los países en el momento de prestar tal asistencia, y esos términos y condiciones se harán conocer".

En cuanto a las modalidades aplicables para los años fiscales 1973 y subsiguientes, ellas estarían sujetas a lo dispuesto en el artículo I, párrafo 5 del Memorándum de Entendimiento suscripto en el año 1964 cuyo texto dice: "los dos Gobiernos por intermedio de representantes debidamente autorizados, harán de tiempo en tiempo arreglos detallados para el cumplimiento de las disposiciones del presente acuerdo". Por lo tanto ellas quedarán condicionadas a los arreglos que se realicen.

El Ministerio de Relaciones Exteriores y Culto aprovecha la oportunidad para reiterar a la Embajada de los Estados Unidos de América las expresiones de su más distinguida consideración.

BUENOS AIRES, 8 de junio de 1972.

Referencias. :

D.A.N. N°

Doc. Agreg.



A LA EMBAJADA DE LOS ESTADOS UNIDOS DE AMÉRICA
BUENOS AIRES.

Translation

MINISTRY OF FOREIGN AFFAIRS AND WORSHIP

The Ministry of Foreign Affairs and Worship presents its compliments to the Embassy of the United States of America and, with reference to Embassy note No. 44 of April 4, 1972, has the pleasure of informing it that, after due consultation, the Government of the Argentine Republic has taken note of the provision of the United States Foreign Assistance Act for the year 1972, requiring payment to the United States Government, in Argentine pesos, of 10% of the value of military assistance provided in the form of training under the Military Assistance Program.

The Argentine Government understands that the payments to be made under this provision will relate to the value of defense articles and services, to be supplied during the course of the United States fiscal year beginning July 1, 1971, and terminating June 30, 1972.

The Argentine Government considers that this provision takes effect April 5, 1972, the date on which the Ministry of Foreign Affairs was officially notified by the Embassy by means of the aforementioned

note, in accordance with the provisions of Article I (4) of the Memorandum of Understanding signed in 1964,¹ the text of which reads as follows: "The assistance to be furnished by the parties under this agreement shall be subject to the respective constitutional provisions and to the terms and conditions of the applicable laws which are in force in each country at the time of furnishing such assistance, and those terms and conditions shall be made known."

With regard to the arrangements applicable for the fiscal year 1973 and subsequent years, they would be subject to the provisions of Article I (5) of the Memorandum of Understanding signed in 1964, the text of which reads as follows: ". . . the two Governments through appropriate representatives shall, from time to time, enter into detailed arrangements to carry out the provisions of this agreement." The matter will, therefore, be subject to future arrangements.

The Ministry of Foreign Affairs and Worship avails itself of this opportunity to renew to the Embassy of the United States of America the expression of its most distinguished consideration.

BUENOS AIRES, June 8, 1972

References:

D.A.N. No.

Attached document

[SEAL]

[Initialed]

EMBASSY OF THE UNITED STATES OF AMERICA,
BUENOS AIRES.

¹ TIAS 5594; 15 UST 720.

KOREA
Education: Educational Commission

Agreement amending the agreement of June 18, 1963, as amended.

Effectuated by exchange of notes

Dated at Seoul June 1 and July 10, 1972;

Entered into force July 10, 1972.

The American Embassy to the Korean Ministry of Foreign Affairs

No. 253

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Republic of Korea and has the honor to propose that, in accordance with the provisions of Article 12 of the agreement between the Government of the United States of America and the Government of the Republic of Korea for Financing Certain Educational Exchange Programs of June 18, 1963, as amended,[¹] the Agreement be further amended as follows:

Article 1-The first paragraph to be amended to read: "There shall be established a commission to be known as the Korean-American Educational Commission (hereinafter designated 'The Commission') to replace the United States Educational Commission in Korea. The Commission shall be recognized by the Government of the United States of America and the Government of the Republic of Korea as an organization created and established to facilitate the administration of an educational program to be financed by funds made available to the Commission by the Government of the United States of America and by other sources for purposes of the present agreement."

Article 4-The first sentence to be amended to read: "The Commission shall consist of ten members, five of whom shall be citizens of the United States of America and five of whom shall be citizens of Korea."

Upon receipt of a Note from the Government of Korea indicating that the foregoing provisions are acceptable to it, the Government of the United States of America will consider that this Note and the reply thereto constitute an Agreement between the two Governments on this subject which shall enter into force on the date of the reply of the Government of the Republic of Korea.

¹ TIAS 5366, 5960, 7240; 14 UST 850; 17 UST 71; 22 UST 2056.

The Embassy of the United States of America avails itself of this opportunity to renew to the Ministry of Foreign Affairs of the Republic of Korea the assurances of its highest consideration.

CFB, JR.

EMBASSY OF THE UNITED STATES OF AMERICA,
Seoul, June 1, 1972

The Korean Ministry of Foreign Affairs to the American Embassy

MINISTRY OF FOREIGN AFFAIRS
SEOUL

OBJ-684

The Ministry of Foreign Affairs of the Republic of Korea presents its compliments to the Embassy of the United States of America and has the honour to acknowledge the receipt of the latter's Note No. 253 of June 1, 1972, which reads as follows:

"The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Republic of Korea and has the honor to propose that, in accordance with the provisions of Article 12 of the agreement between the Government of the United States of America and the Government of the Republic of Korea for Financing Certain Educational Exchange Programs of June 18, 1963, as amended, the Agreement be further amended as follows:

Article 1—The first paragraph to be amended to read: "There shall be established a commission to be known as the Korean-American Educational Commission (hereinafter designated 'The Commission') to replace the United States Educational Commission in Korea. The Commission shall be recognized by the Government of the United States of America and the Government of the Republic of Korea as an organization created and established to facilitate the administration of an educational program to be financed by funds made available to the Commission by the Government of the United States of America and by other sources for purposes of the present agreement."

Article 4—The first sentence to be amended to read: "The Commission shall consist of ten members, five of whom shall be citizens of the United States of America and five of whom shall be citizens of Korea."

Upon receipt of a Note from the Government of Korea indicating that the foregoing provisions are acceptable to it, the Government of

the United States of America will consider that this Note and the reply thereto constitute an Agreement between the two Governments on this subject which shall enter into force on the date of the reply of the Government of the Republic of Korea.

The Embassy of the United States of America avails itself of this opportunity to renew to the Ministry of Foreign Affairs of the Republic of Korea the assurances of its highest consideration."

The Ministry of Foreign Affairs has further the honour to inform the Embassy of the United States of America that the foregoing provisions are acceptable to the Government of the Republic of Korea and to confirm that the latter's Note and this reply thereto will constitute an agreement between the two Governments on this subject which shall enter into force on the date of this reply.

The Ministry of Foreign Affairs avails itself of this opportunity to renew to the Embassy of the United States of America the assurances of its highest consideration.



SEOUL, *July 10, 1972*

EL SALVADOR
Military Assistance: Deposits Under
Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at San Salvador April 25 and June 15, 1972;
Entered into force June 15, 1972;
Effective February 7, 1972.*

The American Embassy to the Salvadoran Ministry of Foreign Relations

No. 156

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Relations of the Republic of El Salvador and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971, [¹] which includes a provision requiring payment to the United States Government in Salvadoran colons of ten per cent of the value of grant military assistance and excess defense articles provided by the United States to the Government of El Salvador.

In accordance with that provision, it is proposed that the Government of El Salvador will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in the country of El Salvador for Salvadoran colons on the date deposits are made, the following amounts in Salvadoran colons:

(A) In the case of any excess defense article given to the Government of El Salvador, an amount equal to ten per cent of the fair value of that article, as determined by the United States Government, and (B) in the case of a grant of military assistance to the Government of El Salvador, an amount equal to ten per cent of each such grant. The Government of El Salvador will be notified quarterly of deliveries of defense articles and rendering of defense services and the values thereof. Deposits to the account of the USG will be due and payable upon request by the USG, which request shall be made, if at all, within one year following the aforesaid notification of deliveries.

¹ 86 Stat. 26; 22 U.S.C. § 2321g.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Salvadoran colons, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961. [1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the Government of the Republic of El Salvador shall, together with this Note, constitute an agreement between our governments on this subject effective from and after February 7, 1972 and applicable to deliveries of defense articles and rendering of defense services funded or agreed to and delivered or rendered on or subsequent to that date.

The Embassy avails itself of this opportunity to renew to the Ministry the assurances of its highest consideration.

EMBASSY OF THE UNITED STATES OF AMERICA,
San Salvador, April 25, 1972.

The Salvadoran Ministry of Foreign Relations to the American Embassy

MINISTERIO DE RELACIONES EXTERIORES
REPUBLICA DE EL SALVADOR, C.A.

DIRECCIÓN DE ASUNTOS AMERICANOS

A.D. 10328

El Ministerio de Relaciones Exteriores presenta sus atentos saludos a la Honorable Embajada de los Estados Unidos de América y tiene el honor de referirse a su Nota No. 156 de fecha 25 de abril del corriente año en la que se hace referencia a las recientes discusiones relativas al Convenio de Ayuda Exterior de los Estados Unidos para 1971, el cual incluye una cláusula solicitando que se pague al Gobierno de los Estados Unidos, en Colones Salvadoreños, el diez por ciento del valor de la concesión de ayuda militar y de exceso de artículos de defensa suministrados por los Estados Unidos al Gobierno de El Salvador.

De acuerdo con dicha propuesta y oída la opinión favorable del Ministerio de Defensa esta Cancillería acepta en todos sus términos la nota en referencia y conforme a ella esta contestación constituye un acuerdo entre nuestro Gobierno y el de los Estados Unidos de América en esta materia, efectivo el día 7 de febrero de 1972, y admite

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

que se aplique a la entrega de artículos de defensa y concesión de ayuda militar consolidada o acordada y entregada o concedidas desde esta fecha en adelante.

El Ministerio de Relaciones Exteriores se vale de esta oportunidad para renovar a la Honorable Embajada de los Estados Unidos de América, los sentimientos de su más alta y distinguida consideración.

SAN SALVADOR, 15 de junio de 1972.



[SEAL]

Translation

MINISTRY OF FOREIGN RELATIONS
REPUBLIC OF EL SALVADOR
OFFICE OF AMERICAN AFFAIRS

A.D. 10328

The Ministry of Foreign Affairs presents its compliments to the Embassy of the United States of America and has the honor to refer to its note No. 156 of April 25, 1972, concerning the recent discussions regarding the United States Foreign Assistance Agreement of 1971, which includes a provision requiring payment to the United States Government in Salvadoran colons of ten per cent of the value of grant military assistance and excess defense articles provided by the United States to the Government of El Salvador.

Pursuant to that proposal, and with the favorable opinion of the Ministry of Defense, this Ministry accepts the terms of the aforesaid note in their entirety; accordingly, this reply shall constitute an agreement between our Government and the Government of the United States of America on this subject, effective on February 7, 1972, and applicable to deliveries of defense articles and rendering of defense services funded or agreed to and delivered or rendered on or subsequent to that date.

The Ministry of Foreign Affairs avails itself of this opportunity to renew to the Embassy of the United States of America the assurances of its highest and most distinguished consideration.

SAN SALVADOR, June 15, 1972

[SEAL]

[Initialed]

FIJI

Alien Amateur Radio Operators: Continued Application to Fiji of the United States-United Kingdom Agreement of November 26, 1965

*Agreement effected by exchange of notes
Signed at Suva and Washington July 10 and August 14, 1972;
Entered into force August 14, 1972.*

*The Fijian Prime Minister and Minister for Foreign Affairs to the
Secretary of State*

PRIME MINISTER
SUVA, FIJI

1173/5/2

10th JULY, 1972

SIR,

I have the honour to refer to the declaration made on 10th October 1970 to the Secretary-General of the United Nations, in which it was stated that the Government of Fiji, conscious of the desirability of maintaining existing legal relationships, and conscious of its obligations under international law to honour its treaty commitments, acknowledged that many treaty rights and obligations of the Government of the United Kingdom in respect of Fiji were succeeded to by Fiji upon independence by virtue of customary international law; but since it is likely that in virtue of customary international law certain treaties might have lapsed at the date of independence of Fiji it seemed essential that each treaty should be subjected to legal examination; and that it was proposed that after this examination would have completed, to indicate which, if any, of the treaties which might have lapsed by customary international law the Government of Fiji might wish to treat as having lapsed.

The Government of Fiji has examined the Exchange of Notes Constituting an Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the United States of America Concerning the Reciprocal Granting of Licenses to Amateur Radio Operators entered into between Great

Britain and the United States of America on 26 November 1965. [¹]

I have the honour to inform you that it is the desire of the Government of Fiji that the above agreement should be regarded as in force between our respective countries.

I have the honour to suggest that your Government's reply in the above sense and this Note should be considered by our respective Governments as constituting an Agreement to that effect.

I have the honour to be
Sir,
Your obedient servant

K.K.T. MARA

(K.K.T. Mara)
Prime Minister and Minister
for Foreign Affairs

The Secretary of State,
GOVERNMENT OF THE UNITED STATES OF AMERICA,
Washington.

The Secretary of State to the Fijian Chargé d'Affaires ad interim

The Secretary of State presents his compliments to the Charge d'Affaires ad interim of Fiji and acknowledges the receipt of the note dated July 18, 1972, [²] forwarding a note dated July 10, 1972, addressed to the Secretary of State by the Prime Minister and Minister for Foreign Affairs of Fiji expressing the desire of the Government of Fiji that the exchange of notes constituting an agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the United States of America concerning the reciprocal granting of licenses to amateur radio operators, entered into on November 26, 1965, be regarded as in force between the United States and Fiji.

The Government of the United States of America considers that the above-mentioned agreement is in force between the United States of America and Fiji and that the note of July 10, 1972, from the Prime Minister and Minister for Foreign Affairs of Fiji and this reply constitute an agreement to that effect.

C. I. B.

Department of State,
Washington, August 14, 1972

¹ TIAS 5941; 16 UST 2047.

² Not printed.

MULTILATERAL

Nice Agreement Concerning the International Classification of Goods and Services to Which Trademarks Are Applied

Done at Nice June 15, 1957;

*Accession advised by the Senate of the United States of America
December 11, 1971,*

*Accession approved by the President of the United States of America
January 26, 1972,*

*Accession of the United States of America deposited with the Gov-
ernment of France February 29, 1972,*

*Proclaimed by the President of the United States of America
August 2, 1972;*

*Entered into force with respect to the United States of America
May 25, 1972.*

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

CONSIDERING THAT

The Nice Agreement Concerning the International Classification of Goods and Services to which Trademarks are Applied, dated June 15, 1957, remains open for accession, a certified copy of which is hereto annexed,

The Senate of the United States of America by its resolution of December 11, 1971, two-thirds of the Senators present concurring therein, gave its advice and consent to accession to the Nice Agreement, and on January 26, 1972 the President of the United States of America approved accession to the Agreement,

The United States of America, in accordance with the provisions of Article 6, paragraph (3) of the Nice Agreement, deposited its instrument of accession on February 29, 1972, pursuant to the provisions of Article 16, paragraph (2) of the Paris Convention for the Protection of Industrial Property as revised at London on June 2, 1934,

Pursuant to the provisions of Article 6, paragraph (3) of the Nice Agreement and Article 16, paragraph (3) of the 1934 revision of the Paris Convention, the Nice Agreement entered into force for the United States of America on May 25, 1972, the date requested by the United States of America,

NOW, THEREFORE, I, Richard Nixon, President of the United States of America, proclaim and make public the Nice Agreement, to the end that it shall be observed and fulfilled with good faith on and after May 25, 1972 by the United States of America and by the citizens of the United States of America and all other persons subject to the jurisdiction thereof.

IN TESTIMONY WHEREOF, I have signed this proclamation and caused the Seal of the United States of America to be affixed.

DONE at the city of Washington this second
day of August in the year of our Lord
one thousand nine hundred seventy-
two and of the Independence of the
United States of America the one
hundred ninety-seventh.

RICHARD NIXON

By the President

JOHN N. IRWIN II

Acting Secretary of State

ARRANGEMENT DE NICE
CONCERNANT LA
CLASSIFICATION INTERNATIONALE
des PRODUITS et des SERVICES
AUXQUELS S'APPLIQUENT
LES MARQUES DE FABRIQUE
OU DE COMMERCE

SIGNÉ LE 15 JUIN 1957

ARRANGEMENT DE NICE CONCERNANT
 LA CLASSIFICATION INTERNATIONALE DES PRODUITS
 ET DES SERVICES AUXQUELS S'APPLIQUENT
 LES MARQUES DE FABRIQUE OU DE COMMERCE [¹]

SIGNÉ LE 15 JUIN 1957

ARTICLE PREMIER

- (1) Les pays auxquels s'applique le présent Arrangement sont constitués à l'état d'Union particulière.
- (2) Ils adoptent, en vue de l'enregistrement des marques, une même classification des produits et des services.
- (3) Cette classification est constituée par
 - a) une liste des classes,
 - b) une liste alphabétique des produits et des services avec indication des classes dans lesquelles ils sont rangés.
- (4) La liste des classes et la liste alphabétique des produits sont celles qui ont été éditées en 1935 par le Bureau International pour la protection de la propriété industrielle.
- (5) La liste des classes et la liste alphabétique des produits et des services pourront être modifiées ou complétées par le Comité d'experts institué par l'article 3 du présent Arrangement et selon la procédure fixée par cet article.
- (6) La classification sera établie en langue française et, sur la demande de chaque pays contractant, une traduction officielle en sa langue pourra en être publiée par le Bureau international, en accord avec l'Administration nationale intéressée. Chaque traduction de la liste des produits et des services mentionnera, en regard de chaque produit ou service, outre le numéro d'ordre propre à l'énumération alphabétique dans la langue considérée, le numéro d'ordre qu'il porte dans la liste établie en langue française.

ARTICLE 2

- (1) Sous réserve des obligations imposées par le présent Arrangement, la portée de la classification internationale est celle qui lui est attribuée par chaque pays contractant. Notamment, la classification internationale ne lie les pays contractants ni quant à l'appréciation de l'étendue de la protection de la marque, ni quant à la reconnaissance des marques de service.
- (2) Chacun des pays contractants se réserve la faculté d'appliquer la classification internationale des produits et des services à titre de système principal ou de système auxiliaire.
- (3) Les Administrations des pays contractants feront figurer dans les titres et publications officielles des enregistrements des marques les numéros des classes de la classification internationale auxquelles appartiennent les produits ou les services pour lesquels la marque est enregistrée.
- (4) Le fait qu'une dénomination figure dans la liste alphabétique des produits et des services n'affecte en rien les droits qui pourraient exister sur cette dénomination.

¹ For the English language text, see p. 1845. [Footnote added by the Department of State.]

ARTICLE 3

- (1) Il est institue aupres du Bureau international un Comite d'experts charge de decider de toutes modifications ou de tous complements a apporter a la classification internationale des produits et des services. Chacun des pays contractants sera represente au Comite d'experts, lequel s'organise par un reglement d'ordre interieur adopte a la majorite des pays representes. Le Bureau international est represente au Comite.
- (2) Les propositions de modification ou de complement doivent etre adresseees par les Administrations des pays contractants au Bureau international qui devra les transmettre aux membres du Comite d'experts au plus tard deux mois avant la seance de celui-ci au cours de laquelle ces propositions seront examinees.
- (3) Les decisions du Comite relatives aux modifications a apporter a la classification sont prises a l'unanimité des pays contractants. Par modification, il faut entendre tout transfert de produits d'une classe a une autre, ou toute creation de nouvelle classe entraînant un tel transfert.
- (4) Les decisions du Comite relatives aux complements a apporter a la classification sont prises a la majorite simple des pays contractants.
- (5) Les experts ont la faculite de faire connaître leur avis par écrit ou de deleguer leurs pouvoirs a l'expert d'un autre pays.
- (6) Dans le cas ou un pays n'aurait pas designe d'expert pour le representant, ainsi que dans le cas ou l'expert designe n'aurait pas fait connaitre son opinion dans un délai qui sera fixe par le reglement d'ordre interieur, le pays en cause serait considere comme acceptant la decision du Comite.

ARTICLE 4

- (1) Toutes modifications et tous complements decidees par le Comite d'experts sont notifies aux Administrations des pays contractants par le Bureau international. L'entree en vigueur des decisions aura lieu, en ce qui concerne les complements, dès la reception de la notification et, en ce qui concerne les modifications, dans un délai de six mois a compter de la date d'envoi de la notification.
- (2) Le Bureau international, en sa qualite de depositaire de la classification des produits et des services, y incorpore les modifications et les complements entres en vigueur. Ces modifications et ces complements font l'objet d'avis publies dans les deux periodiques « La Propriété industrielle » et « Les Marques internationales ».

ARTICLE 5

- (1) Les depenses que le Bureau international aura a assumer en vue de l'execution du present Arrangement seront supportees en commun par les pays contractants, dans les conditions fixees par l'article 13, alineas (8), (9) et (10), de la Convention de Paris pour la protection de la propriete industrielle. Jusqu'a nouvelle decision, ces depenses ne pourront pas depasser la somme de 40.000 francs or par annee (¹).
- (2) Les depenses prevues a l'article 5, alinea (1), ne comprennent pas les frais afférents aux travaux des Conferences de plenipotentiaires, ni les frais que pourront entraîner des travaux speciaux ou des publications effectuees conformement aux decisions d'une Conference. Ces frais, dont le montant annuel ne pourra pas depasser 10.000 francs or (²), seront supportes en commun par les pays contractants dans les conditions fixees a l'alinea (1) ci-dessus.
- (3) Les montants des depenses prevus aux alineas (1) et (2) pourront étre augmentes, au besoin, par decision des pays contractants au d'une des Conferences prevues a l'article 8, de telles decisions seront valables a condition de recueillir l'adhesion des quatre cinquièmes des pays contractants.

(¹) Cette unité monétaire est le franc à 100 centimes, d'un poids de 10/31 de gramme et d'un titre de 0,900.

ARTICLE 6

- (1) Le present Arrangement sera ratifie et les instruments de ratification en seront déposés à PARIS, ou plus tard le 31 décembre 1961. Ces ratifications, avec leurs dates et toutes les déclarations dont elles pourraient être accompagnées, seront notifiées par le Gouvernement de la République Française aux Gouvernements des autres pays contractants.
- (2) Les pays de l'Union pour la protection de la propriété industrielle qui n'auront pas signé le présent Arrangement dans les conditions prévues à l'article 11, alinea 2, seront admis à y adhérer, sur leur demande, dans les conditions prescrites par l'article 16 de la Convention de Paris pour la protection de la propriété industrielle.
- (3) Les pays au nom desquels l'instrument de ratification n'aura pas été déposé dans le délai visé à l'alinea (1) seront admis à l'adhésion aux termes de l'article 16 de la Convention de Paris pour la protection de la propriété industrielle.

ARTICLE 7

Le présent Arrangement entrera en vigueur entre les pays au nom desquels il aura été ratifié au qui y auront adhéré, un mois après la date à laquelle les instruments de ratification auront été déposés ou les adhésions notifiées par dix pays au moins.

L'Arrangement aura la même force et durée que la Convention de Paris pour la protection de la propriété industrielle.

ARTICLE 8

- (1) Le présent Arrangement sera soumis à des révisions périodiques, en vue d'y introduire les améliorations désirables.
- (2) Chacune de ces révisions fera l'objet d'une Conference qui se tiendra dans l'un des pays contractants, entre les délégués desdits pays.
- (3) L'Administration du pays auquel siégera la Conference préparera, avec le concours du Bureau International, les travaux de cette Conference.
- (4) Le Directeur du Bureau international assistera aux séances des Conférences et prendra part aux discussions sans voix délibérative.

ARTICLE 9

- (1) Chacun des pays contractants aura la faculté de dénoncer le présent Arrangement au moyen d'une notification par écrit au Gouvernement de la Confédération suisse.
- (2) Cette dénonciation, qui sera communiquée par ledit Gouvernement à tous les autres pays contractants, ne produira effet qu'à l'égard du pays qui l'aura faite et seulement douze mois après réception de la notification de dénonciation adressée au Gouvernement de la Confédération suisse, l'Arrangement restant exécutoire pour les autres pays contractants.

ARTICLE 10

Les dispositions de l'article 16 bis de la Convention de Paris pour la protection de la propriété industrielle s'appliquent au présent Arrangement.

ARTICLE 11

- (1) Le présent Arrangement sera signé en un seul exemplaire, lequel sera déposé dans les Archives du Ministère des Affaires Etrangères de la République Française. Une copie, certifiée conforme, sera remise par la voie diplomatique à chacun des Gouvernements des pays contractants.
- (2) Le présent Arrangement restera ouvert à la signature des pays membres de l'Union pour la protection de la propriété industrielle jusqu'au 31 décembre 1958 au jusqu'à sa mise en vigueur, si celle-ci intervient avant cette date.

En foi de quoi les Plénipotentiaires soussignés ont signé le présent Arrangement.
Fait à Nice en un seul exemplaire, le 15 juin 1957.

Pour la République Fédérale d'Allemagne

Herbert KUHNEMANN

Pour l'Australie

Pour l'Autriche

Gottfried THALER

Pour la Belgique

L. HERMANS

Pour le Brésil

Pour la République Populaire de Bulgarie

Pour le Canada

Pour Ceylan

Pour Cuba

Pour le Danemark

Julie OLSEN

Pour la République Dominicaine

Pour l'Egypte

Pour l'Espagne

N. JURISTO VALVERDE
J. L. APARICIO

Pour les Etats-Unis d'Amérique

Pour la Finlande

Pour la France

Marcel PLAISANT

Pour le Royaume Uni de Grande Bretagne et d'Irlande du Nord

R. G. ATKINSON

Pour la Grèce

Pour la République Populaire de Hongrie

Lojos DEGE

Pour l'Indonésie

Pour l'Irlande

Pour Israël

Pour l'Italie

TALAMO

Pour le Japon

Pour le Liban

FAYARD
A. SOUFI

Pour la Principauté du Liechtenstein

Hans MORF

Pour le Luxembourg

J. P. HOFFMANN

Pour le Maroc

Taïeb SEBTI

Pour le Mexique

Pour Monaco

C. SOLAMITO

Pour la Norvège

Roald ROED

Pour la Nouvelle-Zélande

Pour les Pays-Bas

C. J. DE HAAN

Pour la République Populaire de Pologne

Z. MUSZYNSKI

Pour le Portugal, avec les îles Açores et Madère

Jorge VAN ZELLER GARIN

Pour la Roumanie

M. BALANESCO 31 12 1958

Pour la Suède

Claes UGGLA

Pour la Suisse

Hans MORF
Leon EGGER

Pour la Syrie

Pour la République Tchécoslovaque

Dr. Jan CECH

Pour la Tunisie

Salah Eddine EL GOULLI

Pour la République de Turquie

Feridun C. ERKIN 31 12 1958

Pour l'Union Sud-Africaine

COPIE CERTIFIÉE CONFORME A L'ORIGINAL
CONSERVÉ AUX ARCHIVES
DU MINISTÈRE DES AFFAIRES ÉTRANGÈRES

Pour le Viet-Nam

PARIS, le 20 JUIN 1969

Milenko JAKOVLEVIC



Le Ministre Plénipotentiaire
Directeur des Archives Diplomatiques

[Signature]
Signé: J. LALOY

*Translation prepared by the
United International
Bureau for the Protection
of Intellectual Property*

NICE AGREEMENT
CONCERNING
THE INTERNATIONAL
CLASSIFICATION OF GOODS
AND SERVICES TO WHICH
TRADEMARKS ARE APPLIED

OF JUNE 15, 1957

Article 1

- (1) The countries to which this Agreement applies form a Special Union.
- (2) They adopt, for the purpose of the registration of marks, a single classification of goods and services.
- (3) This classification consists of:
 - (a) a list of classes;
 - (b) an alphabetical list of goods and services with an indication of the classes into which they fall.
- (4) The list of classes and the alphabetical list of goods are those which were published in 1935 by the International Bureau for the Protection of Industrial Property.
- (5) The list of classes and the alphabetical list of goods and services may be modified or supplemented by the Committee of Experts set up under Article 3 of this Agreement, in accordance with the procedure laid down in that Article.

(6) The classification shall be established in the French language and, at the request of any contracting country, an official translation into the language of that country may be published by the International Bureau in agreement with the national Administration concerned. Each translation of the list of goods and services shall mention against each of the goods or services, in addition to its number according to the alphabetical listing in the language concerned, the number which it bears in the list established in the French language.

Article 2

(1) Subject to the requirements prescribed by this Agreement, the effect of the international classification shall be that attributed to it by each contracting country. In particular, the international classification shall not bind the contracting countries in respect of either the evaluation of the extent of the protection afforded to any given mark, or the recognition of service marks.

(2) Each of the contracting countries reserves the right to apply the international classification of goods and services as a principal or as a subsidiary system.

(3) The Administrations of the contracting countries shall include in the official documents and publications concerning the registrations of marks the numbers of the classes of the international classification to which the goods or services for which the mark is registered belong.

(4) The fact that a term is included in the alphabetical list of goods and services in no way affects any rights which might exist in such a term.

Article 3

(1) A Committee of Experts charged with deciding all modifications and additions to be made in the international classification of goods and services shall be set up at the International Bureau. Each of the contracting countries shall be represented on the Committee of Experts, which shall be organized according to Regula-

tions adopted by a majority of the countries represented. The International Bureau shall be represented on the Committee.

(2) Proposals for modification or addition shall be addressed by the Administrations of the contracting countries to the International Bureau, which shall transmit them to the members of the Committee of Experts not later than two months before that session of the Committee at which the said proposals are to be considered.

(3) Decisions of the Committee concerning modifications in the classification shall be made with the unanimous consent of the contracting countries. "Modification" means any transfer of goods from one class to another or the creation of any new class entailing such transfer.

(4) Decisions of the Committee concerning additions to the classification shall be made by a simple majority of the contracting countries.

(5) Each expert shall have the right to submit his opinion in writing or to delegate his powers to the expert of another country.

(6) If a country does not appoint an expert to represent it, or if the expert appointed does not submit his opinion within a period to be prescribed by the Regulations, the country concerned shall be considered to have accepted the decision of the Committee.

Article 4

(1) Every modification and addition decided by the Committee of Experts shall be notified to the Administrations of the contracting countries by the International Bureau. The decisions shall come into force, in so far as additions are concerned, as soon as the notification is received, and, as far as modifications are concerned, within a period of six months to be reckoned from the date of dispatch of the notification.

(2) The International Bureau, as the depositary of the classification of goods and services, shall incorporate

therein the modifications and additions which have entered into force. Announcements of these modifications and additions shall be published in the two periodicals *La Propriété industrielle* and *Les Marques internationales*.

Article 5

(1) The expenses which the International Bureau incurs in carrying out this Agreement shall be borne in common by the contracting countries in accordance with the provisions of Article 13(8), (9), and (10), of the Paris Convention for the Protection of Industrial Property.^[1] Until a further decision is made, these expenses may not exceed the sum of 40,000 gold francs^[2] per annum.

(2) The expenses referred to in paragraph (1) of Article 5 shall not include expenses relating to the work of diplomatic conferences, or those due to special work or publications carried out in accordance with the decisions of a conference. These expenses, the annual total of which may not exceed 10,000 gold francs,^[2] shall be borne in common by the contracting countries as provided by the terms of paragraph (1) above.

(3) The totals of the expenses provided for in paragraphs (1) and (2) above may, if necessary, be increased by decision of the contracting countries or of one of the conferences referred to in Article 8, such decisions shall be deemed valid if they are supported by four-fifths of the contracting countries.

Article 6

(1) This Agreement shall be ratified and the instruments of ratification deposited at Paris not later than December 31, 1961. These ratifications, with their dates and any statements accompanying them, shall be notified by the Government of the French Republic to the Governments of the other contracting countries.

(2) Countries of the Union for the Protection of Industrial Property which have not signed this Agreement in accordance with Article 11(2) shall be allowed to accede to it, at their request, in accordance with the

¹ TS 941, 53 Stat. 1781. [Footnote added by the Department of State.]

² This monetary unit is the franc at 100 centimes, with a weight of 10/31 of a gram and a fineness of 0.900.

provisions of Article 16 of the Paris Convention for the Protection of Industrial Property

(3) Countries which have not deposited an instrument of ratification within the period prescribed by paragraph (1) of this Article shall be allowed to accede to the Agreement in accordance with Article 16 of the Paris Convention for the Protection of Industrial Property.

Article 7

This Agreement shall come into force between those countries which have ratified or acceded to it one month from the date on which the instruments of ratification have been deposited or the accessions notified by not less than ten countries. The Agreement shall have the same force and duration as the Paris Convention for the Protection of Industrial Property.

Article 8

(1) This Agreement shall be submitted to periodical revisions with a view to the introduction of desired improvements.

(2) Every revision shall be considered at a conference which shall be held in one of the contracting countries, between the delegates of the said countries.

(3) The Administration of the country in which the conference is to be held shall prepare the work of the conference, with the assistance of the International Bureau.

(4) The Director of the International Bureau shall attend the meetings of the conferences and take part in the discussions, but without the right to vote.

Article 9

(1) Each contracting country shall be entitled to denounce this Agreement by means of a written notification addressed to the Government of the Swiss Confederation.

(2) This denunciation, which shall be communicated by the Government of the Swiss Confederation to all other contracting countries, shall have effect only in respect of the denouncing country and only twelve months after receipt of the notification addressed to the Government of the Swiss Confederation, the Agreement remaining in force for the other contracting countries.

Article 10

The provisions of Article 16bis of the Paris Convention for the Protection of Industrial Property shall apply to this Agreement.

Article 11

(1) This Agreement shall be signed in a single copy, which shall be deposited in the archives of the Ministry of Foreign Affairs of the French Republic. A certified copy shall be transmitted through diplomatic channels to each of the Governments of the contracting countries.

(2) This Agreement shall remain open for signature by the member countries of the Union for the Protection of Industrial Property until December 31, 1958, or until it comes into force, whichever date is the earlier.

IN WITNESS WHEREOF the undersigned Plenipotentiaries have signed
this Agreement.

DONE at Nice in a single copy on June 15, 1957

FOR THE FEDERAL REPUBLIC OF GERMANY	HERBERT KUHNEMANN
FOR AUSTRALIA	GOTTFRIED THALER
FOR AUSTRIA	L. HERMANS
FOR BELGIUM	
FOR BRAZIL	
FOR THE PEOPLE'S REPUBLIC OF BULGARIA	
FOR CANADA	
FOR CEYLON	
FOR CUBA	
FOR DENMARK	JULIE OLSEN
FOR THE DOMINICAN REPUBLIC	
FOR EGYPT	
FOR SPAIN	N JURISTO VALVERDE J L. APARICIO
FOR THE UNITED STATES OF AMERICA	
FOR FINLAND	
FOR FRANCE	MARCEL PLAISANT
FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	R. G. ATKINSON
FOR GREECE	
FOR THE HUNGARIAN PEOPLE'S REPUBLIC	LAJOS DEGE
FOR INDONESIA	
FOR IRELAND	
FOR ISRAEL	
FOR ITALY	TALAMO
FOR JAPAN	
FOR LEBANON	FAYARD A. SOUFI
FOR THE PRINCIPALITY OF LIECHTENSTEIN	HANS MORF
FOR LUXEMBOURG	J P HOFFMANN
FOR MOROCCO	TAIEB SEBTI
FOR MEXICO	
FOR MONACO	C. SOLAMITO
FOR NORWAY	ROALD ROED

FOR NEW ZEALAND
FOR THE NETHERLANDS C. J. DE HAAN
FOR THE POLISH PEOPLE'S REPUBLIC Z. MUSZYNSKI
FOR PORTUGAL, INCLUDING THE AZORES AND MADEIRA JORGE VAN ZELLER GARIN
FOR ROMANIA M. BALANESCO 31.12.1958
FOR SWEDEN CLAES UGGLA
FOR SWITZERLAND HANS MORF
LÉON EGGER
FOR SYRIA
FOR THE CZECHOSLOVAK REPUBLIC DR. JAN CECH
FOR TUNISIA SALAH EDDINE EL GOULLI
FOR THE REPUBLIC OF TURKEY FERIDUN C. ERKIN 31.12.1958
FOR THE UNION OF SOUTH AFRICA
FOR VIET-NAM
FOR YUGOSLAVIA MILENKO JAKOVLJEVIC

MULTILATERAL

Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks

Done at Stockholm July 14, 1967;

***Accession advised by the Senate of the United States of America
December 11, 1971,***

***Accession approved by the President of the United States of America
January 26, 1972;***

Accession of the United States of America deposited with the Government of Sweden February 23, 1972;

Proclaimed by the President of the United States of America August 2, 1972;

***Entered into force with respect to the United States of America
May 25, 1972.***

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

CONSIDERING THAT

The Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks of June 15, 1957, as revised at Stockholm on July 14, 1967, remains open for accession, a certified copy of which is hereto annexed,

The Senate of the United States of America by its resolution of December 11, 1971, two-thirds of the Senators present concurring therein, gave its advice and consent to accession to the Agreement as revised, and on January 26, 1972 the President of the United States of America approved accession to the Agreement as revised,

The United States of America deposited its instrument of accession on February 23, 1972, in accordance with the provisions of Article 9, paragraph (3) of the Agreement as revised,

Pursuant to the provisions of Article 9, paragraph (4), the Agreement as revised entered into force for the United States of America on May 25, 1972, three months after the date on which its accession was notified by the Director General of the World Intellectual Property Organization,

Now, THEREFORE, I, Richard Nixon, President of the United States of America, proclaim and make public the Agreement as revised, to the end that it shall be observed and fulfilled with good faith on and after May 25, 1972 by the United States of America and by the citizens of the United States of America and all other persons subject to the jurisdiction thereof.

IN TESTIMONY WHEREOF, I have signed this proclamation and caused the Seal of the United States of America to be affixed.

[SEAL]

DONE at the city of Washington this second day of August in the year of our Lord one thousand nine hundred seventy-two and of the Independence of the United States of America the one hundred ninety-seventh.

RICHARD NIXON

By the President

JOHN N. IRWIN II

Acting Secretary of State

Arrangement de Nice
concernant la classification internationale
des produits et des services
aux fins de l'enregistrement des marques

du 15 juin 1957
révisé à STOCKHOLM le 14 juillet 1967

**Arrangement de Nice
concernant la classification internationale
des produits et des services
aux fins de l'enregistrement des marques [¹]**

du 15 juin 1957

révisé à STOCKHOLM le 14 juillet 1967

Article 1

1) Les pays auxquels s'applique le présent Arrangement sont constitués à l'état d'Union particulière.

2) Ils adoptent, en vue de l'enregistrement des marques, une même classification des produits et des services.

3) Cette classification est constituée par:

- a) une liste des classes,
- b) une liste alphabétique des produits et des services avec indication des classes dans lesquelles ils sont rangés.

4) La liste des classes et la liste alphabétique des produits sont celles qui ont été éditées en 1935 par le Bureau international pour la protection de la propriété industrielle.

5) La liste des classes et la liste alphabétique des produits et des services pourront être modifiées ou complétées par le Comité d'experts institué par l'article 3 du présent Arrangement et selon la procédure fixée par cet article.

6) La classification sera établie en langue française et, sur la demande de chaque pays contractant, une traduction officielle en sa langue pourra en être publiée par le Bureau international de la propriété intellectuelle (ci-après dénommé « le Bureau international ») visé dans la Convention instituant l'Organisation Mondiale de la Propriété Intellectuelle (ci-après dénommée « l'Organisation »), en accord avec l'Administration nationale intéressée. Chaque traduction de la liste des produits et des services mentionnera, en regard de chaque produit ou service, outre le numéro d'ordre propre à l'énumération alphabétique dans la langue considérée, le numéro d'ordre qu'il porte dans la liste établie en langue française.

¹ For the English language text, see p. 1373.

Article 2

1) Sous réserve des obligations imposées par le présent Arrangement, la portée de la classification internationale est celle qui lui est attribuée par chaque pays contractant. Notamment, la classification internationale ne lie les pays contractants ni quant à l'appréciation de l'étendue de la protection de la marque, ni quant à la reconnaissance des marques de service.

2) Chacun des pays contractants se réserve la faculté d'appliquer la classification internationale des produits et des services à titre de système principal ou de système auxiliaire.

3) Les Administrations des pays contractants feront figurer dans les titres et publications officiels des enregistrements des marques les numéros des classes de la classification internationale auxquelles appartiennent les produits ou les services pour lesquels la marque est enregistrée.

4) Le fait qu'une dénomination figure dans la liste alphabétique des produits et des services n'affecte en rien les droits qui pourraient exister sur cette dénomination.

Article 3

1) Il est institué auprès du Bureau international un comité d'experts chargé de décider de toutes modifications ou de tous compléments à apporter à la classification internationale des produits et des services. Chacun des pays contractants sera représenté au Comité d'experts, lequel s'organise par un règlement d'ordre intérieur adopté à la majorité des pays représentés. Le Bureau international est représenté au Comité.

2) Les propositions de modification ou de complément doivent être adressées par les Administrations des pays contractants au Bureau international qui devra les transmettre aux membres du Comité d'experts au plus tard deux mois avant la séance de celui-ci au cours de laquelle ces propositions seront examinées.

3) Les décisions du Comité relatives aux modifications à apporter à la classification sont prises à l'unanimité des pays contractants. Par modification, il faut entendre tout transfert de produits d'une classe à une autre, ou toute création de nouvelles classes entraînant un tel transfert.

4) Les décisions du Comité relatives aux compléments à apporter à la classification sont prises à la majorité simple des pays contractants.

5) Les experts ont la faculte de faire connaitre leur avis par écrit ou de déléguer leurs pouvoirs à l'expert d'un autre pays.

6) Dans le cas où un pays n'aurait pas désigné d'expert pour le représenter, ainsi que dans le cas où l'expert désigné n'aurait pas fait connaître son opinion dans un délai qui sera fixé par le règlement d'ordre intérieur, le pays en cause serait considéré comme acceptant la décision du Comité.

Article 4

1) Toutes modifications et tous compléments décidés par le Comité d'experts sont notifiées aux Administrations des pays contractants par le Bureau international. L'entrée en vigueur des décisions aura lieu, en ce qui concerne les compléments, dès la réception de la notification et, en ce qui concerne les modifications, dans un délai de six mois à compter de la date d'envoi de la notification.

2) Le Bureau international, en sa qualité de dépositaire de la classification des produits et des services, y incorpore les modifications et les compléments entrés en vigueur. Ces modifications et ces compléments font l'objet d'avis publiés dans les deux périodiques *La Propriété industrielle* et *Les Marques internationales*.

Article 5

1) a) L'Union particulière a une Assemblée composée des pays qui ont ratifié le présent Acte ou y ont adhéré.

b) Le Gouvernement de chaque pays est représenté par un délégué, qui peut être assisté de suppléants, de conseillers et d'experts.

c) Les dépenses de chaque délégation sont supportées par le Gouvernement qui l'a désignée.

2) a) Sous réserve des dispositions des articles 3 et 4, l'Assemblée:

i) traite de toutes les questions concernant le maintien et le développement de l'Union particulière et l'application du présent Arrangement;

ii) donne au Bureau international des directives concernant la préparation des conférences de révision, compte étant tenu des observations des pays de l'Union particulière qui n'ont pas ratifié le présent Acte ou n'y ont pas adhéré;

- iii) examine et approuve les rapports et les activités du Directeur général de l'Organisation (ci-après dénommée « le Directeur général ») relatifs à l'Union particulière et lui donne toutes directives utiles concernant les questions de la compétence de l'Union particulière;
- iv) arrête le programme, adopte le budget triennal de l'Union particulière et approuve ses comptes de clôture;
- v) adopte le règlement financier de l'Union particulière;
- vi) crée, outre le Comité d'experts mentionné à l'article 3, les autres comités d'experts et les groupes de travail qu'elle juge utiles à la réalisation des objectifs de l'Union particulière;
- vii) décide quels sont les pays non membres de l'Union particulière et quelles sont les organisations intergouvernementales et internationales non gouvernementales qui peuvent être admis à ses réunions en qualité d'observateurs;
- viii) adopte les modifications des articles 5 à 8;
- ix) entreprend toute autre action appropriée en vue d'atteindre les objectifs de l'Union particulière;
- x) s'acquitte de toutes autres tâches qu'implique le présent Arrangement.

b) Sur les questions qui intéressent également d'autres Unions administrées par l'Organisation, l'Assemblée statue connaissance prise de l'avis du Comité de coordination de l'Organisation.

3) a) Chaque pays membre de l'Assemblée dispose d'une voix.

b) La moitié des pays membres de l'Assemblée constitue le quorum.

c) Nonobstant les dispositions du sous-alinea b), si, lors d'une session, le nombre des pays représentés est inférieur à la moitié mais égal ou supérieur au tiers des pays membres de l'Assemblée, celle-ci peut prendre des décisions; toutefois, les décisions de l'Assemblée, à l'exception de celles qui concernent sa procédure, ne deviennent exécutoires que lorsque les conditions énoncées ci-après sont remplies. Le Bureau international communique lesdites décisions aux pays membres de l'Assemblée qui n'étaient pas représentés, en les invitant à exprimer par écrit, dans un délai de trois mois à compter de la date de ladite communication, leur vote ou leur abstention. Si, à l'expiration de ce délai, le nombre des pays ayant ainsi exprimé leur vote ou leur abstention est au moins égal au nombre de pays qui faisait défaut pour que le quorum fût

atteint lors de la session, lesdites decisions deviennent exécutoires, pourvu qu'en même temps la majorite nécessaire reste acquise.

d) Sous réserve des dispositions de l'article 8.2), les décisions de l'Assemblée sont prises à la majorité des deux tiers des votes exprimés.

e) L'abstention n'est pas considérée comme un vote.

f) Un délégué ne peut représenter qu'un seul pays et ne peut voter qu'au nom de celui-ci.

g) Les pays de l'Union particulière qui ne sont pas membres de l'Assemblée sont admis à ses réunions en qualité d'observateurs.

4) a) L'Assemblée se réunit une fois tous les trois ans en session ordinaire sur convocation du Directeur général et, sauf cas exceptionnels, pendant la même période et au même lieu que l'Assemblée générale de l'Organisation.

b) L'Assemblée se réunit en session extraordinaire sur convocation adressée par le Directeur général, à la demande d'un quart des pays membres de l'Assemblée.

c) L'ordre du jour de chaque session est préparé par le Directeur général.

5) L'Assemblée adopte son règlement intérieur.

Article 6

1) a) Les tâches administratives incombant à l'Union particulière sont assurées par le Bureau international.

b) En particulier, le Bureau international prépare les réunions et assure le secrétariat de l'Assemblée, du Comité d'experts, et de tous autres comités d'experts et tous groupes de travail que l'Assemblée ou le Comité d'experts peut créer.

c) Le Directeur général est le plus haut fonctionnaire de l'Union particulière et la représente.

2) Le Directeur général et tout membre du personnel désigné par lui prennent part, sans droit de vote, à toutes les réunions de l'Assemblée, du Comité d'experts, et de tout autre comité d'experts ou tout groupe de travail que l'Assemblée ou le Comité d'experts peut créer. Le Directeur général ou un membre du personnel désigné par lui est d'office secrétaire de ces organes.

3) a) Le Bureau international, selon les directives de l'Assemblée, prépare les conférences de révision des dispositions de l'Arrangement autres que les articles 5 à 8.

b) Le Bureau international peut consulter des organisations intergouvernementales et internationales non gouvernementales sur la préparation des conférences de révision.

c) Le Directeur général et les personnes désignées par lui prennent part, sans droit de vote, aux délibérations dans ces conférences.

d) Le Bureau international exécute toutes autres tâches qui lui sont attribuées.

Article 7

1) a) L'Union particulière a un budget.

b) Le budget de l'Union particulière comprend les recettes et les dépenses propres à l'Union particulière, sa contribution au budget des dépenses communes aux Unions, ainsi que, le cas échéant, la somme mise à la disposition du budget de la Conférence de l'Organisation.

c) Sont considérées comme dépenses communes aux Unions, les dépenses qui ne sont pas attribuées exclusivement à l'Union particulière mais également à une ou plusieurs autres Unions administrées par l'Organisation. La part de l'Union particulière dans ces dépenses communes est proportionnelle à l'intérêt que ces dépenses présentent pour elle.

2) Le budget de l'Union particulière est arrêté compte tenu des exigences de coordination avec les budgets des autres Unions administrées par l'Organisation.

3) Le budget de l'Union particulière est financé par les ressources suivantes:

- i) les contributions des pays de l'Union particulière;
- ii) les taxes et sommes dues pour les services rendus par le Bureau international au titre de l'Union particulière;
- iii) le produit de la vente des publications du Bureau international concernant l'Union particulière et les droits afférents à ces publications;
- iv) les dons, legs et subventions;
- v) les loyers, intérêts et autres revenus divers.

4) a) Pour déterminer sa part contributive au sens de l'alinea 3)i), chaque pays de l'Union particulière appartient à la classe dans laquelle il est rangé pour ce qui concerne l'Union de Paris pour la protection de la propriété industrielle, et paie ses contributions annuelles sur la base du nombre d'unités déterminé pour cette classe dans cette Union.

b) La contribution annuelle de chaque pays de l'Union particulière consiste en un montant dont le rapport à la somme totale des contributions annuelles au budget de l'Union particulière de tous les pays est le même que le rapport entre le nombre des unités de la classe dans laquelle il est rangé et le nombre total des unités de l'ensemble des pays.

c) Les contributions sont dues au premier janvier de chaque année.

d) Un pays en retard dans le paiement de ses contributions ne peut exercer son droit de vote dans aucun des organes de l'Union particulière si le montant de son arrière est égal ou supérieur à celui des contributions dont il est redevable pour les deux années complètes écoulées. Cependant, un tel pays peut être autorisé à conserver l'exercice de son droit de vote au sein dudit organe aussi longtemps que ce dernier estime que le retard résulte de circonstances exceptionnelles et inévitables.

e) Dans le cas où le budget n'est pas adopté avant le début d'un nouvel exercice, le budget de l'année précédente est reconduit selon les modalités prévues par le règlement financier.

5) Le montant des taxes et sommes dues pour des services rendus par le Bureau international au titre de l'Union particulière est fixe par le Directeur général, qui fait rapport à l'Assemblée.

6) a) L'Union particulière possède un fonds de roulement constitué par un versement unique effectué par chaque pays de l'Union particulière. Si le fonds devient insuffisant, l'Assemblée décide de son augmentation.

b) Le montant du versement initial de chaque pays au fonds précité ou de sa participation à l'augmentation de celui-ci est proportionnel à la contribution de ce pays pour l'année au cours de laquelle le fonds est constitué ou l'augmentation décidée.

c) La proportion et les modalités de versement sont arrêtées par l'Assemblée, sur proposition du Directeur général et après avis du Comité de coordination de l'Organisation.

7) a) L'Accord de siège conclu avec le pays sur le territoire duquel l'Organisation a son siège prévoit que, si le fonds de roulement est insuffisant, ce pays accorde des avances. Le montant de ces avances et les conditions dans lesquelles elles sont accordées font l'objet, dans chaque cas, d'accords séparés entre le pays en cause et l'Organisation.

b) Le pays vise au sous-alinea a) et l'Organisation ont chacun le droit de denoncer l'engagement d'accorder des avances moyennant notification par écrit. La denonciation prend effet trois ans après la fin de l'année au cours de laquelle elle a été notifiée.

8) La vérification des comptes est assurée, selon les modalités prévues par le règlement financier, par un ou plusieurs pays de l'Union particulière ou par des contrôleurs extérieurs, qui sont, avec leur consentement, désignés par l'Assemblée.

Article 8

1) Des propositions de modification des articles 5, 6, 7 et du présent article peuvent être présentées par tout pays membre de l'Assemblée ou par le Directeur général. Ces propositions sont communiquées par ce dernier aux pays membres de l'Assemblée six mois au moins avant d'être soumises à l'examen de l'Assemblée.

2) Toute modification des articles visés à l'alinea 1) est adoptée par l'Assemblée. L'adoption requiert les trois quarts des votes exprimés; toutefois, toute modification de l'article 5 et du présent alinea requiert les quatre cinquièmes des votes exprimés.

3) Toute modification des articles visés à l'alinea 1) entre en vigueur un mois après la réception par le Directeur général des notifications écrites d'acceptation, effectuée en conformité avec leurs règles constitutionnelles respectives, de la part des trois quarts des pays qui étaient membres de l'Assemblée au moment où la modification a été adoptée. Toute modification desdits articles ainsi acceptée lie tous les pays qui sont membres de l'Assemblée au moment où la modification entre en vigueur ou qui en deviennent membres à une date ultérieure; toutefois, toute modification qui augmente les obligations financières des pays de l'Union particulière ne lie que ceux d'entre eux qui ont notifié leur acceptation de ladite modification.

Article 9

1) Chacun des pays de l'Union particulière qui a signé le présent Acte peut le ratifier et, s'il ne l'a pas signé, peut y adhérer.

2) Tout pays étranger à l'Union particulière, partie à la Convention de Paris pour la protection de la propriété industrielle, peut adhérer au présent Acte et devenir, de ce fait, membre de l'Union particulière.

3) Les instruments de ratification et d'adhesion sont déposés aupres du Directeur general.

4) a) A l'égard des cinq pays qui ont, les premiers, dépose leurs instruments de ratification ou d'adhesion, le present Acte entre en vigueur trois mois apres le dépôt du cinquième de ces instruments.

b) A l'égard de tout autre pays, le present Acte entre en vigueur trois mois après la date a laquelle sa ratification ou son adhesion a été notifiée par le Directeur general, a moins qu'une date postérieure n'ait été indiquée dans l'instrument de ratification ou d'adhesion. Dans ce dernier cas, le present Acte entre en vigueur, a l'égard de ce pays, a la date ainsi indiquée.

5) La ratification ou l'adhesion emporte de plein droit accession a toutes les clauses et admission a tous les avantages stipules par le present Acte.

6) Apres l'entrée en vigueur du present Acte, un pays ne peut adhérer a l'Acte du 15 juin 1957 du present Arrangement que conjointement avec la ratification du present Acte ou l'adhesion a celui-ci.

Article 10

Le present Arrangement a la même force et duree que la Convention de Paris pour la protection de la propriété industrielle.

Article 11

1) Le present Arrangement sera soumis a des revisions en vue d'y introduire les améliorations désirables.

2) Chacune de ces revisions fera l'objet d'une conférence qui se tiendra entre les délégues des pays de l'Union particulière.

Article 12

1) a) Le present Acte remplace, dans les rapports entre les pays de l'Union particulière qui l'ont ratifié ou qui y ont adhéré, l'Acte du 15 juin 1957.

b) Toutefois, tout pays de l'Union particulière qui a ratifié le présent Acte ou qui y a adhéré est lié par l'Acte du 15 juin 1957 dans ses rapports avec les pays de l'Union particulière qui n'ont pas ratifié le present Acte ou qui n'y ont pas adhéré.

2) Les pays étrangers à l'Union particulière qui deviennent parties au présent Acte l'appliquent à l'égard de tout pays de

cette Union qui n'est pas partie au présent Acte. Lesdits pays admettent que ledit pays de l'Union applique dans ses relations avec eux les dispositions de l'Acte du 15 juin 1957.

Article 13

1) Tout pays peut dénoncer le présent Acte par notification adressee au Directeur general. Cette dénonciation emporte aussi dénonciation de l'Acte du 15 juin 1957 du présent Arrangement et ne produit son effet qu'à l'égard du pays qui l'a faite, l'Arrangement restant en vigueur et executoire a l'égard des autres pays de l'Union particulière.

2) La dénonciation prend effet un an apres le jour ou le Directeur general a reçu la notification.

3) La faculte de dénonciation prevue par le présent article ne peut être exercée par un pays avant l'expiration d'un délai de cinq ans a compter de la date a laquelle il est devenu membre de l'Union particulière.

Article 14

Les dispositions de l'article 24 de la Convention de Paris pour la protection de la propriété industrielle s'appliquent au présent Arrangement.

Article 15

1) a) Le présent Acte est signé en un seul exemplaire en langue française et déposé aupres du Gouvernement de la Suede.

b) Des textes officiels sont établis par le Directeur general, apres consultation des Gouvernements intéressés, dans les autres langues que l'Assemblée pourra indiquer.

2) Le présent Acte reste ouvert à la signature, à Stockholm, jusqu'au 13 janvier 1968.

3) Le Directeur general transmet deux copies, certifiées conformes par le Gouvernement de la Suede, du texte signé du présent Acte aux Gouvernements de tous les pays de l'Union particulière et, sur demande, au Gouvernement de tout autre pays.

4) Le Directeur general fait enregistrer le présent Acte aupres du Secretariat de l'Organisation des Nations Unies.

5) Le Directeur general notifie aux Gouvernements de tous les pays de l'Union particulière les signatures, les dépôts d'instruments de ratification ou d'adhésion, l'entrée en vigueur de toutes dispositions du présent Acte, et les notifications de dénonciation.

Article 16

1) Jusqu'à l'entree en fonction du nouveau Directeur general, les references, dans le present Acte, au Bureau international de l'Organisation ou au Directeur general sont consideres comme se rapportant respectivement au Bureau de l'Union etablie par la Convention de Paris pour la protection de la propriete industrielle ou a son Directeur.

2) Les pays de l'Union particuliére qui n'ont pas ratifie le present Acte, ou n'y ont pas adhérè, peuvent, pendant cinq ans apres l'entree en vigueur de la Convention instituant l'Organisation, exercer, s'ils le désirent, les droits prevus par les articles 5 a 8 du present Acte, comme s'ils etaient lies par ces articles. Tout pays qui desire exercer ledits droits depose a cette fin aupres du Directeur general une notification ecrite qui prend effet a la date de sa reception. De tels pays sont reputes étre membres de l'Assemblee jusqu'à l'expiration de ladite periode.

EN FOI DE QUOI, les soussignes,
dûment autorises à cet effet, ont signé
le présent Acte.

FAIT à Stockholm, le 14 juillet 1967.

POUR L'AUSTRALIE.

B^{on} F Cogels

POUR LE DANEMARK.

Julie Olsen

POUR L'ESPAGNE.

**J. F Alcover
Electo J. Garcia Tejedor**

POUR LA FRANCE:

B. de Menthon

POUR LA HONGRIE.

Esztergályos

POUR L'IRLANDE.

Valentín Iremonger

TIAS 7419

POUR ISRAËL:

**Z. Sher
G. Gavrieli**

POUR L'ITALIE.

**Cippico
Giorgio Ranzì**

POUR LE LIBAN:**POUR LE LIECHTENSTEIN:****POUR LE MAROC:**

H'ssaine

POUR MONACO:

J. M. Notari

POUR LA NORVÈGE.

**Jens Evensen
B. Stuevold Lassen**

POUR LES PAYS-BAS:

**Gerbrandy
W G. Belinfante**

POUR LA POLOGNE.

M. Kajzer

POUR LE PORTUGAL:

**Adriano de Carvalho
Jose de Oliveira Ascensão
Ruy Alvaro Costa de Moraes Sei**

POUR LA RÉPUBLIQUE FÉDÉRALE D'ALLEMAGNE:

Kurt Haertel

**POUR LE ROYAUME-UNI
DE GRANDE BRETAGNE ET D'IRLANDE DU NORD**

**Gordon Grant
William Wallace**

POUR LA SUÈDE.

Herman Kling

POUR LA SUISSE:

**Hans Morf
Joseph Voyame**

POUR LA TCHÉCOSLOVAQUIE.

POUR LA TUNISIE.

POUR LA YUGOSLAVIE.

A. Jelic

NOTE

Arrangement de Nice concernant la classification internationale des produits et des services aux fins de l'enregistrement des marques

En ce qui concerne *les signatures*, il y a lieu de noter que figurent sur l'original:

- page 17, sous la signature « Esztergályos », les mots suivants: « 12/1/1968 subject to ratification ».
- page 17, sous la signature « Valentin Iremonger », la date suivante: « 12 January 1968 ».
- page 18, au-dessus de la signature « Jens Evensen », les mots suivants: « subject to ratification ».
- page 19, sous la signature « M. Kajzer », les mots suivants: « sous réserve de ratification ».

Je certifie que le texte qui precede est la copie conforme de l'Acte de Stockholm de l'Arrangement de Nice concernant la classification internationale des produits et des services aux fins de l'enregistrement des marques, adopte a la Conférence de Stockholm de la Propriete Intellectuelle, 1967, ouvert a la signature a Stockholm le 14 juillet 1967, et dont l'original est deposee aupres du Gouvernement de la Suède.



Wilhelm Carlgren

Wilhelm Carlgren

Directeur des Archives
Ministère Royal des Affaires étrangères,
Stockholm

14 janvier 1968

[*Translation*]

**Nice Agreement
Concerning the International Classification
of Goods and Services for the Purposes
of the Registration of Marks**

of June 15, 1957,
as revised at STOCKHOLM on July 14, 1967¹⁾

Article 1

[Establishment of a Special Union; Adoption of an International
Classification; Definition of International Classification; Languages]²⁾

- (1) The countries to which this Agreement applies constitute a Special Union.
- (2) They adopt, for the purposes of the registration of marks, a single classification of goods and services.
- (3) This classification consists of:
 - (a) a list of classes;
 - (b) an alphabetical list of goods and services with an indication of the classes into which they fall.
- (4) The list of classes and the alphabetical list of goods are those which were published in 1935 by the International Bureau for the Protection of Industrial Property.
- (5) The list of classes and the alphabetical list of goods and services may be amended or supplemented by the Committee of Experts set up under Article 3 of this Agreement, in accordance with the procedure laid down in that Article.

¹⁾ This is a provisional English translation prepared by BIRPI.

²⁾ Articles have been given titles to facilitate their identification.
There are no titles in the signed, French text.

[Footnotes added by BIRPI.]

(6) The classification shall be established in the French language and, at the request of any contracting country, an official translation into the language of that country may be published by the International Bureau of Intellectual Property (hereinafter designated as "the International Bureau") referred to in the Convention establishing the World Intellectual Property Organization [¹] (hereinafter designated as "the Organization"), in agreement with the national Office concerned. Each translation of the list of goods and services shall mention against each of the goods or services, in addition to its number according to the alphabetical listing in the language concerned, the number which it bears in the list established in the French language.

Article 2

[Legal Scope and Use of the International Classification]

(1) Subject to the requirements prescribed by this Agreement, the effect of the international classification shall be that attributed to it by each contracting country. In particular, the international classification shall not bind the contracting countries in respect of either the evaluation of the extent of the protection afforded to any given mark or the recognition of service marks.

(2) Each of the contracting countries reserves the right to use the international classification of goods and services as a principal or as a subsidiary system.

(3) The Offices of the contracting countries shall include in the official documents and publications concerning the registrations of marks the numbers of the classes of the international classification to which the goods or services for which the mark is registered belong.

(4) The fact that a term is included in the alphabetical list of goods and services in no way affects any rights which might subsist in such a term.

¹ TIAS 6932, 21 UST 1749.

Article 3

[Amendments and Additions to the International Classification;
Committee of Experts]

(1) A Committee of Experts charged with deciding all amendments and additions to be made in the international classification of goods and services shall be set up at the International Bureau. Each of the contracting countries shall be represented on the Committee of Experts, which shall be organized according to Regulations adopted by a majority of the countries represented. The International Bureau shall be represented on the Committee.

(2) Proposals for amendments or additions shall be addressed by the Offices of the contracting countries to the International Bureau, which shall transmit them to the members of the Committee of Experts not later than two months before that session of the Committee at which the said proposals are to be considered.

(3) Decisions of the Committee concerning amendments to the classification shall require the unanimous consent of the contracting countries. "Amendment" shall mean any transfer of goods from one class to another or the creation of any new class entailing such transfer.

(4) Decisions of the Committee concerning additions to the classification shall require a simple majority of the votes of the contracting countries.

(5) Each expert shall have the right to submit his opinion in writing or to delegate his powers to the expert of another country

(6) If a country does not appoint an expert to represent it, or if the expert appointed does not submit his opinion within a period to be prescribed by the Regulations, the country concerned shall be considered to have accepted the decision of the Committee.

Article 4

[Notification, Entry Into Force, and Publication, of Amendments and Additions]

(1) Every amendment and addition decided by the Committee of Experts shall be notified to the Offices of the contracting countries by the International Bureau. The decisions shall come into force, in so far as additions are concerned, as soon as the notification is received, and, as far as amendments are concerned, within a period of six months from the date of dispatch of the notification.

(2) The International Bureau, as the depositary of the classification of goods and services, shall incorporate therein the amendments and additions which have entered into force. Announcements of such amendments and additions shall be published in the two periodicals, *La Propriété Industrielle* and *Les Marques internationales*.

Article 5

[Assembly of the Special Union]

(1) (a) The Special Union shall have an Assembly consisting of those countries which have ratified or acceded to this Act.

(b) The Government of each country shall be represented by one delegate, who may be assisted by alternate delegates, advisors, and experts.

(c) The expenses of each delegation shall be borne by the Government which has appointed it.

(2) (a) Subject to the provisions of Articles 3 and 4, the Assembly shall:

- (i) deal with all matters concerning the maintenance and development of the Special Union and the implementation of this Agreement;
- (ii) give directions to the International Bureau concerning the preparation for conferences of revision, due account being taken of any comments made by those countries

of the Special Union which have not ratified or acceded to this Act;

- (iii) review and approve the reports and activities of the Director General of the Organization (hereinafter designated as "the Director General") concerning the Special Union, and give him all necessary instructions concerning matters within the competence of the Special Union;
- (iv) determine the program and adopt the triennial budget of the Special Union, and approve its final accounts;
- (v) adopt the financial regulations of the Special Union;
- (vi) establish, in addition to the Committee of Experts referred to in Article 3, such other committees of experts and working groups as it may deem necessary to achieve the objectives of the Special Union;
- (vii) determine which countries not members of the Special Union and which intergovernmental and international non-governmental organizations shall be admitted to its meetings as observers;
- (viii) adopt amendments to Articles 5 to 8;
- (ix) take any other appropriate action designed to further the objectives of the Special Union;
- (x) perform such other functions as are appropriate under this Agreement.

(b) With respect to matters which are of interest also to other Unions administered by the Organization, the Assembly shall make its decisions after having heard the advice of the Coordination Committee of the Organization.

(3) (a) Each country member of the Assembly shall have one vote.

(b) One-half of the countries members of the Assembly shall constitute a quorum.

(c) Notwithstanding the provisions of subparagraph (b), if, in any session, the number of countries represented is less

than one-half but equal to or more than one-third of the countries members of the Assembly, the Assembly may make decisions but, with the exception of decisions concerning its own procedure, all such decisions shall take effect only if the conditions set forth hereinafter are fulfilled. The International Bureau shall communicate the said decisions to the countries members of the Assembly which were not represented and shall invite them to express in writing their vote or abstention within a period of three months from the date of the communication. If, at the expiration of this period, the number of countries having thus expressed their vote or abstention attains the number of countries which was lacking for attaining the quorum in the session itself, such decisions shall take effect provided that at the same time the required majority still obtains.

(d) Subject to the provisions of Article 8(2), the decisions of the Assembly shall require two-thirds of the votes cast.

(e) Abstentions shall not be considered as votes.

(f) A delegate may represent, and vote in the name of, one country only.

(g) Countries of the Special Union not members of the Assembly shall be admitted to the meetings of the latter as observers.

(4) (a) The Assembly shall meet once in every third calendar year in ordinary session upon convocation by the Director General and, in the absence of exceptional circumstances, during the same period and at the same place as the General Assembly of the Organization.

(b) The Assembly shall meet in extraordinary session upon convocation by the Director General, at the request of one-fourth of the countries members of the Assembly.

(c) The agenda of each session shall be prepared by the Director General.

(5) The Assembly shall adopt its own rules of procedure.

Article 6**[International Bureau]**

(1) (a) Administrative tasks concerning the Special Union shall be performed by the International Bureau.

(b) In particular, the International Bureau shall prepare the meetings and provide the secretariat of the Assembly, the Committee of Experts, and such other committees of experts and working groups as may have been established by the Assembly or the Committee of Experts.

(c) The Director General shall be the chief executive of the Special Union and shall represent the Special Union.

(2) The Director General and any staff member designated by him shall participate, without the right to vote, in all meetings of the Assembly, the Committee of Experts, and such other committees of experts or working groups as may have been established by the Assembly or the Committee of Experts. The Director General, or a staff member designated by him, shall be *ex officio* secretary of those bodies.

(3) (a) The International Bureau shall, in accordance with the directions of the Assembly, make the preparations for the conferences of revision of the provisions of the Agreement other than Articles 5 to 8.

(b) The International Bureau may consult with inter-governmental and international non-governmental organizations concerning preparations for conferences of revision.

(c) The Director General and persons designated by him shall take part, without the right to vote, in the discussions at those conferences.

(4) The International Bureau shall carry out any other tasks assigned to it.

Article 7**[Finances]**

(1) (a) The Special Union shall have a budget.

(b) The budget of the Special Union shall include the

income and expenses proper to the Special Union, its contribution to the budget of expenses common to the Unions, and, where applicable, the sum made available to the budget of the Conference of the Organization.

(c) Expenses not attributable exclusively to the Special Union but also to one or more other Unions administered by the Organization shall be considered as expenses common to the Unions. The share of the Special Union in such common expenses shall be in proportion to the interest the Special Union has in them.

(2) The budget of the Special Union shall be established with due regard to the requirements of coordination with the budgets of the other Unions administered by the Organization.

(3) The budget of the Special Union shall be financed from the following sources:

- (i) contributions of the countries of the Special Union;
- (ii) fees and charges due for services rendered by the International Bureau in relation to the Special Union;
- (iii) sale of, or royalties on, the publications of the International Bureau concerning the Special Union;
- (iv) gifts, bequests, and subventions;
- (v) rents, interests, and other miscellaneous income.

(4) (a) For the purpose of establishing its contribution referred to in paragraph (3)(i), each country of the Special Union shall belong to the same class as it belongs to in the Paris Union for the Protection of Industrial Property, and shall pay its annual contributions on the basis of the same number of units as is fixed for that class in that Union.

(b) The annual contribution of each country of the Special Union shall be an amount in the same proportion to the total sum to be contributed to the budget of the Special Union by all countries as the number of its units is to the total of the units of all contributing countries.

(c) Contributions shall become due on the first of January of each year.

(d) A country which is in arrears in the payment of its contributions may not exercise its right to vote in any organ of the Special Union if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. However, any organ of the Special Union may allow such a country to continue to exercise its right to vote in that organ if, and as long as, it is satisfied that the delay in payment is due to exceptional and unavoidable circumstances.

(e) If the budget is not adopted before the beginning of a new financial period, it shall be at the same level as the budget of the previous year, as provided in the financial regulations.

(5) The amount of the fees and charges due for services rendered by the International Bureau in relation to the Special Union shall be established, and shall be reported to the Assembly, by the Director General.

(6) (a) The Special Union shall have a working capital fund which shall be constituted by a single payment made by each country of the Special Union. If the fund becomes insufficient, the Assembly shall decide to increase it.

(b) The amount of the initial payment of each country to the said fund or of its participation in the increase thereof shall be a proportion of the contribution of that country for the year in which the fund is established or the decision to increase it is made.

(c) The proportion and the terms of payment shall be fixed by the Assembly on the proposal of the Director General and after it has heard the advice of the Coordination Committee of the Organization.

(7) (a) In the headquarters agreement concluded with the country on the territory of which the Organization has its headquarters, it shall be provided that, whenever the working capital fund is insufficient, such country shall grant advances. The amount of those advances and the conditions on which

they are granted shall be the subject of separate agreements, in each case, between such country and the Organization.

(b) The country referred to in subparagraph (a) and the Organization shall each have the right to denounce the obligation to grant advances, by written notification. Denunciation shall take effect three years after the end of the year in which it has been notified.

(8) The auditing of the accounts shall be effected by one or more of the countries of the Special Union or by external auditors, as provided in the financial regulations. They shall be designated, with their agreement, by the Assembly

Article 8

[Amendment of Articles 5 to 8]

(1) Proposals for the amendment of Articles 5, 6, 7, and the present Article, may be initiated by any country member of the Assembly, or by the Director General. Such proposals shall be communicated by the Director General to the member countries of the Assembly at least six months in advance of their consideration by the Assembly

(2) Amendments to the Articles referred to in paragraph (1) shall be adopted by the Assembly. Adoption shall require three-fourths of the votes cast, provided that any amendment to Article 5, and to the present paragraph, shall require four-fifths of the votes cast.

(3) Any amendment to the Articles referred to in paragraph (1) shall enter into force one month after written notifications of acceptance, effected in accordance with their respective constitutional processes, have been received by the Director General from three-fourths of the countries members of the Assembly at the time it adopted the amendment. Any amendment to the said Articles thus accepted shall bind all the countries which are members of the Assembly at the time the amendment enters into force, or which become members thereof at a subsequent date, provided that any amendment

increasing the financial obligations of countries of the Special Union shall bind only those countries which have notified their acceptance of such amendment.

Article 9

[Ratification and Accession; Entry Into Force; Effects; Accession to the Original Act of 1957]

(1) Any country of the Special Union which has signed this Act may ratify it, and, if it has not signed it, may accede to it.

(2) Any country outside the Special Union which is party to the Paris Convention for the Protection of Industrial Property [¹] may accede to this Act and thereby become a member of the Special Union.

(3) Instruments of ratification and accession shall be deposited with the Director General.

(4) (a) With respect to the first five countries which have deposited their instruments of ratification or accession, this Act shall enter into force three months after the deposit of the fifth such instrument.

(b) With respect to any other country, this Act shall enter into force three months after the date on which its ratification or accession has been notified by the Director General, unless a subsequent date has been indicated in the instrument of ratification or accession. In the latter case, this Act shall enter into force with respect to that country on the date thus indicated.

(5) Ratification or accession shall automatically entail acceptance of all the clauses and admission to all the advantages of this Act.

(6) After the entry into force of this Act, a country may accede to the original Act of June 15, 1957, [²] of this Agreement only in conjunction with ratification of, or accession to, this Act.

^¹ TS 579, 834, 941, TIAS 4931, 6923, 38 Stat. 1645, 47 Stat. 1789, 53 Stat. 1748, 13 UST 1, 21 UST 1583.

^² TIAS 7418, *ante*, p. 1336.

Article 10**[Force and Duration]**

This Agreement shall have the same force and duration as the Paris Convention for the Protection of Industrial Property

Article 11**[Revision]**

(1) This Agreement shall be submitted to revisions with a view to the introduction of desired improvements.

(2) Every revision shall be considered at a conference which shall be held between the delegates of the countries of the Special Union.

Article 12**[Application of the Various Acts]**

(1) (a) This Act shall, as regards the relations between the countries of the Special Union by which it has been ratified or acceded to, replace the original Act of June 15, 1957.

(b) However, any country of the Special Union which has ratified or acceded to this Act shall be bound by the original Act of June 15, 1957, as regards its relations with countries of the Special Union which have not ratified or acceded to this Act.

(2) Countries outside the Special Union which become party to this Act shall apply it with respect to any country of the Special Union not party to this Act. Such countries shall recognize that the aforesaid country of the Special Union may apply, as regards its relations with them, the provisions of the original Act of June 15, 1957

Article 13**[Denunciation]**

(1) Any country may denounce this Act by notification addressed to the Director General. Such denunciation shall constitute also denunciation of the original Act of June 15,

1957, of this Agreement, and shall affect only the country making it, the Agreement remaining in full force and effect as regards the other countries of the Special Union.

(2) Denunciation shall take effect one year after the day on which the Director General has received the notification.

(3) The right of denunciation provided for by this Article shall not be exercised by any country before the expiration of five years from the date upon which it becomes a member of the Special Union.

Article 14

[Reference to Article 24 of the Paris Convention (Territories)]

The provisions of Article 24 of the Paris Convention for the Protection of Industrial Property shall apply to this Agreement.

Article 15

[Signature, Languages, Depositary Functions]

(1) (a) This Act shall be signed in a single copy in the French language and shall be deposited with the Government of Sweden.

(b) Official texts shall be established by the Director General, after consultation with the interested Governments, in such other languages as the Assembly may designate.

(2) This Act shall remain open for signature at Stockholm until January 13, 1968.

(3) The Director General shall transmit two copies, certified by the Government of Sweden, of the signed text of this Act to the Governments of all countries of the Special Union and, on request, to the Government of any other country.

(4) The Director General shall register this Act with the Secretariat of the United Nations.

(5) The Director General shall notify the Governments of all countries of the Special Union of signatures, deposits of instruments of ratification or accession, entry into force of any provisions of this Act, and notifications of denunciation.

Article 16

[Transitional Provisions]

(1) Until the first Director General assumes office, references in this Act to the International Bureau of the Organization or to the Director General shall be construed as references to the Bureau of the Union established by the Paris Convention for the Protection of Industrial Property or its Director, respectively.

(2) Countries of the Special Union not having ratified or acceded to this Act may, until five years after the entry into force of the Convention establishing the Organization, exercise, if they so desire, the rights provided for under Articles 5 to 8 of this Act as if they were bound by those Articles. Any country desiring to exercise such rights shall give written notification to that effect to the Director General; such notification shall be effective from the date of its receipt. Such countries shall be deemed to be members of the Assembly until the expiration of the said period.

IN WITNESS WHEREOF, the undersigned, duly authorized for that purpose, have signed this Act.

DONE at Stockholm, July 14, 1967

FOR AUSTRALIA

FOR BELGIUM

BON F COGELS

FOR DENMARK

JULIE OLSEN

FOR SPAIN

J. F ALCOVER

ELECTO J GARCÍA TEJEDOR

FOR FRANCE

B. DE MENTHON

FOR HUNGARY

ESZTERGÁLYOS

FOR IRELAND

VALENTIN IREMONGER

FOR ISRAEL

Z. SHER

G. GAVRIELI

FOR ITALY

CIPPICO
GIORGIO RANZI

FOR LEBANON**FOR LIECHTENSTEIN****FOR MOROCCO**

H'SSAINE

FOR MONACO

J M. NOTARI

FOR NORWAY

JENS EVENSEN
B. STUEVOLD LASSEN

FOR THE NETHERLANDS

GERBRANDY
W G. BELINFANTE

FOR POLAND

M. KAJZER

FOR PORTUGAL

ADRIANO DE CARVALHO
JOSÉ DE OLIVEIRA ASCENSÃO
RUY ALVARO COSTA DE MORAIS SERRÃO

FOR THE FEDERAL REPUBLIC OF GERMANY

KURT HAERTEL

**FOR THE UNITED KINGDOM
OF GREAT BRITAIN AND NORTHERN IRELAND**

GORDON GRANT
WILLIAM WALLACE

FOR SWEDEN

HERMAN KLING

FOR SWITZERLAND

HANS MORF
JOSEPH VOYAME

FOR CZECHOSLOVAKIA**FOR TUNISIA****FOR YUGOSLAVIA**

A. JELIĆ

Note**Nice Agreement Concerning the International Classification
of Goods and Services for the Purposes of the
Registration of Marks**

With respect to the *signatures*, it should be noted that there appear on the original

Page 17, under the signature "Esztergályos," the following words.
"12/1/1968 subject to ratification."

Page 17, under the signature "Valentín Iremonger," the following date "12 January 1968."

Page 18, over the signature "Jens Evensen," the following words
"subject to ratification."

Page 19, under the signature "M. Kajzer," the following words
"subject to ratification."

MULTILATERAL
Locarno Agreement Establishing an International
Classification for Industrial Designs

*Done at Locarno October 8, 1968;
Ratification advised by the Senate of the United States of America
December 11, 1971;
Ratified by the President of the United States of America Jan-
uary 26, 1972;
Ratification of the United States of America deposited with the
Government of Switzerland February 23, 1972;
Proclaimed by the President of the United States of America Au-
gust 2, 1972;
Entered into force with respect to the United States of America
May 25, 1972.*

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

CONSIDERING THAT:

The Locarno Agreement Establishing an International Classification for Industrial Designs was signed October 8, 1968, a certified copy of which is hereto annexed;

The Senate of the United States of America by its resolution of December 11, 1971, two-thirds of the Senators present concurring therein, gave its advice and consent to ratification of the Agreement, and the President of the United States of America ratified the Agreement on January 26, 1972;

The United States of America deposited its instrument of ratification of the Agreement on February 23, 1972, in accordance with the provisions of Article 9, paragraph (2) of the Agreement;

Pursuant to the provisions of Article 9, paragraph (3), the Agreement entered into force for the United States of America on May 25, 1972, three months after the date on which its ratification was notified by the Director General of the World Intellectual Property Organization;

Now, THEREFORE, I, Richard Nixon, President of the United States of America, proclaim and make public the Agreement, to the end that it shall be observed and fulfilled with good faith on and after May 25,

1972 by the United States of America and by the citizens of the United States of America and all other persons subject to the jurisdiction thereof.

IN TESTIMONY WHEREOF, I have signed this proclamation and caused the Seal of the United States of America to be affixed.

[SEAL]

DONE at the city of Washington this second day of August in the year of our Lord one thousand nine hundred seventy-two and of the Independence of the United States of America the one hundred ninety-seventh.

RICHARD NIXON

By the President:

JOHN N. IRWIN II

Acting Secretary of State

**Arrangement de Locarno
instituant une classification internationale
pour les dessins et modèles industriels**

Signé à LOCARNO le 8 octobre 1968

**Locarno Agreement Establishing
an International Classification
for Industrial Designs**

Signed at LOCARNO on October 8, 1968

Arrangement de Locarno
instituant une classification internationale
pour les dessins et modèles industriels
du 8 octobre 1968 [¹]

Article premier

Constitution d'une Union particulière;
adoption d'une classification internationale

- 1) Les pays auxquels s'applique le présent Arrangement sont constitués à l'état d'Union particulière.
- 2) Ils adoptent une même classification pour les dessins et modèles industriels (ci-après dénommée «classification internationale»).
- 3) La classification internationale comprend:
 - i) une liste des classes et des sous-classes;
 - ii) une liste alphabétique des produits auxquels sont incorporés des dessins et des modèles, avec indication des classes et sous-classes dans lesquelles ils sont rangés;
 - iii) des notes explicatives.
- 4) La liste des classes et des sous-classes est celle qui est annexée au présent Arrangement, sous réserve des modifications et compléments que le Comité d'experts institué par l'article 3 (ci-après dénommé «Comité d'experts») pourrait y apporter.
- 5) La liste alphabétique des produits et les notes explicatives seront adoptées par le Comité d'experts selon la procédure fixée par l'article 3.
- 6) La classification internationale pourra être modifiée ou complétée par le Comité d'experts selon la procédure fixée par l'article 3.
- 7) a) La classification internationale est établie dans les langues anglaise et française.
b) Des textes officiels de la classification internationale sont, après consultation des Gouvernements intéressés, établis dans les autres langues que pourra désigner l'Assemblée visée à l'article 5, par le Bureau international de la propriété intellectuelle (ci-après dénommé «le Bureau international») visé dans la Convention instituant l'Organisation Mondiale de la Propriété Intellectuelle (ci-après dénommée «l'Organisation»).

¹ For the English language text, see p. 1402.

Article 2**Application et portée juridique
de la classification internationale**

1) Sous réserve des obligations imposées par le présent Arrangement, la classification internationale n'a par elle-même qu'un caractère administratif. Toutefois, chaque pays peut lui attribuer la portée juridique qui lui convient. Notamment, la classification internationale ne lie pas les pays de l'Union particulière quant à la nature et à l'étendue de la protection du dessin ou modèle dans ces pays.

2) Chacun des pays de l'Union particulière se réserve la faculté d'appliquer la classification internationale à titre de système principal ou de système auxiliaire.

3) Les Administrations des pays de l'Union particulière feront figurer, dans les titres officiels des dépôts ou enregistrements des dessins ou modèles et, s'ils sont publiés officiellement, dans ces publications, les numéros des classes et sous-classes de la classification internationale dans lesquelles sont rangés les produits auxquels sont incorporés les dessins ou modèles.

4) Dans le choix des dénominations à porter dans la liste alphabétique des produits, le Comité d'experts évitera, autant qu'il sera raisonnable de le faire, de se servir de dénominations sur lesquelles des droits exclusifs pourraient exister. Toutefois, l'inclusion d'un terme quelconque dans la liste alphabétique ne pourra être interprétée comme exprimant l'opinion du Comité d'experts sur le point de savoir si ledit terme est ou n'est pas couvert par des droits exclusifs.

Article 3**Comité d'experts**

1) Il est institué auprès du Bureau international un Comité d'experts chargé des tâches visées à l'article 1.4), 1.5) et 1.6). Chacun des pays de l'Union particulière est représenté au Comité d'experts, lequel s'organise par un règlement intérieur adopté à la majorité simple des pays représentés.

2) Le Comité d'experts adopte, à la majorité simple des pays de l'Union particulière, la liste alphabétique et les notes explicatives.

3) Des propositions de modifications ou compléments de la classification internationale peuvent être faites par l'Administration de tout pays de l'Union particulière ou par le Bureau international. Toute proposition émanant d'une

Administration est communiquée par celle-ci au Bureau international. Les propositions des Administrations et du Bureau international sont transmises par ce dernier aux membres du Comité d'experts au plus tard deux mois avant la session de celui-ci au cours de laquelle ces propositions seront examinées.

4) Les décisions du Comité d'experts relatives aux modifications et compléments à apporter à la Classification internationale sont prises à la majorité simple des pays de l'Union particulière. Toutefois, si elles impliquent la création d'une nouvelle classe ou le transfert de produits d'une classe à une autre, l'unanimité est requise.

5) Les experts ont la faculté de voter par correspondance.

6) Dans le cas où un pays n'aurait pas désigné de représentant pour une session déterminée du Comité d'experts, ainsi que dans le cas où l'expert désigné n'aurait pas exprimé son vote séance tenante ou dans un délai qui sera fixé par le règlement intérieur du Comité d'experts, le pays en cause serait considéré comme acceptant la décision du Comité.

Article 4

Notification et publication de la classification et de ses modifications et compléments

1) La liste alphabétique des produits et les notes explicatives adoptées par le Comité d'experts, ainsi que toute modification et tout complément de la classification internationale décidés par lui, sont notifiés aux Administrations des pays de l'Union particulière par le Bureau international. Les décisions du Comité d'experts entreront en vigueur dès réception de la notification. Toutefois, si elles impliquent la création d'une nouvelle classe ou le transfert de produits d'une classe à une autre, elles entreront en vigueur dans un délai de six mois à compter de la date d'envoi de la notification.

2) Le Bureau international, en sa qualité de dépositaire de la classification internationale, y incorpore les modifications et compléments entrés en vigueur. Les modifications et compléments font l'objet d'avis publiés dans les périodiques à désigner par l'Assemblée.

Article 5

Assemblée de l'Union

1) a) L'Union particulière a une Assemblée composée des pays de l'Union particulière.

- b) Le Gouvernement de chaque pays de l'Union particulière est représenté par un délégué, qui peut être assisté de suppléants, de conseillers et d'experts.
 - c) Les dépenses de chaque délégation sont supportées par le Gouvernement qui l'a désignée.
 - 2) a) Sous réserve des dispositions de l'article 3, l'Assemblée:
 - i) traite de toutes les questions concernant le maintien et le développement de l'Union particulière et l'application du présent Arrangement;
 - ii) donne au Bureau international des directives concernant la préparation des conférences de révision;
 - iii) examine et approuve les rapports et les activités du Directeur général de l'Organisation (ci-après dénommé «le Directeur général») relatifs à l'Union particulière et lui donne toutes directives utiles concernant les questions de la compétence de l'Union particulière;
 - iv) arrête le programme, adopte le budget triennal de l'Union particulière et approuve ses comptes de clôture;
 - v) adopte le règlement financier de l'Union particulière;
 - vi) décide de l'établissement des textes officiels de la classification internationale en d'autres langues que l'anglais et le français;
 - vii) crée, indépendamment du Comité d'experts institué par l'article 3, les autres comités d'experts et les groupes de travail qu'elle juge utiles à la réalisation des objectifs de l'Union particulière;
 - viii) décide quels sont les pays non membres de l'Union particulière et quelles sont les organisations intergouvernementales et internationales non-gouvernementales qui peuvent être admis à ses réunions en qualité d'observateurs;
 - ix) adopte les modifications à apporter aux articles 5 à 8;
 - x) entreprend toute autre action appropriée en vue d'atteindre les objectifs de l'Union particulière;
 - xi) s'acquitte de toutes autres tâches qu'implique le présent Arrangement.
 - b) Sur les questions qui intéressent également d'autres Unions administrées par l'Organisation, l'Assemblée statue, connaissance prise de l'avis du Comité de coordination de l'Organisation.
- 3) a) Chaque pays membre de l'Assemblée dispose d'une voix.
 - b) La moitié des pays membres de l'Assemblée constitue le quorum.
 - c) Nonobstant les dispositions du sous-alinéa b), si, lors d'une session, le nombre des pays représentés est inférieur à la moitié, mais égal

ou supérieur au tiers, des pays membres de l'Assemblée, celle-ci peut prendre des décisions; toutefois, les décisions de l'Assemblée, à l'exception de celles qui concernent sa procédure, ne deviennent exécutoires que lorsque les conditions énoncées ci-après sont remplies. Le Bureau international communique lesdites décisions aux pays membres de l'Assemblée qui n'étaient pas représentés, en les invitant à exprimer par écrit, dans un délai de trois mois à compter de la date de ladite communication, leur vote ou leur abstention. Si, à l'expiration de ce délai, le nombre des pays ayant ainsi exprimé leur vote ou leur abstention est au moins égal au nombre de pays qui faisait défaut pour que le quorum fût atteint lors de la session, lesdites décisions deviennent exécutoires, pourvu qu'en même temps la majorité nécessaire reste acquise.

- d) Sous réserve des dispositions de l'article 8.2), les décisions de l'Assemblée sont prises à la majorité des deux tiers des votes exprimés.
 - e) L'abstention n'est pas considérée comme un vote.
 - f) Un délégué ne peut représenter qu'un seul pays et ne peut voter qu'au nom de celui-ci.
- 4) a) L'Assemblée se réunit une fois tous les trois ans en session ordinaire, sur convocation du Directeur général et, sauf cas exceptionnels, pendant la même période et au même lieu que l'Assemblée générale de l'Organisation.
 - b) L'Assemblée se réunit en session extraordinaire sur convocation adressée par le Directeur général, à la demande d'un quart des pays membres de l'Assemblée.
 - c) L'ordre du jour de chaque session est préparé par le Directeur général.
- 5) L'Assemblée adopte son règlement intérieur.

Article 6

Bureau international

- 1) a) Les tâches administratives incombant à l'Union particulière sont assurées par le Bureau international.
- b) En particulier, le Bureau international prépare les réunions et assure le secrétariat de l'Assemblée, du Comité d'experts, et de tous autres comités d'experts et de tous groupes de travail que l'Assemblée ou le Comité d'experts peut créer.
- c) Le Directeur général est le plus haut fonctionnaire de l'Union particulière et la représente.

- 2) Le Directeur général et tout membre du personnel désigné par lui prennent part, sans droit de vote, à toutes les réunions de l'Assemblée, du Comité d'experts, et de tout autre comité d'experts ou tout groupe de travail que l'Assemblée ou le Comité d'experts peut créer. Le Directeur général ou un membre du personnel désigné par lui est d'office secrétaire de ces organes.
- 3) a) Le Bureau international, selon les directives de l'Assemblée, prépare les conférences de révision des dispositions de l'Arrangement autres que les articles 5 à 8.
 - b) Le Bureau international peut consulter des organisations intergouvernementales et internationales non gouvernementales sur la préparation des conférences de révision.
 - c) Le Directeur général et les personnes désignées par lui prennent part, sans droit de vote, aux délibérations dans ces conférences.
- 4) Le Bureau international exécute toutes autres tâches qui lui sont attribuées.

Article 7

Finances

- 1) a) L'Union particulière a un budget.
 - b) Le budget de l'Union particulière comprend les recettes et les dépenses propres à l'Union particulière, sa contribution au budget des dépenses communes aux Unions, ainsi que, le cas échéant, la somme mise à la disposition du budget de la Conférence de l'Organisation.
 - c) Sont considérées comme dépenses communes aux Unions les dépenses qui ne sont pas attribuées exclusivement à l'Union particulière mais également à une ou plusieurs autres Unions administrées par l'Organisation. La part de l'Union particulière dans ces dépenses communes est proportionnelle à l'intérêt que ces dépenses présentent pour elle.
- 2) Le budget de l'Union particulière est arrêté compte tenu des exigences de coordination avec les budgets des autres Unions administrées par l'Organisation.
- 3) Le budget de l'Union particulière est financé par les ressources suivantes:
 - i) les contributions des pays de l'Union particulière;
 - ii) les taxes et sommes dues pour les services rendus par le Bureau international au titre de l'Union particulière;
 - iii) le produit de la vente des publications du Bureau international concernant l'Union particulière et les droits afférents à ces publications;

- iv) Les dons, legs et subventions;
 - v) les loyers, intérêts et autres revenus divers.
- 4) a) Pour déterminer sa part contributive au sens de l'alinéa 3) i), chaque pays de l'Union particulière appartient à la classe dans laquelle il est rangé pour ce qui concerne l'Union de Paris pour la protection de la propriété industrielle, et paie ses contributions annuelles sur la base du nombre d'unités déterminé pour cette classe dans cette Union.
- b) La contribution annuelle de chaque pays de l'Union particulière consiste en un montant dont le rapport à la somme totale des contributions annuelles au budget de l'Union particulière de tous les pays est le même que le rapport entre le nombre des unités de la classe dans laquelle il est rangé et le nombre total des unités de l'ensemble des pays.
- c) Les contributions sont dues au premier janvier de chaque année.
- d) Un pays en retard dans le paiement de ses contributions ne peut exercer son droit de vote dans aucun des organes de l'Union particulière si le montant de son arriéré est égal ou supérieur à celui des contributions dont il est redevable pour les deux années complètes écoulées. Cependant, un tel pays peut être autorisé à conserver l'exercice de son droit de vote au sein dudit organe aussi longtemps que ce dernier estime que le retard résulte de circonstances exceptionnelles et inévitables.
- e) Dans le cas où le budget n'est pas adopté avant le début d'un nouvel exercice, le budget de l'année précédente est reconduit selon les modalités prévues par le règlement financier.
- 5) Le montant des taxes et sommes dues pour des services rendus par le Bureau international au titre de l'Union particulière est fixé par le Directeur général, qui fait rapport à l'Assemblée.
- 6) a) L'Union particulière possède un fonds de roulement constitué par un versement unique effectué par chaque pays de l'Union particulière. Si le fonds devient insuffisant, l'Assemblée décide de son augmentation.
- b) Le montant du versement initial de chaque pays au fonds précité ou de sa participation à l'augmentation de celui-ci est proportionnel à la contribution de ce pays pour l'année au cours de laquelle le fonds est constitué ou l'augmentation décidée.
- c) La proportion et les modalités de versement sont arrêtées par l'Assemblée, sur proposition du Directeur général et après avis du Comité de coordination de l'Organisation.
- 7) a) L'Accord de siège conclu avec le pays sur le territoire duquel l'Organisation a son siège prévoit que, si le fonds de roulement est insuffisant, ce pays accorde des avances. Le montant de ces avances et les

conditions dans lesquelles elles sont accordées font l'objet, dans chaque cas, d'accords séparés entre le pays en cause et l'Organisation.

b) Le pays visé au sous-alinéa a) et l'Organisation ont chacun le droit de dénoncer l'engagement d'accorder des avances, moyennant notification par écrit. La dénonciation prend effet trois ans après la fin de l'année au cours de laquelle elle a été notifiée.

8) La vérification des comptes est assuré, selon les modalités prévues par le règlement financier, par un ou plusieurs pays de l'Union particulière ou par des contrôleurs extérieurs, qui sont, avec leur consentement, désignés par l'Assemblée.

Article 8

Modification des articles 5 à 8

1) Des propositions de modification des articles 5, 6, 7, et du présent article peuvent être présentées par tout pays de l'Union particulière ou par le Directeur général. Ces propositions sont communiquées par ce dernier aux pays de l'Union particulière six mois au moins avant d'être soumises à l'examen de l'Assemblée.

2) Toute modification des articles visés à l'alinéa 1) est adoptée par l'Assemblée. L'adoption requiert les trois quarts des votes exprimés; toutefois, toute modification de l'article 5 et du présent alinéa requiert les quatre cinquièmes des votes exprimés.

3) Toute modification des articles visés à l'alinéa 1) entre en vigueur un mois après la réception par le Directeur général des notifications écrites d'acceptation, effectuée en conformité avec leurs règles constitutionnelles respectives, de la part des trois quarts des pays qui étaient membres de l'Union particulière au moment où la modification a été adoptée. Toute modification desdits articles ainsi acceptée lie tous les pays qui sont membres de l'Union particulière au moment où la modification entre en vigueur ou qui en deviennent membres à une date ultérieure; toutefois, toute modification qui augmente les obligations financières des pays de l'Union particulière ne lie que ceux qui ont notifié leur acceptation de ladite modification.

Article 9

Ratification, adhésion; entrée en vigueur

1) Tout pays partie à la Convention de Paris pour la protection de la propriété industrielle qui a signé le présent Arrangement peut le ratifier et, s'il ne l'a pas signé, peut y adhérer.

- 2) Les instruments de ratification et d'adhésion sont déposés auprès du Directeur général.
 - 3) a) A l'égard des cinq pays qui ont, les premiers, déposé leurs instruments de ratification ou d'adhésion, le présent Arrangement entre en vigueur trois mois après le dépôt du cinquième de ces instruments.
 - b) A l'égard de tout autre pays, le présent Arrangement entre en vigueur trois mois après la date à laquelle sa ratification ou son adhésion a été notifiée par le Directeur général, à moins qu'une date postérieure n'ait été indiquée dans l'instrument de ratification ou d'adhésion. Dans ce dernier cas, le présent Arrangement entre en vigueur, à l'égard de ce pays, à la date ainsi indiquée.
- 4) La ratification ou l'adhésion emporte de plein droit accession à toutes les clauses et admission à tous les avantages stipulés par le présent Arrangement.

Article 10

Force et durée de l'Arrangement

Le présent Arrangement a la même force et durée que la Convention de Paris pour la protection de la propriété industrielle.

Article 11

Revision des articles 1 à 4 et 9 à 15

- 1) Les articles 1 à 4 et 9 à 15 du présent Arrangement sont susceptibles de révisions en vue d'y introduire les améliorations désirables.
- 2) Chacune de ces révisions fera l'objet d'une conférence qui se tiendra entre les délégués des pays de l'Union particulière.

Article 12

Dénonciation

- 1) Tout pays peut dénoncer le présent Arrangement par notification adressée au Directeur général. Cette dénonciation ne produit son effet qu'à l'égard du pays qui l'a faite, l'Arrangement restant en vigueur et exécutoire à l'égard des autres pays de l'Union particulière.
- 2) La dénonciation prend effet un an après le jour où le Directeur général a reçu la notification.
- 3) La faculté de dénonciation prévue par le présent article ne peut être exercée par un pays avant l'expiration d'un délai de cinq ans à compter de la date à laquelle il est devenu membre de l'Union particulière.

Article 13**Territoires**

Les dispositions de l'article 24 de la Convention de Paris pour la protection de la propriété industrielle s'appliquent au présent Arrangement.

Article 14**Signature, langues, notifications**

- 1) a) Le présent Arrangement est signé en un seul exemplaire en langues anglaise et française, ces textes faisant également foi; il est déposé auprès du Gouvernement de la Suisse.
- b) Le présent Arrangement reste ouvert à la signature, à Berne, jusqu'au 30 juin 1969.
- 2) Des textes officiels sont établis par le Directeur général, après consultation des Gouvernements intéressés, dans les autres langues que l'Assemblée pourra désigner.
- 3) Le Directeur général transmet deux copies, certifiées conformes par le Gouvernement de la Suisse, du texte signé du présent Arrangement aux Gouvernements des pays qui l'ont signé et, sur demande, au Gouvernement de tout autre pays.
- 4) Le Directeur général fait enregistrer le présent Arrangement auprès du Secrétariat de l'Organisation des Nations Unies.
- 5) Le Directeur général notifie aux Gouvernements de tous les pays de l'Union particulière la date d'entrée en vigueur de l'Arrangement, les signatures, les dépôts d'instruments de ratification ou d'adhésion, les acceptations de modifications du présent Arrangement et les dates auxquelles ces modifications entrent en vigueur, et les notifications de dénonciation.

Article 15**Disposition transitoire**

Jusqu'à l'entrée en fonctions du premier Directeur général, les références, dans le présent Arrangement, au Bureau international de l'Organisation ou au Directeur général sont considérées comme se rapportant respectivement aux Bureaux internationaux réunis pour la protection de la propriété intellectuelle (BIRPI), ou à leur Directeur.

EN FOI DE QUOI, les soussignés,
dûment autorisés à cet effet, ont
signé le présent Arrangement.
FAIT à LOCARNO, le 8 octobre 1968

Locarno Agreement Establishing
an International Classification
for Industrial Designs
of October 8, 1968

Article 1

Establishment of a Special Union;
Adoption of an International Classification

(1) The countries to which this Agreement applies constitute a Special Union.

(2) They adopt a single classification for industrial designs (hereinafter designated as «the international classification»).

(3) The international classification shall comprise:

- (i) a list of classes and subclasses;
- (ii) an alphabetical list of goods in which industrial designs are incorporated, with an indication of the classes and subclasses into which they fall;
- (iii) explanatory notes.

(4) The list of classes and subclasses is the list annexed to the present Agreement, subject to such amendments and additions as the Committee of Experts set up under Article 3 (hereinafter designated as «the Committee of Experts») may make to it.

(5) The alphabetical list of goods and the explanatory notes shall be adopted by the Committee of Experts in accordance with the procedure laid down in Article 3.

(6) The international classification may be amended or supplemented by the Committee of Experts, in accordance with the procedure laid down in Article 3.

(7) (a) The international classification shall be established in the English and French languages.

(b) Official texts of the international classification, in such other languages as the Assembly referred to in Article 5 may designate, shall be established, after consultation with the interested Governments, by the International Bureau of Intellectual Property (hereinafter designated as «the International Bureau») referred to in the Convention establishing the World Intellectual Property Organization^[1] (hereinafter designated as «the Organisation»).

¹ TIAS 6932; 21 UST 1749.

Article 2**Use and Legal Scope of the International Classification**

(1) Subject to the requirements prescribed by this Agreement, the international classification shall be solely of an administrative character. Nevertheless, each country may attribute to it the legal scope which it considers appropriate. In particular, the international classification shall not bind the countries of the Special Union as regards the nature and scope of the protection afforded to the design in those countries.

(2) Each country of the Special Union reserves the right to use the international classification as a principal or as a subsidiary system.

(3) The Offices of the countries of the Special Union shall include in the official documents for the deposit or registration of designs, and if they are officially published, in the publications in question, the numbers of the classes and subclasses of the international classification into which the goods incorporating the designs belong.

(4) In selecting terms for inclusion in the alphabetical list of goods, the Committee of Experts shall exercise reasonable care to avoid using terms in which exclusive rights may exist. The inclusion of any word in the alphabetical index, however, is not an expression of opinion of the Committee of Experts on whether or not it is subject to exclusive rights.

Article 3**Committee of Experts**

(1) A Committee of Experts shall be entrusted with the tasks referred to in Article 1 (4), 1 (5) and 1 (6). Each country of the Special Union shall be represented on the Committee of Experts, which shall be organized according to rules of procedure adopted by a simple majority of the countries represented.

(2) The Committee of Experts shall adopt the alphabetical list and explanatory notes by a simple majority of the votes of the countries of the Special Union.

(3) Proposals for amendments or additions to the international classification may be made by the Office of any country of the Special Union or by the International Bureau. Any proposal emanating from an Office shall be communicated by that Office to the International Bureau. Proposals from Offices and from the International Bureau shall be transmitted by the latter to the members of the Committee of Experts not later than two months before the session of the Committee at which the said proposals are to be considered.

(4) The decisions of the Committee of Experts concerning the adoption of amendments and additions to be made in the international classification shall be by a simple majority of the countries of the Special Union. Nevertheless, if such decisions entail the setting up of a new class or any transfer of goods from one class to another, unanimity shall be required.

(5) Each expert shall have the right to vote by mail.

(6) If a country does not appoint a representative for a given session of the Committee of Experts, or if the expert appointed has not expressed his vote during the session or within a period to be prescribed by the rules of procedure of the Committee of Experts, the country concerned shall be considered to have accepted the decision of the Committee.

Article 4

Notification and publication of the classification and of its amendments and additions thereto

(1) The alphabetical list of goods and the explanatory notes adopted by the Committee of Experts, as well as any amendment or addition to the international classification decided by the Committee, shall be communicated to the Offices of the countries of the Special Union by the International Bureau. The decisions of the Committee of Experts shall enter into force as soon as the communication is received. Nevertheless, if such decisions entail the setting up of a new class or any transfer of goods from one class to another, they shall enter into force within a period of six months from the date of said communication.

(2) The International Bureau, as depositary of the international classification, shall incorporate therein the amendments and additions which have entered into force. Announcements of the amendments and additions shall be published in the periodicals to be designated by the Assembly.

Article 5

Assembly of the Special Union

(1) (a) The Special Union shall have an Assembly consisting of the countries of the Special Union.

(b) The Government of each country of the Special Union shall be represented by one delegate, who may be assisted by alternate delegates, advisors, and experts.

(c) The expenses of each delegation shall be borne by the Government which has appointed it.

- (2) (a) Subject to the provisions of Article 3, the Assembly shall:
- (i) deal with all matters concerning the maintenance and development of the Special Union and the implementation of this Agreement;
 - (ii) give directions to the International Bureau concerning the preparation for conferences of revision;
 - (iii) review and approve the reports and activities of the Director General of the Organization (hereinafter designated as «the Director General») concerning the Special Union, and give him all necessary instructions concerning matters within the competence of the Special Union;
 - (iv) determine the program and adopt the triennial budget of the Special Union, and approve its final accounts;
 - (v) adopt the financial regulations of the Special Union;
 - (vi) decide on the establishment of official texts of the international classification in languages other than English and French;
 - (vii) establish, in addition to the Committee of Experts set up under Article 3, such other committees of experts and working groups as it deems appropriate to achieve the objectives of the Special Union;
 - (viii) determine which countries not members of the Special Union and which intergovernmental and international non-governmental organizations shall be admitted to its meetings as observers;
 - (ix) adopt amendments to Articles 5 to 8;
 - (x) take any other appropriate action designed to further the objectives of the Special Union;
 - (xi) perform such other functions as are appropriate under this Agreement.

(b) With respect to matters which are of interest also to other Unions administered by the Organization, the Assembly shall make its decisions after having heard the advice of the Coordination Committee of the Organization.

- (3) (a) Each country member of the Assembly shall have one vote.
- (b) One-half of the countries members of the Assembly shall constitute a quorum.
- (c) Notwithstanding the provisions of subparagraph (b), if, in any session, the number of countries represented is less than one-half but equal to or more than one-third of the countries members of the Assembly, the Assembly may make decisions but, with the exception of decisions concerning its own procedure, all such decisions shall take effect only if the conditions set forth hereinafter are fulfilled. The International Bureau shall communicate the said decisions to the countries members of the Assembly which were not represented and shall invite them to express in writing their vote or abstention within a period of three months from the date of the communication. If, at the expiration of this period, the number of countries having thus expressed their vote or abstention attains the number of countries which was lacking for attaining the quorum in the session itself, such decisions shall take effect provided that at the same time the required majority still obtains.

- (d) Subject to the provisions of Article 8 (2), the decisions of the Assembly shall require two-thirds of the votes cast.
- (e) Abstentions shall not be considered as votes.
- (f) A delegate may represent, and vote in the name of, one country only.
- (4) (a) The Assembly shall meet once in every third calendar year in ordinary session upon convocation by the Director General and, in the absence of exceptional circumstances, during the same period and at the same place as the General Assembly of the Organization.
 - (b) The Assembly shall meet in extraordinary session upon convocation by the Director General, at the request of one-fourth of the countries members of the Assembly.
 - (c) The agenda of each session shall be prepared by the Director General.
 - (5) The Assembly shall adopt its own rules of procedure.

Article 6

International Bureau

- (1) (a) Administrative tasks concerning the Special Union shall be performed by the International Bureau.
 - (b) In particular, the International Bureau shall prepare the meetings and provide the secretariat of the Assembly, the Committee of Experts, and such other committees of experts and working groups as may have been established by the Assembly or the Committee of Experts.
 - (c) The Director General shall be the chief executive of the Special Union and shall represent the Special Union.
- (2) The Director General and any staff member designated by him shall participate, without the right to vote, in all meetings of the Assembly, the Committee of Experts, and such other committees of experts or working groups as may have been established by the Assembly or the Committee of Experts. The Director General, or a staff member designated by him, shall be ex officio secretary of those bodies.
- (3) (a) The International Bureau shall, in accordance with the directions of the Assembly, make the preparations for the conferences of revision of the provisions of the Agreement other than Articles 5 to 8.
 - (b) The International Bureau may consult with intergovernmental and international non-governmental organizations concerning preparations for conferences of revision.
 - (c) The Director General and persons designated by him shall take part, without the right to vote, in the discussions at those conferences.
- (4) The International Bureau shall carry out any other tasks assigned to it.

Article 7**Finances**

(1) (a) The Special Union shall have a budget.

(b) The budget of the Special Union shall include the income and expenses proper to the Special Union, its contribution to the budget of expenses common to the Unions, and, where applicable, the sum made available to the budget of the Conference of the Organization.

(c) Expenses not attributable exclusively to the Special Union but also to one or more other Unions administered by the Organization shall be considered as expenses common to the Unions. The share of the Special Union in such common expenses shall be in proportion to the interest the Special Union has in them.

(2) The budget of the Special Union shall be established with due regard to the requirements of coordination with the budgets of the other Unions administered by the Organization.

(3) The budget of the Special Union shall be financed from the following sources:

- (i) contributions of the countries of the Special Union;
- (ii) fees and charges due for services rendered by the International Bureau in relation to the Special Union;
- (iii) sale of, or royalties on, the publications of the International Bureau concerning the Special Union;
- (iv) gifts, bequests, and subventions;
- (v) rents, interests, and other miscellaneous income.

(4) (a) For the purpose of establishing its contribution referred to in paragraph (3) (i), each country of the Special Union shall belong to the same class as it belongs to in the Paris Union for the Protection of Industrial Property, and shall pay its annual contributions on the basis of the same number of units as is fixed for that class in that Union.

(b) The annual contribution of each country of the Special Union shall be an amount in the same proportion to the total sum to be contributed to the budget of the Special Union by all countries as the number of its units is to the total of the units of all contributing countries.

(c) Contributions shall become due on the first of January of each year.

(d) A country which is in arrears in the payment of its contributions may not exercise its right to vote in any organ of the Special Union if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. However, any organ of the Special Union may allow such a country to continue to exercise its right to vote in that organ if, and as long as, it is satisfied that the delay in payment is due to exceptional and unavoidable circumstances.

(e) If the budget is not adopted before the beginning of a new financial period, it shall be at the same level as the budget of the previous year, as provided in the financial regulations.

(5) The amount of the fees and charges due for services rendered by the International Bureau in relation to the Special Union shall be established, and shall be reported to the Assembly, by the Director General.

(6) (a) The Special Union shall have a working capital fund which shall be constituted by a single payment made by each country of the Special Union. If the fund becomes insufficient, the Assembly shall decide to increase it.

(b) The amount of the initial payment of each country to the said fund or of its participation in the increase thereof shall be a proportion of the contribution of that country for the year in which the fund is established or the decision to increase it is made.

(c) The proportion and the terms of payment shall be fixed by the Assembly on the proposal of the Director General and after it has heard the advice of the Coordination Committee of the Organization.

(7) (a) In the headquarters agreement concluded with the country on the territory of which the Organization has its headquarters, it shall be provided that, whenever the working capital fund is insufficient, such country shall grant advances. The amount of those advances and the conditions on which they are granted shall be the subject of separate agreements, in each case, between such country and the Organization.

(b) The country referred to in subparagraph (a) and the Organization shall each have the right to denounce the obligation to grant advances, by written notification. Denunciation shall take effect three years after the end of the year in which it has been notified.

(8) The auditing of the accounts shall be effected by one or more of the countries of the Special Union or by external auditors, as provided in the financial regulations. They shall be designated, with their agreement, by the Assembly.

Article 8

Amendment of Articles 5 to 8

(1) Proposals for the amendment of Articles 5, 6, 7 and the present Article, may be initiated by any country of the Special Union or by the Director General. Such proposals shall be communicated by the Director General to the countries of the Special Union at least six months in advance of their consideration by the Assembly.

(2) Amendments to the Articles referred to in paragraph (1) shall be adopted by the Assembly. Adoption shall require three-fourths of the votes cast, provided that any amendment to Article 5, and to the present paragraph, shall require four-fifths of the votes cast.

(3) Any amendment to the Articles referred to in paragraph (1) shall enter into force one month after written notifications of acceptance, effected in accordance with their respective constitutional processes, have been received by the Director General from three-fourths of the countries members of the Special Union at the time the amendment was adopted. Any amendment to the said Articles thus accepted shall bind all the countries which are members of the Special Union at the time the amendment enters into force, or which become members thereof at a subsequent date, provided that any amendment increasing the financial obligations of countries of the Special Union shall bind only those countries which have notified their acceptance of such amendment.

Article 9

Ratification and Accession; Entry Into Force

(1) Any country party to the Paris Convention for the Protection of Industrial Property [¹] which has signed this Agreement may ratify it, and, if it has not signed it, may accede to it.

(2) Instruments of ratification and accession shall be deposited with the Director General.

(3) (a) With respect to the first five countries which have deposited their instruments of ratification or accession, this Agreement shall enter into force three months after the deposit of the fifth such instrument.

(b) With respect to any other country, this Agreement shall enter into force three months after the date on which its ratification or accession has been notified by the Director General, unless a subsequent date has been indicated in the instrument of ratification or accession. In the latter case, this Agreement shall enter into force with respect to that country on the date thus indicated.

(4) Ratification or accession shall automatically entail acceptance of all the clauses and admission to all the advantages of this Agreement.

Article 10

Force and Duration of the Agreement

This Agreement shall have the same force and duration as the Paris Convention for the Protection of Industrial Property.

¹ TS 579, 834, 941, TIAS 4931, 6923; 38 Stat. 1645; 47 Stat. 1789; 53 Stat. 1748; 13 UST 1; 21 UST 1588.

Article 11**Revision of articles 1 to 4 and 9 to 15**

- (1) Articles 1 to 4 and 9 to 15 of this Agreement may be submitted to revision with a view to the introduction of desired improvements.
- (2) Every revision shall be considered at a conference which shall be held among the delegates of the countries of the Special Union.

Article 12**Denunciation**

(1) Any country may denounce this Agreement by notification addressed to the Director General. Such denunciation shall affect only the country making it, the Agreement remaining in full force and effect as regards the other countries of the Special Union.

(2) Denunciation shall take effect one year after the day on which the Director General has received the notification.

(3) The right of denunciation provided by this Article shall not be exercised by any country before the expiration of five years from the date upon which it becomes a member of the Special Union.

Article 13**Territories**

The provisions of Article 24 of the Paris Convention for the Protection of Industrial Property shall apply to this Agreement.

Article 14**Signature, Languages, Notifications**

(1) (a) This Agreement shall be signed in a single copy in the English and French languages, both texts being equally authentic, and shall be deposited with the Government of Switzerland.

(b) This Agreement shall remain open for signature at Berne until June 30, 1969.

(2) Official texts shall be established by the Director General, after consultation with the interested Governments, in such other languages as the Assembly may designate.

(3) The Director General shall transmit two copies, certified by the Government of Switzerland, of the signed text of this Agreement to the Governments of the countries that have signed it and, on request, to the Government of any other country.

(4) The Director General shall register this Agreement with the Secretariat of the United Nations.

(5) The Director General shall notify the Governments of all countries of the Special Union of the date of entry into force of the Agreement, signatures, deposits of instruments of ratification or accession, acceptances of amendments to this Agreement and the dates on which such amendments enter into force, and notifications of denunciation.

Article 15

Transitional Provision

Until the first Director General assumes office, references in this Agreement to the International Bureau of the Organization or to the Director General shall be deemed to be references to the United International Bureaux for the Protection of Intellectual Property (BIRPI) or its Director, respectively.

IN WITNESS WHEREOF, the under-signed, being duly authorized thereto, have signed this Agreement.

DONE at Locarno, on October 8, 1968.

POUR L'AFRIQUE DU SUD:
FOR SOUTH AFRICA:

POUR L'ALGÉRIE:
FOR ALGERIA:

K. Laala

POUR L'ARGENTINE:
FOR ARGENTINA:

POUR L'AUSTRALIE:
FOR AUSTRALIA:

POUR L'AUTRICHE:
FOR AUSTRIA:

Thaler
Dr. Lorenz

POUR LA BELGIQUE:
FOR BELGIUM:

A. Schurmans

POUR LE BRÉSIL:
FOR BRAZIL:

POUR LA BULGARIE:
FOR BULGARIA:

POUR LE CAMEROUN:
FOR CAMEROON:

POUR LE CANADA:
FOR CANADA:

POUR CEYLAN:
FOR CEYLON:

POUR CHYPRE:
FOR CYPRUS:

POUR LE CONGO (BRAZZAVILLE):
FOR THE CONGO (BRAZZAVILLE):

POUR LA CÔTE D'IVOIRE:
FOR THE IVORY COAST:

POUR CUBA:
FOR CUBA:

POUR LE DAHOMEY:
FOR DAHOMEY:

POUR LE DANEMARK:
FOR DENMARK:

Erik Tuxen

POUR L'ESPAGNE:
FOR SPAIN:

J. L. Xifra
A. F. - Mazarambroz
J. Escudero

POUR LES ÉTATS-UNIS D'AMÉRIQUE:
FOR THE UNITED STATES OF AMERICA:
Gerald D. O'Brien
Harvey J. Winter

POUR LA FINLANDE:
FOR FINLAND:
Erkki Tuuli

POUR LA FRANCE:
FOR FRANCE:
G. Bonneau

POUR LE GABON:
FOR GABON:

POUR LA GRÈCE:
FOR GREECE:

POUR HAITI:
FOR HAITI:

POUR LA HAUTE-VOLTA:
FOR THE UPPER VOLTA:

POUR LA HONGRIE:
FOR HUNGARY:
Emil Tasnádi

/
POUR L'INDONÉSIE:
FOR INDONESIA:

POUR L'IRAN:
FOR IRAN:
M. Naraghi

TIAS 7420

POUR L'IRLANDE:
FOR IRELAND:

POUR L'ISLANDE:
FOR ICELAND:

POUR ISRAEL:
FOR ISRAEL:

POUR L'ITALIE:
FOR ITALY:

Giorgio Ranzi

POUR LE JAPON:
FOR JAPAN:

POUR LE KENYA:
FOR KENYA:

D. J. Coward

POUR LE LAOS:
FOR LAOS:

POUR LE LIBAN:

FOR LEBANON:

POUR LE LIECHTENSTEIN:

FOR LIECHTENSTEIN:

Dr. Marianne Marxer

POUR LE LUXEMBOURG:

FOR LUXEMBOURG:

J. P. Hoffmann

POUR MADAGASCAR:

FOR MADAGASCAR:

POUR LE MALAWI:

FOR MALAWI:

POUR MALTE:

FOR MALTA:

POUR LE MAROC:

FOR MOROCCO:

POUR LA MAURITANIE:
FOR MAURITANIA:

POUR LE MEXIQUE:
FOR MEXICO:

POUR MONACO:
FOR MONACO:

J. M. Notari

POUR LE NIGER:
FOR NIGER:

POUR LE NIGÉRIA:
FOR NIGERIA:

POUR LA NORVÈGE:
FOR NORWAY:

Roald Röed

POUR LA NOUVELLE-ZÉLANDE:
FOR NEW ZEALAND:

POUR L'UGANDA:

FOR UGANDA:

POUR LES PAYS-BAS:

FOR THE NETHERLANDS:

Phaf
E. van Weel

POUR LES PHILIPPINES:

FOR THE PHILIPPINES:

POUR LA POLOGNE:

FOR POLAND:

POUR LE PORTUGAL:

FOR PORTUGAL:

Adriano de Carvalho
Jorge Van-Zeller Garin
José Mota Maia

POUR LA RÉPUBLIQUE ARABE SYRIENNE:

FOR THE SYRIAN ARAB REPUBLIC:

POUR LA RÉPUBLIQUE ARABE UNIE:

FOR THE UNITED ARAB REPUBLIC:

POUR LA RÉPUBLIQUE CENTRAFRICAINE:
FOR THE CENTRAL AFRICAN REPUBLIC:

POUR LA RÉPUBLIQUE DOMINICAINE:
FOR THE DOMINICAN REPUBLIC:

POUR LA RÉPUBLIQUE FÉDÉRALE D'ALLEMAGNE:
FOR THE FEDERAL REPUBLIC OF GERMANY

von Keller
Gerhard Schneider

POUR LA RÉPUBLIQUE DU VIET-NAM:
FOR THE REPUBLIC OF VIET-NAM:

POUR LA ROUMANIE:
FOR ROMANIA:

POUR LE ROYAUME-UNI DE GRANDE BRETAGNE
ET D'IRLANDE DU NORD:
FOR THE UNITED KINGDOM OF GREAT BRITAIN
AND NORTHERN IRELAND:

POUR SAINT-MARIN:
FOR SAN MARINO:

POUR LE SAINT-SIÈGE:
FOR THE HOLY SEE:
P. Henri de Riedmatten

POUR LE SÉNÉGAL:
FOR SENEGAL:

POUR LA SUÈDE:
FOR SWEDEN:
Bengt Holmquist

POUR LA SUISSE:
FOR SWITZERLAND:
Joseph Voyame
W. Stamm

POUR LA TANZANIE:
FOR TANZANIA:

POUR LE TCHAD:
FOR CHAD:

POUR LA TCHECOSLOVAQUIE:

FOR CZECHOSLOVAKIA:

Prof. František Kříštek

POUR LE TOGO:

FOR TOGO:

POUR LA TRINITÉ ET TOBAGO:

FOR TRINIDAD AND TOBAGO:

POUR LA TUNISIE:

FOR TUNISIA:

POUR LA TURQUIE:

FOR TURKEY:

POUR L'UNION DES RÉPUBLIQUES
SOCIALISTES SOVIÉTIQUES:

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

Z. Mironova

~~83-475~~

POUR L'URUGUAY:
FOR URUGUAY:

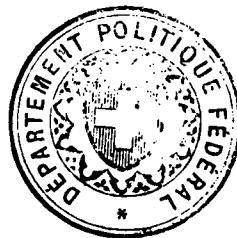
POUR LA YOUGOSLAVIE:
FOR YUGOSLAVIA:

Zoltan Biro

POUR LA ZAMBIE:
FOR ZAMBIA:

Copie certifiée conforme à l'original
déposé auprès du Conseil Fédéral Suisse

Pour le
DEPARTEMENT POLITIQUE FEDERAL



Berne, le 15 juillet 1969

TIAS 7420

ANNEXE [¹]

**LISTE DES CLASSES ET DES SOUS-CLASSES
DE LA
CLASSIFICATION INTERNATIONALE**

Classe 1 — Produits alimentaires, y compris diététiques

- 01) Boulangerie, biscuits, pâtisserie, pâtes
- 02) Chocolats, confiserie, glaces
- 03) Fromages, beurre et autres produits laitiers et succédanés
- 04) Produits de charcuterie et de boucherie
- 05) Produits alimentaires pour animaux
- 99) Divers

Classe 2 — Articles d'habillement, y compris chaussures

- 01) Vêtements
- 02) Sous-vêtements, lingerie, corsets, soutien-gorge
- 03) Articles de chapellerie
- 04) Chaussures (y compris bottes, souliers et pantoufles)
- 05) Bas et chaussettes
- 06) Cravates, écharpes et foulards
- 07) Ganterie
- 08) Mercerie
- 99) Divers

Classe 3 — Articles de voyage et objets personnels, non compris dans d'autres classes

- 01) Malles, valises et serviettes
- 02) Sacs à main, portefeuilles, porte-monnaie, étuis
- 03) Parapluies, cannes
- 04) Eventails
- 99) Divers

Classe 4 — Brosseerie

- 01) Brosses de nettoyage et balais
- 02) Brosses de toilette et pour vêtements
- 03) Brosses pour l'industrie

¹ For the English language text, see p. 1482.

- 04) Pinceaux
- 99) Divers

Classe 5 — Articles textiles non confectionnés, feuilles de matière artificielle ou naturelle et cuirs

- 01) Filés
- 02) Etoffes textiles (tissées, tricotées ou d'autres fabrications)
- 03) Feuilles de matières artificielles ou naturelles
- 04) Feutre
- 05) Feuilles de revêtement (papiers peints, linoléum, etc. . . .)
- 06) Dentelles
- 07) Broderies
- 08) Rubans, galons et autres articles de passementerie
- 09) Cuir et succédanés
- 99) Divers

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Classe 6 — Ameublement

- 01) Meubles
- 02) Matelas et coussins
- 03) Rideaux (prêts à l'emploi)
- 04) Tapis
- 05) Paillassons et carpettes
- 06) Miroirs et cadres
- 07) Cintres
- 08) Couvertures
- 09) Linge de maison et de table
- 99) Divers

Classe 7 — Articles de ménage non compris dans d'autres classes

- 01) Vaisselle et verrerie
- 02) Ustensiles et récipients pour la cuisine
- 03) Couteaux, fourchettes, cuillers
- 04) Cuisinières, toasters, etc. . .
- 05) Appareils à hacher, à moudre et à mélanger
- 06) Fers à repasser, ustensiles pour laver, sécher et nettoyer
- 99) Divers

Classe 8 — Outils et quincaillerie

- 01) Outils et instruments pour l'agriculture, la sylviculture et l'horticulture
- 02) Autres outils et intruments
- 03) Serrures et ferrures
- 04) Clous, vis, écrous, boulons, etc. . .
- 99) Divers

Classe 9 — Emballages et récipients

- 01) Bouteilles, flacons, bonbonnes et pots
- 02) Moyens de fermeture
- 03) Bidons et fûts
- 04) Boîtes, caisses
- 05) Cageots et paniers
- 06) Sacs, enveloppes, tubes et capsules
- 07) Boîtes de conserves
- 08) Cordes et matériaux de cerclage
- 99) Divers

Classe 10 — Horlogerie et instruments de mesure

- 01) Horloges d'appartement et pendules
- 02) Montres et bracelets-montres
- 03) Réveils
- 04) Autres horloges
- 05) Tous autres instruments chronométriques
- 06) Cadrans, aiguilles et toutes autres parties d'horlogerie, parties d'autres instruments chronométriques
- 07) Instruments géodésiques, nautiques, acoustiques, météorologiques
- 08) Instruments pour la mesure des grandeurs physiques, telles que longeur, pression, etc . . .
- 09) Instruments pour la mesure des températures
- 10) Instruments pour la mesure des grandeurs électriques (voltmètres, etc. . . .)
- 11) Instruments d'essai
- 99) Divers

Classe 11 — Objets d'ornement

- 01) Bijouterie et joaillerie
- 02) Bibelots, ornements de table, de dessus de cheminée et de murs, y compris vases à fleurs
- 03) Médailles et insignes
- 04) Fleurs, plantes et fruits artificiels
- 05) Articles de décoration de fêtes
- 99) Divers

Classe 12 — Véhicules

- 01) Véhicules à traction animale
- 02) Chariots, fardiers et brouettes, tirés à la main
- 03) Locomotives et wagons pour les chemins de fer ou tous autres véhicules sur rails
- 04) Téléphériques et télésièges
- 05) Elévateurs

- 06) Navires et bateaux
- 07) Avions et véhicules spatiaux
- 08) Automobiles et autobus
- 09) Camions et tracteurs
- 10) Remorques et caravanes
- 11) Motocyclettes et cycles
- 12) Voitures d'enfants et pour infirmes
- 13) Véhicules spéciaux
- 14) Pneus, chambres à air et autres équipements et accessoires pour véhicules automobiles non compris dans d'autres classes
- 99) Divers

Classe 13 — Appareils de production, distribution et transformation de l'énergie électrique

- 01) Générateurs et moteurs
- 02) Transformateurs, redresseurs, piles et accumulateurs
- 03) Matériaux de distribution et de commande d'énergie électrique (conducteurs, interrupteurs, tableaux, etc . . .)
- 99) Divers

Classe 14 — Appareils électriques et électroniques

- 01) Appareils d'enregistrement et de reproduction de sons ou d'images
- 02) Appareils d'enregistrement, de reproduction et de traitement d'information
- 03) Appareils de télécommunication (télégraphe, téléphone, télescripteurs, téléviseurs, radios)
- 04) Amplificateurs
- 99) Divers

Classe 15 — Machines industrielles et de ménage

- 01) Moteurs non électriques
- 02) Pompe et compresseurs
- 03) Machines agricoles
- 04) Machines pour bâtir
- 05) Machines pour l'industrie non mentionnées ailleurs
- 06) Machines pour la lessive et le nettoyage industriel
- 07) Machines pour la lessive et le nettoyage de ménage
- 08) Machines textiles à coudre, à tricoter et à broder, industrielles
- 09) Machines textiles à coudre, à tricoter et à broder, de ménage
- 10) Machines de réfrigération industrielles
- 11) Machines de réfrigération de ménage
- 12) Machines pour préparer la nourriture
- 99) Divers

Classe 16 — Articles de photographie, de cinématographie et d'optique

- 01) Appareils pour photographier
- 02) Appareils pour filmer
- 03) Appareils de projection (vues fixes)
- 04) Appareils de projection (films)
- 05) Appareils pour photocopier et agrandir
- 06) Appareils pour le développement
- 07) Accessoires
- 08) Articles d'optique, tels que lunettes, microscopes, etc. . . .
- 99) Divers

Classe 17 — Instruments de musique

- 01) Instruments à clavier (y compris orgues électroniques et autres)
- 02) Instruments à vent (y compris accordéons à clavier)
- 03) Instruments à corde
- 04) Instruments à percussion
- 05) Instruments mécaniques
- 99) Divers

Classe 18 — Imprimerie et machines de bureau

- 01) Machines à écrire et à calculer, à l'exception des machines électroniques
- 02) Machines typographiques
- 03) Machines pour l'impression par des procédés différents de la typographie (à l'exclusion des machines pour photocopier)
- 04) Caractères et signes typographiques
- 05) Massicots
- 99) Divers

Classe 19 — Papeterie, articles de bureau, matériel pour artistes et d'enseignement

- 01) Papier à écrire et enveloppes
- 02) Articles de bureau
- 03) Calendriers
- 04) Reliures
- 05) Cartes illustrées et autres imprimés
- 06) Matériel et instruments pour écrire à la main
- 07) Matériel et instruments pour peindre, à l'exclusion des pinceaux, pour sculpter, pour graver et pour d'autres techniques artistiques
- 08) Matériel d'enseignement
- 99) Divers

Classe 20 — Equipement de vente et de publicité

- 01) Distributeurs automatiques
- 02) Matériel d'exposition et de vente

- 03) Panneaux et dispositifs publicitaires
- 99) Divers

- Classe 21 — Jeux, jouets et articles de sport
- 01) Jeux
 - 02) Jouets
 - 03) Appareils et articles de gymnastique et de sport
 - 04) Articles d'amusement et de divertissement
 - 05) Tentes
 - 99) Divers

- Classe 22 — Armes et articles pour la chasse, la pêche et la destruction d'animaux nuisibles

- 01) Armes blanches
- 02) Armes à projectiles
- 03) Munitions, fusées et projectiles
- 04) Articles pour la chasse (à l'exclusion des armes)
- 05) Cannes à pêche
- 06) Moulinets
- 07) Hameçons
- 08) Autres articles pour la pêche
- 09) Pièges et articles pour la destruction d'animaux nuisibles
- 99) Divers

- Classe 23 — Installations sanitaires, de chauffage, de ventilation et de conditionnement d'air

- 01) Appareils pour la distribution de liquides et de gaz (y compris la robinetterie et la tuyauterie)
- 02) Appareils sanitaires (baignoires, douches, lavabos, W.C., blocs sanitaires, etc. . .)
- 03) Equipement pour le chauffage
- 04) Ventilation et conditionnement d'air
- 05) Combustibles solides
- 99) Divers

- Classe 24 — Médecine et laboratoires

- 01) Matériel de transport des malades et d'hospitalisation
- 02) Appareils et installations pour hôpitaux (pour le diagnostic, les analyses, les opérations, les traitements, le contrôle des yeux)
- 03) Instruments médicaux, chirurgicaux et dentaires
- 04) Prothèses
- 05) Articles de pansements, de bandages et de soins médicaux
- 99) Divers

Classe 25 — Bâtiments et éléments de construction

- 01) Matériel et éléments de construction de bâtiments tels que briques, poutres, tuiles, ardoises, panneaux, etc. . . .
- 02) Fenêtres, portes, stores, etc. . . .
- 03) Profilés
- 04) Maisons, garages et tous autres bâtiments
- 05) Eléments de construction de génie civil
- 99) Divers

Classe 26 — Appareils d'éclairage

- 01) Sources lumineuses, électriques ou non, telles que lampes à incandescence, tubes et plaques lumineuses
- 02) Lampes, lampadaires, lustres, appliques murales et de plafond
- 03) Appareils d'éclairage public (lampes d'extérieur), éclairage de scènes, projecteurs d'éclairage)
- 04) Torches, lampes et lanternes portatives
- 05) Bougies, bougeoirs et chandeliers
- 06) Abat-jour
- 99) Divers

Classe 27 — Tabacs et articles pour fumeurs

- 01) Tabacs, cigares et cigarettes
- 02) Pipes, fume-cigare et fume-cigarettes
- 03) Cendriers
- 04) Allumettes
- 05) Briquets
- 06) Etuis à cigares, étuis à cigarettes, tabatières et pots à tabac
- 99) Divers

Classe 28 — Produits et articles pharmaceutiques et cosmétiques, articles et équipement de toilette

- 01) Produits et articles pharmaceutiques
- 02) Produits et articles cosmétiques
- 03) Articles de toilette et équipement pour soins de beauté
- 99) Divers

Classe 29 — Dispositifs et équipements de sauvetage et de protection de l'homme

- 01) Dispositifs et équipements contre le feu
- 02) Dispositifs et équipements pour le sauvetage sur ou sous l'eau
- 03) Dispositifs et équipements pour le sauvetage en montagne
- 99) Dispositifs et équipements contre les autres dangers (routes, mines, industriels, etc. . . .)

Classe 30 — Soins et entretien des animaux

- 01) Abris et enclos
- 02) Nourrisseurs et abreuvoirs
- 03) Sellerie
- 04) Dispositifs et équipements pour le sauvetage des animaux
- 99) Autres articles

Classe 31 — Miscellanea

Tous les produits non compris dans les classes précédentes.

ANNEX

LIST OF CLASSES AND SUBCLASSES
OF THE
INTERNATIONAL CLASSIFICATION

Class 1 — Foodstuffs, Including Dietetic Foods

- 01) Bakers' products, biscuits, pastry, macaroni, etc.
- 02) Chocolates, confectionery, ices
- 03) Cheeses, butter and other dairy produce and substitutes
- 04) Butchers' meat (including pork products)
- 05) Animal foodstuffs
- 99) Miscellaneous

Class 2 — Articles of Clothing, Including Footwear

- 01) Garments
- 02) Undergarments, lingerie, corsets, brassières
- 03) Headwear
- 04) Footwear (including boots, shoes and slippers)
- 05) Socks and stockings
- 06) Neckties, scarves and neckerchiefs
- 07) Gloves
- 08) Haberdashery
- 99) Miscellaneous

Class 3 — Travel Goods and Personal Belongings, Not Elsewhere Specified

- 01) Trunks, suitcases and briefcases
- 02) Handbags, wallets, pocketbooks, purses, boxes
- 03) Umbrellas, walking sticks
- 04) Fans
- 99) Miscellaneous

Class 4 — Brushware

- 01) Brushes for cleaning and brooms
- 02) Toilet and clothes brushes
- 03) Brushes for industry
- 04) Paint-brushes
- 99) Miscellaneous

Class 5 — Textile Piece-goods Articles, and Other Sheet Material

- 01) Spun articles
- 02) Textile fabrics (woven, knitted, etc.)
- 03) Sheet material
- 04) Felt
- 05) Covering sheets (wallpaper, linoleum, etc.)
- 06) Lace
- 07) Embroideries
- 08) Ribbons, braids and other trimmings
- 09) Leather and substitutes
- 99) Miscellaneous

Class 6 — Furnishing

- 01) Furniture
- 02) Mattresses and cushions
- 03) Curtains (ready-made)
- 04) Carpets
- 05) Mats and floor rugs
- 06) Mirrors and frames
- 07) Garment hangers
- 08) Bedspreads
- 09) Household linen and napery
- 99) Miscellaneous

Class 7 — Household Goods, Not Elsewhere Specified

- 01) China, glassware, dishes and other articles of similar nature
- 02) Cooking utensils and containers
- 03) Knives, forks and spoons
- 04) Cooking stoves, toasters, etc.
- 05) Chopping, mincing, grinding and mixing machines
- 06) Flat-irons and laundering, cleaning and drying equipment
- 99) Miscellaneous

Class 8 — Tools and Hardware

- 01) Tools and implements for agriculture, forestry and horticulture
- 02) Other tools and implements
- 03) Locks and other hardware fittings
- 04) Nails, screws, nuts, bolts, etc.
- 99) Miscellaneous

Class 9 — Packages and Containers

- 01) Bottles, flasks, carboys, demijohns and pots
- 02) Closing means

- 03) Drums and casks
- 04) Boxes and cases
- 05) Hampers, crates and baskets
- 06) Bags, wrappers and tubes and capsules
- 07) Cans
- 08) Ropes and hooping materials
- 99) Miscellaneous

Class 10 — Clocks and Watches, and Measuring Instruments

- 01) House clocks
- 02) Watches and wrist-watches
- 03) Alarms
- 04) Other clocks
- 05) All other chronometrical instruments
- 06) Dials, hands and all other parts of watches, clocks, and of other chronometrical instruments
- 07) Geodetic, nautical, acoustic and meteorological articles
- 08) Instruments for measuring physical sizes, like length, pressure, etc.
- 09) Instruments for measuring temperature
- 10) Instruments for measuring electric sizes (voltmeters, etc.)
- 11) Testing instruments
- 99) Miscellaneous

Class 11 — Articles of Adornment

- 01) Jewelry
- 02) Trinkets, table, mantel and wall ornaments, including flower vases
- 03) Medals and badges
- 04) Artificial flowers, fruits and plants
- 05) Festive decorations
- 99) Miscellaneous

Class 12 — Vehicles

- 01) Vehicles drawn by animals
- 02) Trolleys, trucks and barrows, hand-drawn
- 03) Locomotives and rolling-stock for railways and all other rail vehicles
- 04) Telepher carriers and chair lifts
- 05) Elevators and hoists
- 06) Ships and boats
- 07) Aircraft and space vehicles
- 08) Motor-cars and buses
- 09) Lorries and tractors
- 10) Trailers, including camping or house trailers
- 11) Motorcycles, scooters, bicycles and tricycles

- 12) Perambulators and invalid chairs
- 13) Special vehicles
- 14) Pneumatic tyres, inner tubes and all other equipment or accessories, not elsewhere specified
- 99) Miscellaneous

Class 13 — Equipment for Production, Distribution and Transformation of Electricity

- 01) Generators and motors
- 02) Power transformers, rectifiers, batteries and accumulators
- 03) Equipment for distribution and control of electric power (conductors, switch-gear, etc.)
- 99) Miscellaneous

Class 14 — Electrical and Electronic Equipment

- 01) Equipment for the recording and reproduction of sounds or pictures
- 02) Equipment for the recording, reproduction and retrieval of information
- 03) Communications equipment (telegraph, telephone, teletype, television and radio)
- 04) Amplifiers
- 99) Miscellaneous

Class 15 — Industrial and Household Machines

- 01) Engines (not electrical)
- 02) Pumps and compressors
- 03) Agricultural machinery
- 04) Construction machinery
- 05) Industrial machines, not elsewhere specified
- 06) Industrial laundry and cleaning machines
- 07) Household laundry and cleaning machines
- 08) Industrial textile sewing, knitting and embroidering machines
- 09) Household textile sewing, knitting and embroidering machines
- 10) Industrial refrigeration apparatus
- 11) Household refrigeration apparatus
- 12) Food preparation machines
- 99) Miscellaneous

Class 16 — Photographic, Cinematographic and Optical Apparatus

- 01) Photographic cameras
- 02) Film cameras
- 03) Projectors (for slides)
- 04) Projectors (for films)
- 05) Photocopying apparatus and enlargers

- 06) Developing apparatus
- 07) Accessories
- 08) Optical articles, such as spectacles, microscopes, etc.
- 99) Miscellaneous

Class 17 — Musical Instruments

- 01) Keyboard instruments (including electronic and other organs)
- 02) Wind instruments (including piano accordions)
- 03) Stringed instruments
- 04) Percussion instruments
- 05) Mechanical instruments
- 99) Miscellaneous

Class 18 — Printing and Office Machinery

- 01) Typewriters and calculating machines, with the exception of electronic machines
- 02) Typographical machinery
- 03) Machinery for printing by processes other than typography (excluding photocopying machinery)
- 04) Characters and type faces
- 05) Massicots
- 99) Miscellaneous

Class 19 — Stationers' Goods, Desk Equipment, Artists' and Teaching Materials

- 01) Writing paper and envelopes
- 02) Desk equipment
- 03) Calendars
- 04) Bindings
- 05) Illustrated cards and other printed matter
- 06) Materials and instruments for writing by hand
- 07) Materials and instruments for painting (excluding brushes), for sculpture, for engraving and for other artistic techniques
- 08) Teaching materials
- 99) Miscellaneous

Class 20 — Sales and Advertising Equipment

- 01) Automatic vending machines
- 02) Display and sales equipment
- 03) Signboards and advertising materials
- 99) Miscellaneous

Class 21 — Games, Toys and Sports Goods

- 01) Games
- 02) Toys
- 03) Gymnastics and sports apparatus and equipment
- 04) Amusement and entertainment articles
- 05) Tents
- 99) Miscellaneous

Class 22 — Arms and Tackle for Hunting, Fishing and Vermin Trapping

- 01) Side arms
- 02) Projectile weapons
- 03) Ammunition, fuses and projectiles
- 04) Hunting equipment (excluding weapons)
- 05) Fishing rods
- 06) Reels for fishing rods
- 07) Baits
- 08) Other pieces of fishing tackle
- 09) Traps and articles for vermin destruction
- 99) Miscellaneous

Class 23 — Sanitary, Heating, Ventilation and Air-Conditioning Equipment

- 01) Fluid and gas-distribution equipment (including pipes and pipe fittings)
- 02) Sanitary fittings and equipment (baths, showers, washbasins, lavatories, sanitary units, etc.)
- 03) Heating equipment
- 04) Ventilation and air-conditioning
- 05) Solid fuel
- 99) Miscellaneous

Class 24 — Medical and Laboratory Equipment

- 01) Equipment for transport and accommodation for patients
- 02) Hospital and laboratory equipment (for diagnostic, tests, operations, treatment, eye-testing)
- 03) Medical, surgical, dental instruments
- 04) Prosthetic articles
- 05) Material for dressing and nursing
- 99) Miscellaneous

Class 25 — Building Units and Construction Elements

- 01) Building material and elements, such as bricks, beams, tiles, slates, panels, etc.
- 02) Windows, doors, blinds, etc.
- 03) Sections, angles and channels
- 04) Houses, garages, and all other buildings

05) Civil engineering elements

99) Miscellaneous

Class 26 - Lighting Apparatus

01) Luminous sources, electrical or not, such as incandescent bulbs, luminous

tubes and plates

02) Lamps, standard lamps, chandeliers, wall and ceiling fixtures

03) Public lighting fixtures (outside lamps, stagelighting, floodlights)

04) Torches and hand lamps and lanterns

05) Candles, candlesticks

06) Lamp-shades

99) Miscellaneous

Class 27 - Tobacco and Smokers' Supplies

01) Tobacco, cigars and cigarettes

02) Pipes, cigar and cigarette holders

03) Ash-trays

04) Matches

05) Lighters

06) Cigar cases, cigarette cases, tobacco jars and pouches

99) Miscellaneous

Class 28 - Pharmaceutical and Cosmetic Articles and Products, Toilet Articles and Apparatus

01) Pharmaceutical articles and products

02) Cosmetic articles and products

03) Toilet articles and beauty parlor equipment

99) Miscellaneous

Class 29 - Safety and Protective Devices and Equipment for Human Beings

01) Devices and equipment against fire hazards

02) Devices and equipment for water rescue

03) Devices and equipment for mountain rescue

99) Devices and equipment against other hazards (roads, mines, industries, etc.)

Class 30 - Care and Handling of Animals

01) Shelters and pens

02) Feeders and waterers

03) Saddlery

04) Safety and protective devices and equipment for animals

99) Other articles

Class 31 - Miscellaneous

All the products not included in the preceding Classes.

FINLAND

Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Helsinki August 17, 1972;
Entered into force August 17, 1972;
Effective February 7, 1972.*

The American Embassy to the Finnish Ministry for Foreign Affairs

No. 107

The Embassy of the United States of America presents its compliments to the Ministry for Foreign Affairs of the Government of Finland and has the honor to refer to the United States Foreign Assistance Act of 1971, [1] which includes a provision requiring payment to the United States Government in Finnmarks of ten percent of the value of training services provided by the United States to the Government of Finland under Part II of the Foreign Assistance Act.

In accordance with that provision, it is proposed that the Government of Finland will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in the country of Finland for Finnmarks on the date deposits are made, the following amounts in Finnmarks: in the case of a grant of training services to the Government of Finland, an amount equal to ten percent of each such grant. The Government of Finland will be notified quarterly of services rendered and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification of services rendered.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Finnmarks, including but not limited to all costs relating to the financing of international educational and cultural exchange activities

¹ 86 Stat. 26; 22 U.S.C. § 2321g.

under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961.^[1]

It is finally proposed that the Ministry's reply, stating that the foregoing is acceptable to the Government of Finland, shall, together with this Note, constitute an agreement between our governments on this subject effective from and after February 7, 1972, and applicable to rendering of services funded or agreed to and rendered on or subsequent to that date.

JHL

EMBASSY OF THE UNITED STATES OF AMERICA
HELSINKI, August 17, 1972

The Finnish Ministry for Foreign Affairs to the American Embassy

MINISTRY FOR FOREIGN AFFAIRS OF FINLAND

No. 52919

The Ministry for Foreign Affairs present their compliments to the Embassy of the United States of America and have the honour to acknowledge receipt of the Embassy's note No. 107 of August 17, 1972, reading as follows:

"The Embassy of the United States of America presents its compliments to the Ministry for Foreign Affairs of the Government of Finland and has the honour to refer to the United States Foreign Assistance Act of 1971, which includes a provision requiring payment to the United States Government in Finnmarks of ten percent of the value of training services provided by the United States to the Government of Finland under Part II of the Foreign Assistance Act.

In accordance with that provision, it is proposed that the Government of Finland will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in the country of Finland for Finnmarks on the date deposits are made, the following amounts in Finnmarks: in the case of a grant of training services to the Government of Finland, an amount equal to ten percent of each such grant. The Government of Finland will be notified quarterly of services rendered and the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government,

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

which request shall be made, if at all, within one year following the aforesaid notification of services rendered.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Finnmarks, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Education and Cultural Exchange Act of 1961.

It is finally proposed that the Ministry's reply, stating that the foregoing is acceptable to the Government of Finland, shall, together with this Note, constitute an agreement between our governments on this subject effective from and after February 7, 1972, and applicable to rendering of services funded or agreed to and rendered on or subsequent to that date."

In reply thereto, the Ministry for Foreign Affairs have the honour to inform the Embassy that the Government of Finland accept the proposal of the Government of the United States of America, and will regard the Embassy's note and this reply as constituting an agreement between our two Governments.

The ministry for Foreign Affairs avail themselves of this opportunity to renew to the Embassy of the United States of America the assurance of their highest consideration.



To

the EMBASSY OF THE UNITED STATES OF AMERICA
HELSINKI

ZAIRE

Military Assistance: Deposits Under Foreign Assistance Act of 1971

*Agreement effected by exchange of notes
Dated at Kinshasa April 18 and May 16, 1972;
Entered into force May 16, 1972;
Effective February 7, 1972.*

*The American Embassy to the Zairian Ministry of Foreign Affairs
and Cooperation*

Nº 21

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs and Cooperation of the Republic of Zaire and has the honor to refer to recent discussions regarding the United States Foreign Assistance Act of 1971,[¹] which includes a provision requiring payment to the United States Government in Zaires of ten percent of the value of grant military assistance and excess defense articles provided by the United States to the government of the Republic of Zaire.

In accordance with that provision, it is proposed that the government of the Republic of Zaire will deposit in an account to be specified by the United States Government, at a rate of exchange which is not less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in the country of Zaire for Zaires on the date deposits are made, the following amounts in Zaires.

(A) In the case of any excess defense article given to the government of the Republic of Zaire, an amount equal to ten percent of the fair value of that article, as determined by the United States Government, and

(B) In the case of a grant of military assistance to the government of the Republic of Zaire an amount equal to ten percent of each such grant. The government of the Republic of Zaire will be notified quarterly of deliveries of defense articles and rendering of defense services and the values thereof. Deposits to the account of the United States

¹ 86 Stat. 26; 22 U.S.C. § 2321g.

Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within one year following the aforesaid notification of deliveries.

It is further proposed that the amounts to be deposited may be used to pay all official costs of the United States Government payable in Zaires, including but not limited to all costs relating to the financing of international educational and cultural exchange activities under programs authorized by the United States Mutual Educational and Cultural Exchange Act of 1961.^[1]

It is finally proposed that the Ministry's reply stating that the foregoing is acceptable to the government of the Republic of Zaire, shall, together with this note, constitute an agreement between our governments on this subject effective from and after February 7, 1972 and applicable to deliveries of defense articles and rendering of defense services funded or agreed to and delivered or rendered on or subsequent to that date.

The Embassy of the United States of America takes this opportunity to renew to the Ministry of Foreign Affairs and Cooperation of the Republic of Zaire the assurances of its highest consideration.

C.C.F.

KINSHASA, APRIL 18, 1972

The Zairian Ministry of Foreign Affairs and Cooperation to the American Embassy

REPUBLIQUE DU ZAIRE.
MINISTÈRE DES AFFAIRES ÉTRANGÈRES
CABINET DU MINISTRE

N° 130/0917

KINSHASA, le

Le Ministère des Affaires Etrangères et de la Coopération de la République du Zaïre présente ses compliments à l'Ambassade des Etats-Unis d'Amérique et à l'honneur d'accuser réception de sa note n° 21 du 18 avril 1972 proposant un accord entre les Etats-Unis d'Amérique et la République du Zaïre au sujet du paiement en zaïres, au Gouvernement des Etats-Unis, de dix pour cent de la valeur de l'aide militaire accordée à titre de don et des articles excédentaires de défense fournis par les Etats-Unis au Gouvernement de la République du Zaïre.

¹ 75 Stat. 527; 22 U.S.C. § 2451 note.

Conformément à cet accord, le Gouvernement de la République du Zaïre déposerait dans un compte désigné par le Gouvernement des Etats-Unis, à un taux de change qui ne sera pas moins favorable au Gouvernement des Etats-Unis que la taux légal le meilleur auquel sont vendus les dollars des Etats-Unis par les personnes autorisées à cet effet au Zaïre, en échange de zaïres à la date à laquelle les dépôts sont effectués, les commes suivantes en zaïres

a) Dans le cas de tout article excédentaire de défense donné au Gouvernement de la République du Zaïre, une somme équivalente à dix pour cent de la valeur courante dudit article, selon qu'il sera décidé par le Gouvernement des Etats-Unis, et

b) Dans le cas d'aide militaire accordée à titre de don au Gouvernement de la République du Zaïre, une somme équivalente à dix pour cent de chaque don de ce genre. Le Gouvernement de la République du Zaïre sera avisé tous les trois mois des livraisons d'articles de défense et de la prestation de services en matière de défense ainsi que de la valeur y relative. Les dépôts au compte du Gouvernement des Etats-Unis seront dûs et exigibles à la demande du Gouvernement des Etats-Unis, laquelle demande sera faite, au cas où elle le serait, dans les douze mois qui suivront l'avis des livraisons mentionnées ci-dessus.

Les sommes devant être déposées seront utilisées pour le paiement de tous les frais officiels du Gouvernement des Etats-Unis payables en zaïres, y compris, mais sans y être limités, tous les frais relatifs au financement des activités éducatives et culturelles au titre des programmes d'échanges internationaux autorisés par la loi américaine de 1961 sur les échanges éducatifs et culturels mutuels.

Le Ministère des Affaires Etrangères et de la Coopération de la République du Zaïre a le plaisir d'informer l'Ambassade des Etats-Unis d'Amérique que les dispositions ci-dessus rencontrent l'agrément du Gouvernement de la République du Zaïre, et que la présente note constitue entre nos deux gouvernements un accord qui prendra effet à compter du 7 février 1972 et sera applicable aux livraisons d'articles de défense et aux prestations de services en matière de défense ou convenus et livrés ou rendus à la date précitée ou après cette date.

Le Ministère des Affaires Etrangères et de la Coopération de la

République du Zaïre saisit cette occasion pour renouveler à l'Ambassade des Etats-Unis d'Amérique les assurances de sa plus haute considération.—

FAIT à Kinshasa, le 16. V. 1972



A L'AMBASSADE DES ETATS-UNIS
D'AMÉRIQUE

A

KINSHASA/GOMBE.—

Translation

REPUBLIC OF ZAIRE
MINISTRY OF FOREIGN AFFAIRS
OFFICE OF THE MINISTER

No. 130/0917

KINSHASA

The Ministry of Foreign Affairs and Cooperation of the Republic of Zaire presents its compliments to the Embassy of the United States of America and has the honor to acknowledge Embassy Note No. 21 dated April 18, 1972, proposing an agreement between the United States of America and the Republic of Zaire concerning payment to the United States Government in zaire of ten percent of the value of grant military assistance and excess defense articles provided by the United States to the Government of the Republic of Zaire.

In accordance with that agreement, the Government of the Republic of Zaire would deposit in an account specified by the United States Government, at a rate of exchange which will not be less favorable to the United States Government than the best legal rate at which United States dollars are sold by authorized dealers in Zaire for zaires on the date deposits are made, the following amounts of zaires:

(a) In the case of any excess defense article given to the Government of the Republic of Zaire, an amount equal to ten percent of the fair value of that article, as determined by the United States Government, and

(b) In the case of a grant of military assistance to the Government of the Republic of Zaire, an amount equal to ten percent of each such grant. The Government of the Republic of Zaire will be notified quarterly of deliveries of defense articles and of the rendering of defense services as well as of the values thereof. Deposits to the account of the United States Government will be due and payable upon request by the United States Government, which request shall be made, if at all, within twelve months following the aforesaid notification of deliveries.

The amounts to be deposited will be used for the payment of all official costs of the United States Government payable in zaires, including but not limited to all costs relating to the financing of educational and cultural activities under programs of international exchange authorized by the United States Mutual Educational and Cultural Exchange Act of 1961.

The Ministry of Foreign Affairs and Cooperation of the Republic of Zaire is pleased to inform the Embassy of the United States of America that the foregoing provisions are acceptable to the Government of the Republic of Zaire and that this Note constitutes an agreement between our two governments effective from and after February 7, 1972, and will be applicable to deliveries of defense articles and rendering of defense services either agreed to and delivered or rendered on or subsequent to that date.

The Ministry of Foreign Affairs and Cooperation of the Republic of Zaire takes this opportunity to renew to the Embassy of the United States of America the assurances of its highest consideration.

DONE at Kinshasa, May 16, 1972

[SEAL] [Initialed]

EMBASSY OF THE UNITED STATES,
KINSHASA/GOMBE

UNION OF SOVIET SOCIALIST REPUBLICS

Grains Agreement

*Signed at Washington July 8, 1972;
Entered into force July 8, 1972.
With exchange of notes.*

(1447)

TIAS 7423

AGREEMENT**BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST
REPUBLICS WITH RESPECT TO PURCHASES OF GRAINS BY THE
SOVIET UNION IN THE UNITED STATES AND CREDIT TO BE MADE
AVAILABLE BY THE UNITED STATES**

The Government of the United States of America (USA) and the Government of the Union of Soviet Socialist Republics (USSR) have agreed as follows:

Article 1**1. The Government of the USA through its Commodity Credit**

Corporation's Export Credit Sales Program hereby makes available a total amount of US \$750 million credit for financing the payment for USA grown grains (at buyer's option -- wheat, corn, barley, sorghum, rye, oats) purchased by the USSR in the USA under this Agreement. Such total amount may be increased by the USA.

2. The USSR through its foreign trade organizations shall purchase

from private United States exporters not less than US \$750 million port value of such grains (at buyer's option -- wheat, corn, barley, sorghum, rye, oats) for delivery during the three-year period August 1, 1972, through July 31, 1975, and of such amount not less than US \$200 million shall be purchased for delivery prior to August 1, 1973. In case of purchases of such grains for cash for delivery during the period of August 1, 1972, through July 31, 1975, the U. S. dollar amount of such purchases shall be counted as if they were made on credit terms under this Agreement.

3. The following provisions shall apply with respect to the credit

referred to in Section 1 of this Article 1.

3.1 It shall continue to be available, if not previously exhausted, for deliveries made not later than July 31, 1975.

3.2 The total amount of credit outstanding at one time shall not exceed US \$500 million.

3.3 Delivery for purchases shall be F. A. S. or F. O. B. port of export and interest shall run from date of delivery. The date of delivery shall be the on-board date of the ocean bill of lading.

3.4 The principal and interest for credit arising under each delivery shall be payable by the USSR as follows: one-third of the principal annually, plus accrued interest on the outstanding principal balance to the date of each principal payment.

3.5 The amount of credit for each delivery will be limited to the United States port value of the commodity, without ocean freight, insurance, or other charges or costs.

3.6 The interest rate for purchases under this Agreement for which delivery is made not later than March 31, 1973, shall be 6-1/8% per annum on that portion of the obligation confirmed by a USA bank. This rate of interest for that portion of the obligation confirmed by a USA bank shall be applicable during the whole three-year period for repayment of the credit which arises under each delivery made not later than March 31, 1973.

Article 2

This Agreement shall enter into force from the day of its signing and shall remain valid until all the obligations arising from it for both sides are fulfilled.

IN WITNESS WHEREOF, the undersigned, duly authorized thereto,
have signed this Agreement.

DONE at Washington this 24 day of July 1972 in duplicate, in
the English and Russian languages, each text equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

Peter G. Peterson Earl L. Butz [1] [2] *M. Kuzmin* [3]

FOR THE GOVERNMENT OF THE
UNION OF SOVIET SOCIALIST
REPUBLICS:

¹ Peter G. Peterson
² Earl L. Butz
³ M. Kuzmin

СОГЛАШЕНИЕ

между Правительством Соединенных Штатов Америки и
Правительством Союза Советских Социалистических
Республик о закупках Советским Союзом зерна в
Соединенных Штатах и кредите, предоставляемом Сое-
диненными Штатами

Правительство Соединенных Штатов Америки (США) и Правитель-
ство Союза Советских Социалистических Республик (СССР) договори-
лись о нижеследующем:

Статья I

1. Правительство США через Программу Кредитования Экспортных Продаж своей Товарно-Кредитной Корпорации настоящим предоставляет кредит на общую сумму 750 млн.долларов США для финансирования пла-
тежей за закупаемое СССР в США по настоящему Соглашению зерно, про-
изведенное в США (по выбору покупателя — пшеницу, кукурузу, ячмень,
сорго, рожь, овес). Такая общая сумма может быть увеличена США.

2. СССР через свои внешнеторговые организации закупит у част-
ных экспортёров Соединенных Штатов такое зерно (по выбору покупа-
теля — пшеницу, кукурузу, ячмень, сорго, рожь, овес) на сумму не
менее 750 млн.долларов США, принимая за базу стоимость товара в
порту отгрузки, с поставкой в течение трехлетнего периода с 1 ав-
густа 1972 года по 31 июля 1975 года, и из этой суммы не менее, чем
на 200 млн.долларов США будет закуплено с поставкой до 1 августа
1973 года. В случае закупок такого зерна с оплатой наличными с по-
ставкой в период с 1 августа 1972 года по 31 июля 1975 года, сумма
таких закупок в долларах США будет засчитана, как если бы они про-
изводились в кредит по настоящему Соглашению.

3. В отношении кредита, упомянутого в пункте I настоящей
Статьи I, будут применяться ниже следующие положения.

3.1. Его предоставление будет продолжаться для поставок, осуществляемых не позднее 31 июля 1975 года, если он не будет использован ранее.

3.2. Общая сумма единовременной задолженности по кредиту не будет превышать 500 млн. долларов США.

3.3. Поставки по закупкам будут осуществляться на условиях ФАС или ФОБ порт экспорта и начисление процентов будет начинаться с даты поставки. Датой поставки будет дата морского бортового коносамента.

3.4. Основной долг и проценты по кредиту по каждой поставке будут подлежать выплате Советским Союзом следующим образом: одна треть основного долга ежегодно, плюс проценты, начисленные на остаток непогашенной основной задолженности к дате каждого платежа основного долга.

3.5. Сумма кредита по каждой поставке будет ограничена стоимостью товара в порту Соединенных Штатов, без морского фрахта, страхования или других сборов или расходов.

3.6. Процентная ставка для закупок по настоящему Соглашению, поставка по которым будет произведена не позднее 31 марта 1973 года, будет составлять 6 1/8% годовых по той части обязательства, которая подтверждена американским банком. Эта процентная ставка по той части обязательства, которая подтверждена американским банком, будет применяться в течение всего трехлетнего периода выплаты кредита, вытекающего из каждой поставки, произведенной не позднее 31 марта 1973 года.

Статья 2

Настоящее Соглашение вступает в силу со дня его подписания и будет оставаться в силе до тех пор, пока не будут выполнены все обязательства, вытекающие из него для обеих сторон.

В подтверждение чего нижеподписавшиеся, должностным образом на то уполномоченные, подписали настоящее Соглашение.

Совершено в Вашингтоне 8th июля 1972 года в двух экземплярах на английском и русском языках, причем оба текста имеют одинаковую силу.

За Правительство
Соединенных Штатов Америки

За Правительство
Союза Советских Социалистических
Республик

Peter G. Peterson East. Secy

M. Кургинов

[EXCHANGE OF NOTES]

WASHINGTON, D.C., July 8, 1972

DEAR MR. FIRST DEPUTY MINISTER:

In connection with signing today of the Agreement between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics with respect to purchases of Grains by the Soviet Union in the United States and Credit to be made available by the United States, we have the honor to confirm the understanding on interpretation reached between us that:

1. As to matters not covered in the above Agreement, the credits for grain purchases under the Export Credit Sales Program shall be governed by the "Regulations Covering Export Financing of Sales of Agricultural Commodities under the Commodity Credit Corporation Export Credit Sales Program (GSM-4)" effective in the USA on the day of signing this Agreement.

2. Grains purchased under the above Agreement shall be consumed primarily in the USSR. However the USSR shall have the right to divert some portion of the grain for consumption in European countries presently full members of the Council for Mutual Economic Assistance.

Please accept, Mr. First Deputy Minister, the assurances of our highest consideration.

PETER G. PETERSON

Peter G. Peterson

EARL L. BUTZ

Earl L. Butz

*Heads of the USA Government
Delegation***The Honorable M. R. KUZMIN***Head of the USSR Government Delegation**Washington, D.C.*

МИНИСТЕРСТВО
ВНЕШНЕЙ ТОРГОВЛИ
С.С.С.Р

Вашингтон, "8" июля 1972 г.

Уважаемые господа министры,

В связи с подписанием сего числа Соглашения между Правительством Союза Советских Социалистических Республик и Правительством Соединенных Штатов Америки о закупках зерна Советским Союзом в Соединенных Штатах и кредите, предоставляемом Соединенными Штатами, имею честь подтвердить достигнутое между нами понимание интерпретации, что:

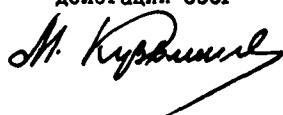
1. В отношении вопросов, не предусмотренных указанным Соглашением, кредиты для закупок зерна по Программе Кредитования Экспортных Продаж будут регулироваться действующими в США на день подписания этого Соглашения "Правилами, Относящимися к Экспортному Финансированию Продаж Сельскохозяйственных Товаров по Программе Кредитования Экспортных Продаж Товарно-Кредитной Корпорации (GSM-4)".

2. Зерно, закупаемое в соответствии с упомянутым выше Соглашением, будет потребляться преимущественно в СССР. Однако СССР будет иметь право направлять некоторую часть этого зерна для потребления в европейских странах, являющихся в настоящее время полноправными членами Совета Экономической Взаимопомощи.

Примите, господа министры, уверения в моем высоком к Вам уважении.

М. Кузьмин
Глава Правительственной
делегации СССР

Уважаемому господину
Питеру Г.Питерсону
Уважаемому господину
Эрлу Л.Батцу
Главам Правительственной
делегации США
г. Вашингтон



Translation

MINISTRY OF FOREIGN TRADE
U.S.S.R.

WASHINGTON, July 8, 1972

DEAR SIRS,

In connection with the signing today of the Agreement between the Government of the Union of Soviet Socialist Republics and the Government of the United States of America with respect to purchases of grains by the Soviet Union in the United States and credit to be made available by the United States, I have the honor to confirm the understanding on interpretation reached between us that:

1. As to matters not covered in the above Agreement, the credits for grain purchases under the Export Credit Sales Program will be governed by the "Regulations Covering Export Financing of Sales of Agricultural Commodities under the Commodity Credit Corporation Export Credit Sales Program (GSM-4)" effective in the USA on the day of signing this Agreement.

2. Grains purchased under the above Agreement will be consumed primarily in the USSR. However, the USSR will have the right to divert some portion of the grain for consumption in European countries presently full members of the Council for Mutual Economic Assistance.

Accept, Sirs, the assurances of my highest consideration.

M. Kuzmin

*Head of the USSR Government
Delegation*

M. KUZMIN

The Honorable PETER G. PETERSON
The Honorable EARL L. BUTZ

*Heads of the U.S. Government Delegation
Washington, D.C.*

EGYPT

Finance: Debt Rescheduling Under Certain Agricultural Commodity and Credit and Loan Agreements

Agreement relating to agricultural commodity agreement.

Signed at Cairo December 6, 1971;

Entered into force December 6, 1971.

Agreement relating to credit and loan agreements.

Signed at Cairo December 6, 1971;

Entered into force August 28, 1972.

AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE ARAB REPUBLIC OF EGYPT REGARDING THE CONSOLIDATION AND RESCHEDULING OF PAST DUE DEBT OWED UNDER PL-480 AGRICULTURAL COMMODITIES AGREEMENT OF JANUARY 3, 1966 [¹]

1. Reference is made to the 1966 Agreement between the Government of the United States and the Government of the United Arab Republic,[¹] identified in Annex A attached to this Agreement and hereinafter referred to as the "PL-480 Agreement". Reference is made also to the Memorandum of Understanding signed in Washington on October 2, 1971,[²] and to the Agreement signed in Cairo on December 6, 1971,[³] wherein agreement was reached on the consolidation and rescheduling of past due debt owing under the PL-480 Agreement.

2. In accordance with the Memorandum of Understanding and the 1971 Agreement cited above, it is agreed that dollar payment obligations due and unpaid under the PL-480 Agreement prior to January 1, 1972, shall be consolidated and repaid as follows:

a. Principal and interest in the amount of \$5,038,553.12, and as listed in Annex A, shall be termed hereafter as the Consolidated Debt and shall be repaid in semi-annual installments as follows:

2.5% on April 1, 1974, and 2.5% on October 1, 1974

5.0% on April 1, 1975, and 5.0% on October 1, 1975

10.0% on April 1, 1976, and 10.0% on October 1, 1976

15.0% on April 1, 1977, and 15.0% on October 1, 1977

17.5% on April 1, 1978, and 17.5% on October 1, 1978

b. Consolidation Interest, which is the interest on the outstanding balance of the Consolidated Debt, shall accrue at the rate of 6 percent per annum beginning January 1, 1972. Consolidation Interest shall be due and payable on April 1 and October 1 of each year, with the first payment due and payable on April 1, 1972. Consolidation Interest shall be computed on a 365-day-year basis for the actual number of days that the Consolidated Debt is outstanding.

3. Principal and interest falling due on or after January 1, 1972, under the PL-480 Agreement not in default prior to January 1, 1972, and as listed in Annex A shall be paid in accordance with the terms and conditions of the PL-480 Agreement.

¹ TIAS 5951; 17 UST 17.

² Not printed.

³ See p. 1461.

[Footnotes added by the Department of State.]

4. Annex B of this Agreement sets forth the payment schedule resulting from this Agreement.

5. To the extent not amended herein, the terms and conditions of the PL-480 Agreement shall remain in full force and effect.

6. Done at Cairo, Egypt, in duplicate this 6th day of December, 1971.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA

DONALD C. BERGUS

FOR THE GOVERNMENT OF THE
ARAB REPUBLIC OF EGYPT

M MERZBAN

ANNEX A

ARAB REPUBLIC OF EGYPT

PL-480 Agricultural Commodities Agreement and Terms
(In dollars)Agreement Identification^[a]

Treasury Number	Date of Agreement	Purpose
66-0011	January 3, 1966	Sale of Agricultural Commodities

Past Due Debt Through December 31, 1971:

Principal	\$3, 042, 806. 16
Interest	\$1, 995, 746. 96
Total	\$5, 038, 553. 12

Balance of Original Credit:

Principal	\$11, 410, 523. 10
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* Original Credit Provisions of Agricultural Commodities Agreement Between the Government of the United States of America and the Government of the United Arab Republic under Title IV of the Agricultural Trade Development and Assistance Act, as Amended.

Payments of amounts financed in connection with shipments made in each calendar year, including the applicable ocean transportation costs related to such deliveries, shall be made in 19 approximately equal installments. The first payment shall become due two years from the date of last delivery in any calendar year. Any annual payment may be made prior to the due date thereof.

Interest on the unpaid balance of the principal amount due the Government of the United States of America for commodities delivered in each calendar year will begin on the date of the last delivery of commodities in such calendar year and will be paid annually not later than the anniversary date of those deliveries. Interest shall be computed at the rate of 2½ percent per annum. (Last delivery date in calendar year 1966—June 23, 1966.)

ARAB REPUBLIC OF EGYPT

ANNEX B

**REVISED SCHEDULE OF PAYMENTS DUE RESULTING FROM RESCHEDULING OF PAST
DUE DEBT OWED TO THE DEPARTMENT OF AGRICULTURE FOR P.L.-480 CREDITS**
 (In Dollars)

Due Dates	Repayments of Consolidated Debt ^[a]		Payment Due for Consolidation Interest at 6.0% per annum on Balance of Consolidated Debt in Column 2 ^{[b][c]}	Payment of Current Maturities ^[d]		Total Payments (Columns 1+3+4+5)
	Amount Due	Balance		Principal	Interest	
	(1)	(2)	(3)	(4)	(5)	(6)
1972						
April 1	\$ 75,371.23					\$ 75,371.23
June 23						897,471.21
October 1		151,156.59				151,156.59
Sub-Total		226,527.82		760,701.54	136,769.67	1,123,999.03
1973						
April 1		151,156.59				151,156.59
June 23				760,701.54	266,245.54	1,026,947.08
October 1		151,156.59				151,156.59
Sub-Total		302,313.18		760,701.54	266,245.54	1,329,260.26
1974						
April 1	125,963.83	4,912,589.29	151,156.59			277,120.42
June 23				760,701.54	247,228.00	1,007,929.54
October 1	125,963.83	4,786,625.46	147,781.45			273,745.28
Sub-Total	251,927.66		298,938.04	760,701.54	247,228.00	1,558,795.24
1975						
April 1	251,927.66	4,534,697.80	143,205.34			395,133.00
June 23				760,701.54	228,210.46	988,912.00
October 1	251,927.65	4,282,770.15	136,413.65			388,341.30
Sub-Total	503,855.31		279,618.99	760,701.54	228,210.46	1,772,386.30
1976						
April 1	503,855.31	3,778,914.84	128,131.09			631,986.40
June 23				760,701.54	209,192.92	969,894.46
October 1	503,855.31	3,275,059.53	113,678.04			617,533.35
Sub-Total	1,007,710.62		241,809.13	760,701.54	209,192.92	2,219,414.21
1977						
April 1	755,782.97	2,519,276.56	97,982.61			853,765.58
June 23				760,701.54	190,175.39	950,876.93
October 1	755,782.97	1,763,493.59	75,785.37			831,568.34
Sub-Total	1,511,565.94		173,767.98	760,701.54	190,175.39	2,636,210.85
1978						
April 1	881,746.79	881,746.80	52,759.87			934,506.66
June 23				760,701.54	171,157.85	931,859.39
October 1	881,746.80	-0-	26,524.88			908,271.68
Sub-Total	1,763,493.59		79,284.75	760,701.54	171,157.85	2,774,637.73
1979	June 23			760,701.54	152,140.31	912,841.85
1980	June 23			760,701.54	133,122.77	893,824.31
1981	June 23			760,701.54	114,105.23	874,806.77
1982	June 23			760,701.54	95,087.69	855,789.23
1983	June 23			760,701.54	76,070.15	836,771.69
1984	June 23			760,701.54	57,052.62	817,754.16
1985	June 23			760,701.54	38,035.08	798,736.62
1986	June 23			760,701.54	19,017.54	779,719.08
	GRAND TOTAL	\$5,038,553.12	\$1,602,259.89	\$11,410,523.10	\$2,133,611.22	\$20,184,947.33

* The consolidated debt through December 31, 1971 consists of \$3,042,806.16 past due principal and \$1,995,746.96 past due interest for a total of \$5,038,553.12. It will be repaid in accordance with the schedule in Paragraph 2(b) of this Agreement.

^b Column 3 represents consolidation interest at 6.0 percent per annum accruing as of January 1, 1972 and payable semi-annually during 1972-1978 on the outstanding balance of the consolidated debt declining in accordance with Column 2.

^c For any periods under a year, interest is paid on a 365-day year, number-of-days basis.

^d Current maturities are paid on due dates in accordance with existing contracts.



AGREEMENT BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE ARAB REPUBLIC OF EGYPT REGARDING THE CONSOLIDATION AND RESCHEDULING OF PAST DUE DEBTS OWED TO UNITED STATES GOVERNMENT AGENCIES

The Government of the United States of America and the Government of the Arab Republic of Egypt agree to the following:

1. In accordance with the terms and conditions agreed upon *ad referendum* in the Memorandum of Understanding of October 2, 1971, the Government of the United States of America and the Government of the Arab Republic of Egypt have agreed to consolidate and reschedule all dollar obligations of principal and interest due and unpaid to United States Government agencies by the Government of the Arab Republic of Egypt as of January 1, 1972, under the agreements listed in Annex A. Local currency payments due to the United States Government by the Government of the Arab Republic of Egypt are not covered by this Agreement. The relevant United States Government agencies are the Commodity Credit Corporation, the Export-Import Bank of the United States, and the Agency for International Development. Bilateral agreements will be signed with each of the relevant United States Government agencies to carry out the terms of this Agreement.

2. Amounts to be consolidated and rescheduled under the terms and conditions of this Agreement total \$145,344,470.97. Annex B specifies the amounts to be consolidated and rescheduled for each of the relevant United States Government agencies.

3. The following terms and conditions of payment shall be applicable:

a. The Government of the Arab Republic of Egypt agrees to repay to the relevant United States Government agencies all principal and interest due and unpaid as of January 1, 1972, under the agreements listed in Annex A.

b. Principal and interest due and unpaid as of January 1, 1972, in the amounts shown for each Agency in Appendix B shall be termed the Consolidated Debt for such agency. A table summarizing the revised payments due to these agencies is attached as Annex C.

c. The Consolidated Debt owed to the Commodity Credit Corporation for credits made available under the programs of the Commodity Credit Corporation shall be repaid in ten semi-annual installments on due dates of January 1 and July 1 of each year beginning on January 1, 1972, and ending on July 1, 1976. Repayments shall amount to the following percentages of the Consolidated Debt: 1) the first two installments each representing 13.75% of the Consolidated Debt; 2) the third, fourth, fifth, sixth, seventh and eighth installments each representing 10% of the Consolidated Debt and 3) the ninth and tenth installments each representing 6.25% of the Consolidated Debt.

d. The Consolidated Debt owed to the Export-Import Bank of the United States, the Agency for International Development and the United States Government for P.L. 480 shall be repaid in ten semi-annual installments on due dates of April 1 and October 1 of each year beginning on April 1, 1974, and ending on October 1, 1978. Repayments shall amount to the following percentages of the Consolidated Debt: 1) the first two installments each representing 2.5% of the Consolidated Debt; 2) the third and fourth installments each representing 5% of the Consolidated Debt; 3) the fifth and sixth installments each representing 10% of the Consolidated Debt; 4) the seventh and eighth installments each representing 15% of the Consolidated Debt; 5) the ninth and tenth installments each representing 17.5% of the Consolidated Debt.

e. The Consolidation Interest rate is the interest rate applied on the outstanding balance of the Consolidated Debt owed to the relevant United States Government agencies.

f. The Consolidation Interest rate shall be 6.65 percent per annum on the outstanding balance of the Consolidated Debt owed to the Commodity Credit Corporation for credits made available under the programs of the Commodity Credit Corporation and 6.0 percent per annum on the outstanding balance of the Consolidated Debt owed to the Export-Import Bank of the United States, the Agency for International Development and the United States Government for P.L. 480. With regard to the Consolidated Debt owed to the Agency for International Development, interest shall also accrue on any past due Consolidation Interest. Consolidation Interest shall begin to accrue on the outstanding balance of the Consolidated Debt on January 1, 1972, and shall be paid semi-annually in accordance with the schedules provided in the bilateral agreements of each of the relevant agencies.

4. The Government of the Arab Republic of Egypt agrees to resume payments of principal and interest due after December 31, 1971, on credits listed in Annex A in accordance with the terms and conditions of the contracts in effect prior to this Agreement between each of the relevant United States Government agencies and the Government of the Arab Republic of Egypt.

5. New credit facilities amounting to 95 percent of repayments on the Consolidated Debt owed to the Commodity Credit Corporation for credits made available under programs of the Commodity Credit Corporation shall be made available to the Government of the Arab Republic of Egypt at its request during the period of repayment (1972-1976) as specified in the bilateral agreement between the Government of the Arab Republic of Egypt and the Commodity Credit Corporation rescheduling Commodity Credit Corporation credits.

6. The Export-Import Bank of the United States shall be prepared to consider the extension of credit facilities as a credit relationship is reestablished.

7. This Agreement shall enter into effect^[1] as of the day and year when:

a. it has been signed by representatives of the Government of the Arab Republic of Egypt and the Government of the United States and

b. the bilateral agreements provided for in section 1 of this Agreement have been signed by the Government of the Arab Republic of Egypt and the relevant United States Government agencies and have become effective pursuant to their terms.

8. Done at Cairo, in duplicate, this 6th day of December, 1971.

FOR THE GOVERNMENT OF
THE UNITED STATES OF AMERICA

DONALD C. BERGUS

FOR THE GOVERNMENT OF
THE ARAB REPUBLIC OF EGYPT

M MERZBAN

^[1] Aug. 28, 1972. [Footnote added by the Department of State.]

ANNEX A

**ARAB REPUBLIC OF EGYPT—COMMODITY CREDIT CORPORATION
CREDIT AGREEMENTS**

(In dollars)

Credit Identification			Credit Identification		
GSM Number	Date of Agree- ment	Purpose	GSM Number	Date of Agree- ment	Purpose
3552	4-20-66	Sale of Agri-	3875	8- 9-66	Sale of Agri-
3556	4-20-66	culture	3877	8- 9-66	culture
3557	4-20-66	Commodi-	3878	8- 9-66	Commodi-
3562	4-20-66	ties	3879	8- 9-66	ties
3581	4-20-66		3880	8- 9-66	
3586	4-21-66		3881	8- 9-66	
3598	4-26-66		3882	8- 9-66	
3605	5- 5-66		3883	8- 9-66	
3608	5- 9-66		3896	8-12-66	
3611	5- 9-66		4041	9-23-66	
3616	5-11-66		4062	10-17-66	
3633	5-24-66		4124	11-16-66	
3634	5-26-66		4127	11-17-66	
3635	5-26-66		4131	11-16-66	
3644	6- 8-66		4132	11-16-66	
3680	6-28-66		4160	12- 2-66	
3865	8- 9-66		4167	12- 7-66	
3868	8- 9-66		4178	12-14-66	
3869	8- 9-66		4205	12-23-66	
3870	8- 9-66		4236	1-10-67	
3873	8- 9-66		4340	2-28-67	

ANNEX A

ARAB REPUBLIC OF EGYPT—EXPORT-IMPORT BANK CREDIT AGREEMENTS AND TERMS
 (In dollars)

<u>Credit Identification</u>			<u>Past Due Debt as of Dec. 31, 1971</u>		
<u>Number</u>	<u>Credit Agreement Signed</u>	<u>Purpose</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
1265 ^[1]	Oct. 5, 1960	Purchase of Railway Equipment	14,046, 561. 97	4,379, 160. 01	18,425, 721. 98
2110 ^[2]	Oct. 16, 1963 (amended Oct. 28, 1965)	Purchase of Railway Equipment	8,593, 750. 00	3,908, 735. 75	12,502, 485. 75

¹ Original repayment terms of credit agreement #1265: Principal repayable in 16 semiannual installments commencing July 31, 1962; interest at 5½% payable semiannually.

² Original repayment terms of credit agreement #2110: Principal repayable in 16 semiannual installments commencing (as amended) March 1, 1966; interest at 5½% payable semiannually.

ANNEX A

ARAB REPUBLIC OF EGYPT—AGENCY FOR INTERNATIONAL DEVELOPMENT LOAN AGREEMENTS

1. Loan Agreement Between the Societe Misr Pour La Rayonne, the United Arab Republic and the Agency for International Development, dated April 26, 1962 (A.I.D. Loan No. 263-H-014)
2. Loan Agreement Between the United Arab Republic and the Agency for International Development, dated April 26, 1962 (A.I.D. Loan No. 263-H-015)
3. Loan Agreement Between the United Arab Republic and the Agency for International Development, dated June 1, 1962 (A.I.D. Loan No. 263-K-016)
4. Loan Agreement Between the United Arab Republic and the Agency for International Development, dated June 1, 1962 (A.I.D. Loan No. 263-K-019)
5. Loan Agreement Between the Government of the United Arab Republic and the Agency for International Development, dated February 20, 1963 (A.I.D. Loan No. 263-H-020)
6. Loan Agreement Between the Societe Generale De L'Industrie Du Papier "Rakta," the Government of the United Arab Republic and the United States of America, dated November 12, 1963 (A.I.D. Loan No. 263-H-022)

ANNEX A

ARAB REPUBLIC OF EGYPT

PL-480 AGRICULTURAL COMMODITIES AGREEMENT AND TERMS
 (In Dollars)
Agreement Identification^[a]

Treasury Number	Date of Agreement	Purpose
66-0011	January 3, 1966	Sale of Agricultural Commodities

Past Due Debt Through December 31, 1971:

Principal	\$3,042,806.16
Interest	\$1,995,746.96
Total	<u><u>\$5,038,553.12</u></u>

Balance of Original Credit:

Principal	<u><u>\$11,410,523.10</u></u>
-----------	-------------------------------

^a Original Credit Provisions of Agricultural Commodities Agreement Between the Government of the United States of America and the Government of the United Arab Republic under Title IV of the Agricultural Trade Development and Assistance Act, as Amended.

Payments of amounts financed in connection with shipments made in each calendar year, including the applicable ocean transportation costs related to such deliveries, shall be made in 19 approximately equal installments. The first payment shall become due two years from the date of last delivery in any calendar year. Any annual payment may be made prior to the due date thereof.

Interest on the unpaid balance of the principal amount due the Government of the United States of America for commodities delivered in each calendar year will begin on the date of the last delivery of commodities in such calendar year and will be paid annually not later than the anniversary date of those deliveries. Interest shall be computed at the rate of 2½ percent per annum. (Last delivery date in calendar year 1966—June 23, 1966.)

ANNEX B

**PAST DUE DEBT CONSOLIDATED THROUGH DECEMBER 31, 1971 OWED
BY THE ARAB REPUBLIC OF EGYPT TO UNITED STATES GOVERN-
MENT AGENCIES**

(In Dollars)

<u>Agency</u>	<u>Principal in Arrears</u>	<u>Interest in Arrears</u>	<u>Total Past Due Debt</u>
Commodity Credit Corporation	62, 980, 893. 81	21, 775, 756. 21	84, 756, 650. 02
Export-Import Bank of the United States	22, 640, 311. 97	8, 287, 895. 76	30, 928, 207. 73
Agency for Inter- national Development	19, 714, 175. 60	4, 906, 884. 50	24, 621, 060. 10
United States Govern- ment for PL-480	3, 042, 806. 16	1, 995, 746. 96	5, 038, 553. 12
Totals	108, 378, 187. 54	36, 966, 283. 43	145, 344, 470. 97

ANNEX C

**ARAB REPUBLIC OF EGYPT—REVISED SCHEDULE OF PAYMENTS RESULTING
FROM RESCHEDULING OF PAST DUE DEBT OWED TO UNITED STATES GOVERNMENT AGENCIES [F]**

(In dollars)

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Totals</u>
1. Repayment of Consolidated Debt [f]	23, 308, 078. 76	16, 951, 330. 00	19, 980, 721. 04	23, 010, 112. 09	22, 712, 145. 44	18, 176, 346. 30	21, 205, 737. 34	145, 344, 470. 97
2. Consolidation Interest [f]	6, 168, 202. 55	7, 152, 883. 44	5, 985, 603. 43	4, 630, 647. 63	3, 264, 511. 07	2, 094, 920. 95	952, 851. 15	30, 249, 620. 22
3. Payment of Current Maturities	6, 765, 887. 98	3, 490, 380. 03	2, 500, 093. 23	2, 559, 137. 81	2, 530, 434. 50	2, 501, 731. 22	2, 473, 027. 91	22, 820, 692. 68
4. Totals (1+2+3)	<u>36, 242, 169. 29</u>	<u>27, 594, 593. 47</u>	<u>28, 466, 417. 70</u>	<u>30, 199, 897. 53</u>	<u>28, 507, 091. 01</u>	<u>22, 772, 998. 47</u>	<u>24, 631, 616. 40</u>	<u>198, 414, 783. 87</u>

^a These agencies are: Commodity Credit Corporation; the Export-Import Bank of the United States; and the Agency for International Development; and the United States Government for PL-480.

^b The Consolidated Debt consists of \$108,378,187.54 of past due principal and \$36,956,283.43 of past due interest, for a total of \$145,344,470.97.
◦ Consolidation Interest is 6.65% per annum on the repayment of the Commodity Credit Corporation Consolidated Debt, and 6.0% per annum on the repayment of the Consolidated Debts of the other agencies listed in footnote (a) above.

SAUDI ARABIA

Defense: Privileges and Immunities for United States Personnel Under F-5 Aircraft Maintenance and Training Program

*Agreement effected by exchange of notes
Signed at Jidda April 4 and July 5, 1972;
Entered into force July 5, 1972.*

The American Ambassador to the Saudi Arabian Minister of State for Foreign Affairs

No. 137

JIDDA, April 4, 1972

EXCELLENCY:

I have the honor to refer to the agreement concerning the maintenance and training program for the support of the F-5 aircraft to be undertaken by the United States Government in conformity with the contract between it and the Government of the Kingdom of Saudi Arabia. As personnel working in this program will, like members of the Corps of Engineers, be present in Saudi Arabia for the sole purpose of providing or administering provisions of reimbursable services for the benefit of the Government of the Kingdom of Saudi Arabia, I would hope that your government might concur with the proposal that military personnel and civilian employees, and the dependents of such personnel and employees of the United States Government, present in the Kingdom of Saudi Arabia in connection with this program, be accorded the privileges and immunities accorded to members of the United States Army Corps of Engineers and their dependents pursuant to part VII of the agreement between our two governments concerning construction of military facilities, dated May 24/June 5, 1965. [¹] For purposes of the present agreement, the Chief, United States Military Training Mission to Saudi Arabia shall assume the functions performed by the senior representative of the Corps of Engineers under the aforementioned agreement.

¹ TIAS 5830; 16 UST 895.

If the foregoing proposal is acceptable to Your Excellency's Government, I have the honor to propose further that this note and Your Excellency's Note in reply concurring therein shall constitute an agreement between our two governments which shall enter into force on the date of Your Excellency's reply.

NICHOLAS G. THACHER

His Excellency

SAYYID OMAR SAQQAF

Minister of State for Foreign Affairs

Jidda

The Saudi Arabian Minister of State for Foreign Affairs to the American Ambassador

٤/٧/١١١١ / ٩٨٥ / رقم :

التاريخ : ٩٣٠١ ٢٦

المرنات: بدر

المملكة العربية السعودية
وزارة الخارجية

صاحب السعادة

الستير نيكولا ساج . ناتشر
سفير الولايات المتحدة الأمريكية
جدة .

يا صاحب السعادة

أشير إلى خطابكم رقم ١٣٢ بتاريخ ٤ أبريل ١٩٢٢ الموافق ٢٠ صفر ١٣٩٢ بشأن اتفاقية برنامج الصيانة والتدريب الخاص بدعم الطائرات من طراز أف - ٥ والذى مستولاه حكومة الولايات المتحدة وقتا للعقد العين بينها وبين المملكة العربية السعودية ، والذى ذكرتم فيه أن الماءلين فى برنامج الصيانة والتدريب سيتواجدون فى المملكة لجرد تقديم إدارة الإمدادات المتعلقة بالخدمات التي تحدد قيمتها لصالح حكومة الملك العربية السعودية ، شأنهم شأن أعضاء فريق سلاح المندسين ، ولذلك تأملون فى ان توافق حكومة جلالته على اقتراحكم بأن ينضم الموظفين العسكريين والمستخدمين المدنيين وأفراد عائلات أمثال هؤلاء الموظفين والمستخدمين فى حكومة الولايات المتحدة القادمين للملكة العربية السعودية لهذا البرنامج الامتيازات والحقوق المترتبة لاعضاً فريق سلاح المندسين التابع للجيشه الأمريكي وآخرين عائلاتهم وقتا للنترة السابعة من الاتفاقية العسكرية فى ٢٤ مايو و ٢٥ يونيو ١٩٦٥ بين حكومتيها بشأن انشاء المارق العسكري . وأن رئيس بعثة التدريب العسكرية الأمريكية لدى المملكة العربية السعودية سيتولى المهام التي يرمي بها كبير مهندسى سلاح المندسين بموجب الاتفاقية المذكورة أعلاه . ولما كتم سعادكم قد اقررتكم ان يكون خطابكم والرد عليه اتفاقاً بين حكومتيها سارى المفعول من تاريخ الرد .

يطيب لي ان اذكم بالموانئ على تطبيق احكام المادة السابعة الشهار اليها
على فريق المعاينة والتدريب الخاوص بدعم الطائرات من طراز اف-٥، نيسا
لا يتعارض مع نصوص العدد المبم بشأنها.

وتحبلا يا صاحب السعادة أطيب تحياتي،

وزير الدولة للشؤون الخارجية

عمر السناف

Translation

KINGDOM OF SAUDI ARABIA
MINISTRY OF FOREIGN AFFAIRS

No. 92/5/1/7711/2

5/23/92 [Corresponding to JULY 5, 1972]

His Excellency

NICHOLAS G. THACHER,
Ambassador of the United States of America,
Jidda.

EXCELLENCY:

I refer to your note No. 137, dated April 4, 1972, corresponding to 20 Safar, 1392, relating to the agreement concerning the maintenance and training program for the support of the F-5 aircraft to be undertaken by the United States Government in conformity with the contract between it and the Kingdom of Saudi Arabia, in which you stated that personnel working in the maintenance and training program, like members of the Corps of Engineers, would be present in the Kingdom for the sole purpose of providing or administering provisions of reimbursable services for the benefit of the Government of the Kingdom of Saudi Arabia, that, therefore, you hoped that His Majesty's Government might concur with your proposal that military personnel and civilian employees and the members of the families of such personnel and employees of the United States Government, who would be coming to the Kingdom of Saudi Arabia in connection with this program, be accorded the privileges and immunities accorded to the members of the United States Army Corps of Engineers and members of their families pursuant to paragraph 7 of the agreement between our two governments concerning construction of military facilities, signed on May 24 and June 5, 1965, and that the Chief, United States Military Training Mission to the Kingdom of Saudi Arabia, would assume the functions performed by the senior member of the Corps of Engineers under the aforementioned agreement.

In compliance with Your Excellency's proposal that your note and the reply to it shall constitute an agreement between our two governments to enter into force on the date of the reply, I have the pleasure to inform you that we concur in having the provisions of the aforementioned article 7 apply to the members of the maintenance and training group supporting the F-5 aircraft in such a manner as will in no way counter the terms of the contract entered into in connection therewith.

Please accept, Excellency, my best regards.

OMAR ES-SAKKAF
Minister of State for Foreign Affairs

PAKISTAN
Agricultural Commodities

Agreement amending the agreement of March 9, 1972, as amended.

Effectuated by exchange of notes

Signed at Islamabad July 21, 1972;

Entered into force July 21, 1972.

*The Acting Director, United States AID Mission, to the Pakistani
Secretary, Economic Affairs Division*

EMBASSY OF THE
UNITED STATES OF AMERICA

ISLAMABAD July 21, 1972

Sir:

I have the honor to refer to the Exchange of Notes between our two Governments signed on March 9, 1972 as amended on May 11, 1972, [¹] amending the Agricultural Commodities Agreements between our two Governments signed on November 25, 1970 and August 6, 1971, [²] and am pleased to inform the Government of Pakistan that the United States Government has agreed to further amend the said Notes as follows:

In the paragraph following Paragraph (B) of the Notes signed on March 9, 1972 as amended on May 11, 1972, delete the words "120 days" and instead insert the words "180 days".

All other items in the said Agreements and the said Notes shall remain unchanged.

If the foregoing is acceptable to your Government, I propose that this note together with your reply concurring therein shall constitute an agreement between our two Governments to enter into force under the date of your note in reply.

¹ TIAS 7301, 7339; *ante*, pp. 257, 776.

² TIAS 7087, 7232; 22 UST 484, 1893.

Please accept the renewed assurances of my highest consideration.

WILLIAM A. WOLFFER

William A. Wolffer
Director (*Acting*)

Mr. S.S. IQBAL HOSAIN, S.Q.A., PMAS
Secretary
Economic Affairs Division
Ministry of Finance, Planning and Development
Government of Pakistan
Islamabad

*The Pakistani Secretary, Economic Affairs Division, to the Acting
Director, United States AID Mission*

GOVERNMENT OF PAKISTAN
ECONOMIC AFFAIRS DIVISION

No.1(2)US-VI/72.

ISLAMABAD: July 21, 1972.

DEAR DR. WOLFFER,

I have the honour to acknowledge with thanks the receipt of your letter dated July 21, 1972, regarding extension of the time limit of 120 days to 180 days for the despatch of the PL 480 rice lying at Karachi to Chittagong.

2. The text of your letter under reference is reproduced below:

"I have the honor to refer to the Exchange of Notes between our two Governments signed on March 9, 1972 as amended on May 11, 1972, amending the Agricultural Commodities Agreements between our two Governments signed on November 25, 1970 and August 6, 1971, and am pleased to inform the Government of Pakistan that the United States Government has agreed to further amend the said Notes as follows:

In the paragraph following Paragraph (B) of the Notes signed on March 9, 1972 as amended on May 11, 1972, delete the words "120 days" and instead insert the words "180 days".

All other items in the said Agreements and the said Notes shall remain unchanged.

If the foregoing is acceptable to your Government, I propose that this note together with your reply concurring therein shall constitute an agreement between our two Governments to enter into force under the date of your note in reply.

Please accept the renewed assurances of my highest consideration."

3. I write to concur in the contents of your letter and to confirm that this exchange of letters between us shall constitute an agreement between our two Governments.

Sincerely yours,

S.S. IQBAL HOSAIN

(S.S. Iqbal Hosain)

Dr. WILLIAM A. WOLFFER,
Director (Acting),
USAID Mission,
Islamabad.

TUNISIA
Agricultural Commodities

Agreement amending the agreement of November 17, 1971.

Effectuated by exchange of notes

Dated at Tunis April 19, 1972;

Entered into force April 19, 1972.

The American Embassy to the Tunisian Ministry of Foreign Affairs

No. 0408

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Republic of Tunisia and, referring to the Agricultural Commodities Agreement between our two Governments of November 17, 1971,^[1] has the honor to propose its amendment as follows:

In Part II, item I, "Commodity Table", under "approximate maximum quantity", increase soybean/cottonseed oil under both "A. Dollar Credit" and "B. Convertible Local Currency Credit" to 25,000 metric tons and increase the maximum export value to \$7,573,-000; under appropriate headings insert the following under both "A. Dollar Credit" and "B. Convertible Local Currency Credit": Wheat, wheat flour, 1972, 30,000 metric tons, \$1,797,000; increase the agreement total to \$18,740,000; under item III, "Usual Marketing Table", insert the following under appropriate headings: Wheat, wheat flour, 1972, 80,000 metric tons. Under item IV, Export Limitation, paragraph B, insert at the end of paragraph B the following phrase: for wheat, wheat flour,—wheat, wheat flour, rolled wheat, semolina, farina and bulgar.

As for Article VIII of the November 17, 1971 agreement, the Government of the United States agrees in principle on the deduction of mutually acceptable direct costs from sales proceeds. These costs will be determined by subsequent discussions between the two governments. However, the proceeds deposited to the general development budget must in no case be less than the dinar equivalent of the dollar disbursements by the Commodity Credit Corporation. All other terms and conditions of the November 17, 1971 agreement remain the same.

¹ TIAS 7215; 22 UST 1772.

If the foregoing is acceptable to your Government, the Embassy proposes that it and your reply thereto constitute agreement between our two Governments effective the date of your note in reply.

The Embassy of the United States of America takes this occasion to renew to the Ministry of Foreign Affairs of the Republic of Tunisia the assurances of its highest consideration.

J. F. R.

EMBASSY OF THE UNITED STATES OF AMERICA
Tunis, April 19, 1972

The Tunisian Ministry of Foreign Affairs to the American Embassy

RÉPUBLIQUE TUNISIENNE

MINISTÈRE
DES AFFAIRES ÉTRANGÈRES

No 2758(AE)31

TUNIS, le 19 AVR. 1972.

Le Ministère des Affaires Etrangères présente ses compliments à l'Ambassade des Etats-Unis d'Amérique à Tunis et se référant à sa Note afférente à l'amendement de l'accord de fourniture d'huile de soja du 17 Novembre 1971, et qui lui a été communiquée ce jour, a l'honneur de lui confirmer qu'elle ne soulève aucune objection de sa part.

Le Ministère des Affaires Etrangères saisit cette occasion pour renouveler à l'Ambassade des Etats-Unis d'Amérique à Tunis, l'assurance de sa haute considération.

[SEAL]

AMBASSADE DES ETATS-UNIS
D'AMÉRIQUE À TUNIS.

Translation

TUNISIAN REPUBLIC
MINISTRY OF FOREIGN AFFAIRS

No. 2758 (AE) 31

TUNIS, April 19, 1972

The Ministry of Foreign Affairs presents its compliments to the Embassy of the United States of America at Tunis, and, with reference to the Embassy note concerning the amendment of the Agreement of November 17, 1971, for the supplying of soybean oil, received on this date, has the honor to inform the Embassy that it has no objection to offer.

The Ministry of Foreign Affairs avails itself of this opportunity to renew to the Embassy of the United States of America at Tunis the assurance of its high consideration.

[SEAL]

[Initialed]

EMBASSY OF THE UNITED STATES OF AMERICA,
Tunis.

TIAS 7427

JAPAN
Omega Navigational Station

*Agreement effected by exchange of notes
Signed at Tokyo August 15, 1972;
Entered into force August 15, 1972.*

*The American Ambassador to the Japanese Minister for
Foreign Affairs*

No. 499

TOKYO, August 15, 1972.

EXCELLENCY,

I have the honor to refer to the OMEGA Navigational Stations established in the United States of America and elsewhere which have already proven to be effective as aids to navigation of ships and aircraft, and to state that, in view of the geographical site potentialities of Japan and in order to enlarge the effective coverage of the said aids to navigation, the Government of the United States of America invites the Government of Japan to establish, operate and maintain an OMEGA Navigational Station in Japan (hereinafter designated the "Station") in accordance with the following provisions:

1. The Government of Japan will, without cost to the Government of the United States of America except as provided for in paragraphs 2 and 3 hereof, construct, operate and maintain the Station in accordance with the relevant laws and regulations and within the limit of budgetary appropriations of Japan.

2. (a) The Government of the United States of America will make available without cost to the Government of Japan the following equipment for the Station :

- (i) Two OMEGA transmitters;
- (ii) The electronic timing gear; and
- (iii) The helix, variometers, and their associated control equipment.

(b) The Government of the United States of America will deliver the above equipment without cost to the Government of Japan at such time and place in Japan as may be agreed upon by the appropriate authorities of the two Governments.

(c) Title to such equipment shall remain in the Government of the United States of America.

3. The Government of the United States of America, upon the request of the Government of Japan, will train in the United States Japanese personnel required for the operation and maintenance of the equipment furnished by the Government of the United States of America under paragraph 2. (a) above. The training will be without charge to the Government of Japan but the transportation and per diem expenses of such personnel will not be charged to or paid by the Government of the United States of America.

4. The Government of the United States of America will, upon the request of the Government of Japan, make available on a reimbursable basis parts and materials necessary for the operation and maintenance of the Station on terms and conditions no less favorable than those applied to sales of such parts and materials to other Governments establishing, operating, and maintaining OMEGA Stations.

5. (a) Whenever the appropriate authorities of both Governments agree that any equipment made available to the Government of Japan under paragraph 2 hereof is no longer required for the operation and maintenance of the Station, it will be returned to the Government of the United States of America at such time and place in Japan as may be agreed upon by the appropriate authorities of the two Governments.

(b) When such equipment is returned to the Government of the United States of America, the Government of Japan is not obligated to restore the equipment to the condition in which it was at the time of delivery, or to compensate the Government of the United States of America in lieu of such restoration.

(c) Such equipment shall not be disposed of in Japan except upon conditions to be agreed upon by the two Governments subject to the relevant laws and regulations of the United States and the relevant laws and regulations of Japan.

6. The appropriate authorities of the Government of Japan, in accordance with the relevant laws and regulations in force in Japan, will be responsible for the payment of customs duties and other taxes on the equipment made available under paragraph 2 hereof for the Station, and for equipment and materials brought temporarily into Japan in connection with construction of the Station.

7. The Government of the United States of America shall not be liable for any damage to property or injury to persons by virtue of the fact that title to certain equipment remains in the Government of the United States of America. The foregoing shall not be construed as exempting the Government of the United States of America from liability for damage or injury caused by defects in the aforementioned equipment.

8. The expenses incurred by the Government of the United States of America under this Agreement shall be subject to the availability of the funds to be appropriated by the Congress of the United States.

9. The appropriate authorities of the two Governments may conclude detailed arrangements to implement this Agreement.

10. This Agreement shall remain in force for an initial period of three years and thereafter until its termination six months after either Government shall have given notice in writing to the other Government of its intention to terminate the Agreement.

If the foregoing provisions are acceptable to the Government of Japan, I have the honor to propose that this note together with Your Excellency's reply to that effect shall constitute an agreement between our two Governments regarding this matter, which shall enter into force on the date of Your Excellency's reply.

Accept, Excellency, the assurances of my highest consideration.

ROBERT S. INGERSOLL

His Excellency

MASAYOSHI OHIRA,
Minister for Foreign Affairs,
Tokyo.

します。

本大臣は、以上を申し進めるに際し、ここに閣下に向かつて
敬意を表します。

千九百七十二年八月十五日に東京で

日本国外務大臣

大
平
田
一
彦

アメリカ合衆国特命全権大使

ロバート・S・インガソル閣下

を締結することができる。

10 この協定は、当初の三年の期間効力を有し、その後は、一方の政府がこの協定を終了させる意思を書面により他方の政府に通告した後六箇月を経過するまで引き続き効力を有する。

本使は、前記の規定が日本国政府にとつて受諾しうるものであるときは、この書簡及び受諾を表明される閣下の返簡が閣下の返簡の日付の日に効力を生ずるこの問題に関する両政府間の合意を構成することを提案する光榮を有します。

本大臣は、前記の規定が日本国政府にとつて受諾しうることであることを日本国政府に代わつて確認するとともに、閣下の書簡及びこの返簡がこの返簡の日付の日に効力を生ずるこの問題に関する両政府間の合意を構成することに同意する光榮を有

- 7 い、2の規定に基づいて局のために提供される装置並びに局の建設に関連して一時的に日本国に持ち込まれる装置及び資材に対する関税及びその他の租税の支払について責任を負う。
- 8 アメリカ合衆国政府は、一定の装置に対する権原をアメリカ合衆国政府が引き続き有するという理由により財産の損害又は身体の傷害について責任を負うものではない。この規定は、アメリカ合衆国政府を当該装置の欠陥により生じた損害又は傷害に対する責任から免れさせるものと解してはならない。
- 9 この協定に基づいてアメリカ合衆国政府が負担する経費は、合衆国議会が支出を承認する資金の範囲内に限るものとする。
- 両政府の関係当局は、この協定を実施するため細目取極

6

5
(a)

2の規定に基づいて日本国政府に提供されたいずれかの装置が局の運営及び維持のために必要でなくなつたと両政府の関係当局が合意した場合には、その装置は、両政府の関係当局が合意する時に及びその合意する日本国内の場所においてアメリカ合衆国政府に返還される。

(b)

(a) にいう装置がアメリカ合衆国政府に返還される場合には、日本国政府は、その装置を引渡しの時の状態に回復し、又はその回復の代わりにアメリカ合衆国政府に補償する義務を負わない。

(c)

(a) にいう装置は、合衆国の関係法令及び日本国の関係法令に従つて両政府が合意する条件による場合を除くほか、日本国内で処分してはならない。

日本国政府の関係当局は、日本国の現行の関係法令に従

3

引き続き有する。

アメリカ合衆国政府は、日本国政府の要請があるときは、
2. (a) の規定に基づいてアメリカ合衆国政府が提供した装置の
運営及び維持のために必要とされる日本国の要員を合衆国
内で訓練する。その訓練は、日本国政府に費用の負担をか
けることなく実施する。ただし、それらの要員の旅費及び
日当は、アメリカ合衆国政府が負担し又は支払うことはな
い。

4

アメリカ合衆国政府は、日本国政府の要請があるときは、
対価の支払を条件として、局の運営及び維持に必要な部品
及び資材を、オメガ局を設置し、運営し及び維持する他の
政府に対するそれらの部品及び資材の売却に適用する条件
よりも不利でない条件で提供する。

2

関係法令に従い、かつ、日本国の予算の範囲内で、局を建設し、運営し及び維持する。

(a)

アメリカ合衆国政府は、日本国政府に費用の負担をかけることなく、局のために次の装置を提供する。

(i) オメガ送信装置二組

(ii) 電子タイミング装置

(iii) ヘリックス及びバリオメーター並びにそれらの関連制御装置

(b)

アメリカ合衆国政府は、(a)にいう装置を、日本国政府に費用の負担をかけることなく、両政府の関係当局が合意する時に及びその合意する日本国内の場所において引き渡す。

(c)

(a) にいう装置に対する権原は、アメリカ合衆国政府が

*The Japanese Minister for Foreign Affairs to the
American Ambassador*

書簡をもつて啓上いたします。本大臣は、本日付けの閣下の次
次の書簡を受領したことを確認する光榮を有します。

本使は、船舶及び航空機の航行に対する援助施設として効
果的であることがすでに実証されたアメリカ合衆国及び他の
地域に設置されているオメガ航行援助局に言及するとともに、
日本国が地理的に設置場所としての可能性を有することにか
んがみ、また、その航行援助施設の有効範囲を拡大するため、
アメリカ合衆国政府が、日本国政府に対し、次の規定に従つ
て日本国にオメガ航行援助局（以下「局」という。）を設置し、
運営し及び維持するよう要請する旨を申し述べる光榮を有し
ます。

1 日本国政府は、2及び3に定める場合を除くほか、アメ
リカ合衆国政府に費用の負担をかけることなく、日本国の

Translation

TOKYO, August 15, 1972

EXCELLENCY,

I have the honor to acknowledge receipt of your note of today's date, which reads as follows:

[For the English language text, see p. 1480.]

I have the honor to confirm on behalf of my Government that the foregoing provisions are acceptable to the Government of Japan and to agree that your note and this reply shall constitute an agreement between our two Governments regarding this matter, which shall enter into force on the date of this reply.

I avail myself of this opportunity to extend to Your Excellency the assurances of my highest consideration.

MASAYOSHI OHIRA

*Minister for Foreign Affairs
of Japan.*

His Excellency

ROBERT S. INGERSOLL,

*Ambassador Extraordinary and
Plenipotentiary of the United States
of America.*

DOMINICAN REPUBLIC

Trade: Meat Imports

*Agreement effected by exchange of notes
Signed at Santo Domingo March 15 and May 19, 1972;
Entered into force May 19, 1972.*

*The American Ambassador to the Dominican Secretary of State for
Foreign Relations*

EMBASSY OF THE
UNITED STATES OF AMERICA

o. 29

SANTO DOMINGO, March 15, 1972

EXCELLENCY:

I have the honor to refer to discussions between representatives of our two Governments relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (item 106.10 of the tariff schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (item 106.20 of the tariff schedules of the United States) during the calendar year 1972 and to the agreements between the United States and other countries, including the Dominican Republic, constituting the 1971 restraint program concerning shipments of such meats to the United States.

With the understanding that similar agreements also will be concluded for the calendar year 1972 with the governments of all of the countries that participated in the 1971 restraint program, I have the honor to propose the following agreement between our two Governments:

1. On the basis of the foregoing, and subject to paragraph 4, the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program shall be 1155 million pounds and the Government of the Dominican Republic and the Government of the United States of America shall respectively undertake responsibilities as set forth below for regulating exports to, and imports into, the United States.

2. The Government of the Dominican Republic shall limit exports of the aforementioned meats so that the quantity of such meats originating in the Dominican Republic and during the calendar year

1972 entered or withdrawn from warehouse for consumption in the United States does not exceed 12.5 million pounds or such higher figure as may result from adjustments pursuant to paragraph 4.

3. The Government of the United States of America may limit imports of such meats of Dominican Republic origin, whether by direct or indirect shipments, through issuance of regulations governing the entry, or withdrawal from warehouse, for consumption in the United States, provided that:

(a) Such regulations shall not be employed to govern the timing of entry, or withdrawal from warehouse, for consumption of such meat from the Dominican Republic; and

(b) Such regulations shall be issued only after consultation with the Government of the Dominican Republic pursuant to paragraph 6, and only in circumstances where it is evident after such consultations that the quantity of such meat likely to be presented for entry, or withdrawal from warehouse, for consumption in the calendar year

972 will exceed the quantity specified in paragraph 2, as it may be increased pursuant to paragraph 4.

4. The Government of the United States of America may increase the permissible total quantity of imports of such meats into the United States during the calendar year 1972 from countries participating in the restraint program or may allocate any estimated shortfall in a share of the restraint program quantity or in the initial estimates of imports from countries not participating in the restraint program. Thereupon, if no shortfall is estimated for the Dominican Republic, such increase or estimated shortfall shall be allocated to the Dominican Republic in the proportion that 12.5 million pounds bears to the total initial shares from all countries participating in the restraint program which are estimated to have no shortfall for the calendar year 1972. The foregoing allocation shall not apply to any increase in the estimate of imports from countries not participating in the 1972 restraint program.

5. The Government of the United States of America shall separately report meats rejected as unacceptable for human consumption under United States inspection standards, and such meats will not be regarded as part of the quantity described in paragraph 2.

6. The Government of the Dominican Republic and the Government of the United States of America shall consult promptly upon the request of either Government regarding any matter involving the application, interpretation or implementation of this agreement, and regarding increase in the total quantity permissible under the restraint program and allocation of shortfall.

7. In the event that quotas on the imports of such meats should become necessary, the representative period used by the Government of the United States of America for calculation of the quota for the Dominican Republic shall not include the period between October 1, 1968 and December 31, 1972.

I have the honor to propose that, if the foregoing is acceptable to the Government of the Dominican Republic, this note together with Your Excellency's confirmatory reply shall constitute an agreement between our two Governments which shall enter into force on the date of your reply.

Accept, Excellency, the renewed assurances of my highest consideration.

FRANCIS E. MELOY, JR.

His Excellency

VÍCTOR GÓMEZ BERGÉS

Secretary of State for Foreign Relations

*The Dominican Secretary of State for Foreign Relations to the
American Ambassador*

REPÚBLICA DOMINICANA
SECRETARÍA DE ESTADO
DE RELACIONES EXTERIORES

PR-12633

SANTO DOMINGO, D.N.
19 de mayo de 1972.

SEÑOR EMBAJADOR:

Tengo a honra dirigirme a Vuestra Excelencia para informarle que el acuerdo contenido en la Nota No. 29 de fecha 15 de marzo de 1972, relacionado con las importaciones a los Estados Unidos de América, para consumo, de carne fresca, refrigerada o congelada de ganado vacuno (rubro 106.10 del acuerdo de tarifas de los Estados Unidos) y carne fresca, refrigerada o congelada de ganado ovino y caprino, salvo corderos (rubro 106.20 del acuerdo de tarifas de los Estados Unidos) durante el año civil de 1972, y a los acuerdos entre los Estados Unidos de América y otros países, incluyendo la República Dominicana, que constituyen el programa de restricciones para 1971 en relación con los envíos de tales carnes a los Estados Unidos, ha sido aceptado por el Gobierno Dominicano.

El acuerdo regirá como sigue:

1.— Con base en lo anterior, y con sujeción a lo indicado en el párrafo 4, la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972, por parte de países que participen en el programa de restricciones será de 1155 millones de libras y el Gobierno de la República Dominicana y el Gobierno de los Estados Unidos de América asumirán respectivamente las obli-

gaciones que se indican a continuación para reglamentar las exportaciones e importaciones a los Estados Unidos.

2.- El Gobierno de la República Dominicana limitará las exportaciones de las carnes antes señaladas con el fin de que la cantidad de dichas carnes cuyo origen es la República Dominicana y que durante el año civil de 1972 hayan tenido entrada o salida de almacén para el consumo en los Estados Unidos no exceda de 12.5 millones de libras, o la cantidad mayor que pueda resultar de los ajustes realizados en virtud del párrafo 4.

3.- El Gobierno de los Estados Unidos de América podrá limitar las importaciones de tales carnes cuyo origen es la República Dominicana bien sea en envíos por vía directa o indirecta, por medio de la promulgación de reglamentos que gobiernen la entrada o salida de almacén de las carnes para consumo en los Estados Unidos, siempre que:

a) Tales reglamentos no se empleen para gobernar las fechas al momento de entrada o salida de almacén para el consumo de tales carnes de la República Dominicana; y

b) Tales reglamentos se promulguen solamente después de que se hayan celebrado consultas con el Gobierno de la República Dominicana conforme al párrafo 6, y solamente bajo circunstancias en las que es obvio, después de celebrarse tales consultas, que la cantidad de tales carnes que probablemente se presentará para su entrada o salida de almacén para el consumo en el año civil de 1972, excederá la cantidad que se especifica en el párrafo 2, en la medida en que pueda ser aumentada en virtud del párrafo 4.

4.- El Gobierno de los Estados Unidos de América podrá aumentar la cantidad total permitida de importaciones de tales carnes a los Estados Unidos durante el año civil de 1972 de países que participen en el programa de restricciones o podrá adjudicar cualquier déficit calculando en una parte de la cantidad del programa de restricciones o en los cálculos iniciales de importaciones de países que no participen en el programa de restricciones. Seguidamente, si no se ha calculado un déficit para el año 1972, tal aumento o déficit calculado será adjudicado a la República Dominicana en la proporción que 12.5 millones de libras tienen con el total de participaciones iniciales de todos los países participantes en el programa de restricciones y que se calcula no tendrán déficit en el año civil de 1972. La adjudicación anterior no se aplicará a cualesquiera aumentos en el cálculo de importaciones de países que no participen en el programa de restricciones para el año de 1972.

5.- El Gobierno de los Estados Unidos de América rendirá informes, por separado, acerca de carnes rechazadas por no ser aptas para el consumo humano conforme a las normas de inspección de los Estados Unidos, y tales carnes no se considerarán como parte de la cantidad que se indica en el párrafo 2.

6.- El Gobierno de la República Dominicana y el Gobierno de los Estados Unidos de América celebrarán consultas lo antes posible después de que uno de los Gobiernos las solicite, en relación con cualquier asunto sobre la aplicación, interpretación o puesta en práctica del presente acuerdo, y sobre aumentos de la cantidad total permitida conforme al programa de restricciones y la adjudicación del déficit.

7.- En el caso en que sea necesario implantar cuotas para las importaciones de tales carnes, el período representativo que el Gobierno de los Estados Unidos de América empleará para calcular la cuota de la República Dominicana no incluirá el período entre el 1º de octubre de 1968 y el 31 de diciembre de 1972.

Aprovecho esta oportunidad para reiterar a Vuestra Excelencia las seguridades de mi más alta consideración.

V GÓMEZ B.

Excelentísimo Señor

FRANCIS EDWARD MELOY JR.,
EmbaJador Extraordinario y
Plenipotenciario de los
Estados Unidos de América,
Ciudad.

Translation

DOMINICAN REPUBLIC
DEPARTMENT OF STATE FOR
FOREIGN RELATIONS

SANTO DOMINGO, D.N.
May 19, 1972

MR. AMBASSADOR:

I have the honor to inform you that the agreement contained in note No. 29 of March 15, 1972, relating to the importation into the United States for consumption of fresh, chilled, or frozen cattle meat (Item 106.10 of the tariff schedules of the United States) and fresh, chilled, or frozen meat of goats and sheep, except lambs (Item 106.20 of the tariff schedules of the United States) during the calendar year 1972, and to the agreements between the United States of America and other countries, including the Dominican Republic, constituting the 1971 restraint program concerning such shipments to the United States, has been accepted by the Dominican Government.

The agreement reads as follows:

[For the English language text, see p. 1491.]

TIAS 7429

I avail myself of this opportunity to renew to Your Excellency the assurances of my highest consideration.

V. GÓMEZ B.

His Excellency

FRANCIS EDWARD MELOY, JR.

Ambassador Extraordinary

and Plenipotentiary

of the United States of America,

Santo Domingo.

INTER-AMERICAN DEVELOPMENT BANK

Protocol to the Social Progress Trust Fund Agreement

*Signed at Washington April 28, 1972;
Entered into force April 28, 1972.*

PROTOCOL TO THE SOCIAL PROGRESS TRUST FUND AGREEMENT

Agreement dated this 28th day of April, 1972 between the Inter-American Development Bank (hereinafter called the "Bank") and the Government of the United States of America (hereinafter called the "United States"), to amend further the agreement (hereinafter called the "Social Progress Trust Fund Agreement") dated the nineteenth day of June, 1961 [¹] between the Bank and the United States entrusting to the Bank the administration of the Social Progress Trust Fund.

WHEREAS it is the desire of the Bank and the United States to finance a special inter-American program of project preparation ("project preparation program"), the aim of which is to improve development project preparation so that public and private international financing institutions may more effectively contribute to the economic and social progress of the developing countries of Latin America;

WHEREAS the Bank and the United States find it desirable to permit a portion of the resources of the Social Progress Trust Fund up to the equivalent of fifteen million dollars (\$15 million) to be used to finance this project preparation program; and

WHEREAS the Bank, in administering the project preparation program will receive from the Inter-American Committee of the Alliance for Progress ("CIAP") recommendations as to priorities and potential projects,

^¹ TIAS 4763, 5552, 6081; 12 UST 632; 15 UST 104; 17 UST 1200.

NOW THEREFORE, the Parties hereto agree as follows:

ARTICLE I

Section 1.05 of the Social Progress Trust Fund Agreement is amended to read as follows:

"*Section 1.05.* In addition, the Administrator shall utilize the resources of the Fund to provide:

- (a) Technical assistance related to projects in the fields set forth in Section 1.04;
- (b) Technical assistance related to the mobilizing of domestic financial resources and the strengthening of financial institutions;
- (c) Technical assistance pursuant to the terms of the Preinvestment Fund for Latin American Integration established by Resolution DE-92/66 of the Board of Executive Directors of the Bank, provided that the resources of the Fund made available under this Sub-Section (c) shall be in amounts to be agreed upon by the Administrator and the United States from time to time; and
- (d) Technical assistance in addition to that authorized above, for the purpose of project preparation under rules to be established by the Board of Executive Directors of the Bank, provided that the resources of the Fund made available under this Sub-Section (d), shall not exceed the equivalent of fifteen million dollars."

ARTICLE II

This protocol shall enter into force on the date hereof.

DONE at the city of Washington in the District of Columbia, this 28 day of April 1972, in two equally authentic originals.

FOR THE INTER-AMERICAN DEVELOPMENT BANK

ANTONIO ORTIZ MENA

Antonio Ortiz Mena
President

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA

CHARLES A. MEYER

Charles A. Meyer
*U.S. Coordinator,
Alliance for Progress*

PHILIPPINES

Agricultural Commodities

Agreement amending the agreement of May 4, 1972.

Effectuated by exchange of notes

Signed at Manila August 16, 1972;

Entered into force August 16, 1972.

The American Ambassador to the Philippine Secretary of Foreign Affairs

No. 476

MANILA, August 16, 1972

EXCELLENCY:

I have the honor to refer to the Agricultural Commodities Agreement signed by representatives of our two Governments on May 4, 1972^[1] and to propose amendment to Part II as follows:

a. Item I, Commodity Table, is amended to add under the appropriate headings:

Rice, CY 1972, 100,000 Metric Tons, \$14,775 thousand. The Total Maximum Export Market Value of the agreement increases from \$27,848 thousand to \$42,623 thousand.

b. Item II, Payment Terms, is amended in its entirety to read as follows:

Convertible Local Currency Credit

a. For tobacco, cotton, feedgrains and tallow:

1. Initial Payment – 5 percent

2. Currency Use Payment – 20 percent of the dollar amount of the financing by the Government of the exporting country under this agreement is payable to the Government of the exporting country in accordance with paragraph 6 of the Convertible Local Currency Credit Annex applicable to this agreement and on the following schedule: One-half of the currency use payment applicable under this agreement will be due on May 1, 1973 and the balance of the currency use payment will be due December 1, 1973. No request for payment will

¹ TIAS 7324; *ante*, p. 625.

be made by the Government of the exporting country prior to the first disbursement by the Commodity Credit Corporation under this agreement.

3. Number of Installment Payments – 15
 4. Amount of Each Installment Payment – approximately equal annual amounts.
 5. Due Date of First Installment Payment – 5 years from date of last delivery of commodities in each calendar year.
 6. Initial Interest Rate – 2 percent
 7. Continuing Interest Rate – 3 percent
- b. For rice the payment terms are:
1. Initial Payment – none
 2. Currency Use Payment – none
 3. Number of Installment Payments – 21
 4. Amount of Each Installment Payment – approximately equal annual amounts.
 5. Due Date of First Installment Payment – 10 years after date of last delivery of commodities in each calendar year.
 6. Initial Interest Rate – 2 percent
 7. Continuing Interest Rate – 3 percent
- c. Item III, Usual Marketing Table, is amended to add under appropriate headings:

Rice, CY 1972, none.

- d. Item IV, Export Limitations, is amended by adding the following phrase at the end of paragraph B:

For rice – paddy brown rice and milled rice.

- e. Item VI, Economic Development Purposes for Which Proceeds Accruing to Importing Country are to be Used, is amended in its entirety to read as follows:

Self-help measures specified in Item V and for economic development and flood relief and rehabilitation purposes as may be mutually agreed upon. The deposits referred to in Item VII paragraph 4 below shall be made to a separate account for relief and rehabilitation. The funds in this account will be used in accordance with a plan of activity jointly developed by the Philippine Government and the United States Agency for International Development. These uses will be for mutually agreed upon development projects with preference given to rehabilitation or improvement of feeder roads, irrigation systems, flood control systems, and school buildings in the disaster areas.

- f. Item VII, Other Provisions, paragraph 4 is amended in its entirety to read as follows:

With reference to paragraph 4 of the Convertible Local Currency Credit Annex, the Government of the importing country may make deposits of proceeds from the sale of commodities included in Item I

above within one year from the sale of the commodities within the importing country. Except, however, the local currency accruing to the importing country from the sale of rice provided under this agreement will be deposited in a relief and rehabilitation account in accordance with the following schedule: 50 percent within 60 days of its arrival in the importing country and the balance within the next 60 days.

All other terms and conditions of the May 4, 1972 agreement remain the same.

If the foregoing is acceptable to your Government, I propose that this note and your reply thereto constitute an agreement between our two Governments effective on the date of your note in reply.

Accept, Excellency, the renewed assurances of my highest consideration.

HENRY A. BYROADE

His Excellency

CARLOS P. ROMULO,

Secretary of Foreign Affairs,

Republic of the Philippines,

Manila

The Philippine Secretary of Foreign Affairs to the American Ambassador

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF FOREIGN AFFAIRS

19268

MANILA, 16 August 1972

EXCELLENCY:

I have the honor to refer to your Excellency's Note No. 476 dated 16 August 1972 which reads as follows:

"Excellency:

I have the honor to refer to the Agricultural Commodities Agreement signed by representatives of our two Governments on May 4, 1972 and to propose amendment to Part II as follows:

a. Item I, Commodity Table, is amended to add under the appropriate headings:

Rice, CY 1972, 100,000 Metric Tons, \$14,775 thousand. The Total Maximum Export Market Value of the agreement increases from \$27,848 thousand to \$42,623 thousand.

b. Item II, Payment Terms, is amended in its entirety to read as follows:

Convertible Local Currency Credit**a. For tobacco, cotton, feedgrains and tallow:**

1. Initial Payment – 5 percent
2. Currency Use Payment – 20 percent of the dollar amount of the financing by the Government of the exporting country under this agreement is payable to the Government of the exporting country in accordance with paragraph 6 of the Convertible Local Currency Credit Annex applicable to this agreement and on the following schedule: One-half of the currency use payment applicable under this agreement will be due on May 1, 1973 and the balance of the currency use payment will be due December 1, 1973. No request for payment will be made by the Government of the exporting country prior to the first disbursement by the Commodity Credit Corporation under this agreement.
3. Number of Installment Payments – 15
4. Amount of Each Installment Payment – approximately equal annual amounts.
5. Due Date of First Installment Payment – 5 years from date of last delivery of commodities in each calendar year.
6. Initial Interest Rate – 2 percent
7. Continuing Interest Rate – 3 percent

b. For rice the payment terms are:

1. Initial Payment – none
2. Currency Use Payment – none
3. Number of Installment Payments – 21
4. Amount of Each Installment Payment – approximately equal annual amounts.
5. Due Date of First Installment Payment – 10 years after date of last delivery of commodities in each calendar year.
6. Initial Interest Rate – 2 percent
7. Continuing Interest Rate – 3 percent

c. Item III, Usual Marketing Table, is amended to add under appropriate headings:

Rice, CY 1972, none.

d. Item IV, Export Limitations, is amended by adding the following phrase at the end of paragraph B:

For rice—paddy brown rice and milled rice.

e. Item VI, Economic Development Purposes for Which Proceeds Accruing to Importing Country are to be Used, is amended in its entirety to read as follows:

Self-help measures specified in Item V and for economic development and flood relief and rehabilitation purposes as may be mutually agreed upon. The deposits referred to in Item VII paragraph 4 below shall be made to a separate account for relief and rehabilitation. The funds in this account will be used in accordance with a plan of activity jointly developed by the Philippine

Government and the United States Agency for International Development. These uses will be for mutually agreed upon development projects with preference given to rehabilitation or improvement of feeder roads, irrigation systems, flood control systems, and school buildings in the disaster areas.

f. Item VII, Other Provisions, paragraph 4 is amended in its entirety to read as follows:

With reference to paragraph 4 of the Convertible Local Currency Credit Annex, the Government of the importing country may make deposits of proceeds from the sale of commodities included in Item I above within one year from the sale of the commodities within the importing country. Except, however, the local currency accruing to the importing country from the sale of rice provided under this agreement will be deposited in a relief and rehabilitation account in accordance with the following schedule: 50 percent within 60 days of its arrival in the importing country and the balance within the next 60 days.

All other terms and conditions of the May 4, 1972 agreement remain the same.

If the foregoing is acceptable to your Government, I propose that this note and your reply thereto constitute an agreement between our two Governments effective on the date of your note in reply.

Accept, Excellency, the renewed assurances of my highest consideration."

I have the honor to inform your Excellency that the proposal set forth in the above-quoted note is acceptable to my Government, and that your Excellency's note and this reply constitute an agreement between our two Governments which shall be effective as of the date of this note.

Accept, Excellency, the renewed assurances of my highest consideration.

CARLOS P. ROMULO

Secretary of Foreign Affairs

His Excellency

HENRY BYROADE

Ambassador Extraordinary and Plenipotentiary

Embassy of the United States of America

Manila

MULTILATERAL

Northwest Atlantic Fisheries: Panel Membership and Regulatory Measures

Protocol to the convention of February 8, 1949.

Done at Washington October 1, 1969;

***Signed on behalf of the United States of America October 10, 1969;
Ratification advised by the Senate of the United States of America
March 19, 1970;***

***Ratified by the President of the United States of America April 17,
1970;***

***Ratification of the United States of America deposited April 17,
1970;***

***Proclaimed by the President of the United States of America No-
vember 29, 1972;***

Entered into force December 15, 1971.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

CONSIDERING THAT:

The Protocol to the International Convention for the Northwest Atlantic Fisheries Relating to Panel Membership and to Regulatory Measures was opened for signature at Washington on October 1, 1969 and signed for the United States of America on October 10, 1969;

The Senate of the United States of America by its resolution of March 19, 1970, two-thirds of the Senators present concurring therein, gave its advice and consent to ratification of the Protocol;

The President of the United States of America ratified the Protocol on April 17, 1970 and the United States instrument of ratification was deposited on that day; and

Pursuant to the provisions of paragraph 2 of Article IV of the Protocol, the Protocol entered into force on December 15, 1971, the date on which instruments of ratification or approval had been deposited with, or written notifications of adherence had been received by, the Government of the United States of America on behalf of all

the Governments parties to the International Convention for the Northwest Atlantic Fisheries;

Now, THEREFORE, I, Richard Nixon, President of the United States of America, proclaim and make public the Protocol to the end that it shall be observed and fulfilled with good faith on and after December 15, 1971 by the United States of America and all other persons subject to the jurisdiction thereof.

IN TESTIMONY WHEREOF, I have signed this proclamation and caused the seal of the United States of America to be affixed.

DONE at the city of Washington this twenty-ninth day of November in the year of our Lord one thousand nine hundred [SEAL] seventy-two and of the Independence of the United States of America the one hundred ninety-seventh.

RICHARD NIXON

By the President:

WILLIAM P ROGERS
Secretary of State

PROTOCOL TO THE INTERNATIONAL CONVENTION
FOR THE NORTHWEST ATLANTIC FISHERIES
RELATING TO PANEL MEMBERSHIP
AND TO REGULATORY MEASURES

The Governments parties to the International Convention for the Northwest Atlantic Fisheries signed at Washington under date of 8 February 1949, which Convention as amended [¹] is hereinafter referred to as the Convention, desiring to establish a more appropriate basis for the determination of representation on the Panels established under the Convention, and desiring to provide for greater flexibility in the types of fisheries regulatory measures which may be proposed by the International Commission for the Northwest Atlantic Fisheries, agree as follows:

¹ TIAS 2089, 4170, 5380, 6011, 6840, 6841; 1 UST 477; 10 UST 59; 14 UST 924; 17 UST 635; 21 UST 567, 576.

ARTICLE I

Paragraph 2 of Article IV of the Convention shall be amended to read as follows:

"2. Panel representation shall be reviewed annually by the Commission, which shall have the power, subject to consultation with the Panel concerned, to determine representation on each Panel on the basis of current substantial exploitation of the stocks of fish in the subarea concerned or on the basis of current substantial exploitation of harp and hood seals in the Convention Area, except that each Contracting Government with coastline adjacent to a subarea shall have the right of representation on the Panel for the subarea."

ARTICLE II

Paragraph 2 of Article VII of the Convention shall be amended to read as follows:

"2. Each Panel, upon the basis of scientific investigations, and economic and technical considerations, may make recommendations to the Commission for joint action by the Contracting Governments within the scope of paragraph 1 of Article VIII."

ARTICLE III

Paragraph 1 of Article VIII of the Convention shall be amended to read as follows:

"1. The Commission may, on the recommendations of one or more Panels, and on the basis of scientific investigations, and economic and technical considerations, transmit to the Depositary Government appropriate proposals, for joint action by the Contracting Governments, designed to achieve the optimum utilization of the stocks of those species of fish which support international fisheries in the Convention Area."

ARTICLE IV

1. This Protocol shall be open for signature and ratification or approval or for adherence on behalf of any Government party to the Convention.

2. This Protocol shall enter into force on the date on which instruments of ratification or approval have been deposited with, or written notifications of adherence have been received by, the Government of the United States of America, on behalf of all the Governments parties to the Convention.

3. Any Government which adheres to the Convention after this Protocol has been opened for signature shall at the same time adhere to this Protocol.

4. The Government of the United States of America shall inform all Governments signatory or adhering to the Convention of all ratifications or approvals deposited and adherences received and of the date this Protocol enters into force.

ARTICLE V

1. The original of this Protocol shall be deposited with the Government of the United States of America, which Government shall communicate certified copies thereof to all the Governments signatory or adhering to the Convention.

2. This Protocol shall bear the date on which it is opened for signature and shall remain open for signature for a period of fourteen days thereafter, following which period it shall be open for adherence.

IN WITNESS WHEREOF the undersigned, having deposited their respective full powers, have signed this Protocol.

DONE at Washington this first day of October 1969, in the English language.

FOR CANADA:

A. L. Ritchie
October 10, 1969

FOR DENMARK:

Jørgen Steen
October 15, 1969

FOR THE FEDERAL REPUBLIC OF GERMANY:

Hans-Joachim von Weltzien
October 3, 1969.

FOR FRANCE:

Charles Fiterman
October 13th 1969

FOR ICELAND:

FOR ITALY:

FOR NORWAY:

FOR POLAND:

FOR PORTUGAL:

TIAS 7432

FOR ROMANIA:

FOR SPAIN:

Imperialist.

15th October 1969.

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:

FOR THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND:

Edward T. Dominic.

October 6, 1969.

FOR THE UNITED STATES OF AMERICA:

Donald L. Rumsfeld

October 10, 1969

I CERTIFY THAT the foregoing is a true copy of the Protocol to the International Convention for the Northwest Atlantic Fisheries Relating to Panel Membership and to Regulatory Measures, which Protocol was signed at Washington under date of October 1, 1969 in the English language, the signed original of which is deposited in the archives of the Government of the United States of America.

IN TESTIMONY WHEREOF, I, WILLIAM P. ROGERS, Secretary of State of the United States of America, have hereunto caused the seal of the Department of State to be affixed and my name subscribed by the Authentication Officer of the said Department, at the city of Washington, in the District of Columbia, this twenty-second day of October, 1969.

WILLIAM P. ROGERS
Secretary of State

[SEAL] BARBARA HARTMAN
Authentication Officer
Department of State

Note by the Department of State

**Signatures Affixed
to the**

Protocol to the International Convention
for the Northwest Atlantic Fisheries
Relating to Panel Membership
and to Regulatory Measures
signed at Washington
under date of October 1, 1969

FOR CANADA:

FOR DENMARK:

TORBEN RØNNE October 15, 1969

FOR THE FEDERAL REPUBLIC OF GERMANY:

ROLF PAULS October 3, 1969.

FOR FRANCE:

CHARLES LUCET October 13th 1969

FOR ICELAND:

FOR ITALY.

Egidio Ortona October 14th 1969

FOR NORWAY.

ARNE GUNNENG October 14, 1969

FOR POLAND:

JERZY MICHALOWSKI October 14th 1969

FOR PORTUGAL:

FOR ROMANIA:

FOR SPAIN:

MERRY DEL VAL 15th October 1969.

**FOR THE UNION OF SOVIET
SOCIALIST REPUBLICS:**

**FOR THE UNITED KINGDOM OF
GREAT BRITAIN AND NORTHERN IRELAND:**

EDWARD E. TOMKINS October 6, 1969.

FOR THE UNITED STATES OF AMERICA:

DONALD L. MCKERNAN October 10, 1969

NICARAGUA

Trade in Cotton Textiles

*Agreement effected by exchange of notes
Signed at Washington September 5, 1972;
Entered into force September 5, 1972;
Effective August 1, 1972.*

The Secretary of State to the Nicaraguan Chargé d'Affaires ad interim

DEPARTMENT OF STATE
WASHINGTON

September 5, 1972

SIR:

I refer to the Long-Term Arrangement Regarding International Trade in Cotton Textiles (hereinafter referred to as the Long-Term Arrangement), done in Geneva on February 9, 1962, as extended until September 30, 1973. [¹] I also refer to recent discussions between our two Governments concerning the export of cotton textiles from Nicaragua to the United States. As a result of these discussions, I propose the following agreement relating to trade in cotton textiles between Nicaragua and the United States.

1. The term of this agreement shall be from August 1, 1972 through July 31, 1977. During the term of this agreement the Government of Nicaragua shall limit annual exports of cotton textiles from Nicaragua to aggregate and specific limits at the levels specified in the following paragraphs.

2. For the first agreement year, constituting the 12-month period beginning August 1, 1972, the aggregate limit shall be 5.0 million square yards equivalent.

3. Within this aggregate limit, the following specific limits shall apply:

Category	Quantity	Square Yards Equivalent
9/10	-----	1.0
15/16	-----	1.0
22/23	-----	1.0
26/27 (other than duck)	-----	2.0

¹ TIAS 5240, 6940; 13 UST 2672; 21 UST 1970.

4. Within the aggregate limit, each specific limit may be exceeded by not more than five percent.

5. Categories not given specific limits are subject to consultation levels and to the aggregate limit. In the event the Government of Nicaragua wishes to permit exports to the United States in any category during any agreement year in excess of the applicable consultation level, the Government of Nicaragua shall request consultations with the Government of the United States of America on this question and the Government of the United States of America shall enter into such consultations. Until agreement on a different level of exports is reached, the Government of Nicaragua shall limit exports in the category in question to the consultation level. For the first agreement year, the consultation level for each category not given a specific limit shall be 500,000 square yards equivalent in categories 1-38 and category 64 and 350,000 square yards equivalent in categories 39-63.

6. The square yard equivalent of any shortfalls occurring in exports in the categories given specific limits may be used in any category not given a specific limit, subject to the provisions of paragraph 5, or for the purpose described in paragraph 4.

7. In the second and any succeeding agreement year, the level of exports permitted under each limitation in the agreement shall be increased by five percent of the corresponding level for the preceding agreement year, the latter level not to include any adjustments under paragraph 4 or 8.

8. (a) For any agreement year immediately following a year of shortfall (i.e., a year in which cotton textile exports from Nicaragua to the United States were below the aggregate limit and any specific limit applicable to the category concerned) the Government of Nicaragua may permit exports to exceed these limits by carryover in the following amounts and manner:

(i) The carryover shall not exceed the amount of shortfall in either the aggregate limit or any applicable specific limit, and shall not exceed five percent of the aggregate limit applicable to the year of the shortfall;

(ii) In the case of shortfalls in categories subject to specific limits, the carryover shall be used in the same category in which the shortfall occurred, shall not exceed five percent of the specific limit applicable to the category in the year of the shortfall, and shall be in addition to the exports permitted by paragraph 4; and

(iii) In the case of shortfalls not attributable to categories subject to specific limits, the carryover shall not be used to exceed any applicable specific limit except in accordance with the provisions of paragraph 4 and shall be subject to provisions of paragraph 5.

(b) The limits referred to in subparagraph (a) of this paragraph are without any adjustments under this paragraph or paragraph 4.

9. The Government of Nicaragua shall use its best efforts to space exports from Nicaragua to the United States within each category.

evenly throughout the agreement year, taking into consideration normal seasonal factors.

10. The Government of the United States of America shall promptly supply the Government of Nicaragua with data on monthly imports of cotton textiles from Nicaragua; and the Government of Nicaragua shall promptly supply the Government of the United States of America with quarterly data on exports of cotton textiles to the United States. Each Government agrees to supply promptly any other pertinent and readily available statistical data requested by the other Government.

11. In implementing this agreement, the system of categories and the rates of conversion into square yard equivalents listed in the annex hereto shall apply. In any situation where the determination of an article to be a cotton textile would be affected by whether the criterion provided for in Article 9 of the Long-Term Arrangement or the criterion provided for in paragraph 2 of Annex E of the Long-Term Arrangement is used, the chief value criterion used by the Government of the United States of America in accordance with paragraph 2 of Annex E shall apply.

12. The Government of Nicaragua and the Government of the United States of America agree to consult on any question arising in the implementation of this agreement.

13. Mutually satisfactory administrative arrangements or adjustments may be made to resolve minor problems arising in the implementation of this agreement, including differences in points of procedure or operation.

14. If the Government of Nicaragua considers that, as a result of limitations specified in this agreement, Nicaragua is being placed in an inequitable position vis-a-vis a third country, the Government of Nicaragua may request consultation with the Government of the United States of America with a view to taking appropriate remedial action such as reasonable modification of this agreement.

15. For the duration of this agreement, the Government of the United States of America shall not invoke the procedures of Article 3 or 6(c) of the Long-Term Arrangement to request restraint on the export of cotton textiles from Nicaragua to the United States.

16. The Government of the United States of America may assist the Government of Nicaragua in implementing the limitation provisions of this agreement by controlling imports of cotton textiles covered by the agreement.

17. Either Government may terminate this agreement effective at the end of any agreement year by written notice to the other Government to be given at least 90 days prior to the end of such agreement year. Either Government may at any time propose revisions in the terms of this agreement.

If the foregoing proposal is acceptable to the Government of Nicaragua, this note and your note of confirmation on behalf of the Gov-

ernment of Nicaragua shall constitute an agreement between the Government of Nicaragua and the Government of the United States of America.

Accept, Sir, the renewed assurances of my high consideration.

For the Secretary of State:

WILLIS C. ARMSTRONG

Enclosure: Annex A

The Honorable

DR. ALVARO RIZO-CASTELLON,
*Charge d'affaires ad interim
of Nicaragua.*

ANNEX A

Category Number	Description	Unit	Conversion Factor to Syds.
1	Cotton Yarn, carded, singles	Lb.	4. 6
2	Cotton Yarn, carded, plied	Lb.	4. 6
3	Cotton Yarn, combed, singles	Lb.	4. 6
4	Cotton Yarn, combed, plied	Lb.	4. 6
5	Gingham, carded	Syd.	Not required
6	Gingham, combed	Syd.	Not required
7	Velveteen	Syd.	Not required
8	Corduroy	Syd.	Not required
9	Sheeting, carded	Syd.	Not required
10	Sheeting, combed	Syd.	Not required
11	Lawns, carded	Syd.	Not required
12	Lawns, combed	Syd.	Not required
13	Voile, carded	Syd.	Not required
14	Voile, combed	Syd.	Not required
15	Poplin and Broadcloth, carded	Syd.	Not required
16	Poplin and Broadcloth, combed	Syd.	Not required
17	Typewriter ribbon cloth	Syd.	Not required
18	Print cloth, shirting type, 80x80 type carded	Syd.	Not required
19	Print cloth, shirting type, other than 80x80 type, carded	Syd.	Not required
20	Shirting, Jacquard or dobby, carded	Syd.	Not required
21	Shirting, Jacquard or dobby, combed	Syd.	Not required
22	Twill and sateen, carded	Syd.	Not required
23	Twill and sateen, combed	Syd.	Not required
24	Woven fabric, n.e.s., yarn dyed, carded	Syd.	Not required
25	Woven fabric, n.e.s., yarn dyed, combed	Syd.	Not required
26	Woven fabric, n.e.s., other, carded	Syd.	Not required
27	Woven fabric, n.e.s., other, combed	Syd.	Not required
28	Pillowcases, not ornamented, carded	Nos.	1. 084
29	Pillowcases, not ornamented, combed	Nos.	1. 084

<u>Category Number</u>	<u>Description</u>	<u>Unit</u>	<u>Conversion Factor to Syds.</u>
30	Towels, dish	Nos.	.348
31	Towels, other	Nos.	.348
32	Handkerchiefs, whether or not in the piece	Doz.	1.66
33	Table damask and manufactures	Lb.	3.17
34	Sheets, carded	Nos.	6.2
35	Sheets, combed	Nos.	6.2
36	Bedspreads and quilts	Nos.	6.9
37	Braided and woven elastic	Lb.	4.6
38	Fishing nets and fish netting	Lb.	4.6
39	Gloves and mittens	Doz. prs.	3.527
40	Hose and half hose	Doz. prs.	4.6
41	T-shirts, all white, knit, men's and boys'	Doz.	7.234
42	T-shirts, other knit	Doz.	7.234
43	Shirts, knit, other than T-shirts and sweatshirts	Doz.	7.234
44	Sweaters and cardigans	Doz.	36.8
45	Shirts, dress, not knit, men's and boys'	Doz.	22.186
46	Shirts, sport, not knit, men's and boys'	Doz.	24.457
47	Shirts, work, not knit, men's and boys'	Doz.	22.186
48	Raincoats, $\frac{1}{4}$ length or longer, not knit	Doz.	50.0
49	Coats, other, not knit	Doz.	32.5
50	Trousers, slacks, and shorts (outer), not knit, men's and boys'	Doz.	17.797
51	Trousers, slacks and shorts (outer) not knit, women's, girls' and infants'	Doz.	17.797
52	Blouses, not knit	Doz.	14.53
53	Dresses (including uniforms) not knit	Doz.	45.3
54	Playsuits, sunsuits, washsuits, creepers, rompers, etc., not knit, n.e.s.	Doz.	25.0
55	Dressing gowns, including bathrobes and beachrobes, lounging gowns, house-coats, and dusters, not knit	Doz.	51.0
56	Undershirts, knit, men's and boys'	Doz.	9.2
57	Briefs and undershorts, men's and boys'	Doz.	11.25
58	Drawers, shorts and briefs, knit n.e.s.	Doz.	5.0
59	All other underwear, not knit	Doz.	16.0
60	Pajamas and other nightwear	Doz.	51.96
61	Brassieres and other body supporting garments	Doz.	4.75
62	Wearing apparel, knit, n.e.s.	Lb.	4.6
63	Wearing apparel, not knit, n.e.s.	Lb.	4.6
64	All other cotton textiles	Lb.	4.6

The Nicaraguan Chargé d'Affaires ad interim to the Secretary of State

EMBAJADA DE NICARAGUA
WASHINGTON, D.C.

SD-CH-45

September 5, 1972.

EXCELLENCY:

I have the honor to acknowledge the receipt of Your Excellency's note of September 5, containing a proposed agreement on the exportation of cotton textiles from Nicaragua to the United States of America.

Following my Government's instructions, I am happy to inform Your Excellency that the Government of Nicaragua is pleased to accept the terms and conditions specified in the above-mentioned proposal. It is my Government's understanding that Your Excellency's note, together with this note of acceptance, constitute an agreement between the Government of the United States of America and the Government of Nicaragua.

Accept, Excellency, the renewed assurances of my highest consideration.

A Rizo-CASTELLÓN

Alvaro Rizo-Castellón
Chargé d'Affaires a.i.

His Excellency

WILLIAM P. ROGERS
The Secretary of State
Washington, D.C.

ITALY

Loan of Vessels: U.S.S. *Pickerel* and U.S.S. *Volador*

*Agreement effected by exchange of notes
Signed at Rome July 24 and August 12, 1972;
Entered into force August 12, 1972.*

The American Ambassador to the Italian Minister of Foreign Affairs

No. 489

ROME, July 24, 1972

EXCELLENCY:

I have the honor to refer to previous conversations between representatives of our Governments concerning the loan of vessels by the Government of the United States to the Government of Italy and to confirm the following understandings reached between our Governments on this subject:

1. The Government of the United States will lend to the Government of Italy the vessels identified below:

USS *Pickerel* (SS 524)
USS *Volador* (SS 490)

2. The Government of Italy will retain possession of, and will use, the vessels subject to the terms and conditions of this Note and of the Mutual Defense Assistance Agreement between our two Governments signed on January 27, 1950. [¹]

3. The period of the loan for each vessel shall be five years from the date of its delivery to the Government of Italy. However, either Government may terminate the loan of these vessels if such action is necessitated by its own legal or defense requirements.

4. Each vessel, together with its available on board spares and allowances, including consumable stores and fuel, will be delivered to the Government of Italy at such place and time as may be mutually agreed upon. The delivery shall be evidenced by a delivery certificate. The Government of Italy shall have the use of all outfitting equipment, appliances, fuel, consumable stores, spares, and replacement parts on board the vessels at the time of their delivery.

¹ TIAS 2013; 1 UST 50.

5. Title to the vessels and to the items and appurtenances referred to in paragraph 4 of this Note, except fuel, consumable stores, spares, and replacement parts, shall remain in the Government of the United States. The Government of Italy may, however, place the vessels under its flag. The Government of Italy shall not, without the prior express written consent of the Government of the United States, relinquish physical possession of the vessels or any such items and appurtenances.

6. The Government of Italy renounces all claims against the Government of the United States arising from the transfer, use, or operation of the vessels and will save the Government of the United States harmless from any such claims asserted by third parties.

7. Upon the expiration or termination of the loan as provided in paragraph 3 of this Note, each vessel together with its outfitting equipment, appliances, and available on board spares and allowances, including consumable stores, replacement parts, and fuel, will be returned to the United States at a place and time specified by the Government of the United States, in substantially the same condition, reasonable wear and tear excepted, as when transferred. Any items and appurtenances on board the vessels at the time of return shall, if they are not already the property of the Government of the United States, become the property of the Government of the United States without compensation.

8. The Government of Italy will pay the Government of the United States just and reasonable compensation for damages to, or loss of, any of the vessels loaned. The Government of Italy shall not, however, be liable for damage or loss of any such vessel arising out of enemy action sustained while in use in accordance with the provisions of paragraph 2 of this Note. Should any of the vessels sustain damages from any cause, such as in the opinion of the Government of Italy renders such vessel a total loss, the Government of Italy shall consult with the Government of the United States before declaring said vessel a total loss.

If the foregoing is acceptable to the Government of Italy, I have the honor to propose that Your Excellency's reply to that effect and my Note shall together constitute an agreement between our two Governments which shall enter into force on the date of Your Excellency's reply.

Accept, Excellency, the renewed assurances of my highest consideration.

GRAHAM MARTIN

His Excellency

GIUSEPPE MEDICI,

*Minister of Foreign Affairs,
Rome.*

The Italian Minister of Foreign Affairs to the American Ambassador

IL MINISTRO DEGLI AFFARI ESTERI

N. 142/1247

ROMA, li 12 Agosto 1972

ECCellenza,

Ho l'onore di accusare ricevuta della Nota di Vostra Eccellenza n. 489 in data 24 luglio 1972 del seguente tenore:

“ Ho l'onore di riferirmi alle precedenti conversazioni fra rappresentanti dei nostri Governi circa il prestito di navi da guerra al Governo italiano da parte del Governo degli Stati Uniti e di confermare le seguenti intese raggiunte in merito fra i nostri Governi:

1. Il Governo degli Stati Uniti cederà in prestito al Governo italiano le navi da guerra sotto indicate:

USS *Pickerel* (SS 524)USS *Volador* (SS 490)

2. Il Governo italiano conserverà il possesso delle navi da guerra e le userà secondo i termini e le condizioni di questa Nota e dell'Accordo di assistenza per la mutua difesa sottoscritto fra i nostri due Governi il 27 gennaio 1950.

3. La durata del prestito di ciascuna nave da guerra sarà di cinque anni dalla data di consegna al Governo italiano. Tuttavia ciascuno dei due Governi si riserva la facoltà di porre termine al prestito delle navi da guerra di cui trattasi nel caso in cui ciò si renda necessario in relazione alle proprie esigenze legali o di difesa.

4. Ciascuna nave da guerra, con i pezzi di rispetto e i materiali di dotazione che si trovano a bordo, compresi i materiali di consumo e il carburante, sarà consegnata al Governo italiano nel luogo e nel momento che saranno concordati. La consegna sarà documentata da un apposito certificato. Il Governo italiano avrà in uso le attrezzature, le apparecchiature, il carburante, i materiali di consumo, i pezzi di rispetto e di ricambio che si trovano a bordo delle navi da guerra nel momento della loro consegna.

5. Il Governo degli Stati Uniti rimarrà proprietario delle navi da guerra, dei materiali di dotazione e degli accessori indicati nel paragrafo 4 di questa Nota, ad eccezione del carburante, dei materiali di consumo, dei pezzi di rispetto e di ricambio. Il Governo italiano tuttavia può porre le navi da guerra sotto la propria bandiera. Il Governo italiano non potrà senza il preventivo esplicito consenso scritto del Governo degli Stati Uniti cedere il possesso delle navi da guerra, né dei materiali di dotazione e degli accessori.

6. Il Governo italiano rinuncia ad ogni rivendicazione nei confronti del Governo degli Stati Uniti che possa sorgere dal trasferimento, uso o operazione delle navi da guerra e garantirà il Governo degli Stati Uniti da ogni rivendicazione del genere che sia avanzata da terzi.

7. Alla scadenza o al termine del prestito quale previsto dal paragrafo 3 di questa Nota, ciascuna nave da guerra con le attrezzature, le apparecchiature, i pezzi di rispetto e i materiali di dotazione che si trovano a bordo, compresi i materiali di consumo, pezzi di ricambio e carburante sarà restituita agli Stati Uniti nel luogo e nel momento indicati dal Governo degli Stati Uniti, essenzialmente nelle stesse condizioni in cui era stata consegnata, tenuto conto della normale usura. I materiali di dotazione e gli accessori che si troveranno a bordo delle navi da guerra al momento della loro restituzione diventeranno, nel caso in cui non lo siano già, di proprietà del Governo degli Stati Uniti senza compenso.

8. Il Governo italiano darà al Governo degli Stati Uniti un compenso equo e ragionevole nel caso di danni alle navi da guerra concesse in prestito o nel caso della loro perdita. Il Governo italiano tuttavia non sarà responsabile per i danni alle navi da guerra o per la loro perdita verificatisi in conseguenza di un'azione nemica che abbia avuto luogo mentre esse operavano in conformità di quanto previsto dal paragrafo 2 di questa Nota. Nel caso che le navi da guerra subiscano per un motivo qualsiasi danni di entità tale che ad avviso del Governo italiano equivalgono alla perdita delle navi stesse, il Governo italiano si consulterà con il Governo degli Stati Uniti prima di dichiarare la nave da guerra totalmente persa.

Se quanto precede è accettabile per il Governo italiano, ho l'onore di proporre che la mia Nota e la concorde Nota di Vostra Eccellenza costituiscano un Accordo fra i nostri due Governi che entrerà in vigore alla data della risposta di Vostra Eccellenza.” ”

Al riguardo ho l'onore di informarla che il Governo italiano concorda su quanto precede.

Voglia accogliere, Eccellenza, l'espressione della mia più alta considerazione.

G MEDICI

S. E. il Signor

GRAHAM ANDERSON MARTIN
Ambasciatore degli
Stati Uniti d'America
Roma

Translation

THE MINISTER OF FOREIGN AFFAIRS

No. 142/1247

ROME, August 12, 1972

EXCELLENCY.

I have the honor to acknowledge receipt of Your Excellency's note No. 489 dated July 24, 1972, which reads as follows.

[For the English language text, see p. 1521.]

I have the honor to inform you that the Italian Government concurs in the foregoing.

Accept, Excellency, the assurances of my highest consideration.

G. MEDICI

His Excellency

GRAHAM ANDERSON MARTIN,
*Ambassador of the United States
of America,
Rome.*

MULTILATERAL

**Partial Revision of Radio Regulations, Geneva, 1971 and
Final Protocol: Space Telecommunications**

*Signed at Geneva July 17, 1971,
Ratification advised by the Senate of the United States of America
June 13, 1972;
Ratified by the President of the United States of America July 14,
1972;
Ratification of the United States of America deposited with the
Secretary-General of the International Telecommunication
Union July 28, 1972,
Proclaimed by the President of the United States of America Sep-
tember 4, 1972,
Date of entry into force January 1, 1973.*

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

CONSIDERING THAT

A Partial Revision of the Radio Regulations (Geneva, 1959) relating to space telecommunications, with a Final Protocol, was signed at Geneva on July 17, 1971 by the respective plenipotentiaries of the United States of America and certain other countries, the text of which in the English, French, and Spanish languages is hereto annexed,

The Senate of the United States of America by its resolution of June 13, 1972, two-thirds of the Senators present concurring, gave its advice and consent to the ratification of the said Partial Revision with Final Protocol,

The said Partial Revision and Final Protocol were duly ratified by the President of the United States of America on July 14, 1972, and the instrument of ratification of the United States of America was deposited with the Secretary-General of the International Telecommunication Union on July 28, 1972, and

It is provided in the said Partial Revision that the revised provisions of the Radio Regulations shall form an integral part of the Radio Regulations which are annexed to the International Telecommunication Convention and that the said provisions shall come into force on January 1, 1973, on which date the provisions of the Radio Regulations which are cancelled or modified by the revision shall be abrogated;

Now, THEREFORE, I, Richard Nixon, President of the United States of America, proclaim and make public the said Partial Revision of the Radio Regulations (Geneva, 1959), with Final Protocol, to the end that the same and every article and clause thereof may be observed and fulfilled in good faith on and after January 1, 1973 by the United States of America and by the citizens of the United States of America and all other persons subject to the jurisdiction thereof.

IN TESTIMONY WHEREOF, I have signed this proclamation and caused the Seal of the United States of America to be affixed.

DONE at the city of Washington this fourth day of September
in the year of our Lord one thousand nine hundred and
[SEAL] seventy-two and of the Independence of the United States
of America the one hundred ninety-seventh.

RICHARD NIXON

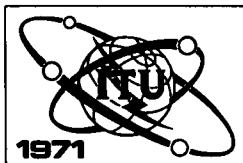
By the President:

WILLIAM P ROGERS
Secretary of State

FINAL ACTS

OF THE
WORLD ADMINISTRATIVE RADIO
CONFERENCE FOR SPACE
TELECOMMUNICATIONS

GENEVA, 1971



C O P I E
certifiée conforme à l'original
Genève, le 6 JAN. 1972
Le Secrétaire général
de l'Union internationale des
télécommunications

ABBREVIATIONS

The following abbreviations are used in the Annexes, to indicate the nature of amendments made in the partial revision of the Radio Regulations.

Symbol	Meaning
MOD	Modification
SUP	Suppression
ADD	Addition
NOC	No change

Note: If a modification affects only the drafting of a number, without changing the substance, the following symbol is used:

(MOD)

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for Space Telecommunications
Geneva, 1971

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**PARTIAL REVISION
OF THE RADIO REGULATIONS¹[²]**

In its Recommendation No. Spa 9, the Extraordinary Administrative Radio Conference to allocate frequency bands for space radiocommunication purposes, held in Geneva in 1963, recommended that the Administrative Council of the Union should review annually the progress in space radiocommunications made by administrations and the available reports and recommendations of the permanent organs of the Union with respect thereto. The Conference also recommended that the Administrative Council should, in the light of its annual review and at a date which it would determine, recommend to administrations the convening of an Administrative Conference to work out further agreements for the international regulation of the use of radio frequency bands allocated for space radiocommunications by the 1963 Conference.

At its 23rd Session in 1968, the Administrative Council, in its Resolution No. 632, recommended that a World Administrative Radio Conference should be convened during the latter part of 1970 or early 1971 and invited Administrations to send to the Secretary-General their proposals for the agenda thereof.

¹ Namely the Radio Regulations, Geneva, 1959, as partially revised by the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunication purposes (Geneva, 1963) by the Extraordinary Administrative Radio Conference for the preparation of a revised allotment plan for the Aeronautical Mobile (R) Service (Geneva, 1966) and, by the World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service (Geneva, 1967).

² TIAS 4898, 5608, 6332, 6590; 12 UST 2377; 15 UST 887; 18 UST 2091; 19 UST 6717. [Footnote added by the Department of State.]

In accordance with Nos. 56 and 64 of the International Telecommunication Convention (Montreux, 1965),^[1] the Administrative Council, at its 1969 Session, with the concurrence of a majority of the Members of the Union, determined in its Resolution No. 653 the agenda of the World Administrative Radio Conference for Space Telecommunications and decided that it would meet in Geneva on 7 June, 1971 for a duration of six weeks, provision being made for one additional week if necessary.

However, in 1970, the Administrative Council, taking into account the provisions of Resolution No. 40 of the XIIth Plenary Assembly of the C.C.I.R. relative to the convening, prior to the Conference, of a Special Joint Meeting of C.C.I.R. Study Groups, decided in its Resolution No. 665 that the duration of the Conference would be six weeks.

* * *

The World Administrative Radio Conference for Space Telecommunications, accordingly convened on the appointed date, considered and revised, in conformity with its agenda, the relevant parts of the Radio Regulations. Particulars of the revision of the Radio Regulations are given in Annexes 1 to 19 hereto.

The revised provisions of the Radio Regulations shall form an integral part of the Radio Regulations which are annexed to the International Telecommunication Convention. They shall come into force on 1 January, 1973, on which date the provisions of the Radio Regulations which are cancelled or modified by this revision shall be abrogated.

* * *

The delegates signing this revision of the Radio Regulations hereby declare that, should an administration make reservations concerning the application of one or more of the revised provisions of the Radio Regulations, no other administration shall be obliged to observe that provision or those provisions in its relations with that particular administration.

* * *

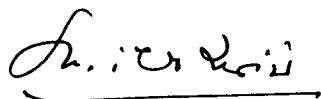
¹ TIAS 6267; 18 UST 591, 592. [Footnote added by the Department of State.]

Members and Associate Members of the Union shall inform the Secretary-General of their approval of the revision of the Radio Regulations by the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971). The Secretary-General will inform Members and Associate Members of the Union regarding receipt of such notifications of approval as they are received.

In witness whereof the delegates of the Members of the Union represented at the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) have signed in the names of their respective countries this revision of the Radio Regulations in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to each Member and Associate Member of the Union.

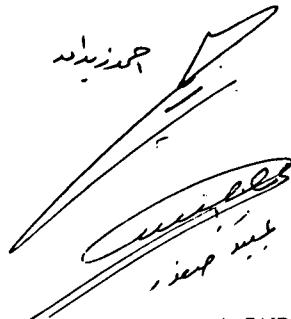
Done at Geneva, 17 July, 1971.

Pour l'Algérie (République Algérienne Démocratique et Populaire):



M. IBNOU-ZEKRI
M. HARBI

Pour le Royaume de l'Arabie Saoudite:



A. ZAIDAN
OBAID AL RAHMAN SAFFDAR

Pour la République Argentine:



N. J. MAZZARO
R. SAIDMAN

Pour le Commonwealth de l'Australie:



L. M. HARRIS
E. SANDBACH

Pour l'Autriche:



H. PANGRATZ

Pour la Belgique:



P. C. M. BOUCHIER

Pour la République Socialiste Soviétique de Biélorussie:

Z. L. PODORSKI

Pour le Brésil:

P. RIBENBOIM
J. V. PARETO NETO
A. J. A. SALGADO
N. V. DA SILVA
C. P. QUEVEDO
M. A. DE BIASE SILVA PICOT
R. R. RAMOS
M. B. MARSIAJ
L. C. BAHIANA
A. B. CARLEIAL
B. HIMELGRYN
J. SANTELLI JUNIOR

Pour la République Populaire de Bulgarie:



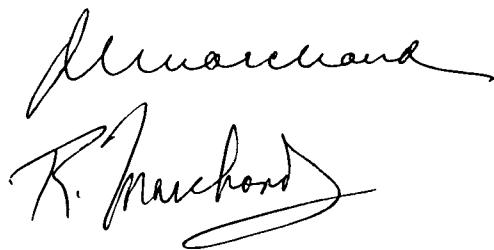
I. IGNATOV

Pour la République Fédérale du Cameroun:



P. N. KAMGA

Pour le Canada:



DE MONTIGNY MARCHAND
R. MARCHAND

Pour la République Centrafricaine:

F. D. DIMA

Pour Ceylan:

M. B. RODRIGO

Pour le Chili:

J. S. SCHATZ
S. H. MORALES
R. ARAGAY
R. B. E. BENAVIDES
A. M. LUENGO
J. B. SERRAT

Pour la Chine:

Cheng Paman 鄭文彥

T V Miao 楊慈鳳

Cheng Chen 陳勤

P. CHENG
T. V. MIAO
C. CHEN

Pour la Republique de Chypre:

R. Michaelides

R. MICHAELIDES

Pour l'Etat de la Cite du Vatican:

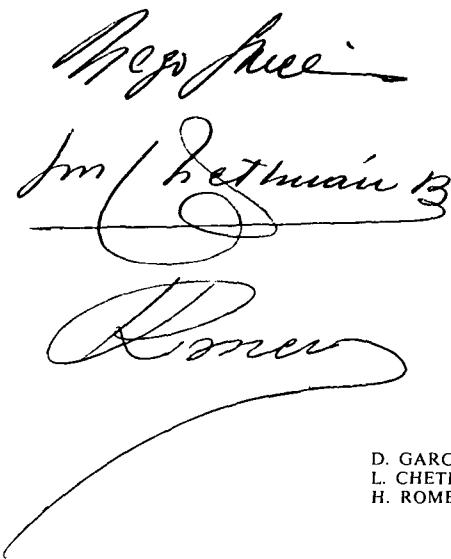
Herrn de Riedmatten O.P

Stefanizzi Antonio

Giudici Pier Vincenzo

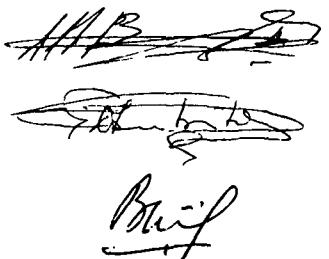
H. M. DE RIEDMATTEN
A. STEFANIZZI
P. V. GIUDICI

Pour la République de Colombie:



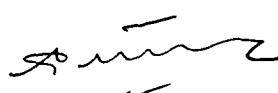
D. GARCES
L. CHETHUAN
H. ROMERO

Pour la République Démocratique du Congo:



A. BANANISA
G. NKUBITO
B. MVILAKANI

Pour la République Populaire du Congo:



F. BATOLA

TIAS 7435

Pour la Republique de Coree:

31 3 84 D.S. Choy
T. K. Cho
01 02 86 Young-hwan
21 21 86 J. U. Kim

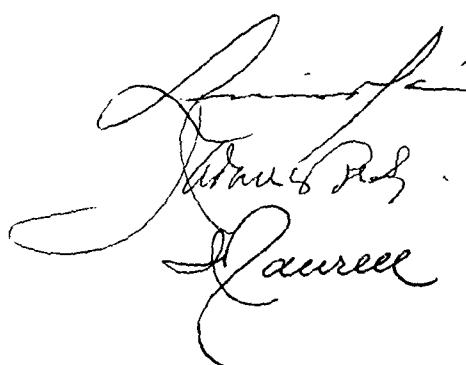
J. S. CHOY
B. K. CHO
Y. H. LEE
J. U. KIM

Pour la Republique de Côte d'Ivoire:

L. -


P. K. KOPOIN
C. N. NOGBOU

Pour Cuba:


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J. A. VALLADARES TIMONEDA
J. RAURELL VIDAL

Pour le Danemark:

G. Pedersen
B. Nielsen
I. Lønberg
P. V. Larsen

G. PEDERSEN
B. NIELSEN
I. LØNBERG
P. V. LARSEN

Pour l'Ensemble des Territoires représentés par l'Office français des postes
et télécommunications d'Outre-Mer:

J. L. A. CONSTANTIN

Pour l'Espagne:

Eugenio Pérez Hernández
F. Molina Negro
J. M. Arto Madrazo
J. M. Paredes Quevedo
B. A. Duran Mingorance

E. PEREZ-HERNANDEZ
F. MOLINA NEGRO
J. M. ARTO MADRAZO
J. M. PAREDES QUEVEDO
B. A. DURAN MINGORANCE

Pour les Etats-Unis d'Amérique:

R. C. Tyson
W. Dean, Jr.
G. L. Huffcutt
R. E. Lee

R. C. TYSON
W. DEAN, JR.
G. L. HUFFCUTT
R. E. LEE

Pour l'Ethiopie:

B. Desta
T. Sebhatu

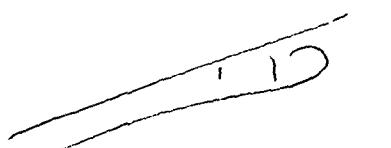
B. DESTA
T. SEBHATU

Pour la Finlande:

T. Kytoniemi
A. Sinkkonen

T. KYTONIEMI
A. SINKKONEN

Pour la France:


Marie Huet
Chaspoul



F. JOB
M. HUET
P. L. CHASPOUL
J. B. BES

Pour la Republique Gabonaise:



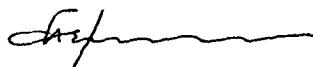
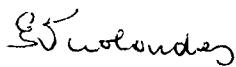

S. EWORE
T. SOUAH

Pour le Ghana:



R. K. BAFFOUR

Pour la Grece:



L. PARAVANTIS
E. NICOLAIDES
G. DEBONOS

Pour la Republique de Haute-Volta:



J. M. OUEDRAOGO
J. GUISSOU

Pour la Republique Populaire Hongroise:



D. HORN

Pour la Republique de l'Inde:

R. G. Deodhar
M. K. Basu
M. V. Krishnaswamy
R. Mukherjee
S. Thiruvenkatachari
B. S. Rao

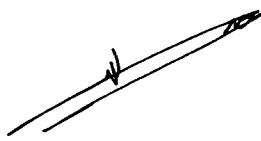
N. C. SHRIVASTAVA
M. K. BASU
R. G. DEODHAR
M. V. KRISHNASWAMY
R. B. MUKHERJEE
S. THIRUVENKATACHARI
B. S. RAO

Pour la Republique d'Indonesie:

W. M. M. Mangoendiprodjo
S. H. Soegiharto

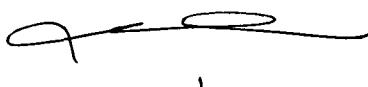
M. K. M. MANGOENDIPRODJO
W. M. MANGOENDIPRODJO
SOEGIHARTO

Pour l'Iran:



A. MOTAMEDI
H. ANSARI
S. FATEMI

Pour la Republique d'Iraq:



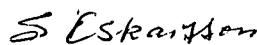
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Pour l'Irlande:



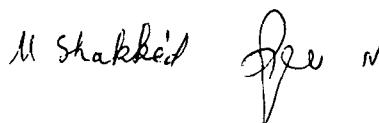
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Pour l'Islande:



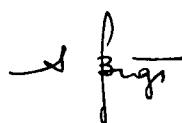
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S. OSKARSSON

Pour l'Etat d'Israël:



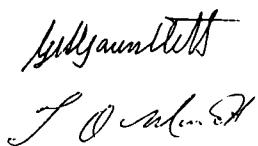
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Pour l'Italie:



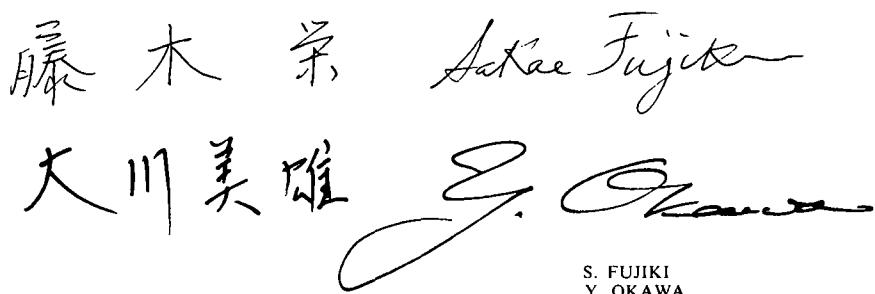
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A. PETTI

Pour la Jamaïque:



G. A. GAUNTLETT
T. O. MINOTT

Pour le Japon:



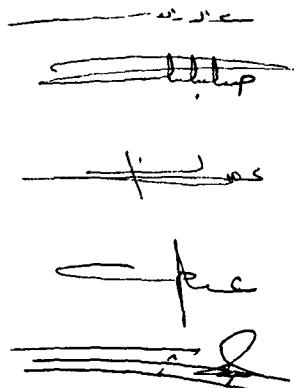
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Y OKAWA

Pour le Kenya:



R. M. YUSUF
P. O. OKUNDI
I. N. ODUNDO

Pour l'Etat de Koweït:



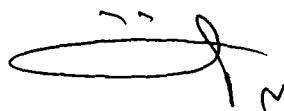
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A. A. ALSAADOON
A. M. ALSABEJ
A. A. ALAYOUB
J. A. ALMAZEEDI

Pour la Republique du Liberia:



S. H. BUTLER

Pour la Republique Arabe Libyenne:



N. S. TULTI

Pour la Principaute de Liechtenstein:

M. LEDEBUR

Pour le Luxembourg:

P. FABER

Pour la Malaisie:

Tun V. T. SAMBANTHAN
K. P. CHEW
S. bin ABDUL KADIR
D. S. VARIYAN

Pour la Republique du Mali:

A handwritten signature consisting of two parts. The top part is a stylized 'K' or 'M'. The bottom part is a cursive signature that appears to begin with 'M. M. KEITA'.

M. L. KANE
M. M. KEITA

Pour le Royaume du Maroc:

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M. MOUKITE

Pour la Republique Islamique de Mauritanie:

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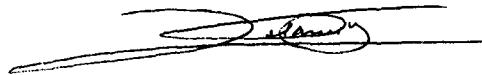
A. DUFFAU

Pour le Mexique:

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J. HERNÁNDEZ

Pour Monaco:



C. C. SOLAMITO

Pour le Nicaragua:



A. A. MULLHAUPT

Pour la Republique du Niger:



M. ABBA

Pour la Republique Federale de Nigeria:

A. A. BODEDE

Pour la Norvege:

H. NYMOEN
A. BØE

Pour la Nouvelle-Zélande:

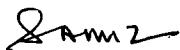
D. C. ROSE
R. J. BUNDLE

Pour l'Ouganda:



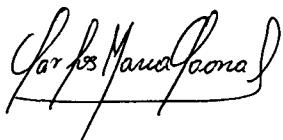
P. O. OKUNDI

Pour le Pakistan:



A. KHAN
S. A. AZIZ
A. ZAIDI

Pour le Paraguay:



C. M. GAONA VELAZCO

Pour le Royaume des Pays-Bas:



F. R. NEUBAUER
P. E. WILLEMS
K. J. KERLING
F. S. LATOUR

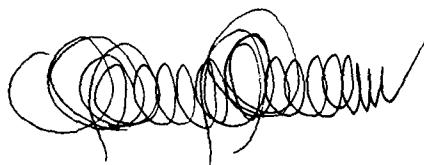
Pour le Pérou:



J. ESTRADA GOMEZ SANCHEZ
J. E. BARREDA DELGADO
M. COLINA-MARIE

TIAS 7435

Pour la République des Philippines:



Leonardo Garcia

C. S. CARREON
L. A. GARCIA

Pour la République Populaire de Pologne:



K. KOZŁOWSKI

Pour le Portugal:

F de alcambar pereira

Fernando de Alcântara Pereira

Juan de Olivas Leandro

Juan de Olivas Leandro

Amaral Marini Castanheira

Amaral Marini Castanheira

Manuel José Lopes da Silva

F. DE ALCAMBAR PEREIRA
D. A. PIRES FRANCO
J. O. LEANDRO
A. MARINI CASTANHEIRA
M. J. LOPES DA SILVA

Pour les Provinces portugaises d'Outre-Mer:

F. de Alcambar Pereira

J. D. Ferraz de Carvalho

J. O. Leandro

F. DE ALCAMBAR PEREIRA
J. D. FERRAZ DE CARVALHO
J. O. LEANDRO

Pour la Republique Arabe Syrienne:

N. Kisrawi

M. Hammoude

N. KISRAWI
M. HAMMOUDE

Pour la Republique Arabe Unie:

E. Elkashlan

Nabil Khodair

E. ELKASHLAN
N. KHODAIR

Pour la Republique Fédérale d'Allemagne:



J. KUPPER

Pour la République Socialiste Soviétique de l'Ukraine:



I. E. TIMCHENKO

Pour la Republique Socialiste de Roumanie:



G. AIRINEI
L. CONSTANTINESCU

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, les îles Anglo-Normandes et l'île de Man:

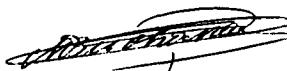
D. E. Baptiste

C. W. Sowton

S. G. Hicks

D. E. BAPTISTE
C. W. SOWTON
S. G. HICKS

Pour la République Rwandaise:



M. BUCYANA

Pour la République du Sénégal:

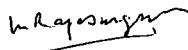


Leourey



A. M'BODJI
L. DIA I. N'DOYE

Pour la Republique de Singapour:



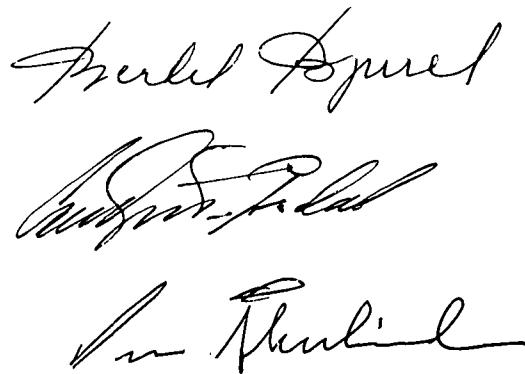
R. G. RAJASINGAM

Pour la Republique Sudafricaine:



A. BIRRELL
P. H. de V. VAN TONDER

Pour la Suede:



B. BJUREL
C.-G. ÅSDAL
P. ÅKERLIND

Pour la Confédération Suisse:

F. Locher
H. R. Probst.
C. Steffen
H. A. Kieffer

F. LOCHER
H. R. PROBST
C. STEFFEN
H. A. KIEFFER

Pour la République Unie de Tanzanie:

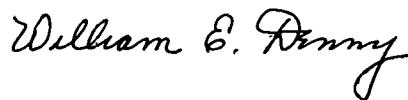
R. M. Yusuf
P. O. Okundi

Pour la République Socialiste Tchécoslovaque:

J. Maršíček
M. Zahradníček
J. Vrba

J. MARŠÍČEK
M. ZAHRADNÍČEK
J. VRBA

Pour les Territoires des Etats-Unis d'Amérique:



W. E. DENNY

Pour les Territoires d'Outre-Mer dont les relations internationales sont assurées par le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord:



T. F. H. HOWARTH

Pour la Thaïlande:



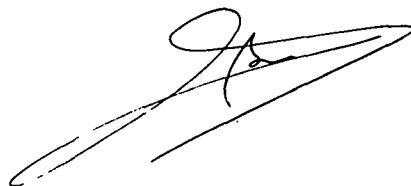
P. SURASIDHI
P. KASEMSRI
C. KANCHANINDU

Pour la République Togolaise:



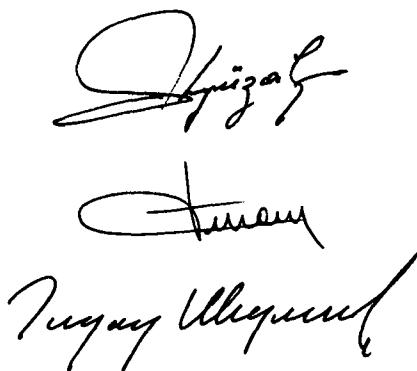
A. AITHNARD

Pour la Tunisie:



B. KHOUADJA

Pour la Turquie:



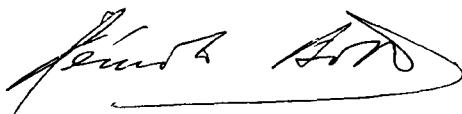
N. AKYÜZALP
O. TURAN
T. ULUÇEVIK

Pour l'Union des Républiques Socialistes Soviétiques:



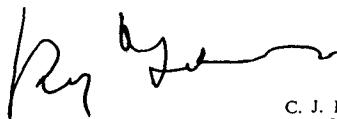
A. L. BADALOV

Pour la Republique Orientale de l'Uruguay:



R. BOTTO

Pour la Republique de Venezuela:



C. J. MARTINEZ
R. ZERPA

Pour la Republique du Viet-Nam:



VUONG QUANG NGHIA
PHAM VAN TRINH
NGUYEN CONG ANH-TUAN

Pour la Republique Socialiste Federative de Yougoslavie:



M. DAKIĆ

ANNEX 1

Revision of Article 1 of the Radio Regulations*

Article 1 of the Radio Regulations shall be amended as follows:

Section II. Radio Systems, Services and Stations

After Regulation No. 21, add the following new Regulations.

ADD **21A**
Spa2

Space Station

A station located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.

* *Note by the General Secretariat*

Certain definitions were rearranged and renumbered by the Conference; some were amended while others were maintained unchanged.

The definitions concerned are the following:

<i>New number</i>	<i>Definition</i>	<i>Old number</i>	<i>Remarks</i>
21A	Space Station	84AE	MOD
21B	Earth Station	84AD	MOD
21C	Space Radiocommunication	84AC	MOD
21D	Terrestrial Radiocommunication	84AA	MOD
21E	Terrestrial Station	84AB	MOD
84AFA	Satellite System	84AL	MOD
84ATD	Space Research Service	84AM	MOD
84ATE	Space Operation Service	84AC	MOD
84ATF	Inter-Satellite Service	84AC	MOD
84BAA	Spacecraft	84BH	MOD
84BAC	Active Satellite	84AJ	NOC
84BAD	Passive Satellite	84AK	NOC

ANN I (ART I)

ADD **21B** *Earth Station*
 Spa2

A station located either on the Earth's surface or within the major portion of the Earth's atmosphere intended for communication:

- with one or more space stations; or
- with one or more stations of the same kind by means of one or more passive satellites or other objects in space.

ADD **21C** *Space Radiocommunication*
 Spa2

Any radiocommunication involving the use of one or more space stations or the use of one or more passive satellites or other objects in space.

ADD **21D** *Terrestrial Radiocommunication¹*
 Spa2

Any radiocommunication other than space radiocommunication or radio astronomy.

ADD **21D.1** ¹ In these Regulations, unless otherwise stated, any radiocommunication service relates to terrestrial radiocommunication.
 Spa2

ADD **21E** *Terrestrial Station¹*
 Spa2

A station effecting terrestrial radiocommunication.

ADD **21E.1** ¹ In these Regulations, unless otherwise stated, any station is a terrestrial station.
 Spa2

Replace Regulation No. 69 by the following new text.

MOD **69** *Safety Service*
 Spa2

A radiocommunication service used permanently or temporarily for the safeguarding of human life and property on the Earth's surface, in the air or in space.

ANN 1 (ART 1)

Delete Regulations Nos. 84AA and 84AB.

Section IIA. Space Systems, Services and Stations

Delete Regulations Nos. 84AC, 84AD and 84AE.

Replace Regulation No. 84AF by the following new text:

MOD **84AF** *Space System*
Spa2
Any group of co-operating earth and/or space stations employing space radiocommunication for specific purposes.

After Regulation No. 84AF, add the following new Regulations:

ADD **84AFA** *Satellite System*
Spa2
A space system using one or more artificial earth satellites.

ADD **84AFB** *Satellite Network*
Spa2
A satellite system or a part of a satellite system, consisting of only one satellite and the co-operating earth stations.

ADD **84AFC** *Satellite Link*
Spa2
A radio link between a transmitting earth station and a receiving earth station through one satellite.

A satellite link comprises one up-path and one down-path.

ANN I (ART I)

ADD **84AFD** *Multi-Satellite Link*
Spa2

A radio link between a transmitting earth station and a receiving earth station through two or more satellites, without any intermediate earth station.

A multi-satellite link comprises one up-path, one or more satellite-to-satellite paths and one down-path.

Replace Regulation No. 84AG by the following new text:

MOD **84AG** *Fixed-Satellite Service*
Spa2

A radiocommunication service:

- between earth stations at specified fixed points when one or more satellites are used; in some cases this service includes satellite to satellite links, which may also be effected in the inter-satellite service;
- for connection between one or more earth stations at specified fixed points and satellites used for a service other than the fixed-satellite service (for example, the mobile-satellite service, broadcasting-satellite service, etc.).

After Regulation No. 84AG, add the following new Regulations:

ADD **84AGA** *Mobile-Satellite Service*
Spa2

A radiocommunication service:

- between mobile earth stations and one or more space stations; or between space stations used by this service;
- or between mobile earth stations by means of one or more space stations;
- and if the system so requires, for connection between these space stations and one or more earth stations at specified fixed points.

ANN 1 (ART 1)

ADD **84AGB** *Aeronautical Mobile-Satellite Service*
Spa2

A mobile-satellite service in which mobile earth stations are located on board aircraft. Survival craft stations and emergency position indicating radiobeacon stations may also participate in this service.

ADD **84AGC** *Maritime Mobile-Satellite Service*
Spa2

A mobile-satellite service in which mobile earth stations are located on board ships. Survival craft stations and emergency position indicating radiobeacon stations may also participate in this service.

ADD **84AGD** *Land Mobile-Satellite Service*
Spa2

A mobile-satellite service in which mobile earth stations are located on land.

Delete Regulations Nos. 84AH to 84AO.

Replace Regulation No. 84AP by the following new text:

MOD **84AP** *Broadcasting-Satellite Service*
Spa2

A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception¹ by the general public.

ADD **84AP.1** ¹In the broadcasting-satellite service, the term "direct reception" shall
Spa2 encompass both individual reception and community reception.

ANN 1 (ART 1)

After Regulation No. 84AP, add the following new Regulations:

ADD **84APA** *Individual reception (in the broadcasting-satellite service)*
Spa2

The reception of emissions from a space station in the broadcasting-satellite service by simple domestic installations and in particular those possessing small antennae.

ADD **84APB** *Community reception (in the broadcasting-satellite service)*
Spa2

The reception of emissions from a space station in the broadcasting-satellite service by receiving equipment, which in some cases may be complex and have antennae larger than those used for individual reception, and intended for use:

- by a group of the general public at one location; or
- through a distribution system covering a limited area.

ADD **84APC** *Radiodetermination-Satellite Service*
Spa2

A radiocommunication service involving the use of radiodetermination and the use of one or more space stations.

Replace Regulation No. 84AQ by the following new text:

MOD **84AQ** *Radionavigation-Satellite Service*
Spa2

A radiodetermination-satellite service used for the same purposes as the radionavigation service; in certain cases this service

ANN 1 (ART 1)

includes transmission or retransmission of supplementary information necessary for the operation of radionavigation systems.

After Regulation No. 84AQ, add the following new Regulations:

ADD **84AQA** *Aeronautical Radionavigation-Satellite Service*
Spa2

A radionavigation-satellite service in which mobile earth stations are located on board aircraft.

ADD **84AQB** *Maritime Radionavigation-Satellite Service*
Spa2

A radionavigation-satellite service in which mobile earth stations are located on board ships.

Delete Regulations Nos. 84AR and 84AS.

Before Regulation No. 84AT, add the following new Regulation:

ADD **84ASA** *Earth Exploration-Satellite Service*
Spa2

A radiocommunication service between earth stations and one or more space stations in which:

- information relating to the characteristics of the Earth and its natural phenomena is obtained from instruments on earth satellites;
- similar information is collected from air-borne or earth-based platforms;
- such information may be distributed to earth stations within the system concerned;
- platform interrogation may be included.

ANN 1 (ART 1)

Replace Regulation No. 84AT by the following new text:

MOD **84AT** *Meteorological-Satellite Service*
Spa2
An earth exploration-satellite service for meteorological purposes.

After Regulation No. 84AT, add the following new Regulations:

ADD **84ATA** *Amateur-Satellite Service*
Spa2
A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.

ADD **84ATB** *Standard Frequency-Satellite Service*
Spa2
A radiocommunication service using space stations on earth satellites for the same purposes as those of the standard frequency service.

ADD **84ATC** *Time Signal-Satellite Service*
Spa2
A radiocommunication service using space stations on earth satellites for the same purposes as those of the time signal service.

ADD **84ATD** *Space Research Service*
Spa2
A radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.

ADD **84ATE** *Space Operation Service*
Spa2
A radiocommunication service concerned exclusively with the operation of spacecraft, in particular tracking, telemetry and telecommand.
These functions will normally be provided within the service in which the space station is operating.

ANN I (ART I)

ADD **84ATF** *Inter-Satellite Service*
Spa2
A radiocommunication service providing links between artificial earth satellites.

Delete Regulations Nos. 84AU and 84AV.

Section IIB. Space, Orbits and Types of Objects in Space

Replace Regulation No. 84BA by the following new text:

MOD **84BA** *Deep Space*
Spa2
Space at distances from the Earth approximately equal to, or greater than, the distance between the Earth and the Moon.

After Regulation No. 84BA, add the following new Regulations:

ADD **84BAA** *Spacecraft*
Spa2
A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.

ADD **84BAB** *Satellite*
Spa2
A body¹ which revolves around another body of preponderant mass and which has a motion primarily and permanently determined by the force of attraction of that other body.

ADD **84BAB.1** ¹A body so defined which revolves around the Sun is called a planet or planetoid.

ADD **84BAC** *Active Satellite*
Spa2
An earth satellite carrying a station intended to transmit or retransmit radiocommunication signals.

ANN 1 (ART 1)

ADD **84BAD** *Passive Satellite*
Spa2
An earth satellite intended to transmit radiocommunication signals by reflection.

Replace Regulations Nos. 84BB to 84BE by the following new texts:

MOD **84BB** *Orbit*
Spa2
1. The path, relative to a specified frame of reference, described by the centre of mass of a satellite or other object in space, subjected solely to natural forces, mainly the force of gravity.
2. By extension, the path described by the centre of mass of an object in space subjected to natural forces and occasional low-energy corrective forces exerted by a propulsive device in order to achieve and maintain a desired path.

MOD **84BC** *Inclination of an Orbit* (of an earth satellite)
Spa2
The angle determined by the plane containing an orbit and the plane of the Earth's equator.

MOD **84BD** *Period* (of a satellite)
Spa2
The time elapsing between two consecutive passages of a satellite or planet through a characteristic point on its orbit.

MOD **84BE** *Altitude of the Apogee (Perigee)*
Spa2
The altitude of the apogee (perigee) above a specified reference surface serving to represent the surface of the Earth.

Delete Regulation No. 84BF.

ANN 1 (ART 1)

Before Regulation No. 84BG, add the following new Regulation:

ADD 84BFA *Geosynchronous Satellite*
Spa2

An earth satellite whose period of revolution is equal to the period of rotation of the Earth about its axis.

Replace Regulation No. 84BG by the following new text:

MOD 84BG *Geostationary Satellite*
Spa2

A satellite, the circular orbit of which lies in the plane of the Earth's equator and which turns about the polar axis of the Earth in the same direction and with the same period as those of the Earth's rotation.

The orbit on which a satellite should be placed to be a geostationary satellite is called the "geostationary satellite orbit".

Delete Regulation No. 84BH.

Section III. Technical Characteristics

After Regulation No. 98, add the following new Regulation:

ADD 98A *Equivalent Isotropically Radiated Power (e.i.r.p.)*
Spa2

The product of the power of an emission as supplied to an antenna and the antenna gain in a given direction relative to an isotropic antenna.

After Regulation No. 103, add the following new Regulations:

ADD 103A *Equivalent Satellite Link Noise Temperature*
Spa2

The noise temperature at the input of the earth station receiver corresponding to the radio-frequency noise power which

ANN I (ART I)

produces the total observed noise at the output of the satellite link excluding noise due to interference coming from satellite links using other satellites and from terrestrial systems.

ADD **103B** *Co-ordination Distance*
Spa2

Distance from an earth station in a given azimuth within which a terrestrial station sharing the same frequency band may cause or be subject to more than a permissible level of interference.

ADD **103C** *Co-ordination Contour*
Spa2

The line joining the points which are on all azimuths around an earth station at a distance from this station equal to the co-ordination distance corresponding to each azimuth.

ADD **103D** *Co-ordination Area*
Spa2

Area around an earth station enclosed by the co-ordination contour.

ANNEX 2

Revision of Article 2 of the Radio Regulations

Article 2 of the Radio Regulations shall be amended as follows:

Section III. Nomenclature of the Frequency and Wavelength Bands used in Radiocommunication

Replace Regulation No. 112 by the following new text:

MOD 112 § 7. The radio spectrum shall be subdivided into nine frequency bands, which shall be designated by progressive whole numbers in accordance with the following table. Frequencies shall be expressed:

- in kilohertz (kHz) up to and including 3000 kHz
- in megahertz (MHz) thereafter up to and including 3000 MHz
- in gigahertz (GHz) thereafter up to and including 3000 GHz.

However, where adherence to these provisions would introduce serious difficulties, for example in connection with the notification and registration of frequencies, the lists of frequencies and related matters, reasonable departures may be made.

ANN 2 (ART 2)

Band Number	Frequency Range (lower limit exclusive, upper limit inclusive)	Corresponding Metric Subdivision
4	3 to 30 kHz	Myriametric waves
5	30 to 300 kHz	Kilometric waves
6	300 to 3000 kHz	Hectometric waves
7	3 to 30 MHz	Decametric waves
8	30 to 300 MHz	Metric waves
9	300 to 3000 MHz	Decimetric waves
10	3 to 30 GHz	Centimetric waves
11	30 to 300 GHz	Millimetric waves
12	300 to 3000 GHz or 3 THz	Decimillimetric waves

Note 1: "Band Number N" extends from $0\cdot3 \times 10^N$ to 3×10^N Hz.

Note 2: Symbols and prefixes:

Hz = hertz
k = kilo (10^3), M = mega (10^6), G = giga (10^9), T = tera (10^{12}).

Note 3: Abbreviations for adjectival band designations:

Band 4 = VLF	Band 8 = VHF
Band 5 = LF	Band 9 = UHF
Band 6 = MF	Band 10 = SHF
Band 7 = HF	Band 11 = EHF

ANNEX 3

Revision of Article 5 of the Radio Regulations

Article 5 of the Radio Regulations shall be amended as follows:

Replace the title of Article 5 by the following new title:

MOD Spa²

Frequency Allocations¹
10 kHz to 275 GHz

Section I. Regions and Areas

Replace Regulation No. 125 by the following new text:

(MOD) **125** § I. For the allocation of frequencies the world has been
Spa² subdivided into three Regions² (see Appendix 24).

Insert the following new foot-note:

ADD Spa² ¹ See Resolution No. 6.

Replace Regulation 125.1 by the following new text:

(MOD) **125.1** ² It should be noted that where the words "regions" or "regional" are without
Spa² a capital "R" in these Regulations, they do not relate to the three Regions here
defined for purposes of frequency allocation.

ANN 3 (ART 5)

MOD Spa2 Section IV. Table of Frequency Allocations – 10 kHz to 275 GHz

In the Table of Frequency Allocations, replace the provisions for the band 1 800 – 2 000 kHz in Regions 2 and 3 by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
NOC	1 800 – 2 000 AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION 198	

NOC 198

SUP 199 199-1

In the Table of Frequency Allocations, replace the provisions for the band 2 170 – 2 194 kHz by the following:

kHz

Region 1	Region 2	Region 3
	2 170 – 2 194 MOBILE (distress and calling) 201 201A	

NOC 201

ADD 201A The frequencies 2 182 kHz, 3 023.5 kHz, 5 680 kHz, 8 364 kHz, 121.5 MHz,
 Spa2 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of \pm 3 kHz about the frequency.

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 2 498 – 2 502 kHz in Region 1 and for the band 2 495 – 2 505 kHz in Regions 2 and 3 by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
2 300 – 2 498 NOC	2 300 – 2 495 NOC	
2 498 – 2 502 STANDARD FREQUENCY 203 203A	2 495 – 2 505 STANDARD FREQUENCY 203 203A	
2 502 – 2 625 NOC	2 505 – 2 625 NOC	

NOC 203

ADD 203A The bands 2 501 – 2 502 kHz, 5 003 – 5 005 kHz, 10 003 – 10 005 kHz, Spa2 15 005 – 15 010 kHz, 19 990 – 19 995 kHz, 20 005 – 20 010 kHz and 25 005 – 25 010 kHz are also allocated, on a secondary basis, to the space research service.

SUP 204

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 2 850 - 3 025 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
2 850 - 3 025	AERONAUTICAL MOBILE (R)	
	201A	

In the Table of Frequency Allocations, replace the provisions for the band 4 995 - 5 005 kHz by the following:

kHz

Region 1	Region 2	Region 3
4 995 - 5 005	STANDARD FREQUENCY	
	203A 210	

NOC 210

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 5 480 – 5 730 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
5 480 – 5 680	AERONAUTICAL MOBILE (R) 201A	
5 680 – 5 730	AERONAUTICAL MOBILE (OR) 201A	

In the Table of Frequency Allocations, replace the provisions for the band 7 000 – 7 100 kHz by the following:

kHz

Region 1	Region 2	Region 3
7 000 – 7 100	AMATEUR AMATEUR-SATELLITE	

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 8 195 – 8 815 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
8 195 – 8 815		
MARITIME MOBILE		

201A 213

NOC 213

In the Table of Frequency Allocations, replace the provisions for the band 9 995 – 10 100 kHz by the following:

kHz

Region 1	Region 2	Region 3
9 995 – 10 005		
STANDARD FREQUENCY		
201A 203A 214		
10 005 – 10 100		
AERONAUTICAL MOBILE (R)		
201A		

NOC 214

SUP 215 215A

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 14 000 – 14 350 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
14 000 – 14 250	AMATEUR AMATEUR-SATELLITE	
14 250 – 14 350	AMATEUR	218

NOC 218

In the Table of Frequency Allocations, replace the provisions for the band 14 990 – 15 010 kHz by the following:

kHz

Region 1	Region 2	Region 3
14 990 – 15 010	STANDARD FREQUENCY	201A 203A 219

NOC 219

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 15 762 – 15 768 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
15 762 – 15 768		
	FIXED	

In the Table of Frequency Allocations, replace the provisions for the band 18 030 – 20 010 kHz by the following:

kHz

Region 1	Region 2	Region 3
18 030 – 18 052		
	FIXED	
18 052 – 18 068		
	FIXED	
	<i>Space Research</i>	
18 068 – 19 990		
	FIXED	
19 990 – 20 010		
	STANDARD FREQUENCY	
	201A 203A 220	

NOC 220

SUP 221 221A

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 21 000 – 21 450 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
21 000 – 21 450	AMATEUR AMATEUR-SATELLITE	

In the Table of Frequency Allocations, replace the provisions for the band 21 850 – 22 000 kHz by the following:

kHz

Region 1	Region 2	Region 3
21 850 – 21 870	RADIO ASTRONOMY	
	221B	
21 870 – 22 000	AERONAUTICAL FIXED AERONAUTICAL MOBILE (R)	

- ADD 221B** In Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R.,
Spa2 the band 21 850 – 21 870 kHz is also allocated to the aeronautical fixed and the aeronautical mobile (R) services. The administrations concerned will take all practicable steps to protect radio astronomy observations in this band from harmful interference.

TIAS 7435

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 23 350 – 25 010 kHz by the following:

kHz

Allocation to Services		
Region 1	Region 2	Region 3
23 350 – 24 990		
FIXED		
LAND MOBILE		
222 222A		
24 990 – 25 010		
STANDARD FREQUENCY		
203A 223		

NOC **222**

ADD **222A** In Argentina and Uruguay, the band 24 528 – 24 538 kHz may be used by
 Spa2 the space research service, subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.

NOC **223**

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 28–47 MHz in Region 1, for the band 28–50 MHz in Region 2 and for the band 28–44 MHz in Region 3 by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
28 – 29·7		
	AMATEUR AMATEUR-SATELLITE	
29·7 – 30·005		
	FIXED 228 229 231 232 MOBILE	
30·005 – 30·01		
	SPACE OPERATION (Satellite identification) FIXED 228 229 231 MOBILE SPACE RESEARCH	
30·01 – 37·75		
	FIXED 228 229 230 231 MOBILE 233A	

NOC 228 229 230 231 232

SUP 233

ADD 233A In Argentina and Uruguay, the bands 36·65 – 36·85 MHz, 41·15 – 41·35 MHz
 Spa2 and 45·65 – 45·85 MHz, and in Argentina, Brazil and Uruguay, the band 170·55 – 170·95 MHz, are allocated to the radio astronomy service and no assignments shall be made to the fixed and mobile services in these bands.

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
37·75 – 38·25		
	FIXED 228 229 231	
	MOBILE	
	<i>Radio Astronomy</i>	
	233B	
38·25 – 41		
	FIXED 228 229 230 231	
	MOBILE	
	235 236 236A	
41 – 47	41 – 50	41 – 44
BROADCASTING	FIXED 228 231 237	FIXED 228 237
<i>Fixed</i> 228 237	MOBILE	MOBILE
<i>Mobile</i>		236A
236A 238 239		44 – 50
240 241	233A 236A	NOC

- ADD 233B In making assignments to stations of other services to which the bands
 Spa2 37·75 – 38·25 MHz, 150·05 – 153 MHz, 406·1 – 410 MHz, 2 690 – 2 700 MHz
 and 4 700 – 5 000 MHz are allocated, administrations are urged to take all
 practicable steps to protect radio astronomy observations from harmful inter-
 ference.
- MOD 235 The band 39·986 – 40·02 MHz is also allocated, on a secondary basis, to the
 Spa2 space research service.
- NOC 236
- ADD 236A The band 40·98 – 41·015 MHz is also allocated, on a secondary basis, to the
 Spa2 space research service, in particular for measurements of the differential Faraday
 effect.
- NOC 237 238 239 240 241

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 80 – 100 MHz in Region 3 by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
NOC	NOC	80 – 87 FIXED MOBILE 254 255 256 257 261 266
NOC	NOC	87 – 100 FIXED MOBILE BROADCASTING 254 267 268

NOC **254 255 256 257 261 266**

MOD **267** In New Zealand, the bands 87 – 88 MHz and 94 – 108 MHz are allocated
Spa2 to the fixed and mobile services.

NOC **268**

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 117.975 – 174 MHz in Region 1, for the bands 117.975 – 146 MHz and 148 – 174 MHz in Region 2 and for the bands 117.975 – 146 MHz and 148 – 170 MHz in Region 3 by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
117.975 – 132		
	AERONAUTICAL MOBILE (R)	
	201A 273 273A	
132 – 136		
	AERONAUTICAL MOBILE (R)	
	273A 274 274A 274B 275	
136 – 137		
	SPACE RESEARCH (Space-to-Earth)	
	281A 281AA	
137 – 138		
	SPACE OPERATION (Telemetering and tracking)	
	METEOROLOGICAL-SATELLITE	
	SPACE RESEARCH (Space-to-Earth)	
	275A 279A 281C 281E	

NOC **273 273A**

MOD **274** In Bulgaria, Japan, Poland, Portugal, Portuguese Oversea Provinces in
 Spa2 Region 1 south of the equator, Roumania, Sweden, Czechoslovakia and the
 U.S.S.R., existing stations in the aeronautical mobile (OR) service in the band
 132 – 136 MHz, may continue to operate for an unspecified period on a primary
 basis.

ADD **274A** In Regions 2 and 3, stations of the fixed and mobile services may continue
 Spa2 to use the band 132 – 136 MHz until 1 January 1976. Until that date, frequency
 assignments to stations of the aeronautical mobile (R) service shall be co-ordinated
 between the administrations concerned and shall be protected from harmful
 interference.

ANN 3 (ART 5)

- ADD 274B In Cuba and Mexico, the band 132 – 136 MHz is also allocated to the fixed
Spa2 and mobile services.
- MOD 275 In Burundi, Ethiopia, Gambia, Malawi, Nigeria, Portuguese Oversea Pro-
Spa2 vinces in Region 1 south of the equator, Rhodesia, Rwanda, Sierra Leone and
in the Republic of South Africa, the band 138 – 144 MHz is allocated to the
fixed and mobile services. In these countries, existing stations in the fixed and
mobile services may continue to operate in the band 132 – 136 MHz until
1 January 1976.
- NOC 275A
- SUP 276 277
- MOD 278 In New Zealand, the band 138 – 144 MHz is allocated to the aeronautical
Spa2 mobile (OR) service.
- SUP 279
- NOC 279A 281A
- ADD 281AA In Bulgaria, China, Cyprus, Korea, Spain, Ethiopia, Ghana, Hungary,
Spa2 India, Indonesia, Iran, Iraq, Kenya, Kuwait, Malaysia, Uganda, Pakistan, Phi-
ippines, Poland, Portugal, the United Arab Republic, Roumania, Senegal,
Syria, Tanzania, Czechoslovakia and the U.S.S.R., the band 136 – 137 MHz is
also allocated to the fixed and mobile services.
- SUP 281B
- MOD 281C In Bulgaria, Hungary, Kuwait, Lebanon, Poland, the United Arab Republic,
Spa2 Roumania, Czechoslovakia, the U.S.S.R. and in Yugoslavia, the band 137 – 138
MHz is also allocated to the aeronautical mobile (OR) service.
- SUP 281D
- MOD 281E In Malaysia, Pakistan and the Philippines, the band 137 – 138 MHz is also
Spa2 allocated to the fixed and mobile services.
- SUP 281F

ANN 3 (ART 5)

MHz

Allocation to Services								
Region 1			Region 2			Region 3		
138 – 143·6			138 – 143·6			138 – 143·6		
AERONAUTICAL MOBILE (OR)			FIXED			FIXED		
			MOBILE			MOBILE		
			Radiolocation			<i>Space Research</i>		
			<i>Space Research</i>			(Space-to-Earth)		
275	281G	282A	283	283A		278	279A	284

- ADD 281G In the F.R. of Germany, the band 138 – 140 MHz is also allocated, on a secondary basis, to the space research service (space-to-Earth).
- SUP 282
- ADD 282A In Belgium, France, Israel, Italy, Liechtenstein, Netherlands, the United Kingdom and Switzerland, the bands 138 – 143·6 MHz and 143·65 – 144 MHz are also allocated, on a secondary basis, to the space research service (space-to-Earth).
- MOD 283 In Austria, Denmark, Greece, Norway, Netherlands, Portugal, F.R. of Germany, United Kingdom, Sweden, Switzerland and Turkey, the band 138 – 144 MHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services.
- ADD 283A In Argentina, the frequency 138·54 MHz \pm 7·5 kHz and the band 143·6 – 143·65 MHz may be used by the space research service (telecommand), subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- NOC 284

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
143·6 – 143·65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (Space-to-Earth)	143·6 – 143·65 FIXED MOBILE SPACE RESEARCH (Space-to-Earth) Radiolocation	143·6 – 143·65 FIXED MOBILE SPACE RESEARCH (Space-to-Earth)
275 283	283A	278 279A 284
143·65 – 144 AERONAUTICAL MOBILE (OR)		
275 282A 283	143·65 – 144 FIXED MOBILE Radiolocation <i>Space Research</i> (Space-to-Earth)	143·65 – 144 FIXED MOBILE <i>Space Research</i> (Space-to-Earth)
144 – 146 AMATEUR AMATEUR-SATELLITE		
146 – 149·9 FIXED MOBILE except aero- nautical mobile (R)	146 – 148 NOC	
285 285A	148 – 149·9 FIXED MOBILE	285A 290
149·9 – 150·05 RADIONAVIGATION-SATELLITE		
	285B 285C	

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
150-05 - 151 FIXED MOBILE except aero-nautical mobile (R) RADIO ASTRONOMY 233B 285 286A	150-05 - 174 FIXED MOBILE	150-05 - 170 FIXED MOBILE
151 - 153 FIXED MOBILE except aero-nautical mobile (R) RADIO ASTRONOMY Meteorological Aids 233B 285 286A		
153 - 154 FIXED MOBILE except aero-nautical mobile (R) Meteorological Aids 285		
154 - 156 FIXED MOBILE except aero-nautical mobile (R) 285		201A 287 287A 290
156 - 174 FIXED MOBILE except aero-nautical mobile 201A 285 287 287A 288	201A 233A 287 287A	170 - 174 NOC

ANN 3 (ART 5)

SUP **284A**NOC **285**MOD **285A** *The band 148 – 149.9 MHz may be authorized for space telecommand, subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected. The bandwidth of an individual transmission shall not exceed ± 15 kHz.*
Spa2MOD **285B** *In Austria, Bulgaria, Cuba, Hungary, Iran, Kuwait, Pakistan, Poland, the United Arab Republic, Roumania and Yugoslavia, the band 149.9 – 150.05 MHz is also allocated to fixed and mobile services (see Recommendation No. Spa 8).*
Spa2ADD **285C** *Emissions of the radionavigation-satellite service in the bands 149.9 – 150.05 MHz and 399.9 – 400.05 MHz may also be used by receiving earth stations of the space research service.*
Spa2SUP **286** (*see ADD 233B*)NOC **286A** **287**ADD **287A** *In the frequency bands designated for the maritime mobile service in accordance with Appendix 18 to the Radio Regulations, the use of satellite systems for safety and distress may be authorized on certain channels on an exclusive basis in the band 157.3125 – 157.4125 MHz for transmissions from ships to satellites and in the band 161.9125 – 162.0125 MHz for transmissions from satellites to ships. The satellite systems shall not be brought into use before 1 January 1976 (see Resolution No. Spa2 – 5).*
Spa2NOC **288 289 290**

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the bands 235 - 470 MHz and 582 - 790 MHz in Region 1; for the band 235 - 942 MHz in Region 2 and for the bands 235 - 470 MHz and 585 - 890 MHz in Region 3 by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
235 - 267		
FIXED		
MOBILE		
	201A 305 305A 308A 309	
267 - 272		
FIXED		
MOBILE		
	<i>Space operation (Telemetering) 309A 309B</i>	
	308A	
272 - 273		
SPACE OPERATION (Telemetering) 309A		
FIXED		
MOBILE		
	308A	
273 - 328·6		
FIXED		
MOBILE		
	308A 310 310A	
328·6 - 335·4		
	AERONAUTICAL RADIONAVIGATION	
	311	

ANN 3 (ART 5)

NOC 305

ADD 305A In New Zealand, the band 235 – 239.5 MHz is also allocated to the aeronautical radionavigation service.
Spa2ADD 308A The bands 240 – 328.6 MHz and 335.4 – 399.9 MHz may also be used by the mobile-satellite service. The use and development of this service shall be subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
Spa2

NOC 309 309A 309B

MOD 310 Radio astronomy observations in the band 322 – 328.6 MHz are carried out
Spa2 in a number of countries under national arrangements. Administrations should bear in mind the needs of the radio astronomy service in using this band.ADD 310A In India, the band 322 – 328.6 MHz is also allocated to the radio astronomy service.
Spa2

NOC 311

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
335·4 – 399·9		
FIXED		
MOBILE		
308A		
399·9 – 400·05		
RADIONAVIGATION-SATELLITE		
285C 311A		
400·05 – 400·15		
STANDARD FREQUENCY-SATELLITE		
312B 313 314		
400·15 – 401		
METEOROLOGICAL AIDS		
METEOROLOGICAL-SATELLITE (Maintenance telemetering)		
SPACE RESEARCH (Telemetry and tracking)		
313 314		

MOD 311A In Bulgaria, Cuba, Greece, Hungary, Indonesia, Iran, Kuwait, Lebanon, the
 Spa2 United Arab Republic, Syria and Yugoslavia, the band 399·9 – 400·05 MHz is
 also allocated to the fixed and mobile services (see Recommendation No. Spa 8).

SUP 312A

ADD 312B In this band the standard frequency is 400·1 MHz. Emissions shall be
 Spa2 confined in a band of \pm 25 kHz about this frequency.

NOC 313 314

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
401 – 402		
	METEOROLOGICAL AIDS SPACE OPERATION (Telemetering) 315A <i>Fixed</i> <i>Meteorological-Satellite</i> (Earth-to-space) <i>Mobile</i> except aeronautical mobile	
	314 315 315B 315C 316	
402 – 403		
	METEOROLOGICAL AIDS <i>Fixed</i> <i>Meteorological-Satellite</i> (Earth-to-space) <i>Mobile</i> except aeronautical mobile	
	314 315 315C 316	
403 – 406		
	METEOROLOGICAL AIDS <i>Fixed</i> <i>Mobile</i> except aeronautical mobile	
	314 315 316	

NOC 315 315A 315B

ADD 315C In the band 401 – 403 MHz, earth exploration-satellite applications, other
Spa2 than the meteorological-satellite service, may also be used for Earth-to-space
transmissions on condition that no harmful interference is caused to stations
operating in accordance with the Table.

NOC 316

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
406 - 406·1	MOBILE-SATELLITE (Earth-to-space) 314 317A 317B	
406·1 - 410	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 233B 314	
410 - 420	FIXED MOBILE except aeronautical mobile 314	

SUP 317 (*see ADD 233B*)

ADD 317A The band 406 - 406·1 MHz is reserved solely for the use and development
 Spa2 of low-power (not to exceed 5 W) emergency position-indicating radiobeacon (EPIRB) systems using space techniques.

ADD 317B In Austria, Bulgaria, Chile, Cuba, Ethiopia, Hungary, India, Iran, Kenya, Kuwait, Liechtenstein, Malaysia, Uganda, Poland, the United Arab Republic, Rwanda, Sweden, Switzerland, Syria, Tanzania, Czechoslovakia and in the U.S.S.R., the band 406 - 406·1 MHz is also allocated to the fixed service and the mobile, except aeronautical mobile, service.

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
420 – 430 FIXED MOBILE except aeronautical mobile <i>Radiolocation</i> 318 319	420 – 450	
430 – 440 AMATEUR RADIOLOCATION 318 319 319B 320 320A 321 322		RADIOLOCATION <i>Amateur</i>
440 – 450 FIXED MOBILE except aeronautical mobile <i>Radiolocation</i> 318 319 319A		318 319A 319B 320A 323 324
450 – 460 FIXED MOBILE 318 319A		
460 – 470 FIXED MOBILE <i>Meteorological-Satellite (Space-to-Earth)</i> 318A 324B		

TIAS 7435

ANN 3 (ART 5)

- MOD 318 Radio altimeters may also be used until 31 December 1974 in the band
Spa2 420 – 460 MHz. However, after this date, they may be authorized to continue to operate on a secondary basis except in the U.S.S.R. where they will continue to operate on a primary basis.
- NOC 318A 319
- MOD 319A The band 449.75 – 450.25 MHz may be used for space telecommand and
Spa2 space research (Earth-to-space), subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- ADD 319B In France and the French Department of Guyana (Region 2) the frequency
Spa2 434 MHz \pm 0.25 MHz may be used for space operation (Earth-to-space) subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- NOC 320
- ADD 320A In the band 435 – 438 MHz, the amateur-satellite service may be authorized,
Spa2 on condition that no harmful interference shall be caused to other services operating in accordance with the Table. Administrations authorizing such use shall ensure that any harmful interference caused by emissions from an amateur satellite is immediately eliminated in accordance with the provisions of No. 1567A.
- NOC 321
- MOD 322 In Denmark, Norway and Sweden, the bands 430 – 432 MHz and 438 –
Spa2 440 MHz are also allocated to the fixed and mobile services.
- NOC 323 324
- (MOD) 324A It is intended that meteorological-satellite space stations operating in the band
Spa2 1 670 – 1 690 MHz shall transmit to selected earth stations. The location of such earth stations is subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- ADD 324B Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460 – 470 MHz and 1 690 – 1 700 MHz for space-to-Earth transmissions on condition that no harmful interference is caused to stations operating in accordance with the Table.

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
470 – 582 NOC	470 – 890 BROADCASTING	470 – 585 NOC
582 – 606 BROADCASTING RADIONAVIGATION 325 327 328 329		585 – 610 RADIONAVIGATION 330B 336 337
606 – 790 BROADCASTING 329 330 330A 331 332 332A		610 – 890 FIXED MOBILE BROADCASTING 330B 332 332A 338 339
790 – 890 NOC	329A 332 332A	
890 – 942 NOC	890 – 942 FIXED RADIOLOCATION 339A 340	890 – 942 NOC

NOC 325

SUP 326

ANN 3 (ART 5)

NOC 327 328 329

ADD 329A In Argentina and Uruguay, the band 602 – 608 MHz is allocated to the radio
Spa2 astronomy service.

NOC 330 330A

ADD 330B In India, the band 608 – 614 MHz is also allocated to the radio astronomy
Spa2 service.

NOC 331 332

ADD 332A Within the frequency band 620 – 790 MHz, assignments may be made to
Spa2 television stations using frequency modulation in the broadcasting-satellite service
subject to agreement between the administrations concerned and those having
services, operating in accordance with the Table, which may be affected (see
Resolutions Nos. Spa2 – 2 and Spa2 – 3). Such stations shall not produce a
power flux density in excess of the value —129 dBW/m² for angles of arrival
less than 20° (see Recommendation No. Spa2 – 10) within the territories of
other countries without the consent of the administrations of those countries.

NOC 336 337 338 339 339A

MOD 340 In Region 2, the frequency 915 MHz is designated for industrial, scientific
Spa2 and medical purposes. Emissions must be confined within the limits of ±13 MHz
of that frequency. Radiocommunication services operating within these limits
must accept any harmful interference that may be experienced from the opera-
tion of industrial, scientific and medical equipment.

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 1 350 – 1 400 MHz by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 350 – 1 400 FIXED MOBILE RADIOLOCATION 349 349A	1 350 – 1 400 RADIOLOCATION 349 349A	

NOC 349

ADD 349A Radio astronomy observations on the Hydrogen line displaced towards lower frequencies are carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of the radio astronomy service in their future planning of the band 1 350 – 1 400 MHz.

In the Table of Frequency Allocations, replace the provisions for the band 1 427 – 1 429 MHz by the following:

MHz

Region 1	Region 2	Region 3
1 427 – 1 429 SPACE OPERATION (Telecommand) FIXED MOBILE except aeronautical mobile		

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 1 525 – 2 300 MHz by the following.

MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 525 – 1 535	1 525 – 1 535	1 525 – 1 535
SPACE OPERATION (Telemetering) 350A	SPACE OPERATION (Telemetering) 350A	SPACE OPERATION (Telemetering) 350A
FIXED 350B	<i>Earth Exploration-Satellite</i> <i>Fixed</i>	FIXED 350B
<i>Earth Exploration-Satellite</i>		<i>Earth Exploration-Satellite</i>
Mobile except aeronautical mobile 350C	Mobile 350D	Mobile

MOD 350A Space stations employing frequencies in the band 1 525 – 1 535 MHz for telemetering purposes may also transmit tracking signals in this band.

NOC 350B 350C 350D

SUP 350E

ANN 3 (ART 5)

MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 535 – 1 542·5	MARITIME MOBILE-SATELLITE 352 352D 352E	
1 542·5 – 1 543·5	AERONAUTICAL MOBILE-SATELLITE (R) MARITIME MOBILE-SATELLITE 352 352D 352F	
1 543·5 – 1 558·5	AERONAUTICAL MOBILE-SATELLITE (R) 352 352D 352G	
1 558·5 – 1 636·5	AERONAUTICAL RADIONAVIGATION 352 352A 352B 352D 352K	
1 636·5 – 1 644	MARITIME MOBILE-SATELLITE 352 352D 352H	
1 644 – 1 645	AERONAUTICAL MOBILE-SATELLITE (R) MARITIME MOBILE-SATELLITE 352 352D 352I	
1 645 – 1 660	AERONAUTICAL MOBILE-SATELLITE (R) 352 352D 352J	

ANN 3 (ART 5)

SUP 351

NOC 352

MOD 352A The bands 1 558·5 – 1 636·5 MHz, 4 200 – 4 400 MHz, 5 000 – 5 250 MHz and 15·4 – 15·7 GHz are reserved on a world-wide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities.

MOD 352B The bands 1 558·5 – 1 636·5 MHz, 5 000 – 5 250 MHz and 15·4 – 15·7 GHz are also allocated to the aeronautical mobile (R) service for the use and development of systems using space radiocommunication techniques. Such use and development is subject to agreement and co-ordination between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.

SUP 352C

NOC 352D

ADD 352E The use of the band 1 535 – 1 542·5 MHz is limited to transmissions from space to earth stations in the maritime mobile-satellite service for communication and/or radiodetermination purposes. Transmissions from coast stations directly to ship stations, or between ship stations, are also authorized when such transmissions are used to extend or supplement the satellite-to-ship links.

ADD 352F The use of the band 1 542·5 – 1 543·5 MHz is limited to transmissions from space to earth stations in the aeronautical mobile-satellite (R) and maritime mobile-satellite services for communication and/or radiodetermination purposes. Transmissions from land stations directly to mobile stations, or between mobile stations, of the aeronautical mobile (R) and maritime mobile services, are also authorized. The utilization of this band is subject to prior operational co-ordination between the two services.

ADD 352G The use of the band 1 543·5 – 1 558·5 MHz is limited to transmissions from space to earth stations in the aeronautical mobile-satellite (R) service for communication and/or radiodetermination purposes. Transmissions from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorized when such transmissions are used to extend or supplement the satellite-to-aircraft links.

ADD 352H The use of the band 1 636·5 – 1 644 MHz is limited to transmissions from earth to space stations in the maritime mobile-satellite service for communication and/or radiodetermination purposes. Transmissions from ship stations directly to coast stations, or between ship stations, are also authorized when such transmissions are used to extend or supplement the ship-to-satellite links.

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- ADD **352I** The use of the band 1 644 – 1 645 MHz is limited to transmissions from earth to space stations in the aeronautical mobile-satellite (R) and maritime mobile-satellite services for communication and/or radiodetermination purposes. Transmissions from mobile stations directly to land stations, or between mobile stations, of the aeronautical mobile (R) and maritime mobile services, are also authorized. The utilization of this band is subject to prior operational co-ordination between the two services.
- ADD **352J** The use of the band 1 645 – 1 660 MHz is limited to transmissions from earth to space stations in the aeronautical mobile-satellite (R) service for communication and/or radiodetermination purposes. Transmissions from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.
- ADD **352K** Radio astronomy observations on important spectral lines due to the hydroxyl radicle OH at frequencies 1 612.231 MHz and 1 720.530 MHz are carried out in a number of countries under national arrangements; the bands observed being 1 611.5 – 1 612.5 MHz and 1 720 – 1 721 MHz respectively. Administrations should bear in mind the needs of radio astronomy service in their future planning of the bands 1 558.5 – 1 636.5 MHz and 1 710 – 1 770 MHz.

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 660 – 1 670	METEOROLOGICAL AIDS RADIO ASTRONOMY 353A 354 354A 354B	
1 670 – 1 690	METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (Space-to-Earth) 324A MOBILE except aeronautical mobile 354	
1 690 – 1 700 METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (Space-to-Earth) <i>Fixed</i> <i>Mobile</i> except aeronautical mobile 324B 354A	1 690 – 1 700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (Space-to-Earth) 324B 354A 354C	
1 700 – 1 710 FIXED SPACE RESEARCH (Space-to-Earth) <i>Mobile</i> 354D	1 700 – 1 710 FIXED MOBILE SPACE RESEARCH (Space-to-Earth) 354D	

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SUP 353

MOD 353A In view of the successful detection by astronomers of two hydroxyl spectral lines in the regions of 1 665 MHz and 1 667 MHz, administrations are urged to give all practicable protection in the band 1 660 – 1 670 MHz for future research in radio astronomy particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664·4 – 1 668·4 MHz as soon as practicable.

NOC 354

MOD 354A In Bulgaria, Cuba, Ethiopia, Hungary, Israel, Jordan, Kenya, Kuwait, Lebanon, Uganda, Pakistan, Poland, the United Arab Republic, Roumania, Syria, Tanzania, Czechoslovakia, the U.S.S.R. and Yugoslavia, the bands 1 660 – 1 670 MHz and 1 690 – 1 700 MHz are also allocated to the fixed service and the mobile, except aeronautical mobile, service.

NOC 354B 354C

ADD 354D The band 1 700 – 1 700·2 MHz may be used, on a secondary basis, for the transmission from space stations on board satellites of frequencies harmonically related to those emitted in the bands 149·9 – 150·05 MHz and 399·9 – 400·05 MHz for the requirements of ionospheric investigation and geodesy.

SUP 355A

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
1 710 – 1 770 FIXED <i>Mobile</i> 352K 356	1 710 – 1 770 FIXED MOBILE 352K 356A	
1 770 – 1 790 FIXED <i>Meteorological-Satellite</i> 356AA <i>Mobile</i> 356	1 770 – 1 790 FIXED MOBILE <i>Meteorological-Satellite</i> 356AA 356A	
1 790 – 2 290 FIXED <i>Mobile</i> 356 356AB 356ABA 356AC	1 790 – 2 290 FIXED MOBILE 356A 356AB 356ABA	
2 290 – 2 300 FIXED SPACE RESEARCH (Space-to-Earth) <i>Mobile</i> 356C	2 290 – 2 300 FIXED MOBILE SPACE RESEARCH (Space-to-Earth)	

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- MOD 356 In Switzerland, the band 1 710 – 2 290 MHz is allocated to the fixed service
Spa2 and the mobile, except the aeronautical mobile, service and the band 1 770 –
1 790 MHz is also allocated, on a secondary basis, to the meteorological-satellite
service.
- MOD 356A In Region 2, in Australia and Japan, the band 1 750 – 1 850 MHz may also
Spa2 be used for Earth-to-space transmissions, and in Regions 2 and 3, the band
2 200 – 2 290 MHz may also be used for space-to-Earth transmissions in the
space research service, subject to agreement between the administrations con-
cerned and those having services, operating in accordance with the Table, which
may be affected.
- NOC 356AA [NOC 356AA is (MOD) 356AA in the French and Spanish version.]
- ADD 356AB In Regions 2 and 3 and in Spain, in the band 2 025 – 2 120 MHz Earth-to-
Spa2 space transmissions in the earth exploration-satellite service may be authorized
with equality of right to operate with stations of other space radiocommunication
services in this band and subject to agreement between the administrations con-
cerned and those having services, operating in accordance with the Table, which
may be affected.
- ADD 356ABA In Region 2, in Australia and Spain, in the band 2 025 – 2 120 MHz and in
Spa2 Regions 1 and 3, in the band 2 110 – 2 120 MHz Earth-to-space transmissions in
the space research service may be authorized with equality of right to operate
with other space radiocommunication services in these bands and subject to
agreement between the administrations concerned and those having services, ope-
rating in accordance with the Table, which may be affected.
- ADD 356AC In Region 1, in the band 2 096 – 2 120 MHz, Earth-to-space transmissions
Spa2 in the earth exploration-satellite service may be authorized with equality of
right to operate with stations of other space radiocommunication services in this
band and subject to agreement between the administrations concerned and those
having services, operating in accordance with the Table, which may be affected
(see No. 356AB).
- SUP 356B
- NOC 356C

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In the Table of Frequency Allocations, replace the provisions for the band 2 450 – 2 700 MHz by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
2 450 – 2 500	2 450 – 2 500	
FIXED	FIXED	
MOBILE	MOBILE	
<i>Radiolocation</i>	<i>RADIOLOCATION</i>	
357 361	357	
2 500 – 2 550	2 500 – 2 535	
FIXED 364C	FIXED 364C	
MOBILE except aeronautical mobile	FIXED-SATELLITE (Space-to-Earth)	
BROADCASTING-SATELLITE 361B	MOBILE except aeronautical mobile BROADCASTING-SATELLITE 361B 361A 364E 364F	
	2 535 – 2 550	
	FIXED 364C	
	MOBILE except aeronautical mobile	
	BROADCASTING-SATELLITE 361B	
361A 362 364F	361A 364F	
2 550 – 2 655		
	FIXED 364C	
	MOBILE except aeronautical mobile	
	BROADCASTING-SATELLITE 361B	
	362 363 364 364F	

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
2 655 – 2 690	2 655 – 2 690	
FIXED 364C 364D		FIXED 364C 364D
MOBILE except aeronautical mobile		FIXED-SATELLITE (Earth-to-space)
BROADCASTING- SATELLITE 361B 364H		MOBILE except aeronautical mobile
363 364 364F 364G		BROADCASTING-SATELLITE 361B 364H
2 690 – 2 700	RADIO ASTRONOMY	
	233B 363 364A 364B	

NOC 357

MOD 361 In France and the United Kingdom, the band 2 450 – 2 500 MHz is allocated
Spa2 on a primary basis to the radiolocation service and, on a secondary basis, to the
fixed and mobile services.ADD 361A In France, the band 2 500 – 2 550 MHz is also allocated, on a primary basis,
Spa2 to the radiolocation service and, on a secondary basis, to the fixed and mobile
services. In Canada, the band 2 500 – 2 550 MHz is also allocated on a primary
basis to the radiolocation service.ADD 361B The use of the band 2 500 – 2 690 MHz by the broadcasting-satellite service
Spa2 is limited to domestic and regional systems for community reception and such
use is subject to agreement between the administrations concerned and those
having services, operating in accordance with the Table, which may be affected
(see Resolutions Nos. Spa2 – 2 and Spa2 – 3). The power flux density at the
Earth's surface shall not exceed the values given in Nos. 470NH–470NK.MOD 362 In the United Kingdom, the band 2 500 – 2 600 MHz is also allocated, on a
Spa2 secondary basis, to the radiolocation service.

NOC 363

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- MOD 364 In Region I, tropospheric scatter systems may operate in the band 2 550 –
Spa2 2 690 MHz, subject to agreement between the administrations concerned and
those having terrestrial radiocommunication services, operating in accordance
with the Table, which may be affected.
- MOD 364A In Bulgaria, Cuba, Hungary, India, Israel, Kuwait, Lebanon, Morocco,
Spa2 Pakistan, the Philippines, Poland, the United Arab Republic, Roumania, Cze-
choslovakia, the U.S.S.R. and Yugoslavia; the band 2 690 – 2 700 MHz is also
allocated to the fixed and mobile services.
- NOC 364B
- ADD 364C When planning new tropospheric scatter radio-relay links in the band 2 500 –
Spa2 2 690 MHz, all possible measures shall be taken to avoid directing the antennae
of these links towards the geostationary satellite orbit.
- ADD 364D Administrations shall make all practicable effort to avoid developing new
Spa2 tropospheric scatter systems in the band 2 655 – 2 690 MHz.
- ADD 364E The use of the bands 2 500 – 2 535 MHz and 2 655 – 2 690 MHz by the
Spa2 fixed-satellite service is limited to domestic and regional systems and such use
is subject to agreement between the administrations concerned and those having
services, operating in accordance with the Table, which may be affected (see
Article 9A). In the direction space-to-Earth, the power flux density at the
Earth's surface shall not exceed the values given in No. 470NE.
- ADD 364F In Bulgaria, Iran, Portugal and the U.S.S.R., the band 2 500 – 2 690 MHz
Spa2 is allocated to the fixed service and the mobile, except aeronautical mobile, service.
- ADD 364G Radio astronomy observations in the band 2 670 – 2 690 MHz are carried
Spa2 out in a number of countries under national arrangements. Administrations
should bear in mind the needs of the radio astronomy service in their future
planning of this band.
- ADD 364H In the design of systems in the broadcasting-satellite service, administrations
Spa2 are urged to take all necessary steps to protect the radio astronomy service in
the band 2 690 – 2 700 MHz.
- SUP 365 (*see ADD 233B*)

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In the Table of Frequency Allocations, replace the provisions for the band 3 400 – 5 250 MHz by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
3 400 – 3 600 FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE <i>Radiolocation</i> 372 373 374 375	3 400 – 3 500 FIXED-SATELLITE (Space-to-Earth) RADIOLOCATION <i>Amateur</i> 376	
3 600 – 4 200 FIXED FIXED-SATELLITE (Space-to-Earth) <i>Mobile</i>	3 500 – 3 700 FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE RADIOLOCATION	3 500 – 3 700 FIXED-SATELLITE (Space-to-Earth) RADIOLOCATION <i>Fixed</i> <i>Mobile</i> 377 378
	3 700 – 4 200 FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE 379	
4 200 – 4 400 AERONAUTICAL RADIONAVIGATION 352A 379A 381 382 383		
4 400 – 4 700 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
4 700 – 4 990	FIXED MOBILE 233B 354 382A 382B	
4 990 – 5 000 FIXED MOBILE RADIO ASTRONOMY 233B	4 990 – 5 000 RADIO ASTRONOMY 383A	4 990 – 5 000 FIXED MOBILE RADIO ASTRONOMY 233B
5 000 – 5 250 AERONAUTICAL RADIONAVIGATION 352A 352B 383B		

NOC 372

(MOD) 373 In Denmark, Norway, Sweden and Switzerland, the fixed, mobile, radio-Spa2 location and fixed-satellite services operate on a basis of equality of rights in the band 3 400 – 3 600 MHz.

NOC 374

SUP 374A

NOC 375 376

MOD 377 In China and Japan, the band 3 500 – 3 700 MHz is also allocated to the Spa2 fixed and mobile services.

NOC 378

(MOD) 379 In Australia, the band 3 700 – 3 770 MHz is allocated to the radiolocation Spa2 and fixed-satellite services.

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- ADD 379A The standard frequency-satellite service and the time signal-satellite service
Spa2 may be authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies and shall be subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- NOC 381 382
- ADD 382A Radio astronomy observations on the formaldehyde line (rest frequency
Spa2 4 829.649 MHz) are being carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of the radio astronomy service in their future planning of the band 4 825 – 4 835 MHz.
- ADD 382B Radio astronomy observations in the band 4 950 – 4 990 MHz are being
Spa2 carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of the radio astronomy service in their future planning of this band.
- NOC 383
- (MOD) 383A In Cuba, the band 4 990 – 5 000 MHz is also allocated to the fixed and mobile services, and the provisions of No. 233B apply.
- ADD 383B The band 5 000 – 5 250 MHz is also allocated to the fixed-satellite service for connection between one or more earth stations at specified fixed points on the Earth and satellites used by the aeronautical mobile (R) service and/or the radio-determination service. Such use and development shall be subject to agreement and co-ordination between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.

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In the Table of Frequency Allocations, replace the provisions for the band 5 725 - 7 750 MHz in Regions 1 and 3 and for the bands 5 725 - 5 850 MHz and 5 925 - 7 750 MHz in Region 2 by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
5 725 - 5 850 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION <i>Amateur</i> 354 388 390 391 391A	5 725 - 5 850 RADIOLOCATION <i>Amateur</i> 389 391 391A	

NOC 388 389

(MOD) 390 In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the
 Spa2 U.S.S.R., the band 5 800 - 5 850 MHz is allocated to the fixed, mobile and fixed-satellite services.

NOC 391

ADD 391A Radio astronomy observations are being carried out in the bands 5 750 -
 Spa2 5 770 MHz and 36.458 - 36.488 GHz in a number of countries under national arrangements. Administrations are urged to take all practicable steps to protect radio astronomy observations in these bands from harmful interference.

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
5 850 – 5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 391	5 850 – 5 925 NOC	5 850 – 5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <i>Radiolocation</i> 391
5 925 – 6 425 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		
6 425 – 7 250 FIXED MOBILE 379A 392AA 392B 393		
7 250 – 7 300 FIXED-SATELLITE (Space-to-Earth) 392D 392G		

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
7 300 – 7 450	FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE 392D	
7 450 – 7 550	FIXED FIXED-SATELLITE (Space-to-Earth) METEOROLOGICAL-SATELLITE (Space-to-Earth) MOBILE 392D	
7 550 – 7 750	FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE 392D	

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SUP 392A

ADD 392AA In Brazil, Canada and the United States of America, the band 6 625 –
Spa2 7 125 MHz is also allocated, on a secondary basis, to the fixed-satellite service
for space-to-Earth transmissions. In Region 2, the power flux density produced
by space stations in this band shall be in accordance with the provisions of
No. 470NM. In Regions 1 and 3, it shall be at least 6 dB lower. Receiving
earth stations in this band may not impose restrictions on the locations or technical
parameters of existing or future terrestrial stations of other countries.

MOD 392B The band 7 145 – 7 235 MHz may be used for Earth-to-space transmissions
Spa2 in the space research service, subject to agreement between the administrations
concerned and those having services, operating in accordance with the Table,
which may be affected.

SUP 392C

MOD 392D As an exception, passive fixed-satellite systems also may be accommodated
Spa2 in the band 7 250 – 7 750 MHz subject to:

- a) agreement between the administrations concerned and those having
services, operating in accordance with the Table, which may be affected;
- b) the co-ordination procedures laid down in Articles 9 and 9A.

Such systems shall not cause any more interference at active earth station receivers
than would be caused by the fixed or mobile service. Power flux density limita-
tions at the Earth's surface after reflection from the passive fixed-satellites shall
not exceed those prescribed in the present Regulations for active fixed-satellite
systems.

SUP 392F

NOC 392G 392H 393

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In the Table of Frequency Allocations, replace the provisions for the band 7 900 - 8 500 MHz by the following:

MHz

Allocation to Services		
Region 1	Region 2	Region 3
7 900 - 7 975	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	
7 975 - 8 025	FIXED-SATELLITE (Earth-to-space) 392H	

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
8 025 – 8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <i>Earth Exploration- Satellite</i> (Space-to-Earth) 394B	8 025 – 8 175 EARTH EXPLORATION- SATELLITE (Space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	8 025 – 8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <i>Earth Exploration- Satellite</i> (Space-to-Earth)
8 175 – 8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL- SATELLITE (Earth-to-space) MOBILE <i>Earth Exploration- Satellite</i> (Space-to-Earth) 394B	8 175 – 8 215 EARTH EXPLORATION- SATELLITE (Space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL- SATELLITE (Earth-to-space) MOBILE	8 175 – 8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL- SATELLITE (Earth-to-space) <i>Earth Exploration- Satellite</i> (Space-to-Earth)
8 215 – 8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <i>Earth Exploration- Satellite</i> (Space-to-Earth) 394 394B	8 215 – 8 400 EARTH EXPLORATION- SATELLITE (Space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	8 215 – 8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <i>Earth Exploration- Satellite</i> (Space-to-Earth) 394

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MHz

Allocation to Services		
Region 1	Region 2	Region 3
8 400 – 8 500	FIXED MOBILE SPACE RESEARCH (Space-to-Earth)	394A 394D

- (MOD) 394 In Australia and the United Kingdom, the band 8 250 – 8 400 MHz is allocated
 Spa2 to the radiolocation and fixed-satellite services.
- MOD 394A In the United Kingdom, the band 8 400 – 8 500 MHz is allocated to the
 Spa2 radiolocation and space research services.
- (MOD) 394B In Israel, the band 8 025 – 8 400 MHz is allocated, on a primary basis, to
 Spa2 the fixed and mobile services and, on a secondary basis, to the fixed-satellite
 service.
- SUP 394C
- NOC 394D

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the provisions for the band 10.55 – 15.35 GHz by the following:

GHz

Allocation to Services		
Region 1	Region 2	Region 3
10.55 – 10.6	NOC	
10.6 – 10.68	FIXED MOBILE RADIO ASTRONOMY <i>Radiolocation</i> 404A	
10.68 – 10.7	RADIO ASTRONOMY 405B	

ADD 404A In the F.R. of Germany, in the band 10.6 – 10.68 GHz, the radio astronomy service is a secondary service.

SUP 405A

NOC 405B

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
10·7 – 10·95		
FIXED		
MOBILE		
10·95 – 11·2	10·95 – 11·2	
FIXED	FIXED	
FIXED-SATELLITE (Space-to-Earth) (Earth-to-space)	FIXED-SATELLITE (Space-to-Earth)	
MOBILE	MOBILE	
11·2 – 11·45		
FIXED		
MOBILE		
11·45 – 11·7		
FIXED		
FIXED-SATELLITE (Space-to-Earth)		
MOBILE		

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
11·7 – 12·5 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE	11·7 – 12·2 FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 405BB 405BC	11·7 – 12·2 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 405BA
405BA	12·2 – 12·5 FIXED MOBILE except aeronautical mobile BROADCASTING	
12·5 – 12·75 FIXED-SATELLITE (Space-to-Earth) (Earth-to-space) 405BD 405BE	12·5 – 12·75 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile	12·5 – 12·75 FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE except aeronautical mobile
12·75 – 13·25	FIXED MOBILE	
13·25 – 13·4	AERONAUTICAL RADIONAVIGATION 406 407 407A	
13·4 – 14	RADIOLOCATION 407 407A 408 409	

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
14 - 14.3		
	FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION 408A 407 407A	
14.3 - 14.4		
	FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION-SATELLITE 408A	
14.4 - 14.5		
	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 408B 408C	
14.5 - 15.35		
	FIXED MOBILE 408B 408C	

- ADD 405BA** In the band 11.7 - 12.2 GHz in Region 3 and in the band 11.7 - 12.5 GHz in Region 1, existing and future fixed, mobile and broadcasting services shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the decisions of the appropriate broadcasting frequency assignment planning conference (see Resolution No. Spa2 - 2) and this requirement shall be taken into account in the decisions of that conference.
- ADD 405BB** Terrestrial radiocommunication services in the band 11.7 - 12.2 GHz in Region 2 shall be introduced only after the elaboration and approval of plans for the space radiocommunication services, so as to ensure compatibility between the uses that each country decides for this band.
- ADD 405BC** The use of the band 11.7 - 12.2 GHz in Region 2 by the broadcasting-satellite and fixed-satellite services is limited to domestic systems and is subject to previous agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected (see Article 9A and Resolution No. Spa2 - 3).

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- ADD 405BD In Bulgaria, Cameroon, Congo (Brazzaville), the Ivory Coast, Gabon, Ghana, Spa2 Hungary, Iraq, Israel, Jordan, Kuwait, Libya, Mali, Niger, Poland, Syria, United Arab Republic, Roumania, Senegal, Czechoslovakia, Togo and the U.S.S.R., the band 12·5 – 12·75 GHz is also allocated to the fixed service and the mobile, except aeronautical mobile, service.
- ADD 405BE In Algeria, Belgium, Denmark, Spain, Ethiopia, Finland, France, Greece, Spa2 Kenya, Liechtenstein, Luxembourg, Monaco, Norway, Uganda, Netherlands, Portugal, the F. R. of Germany, Sweden, Switzerland, Tanzania and Tunisia, the band 12·5 – 12·75 GHz is also allocated, on a secondary basis, to the fixed service and the mobile, except aeronautical mobile, service.
- NOC 406
- MOD 407 In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the Spa2 U.S.S.R., the bands 13·25 – 13·5 GHz, 14·175 – 14·3 GHz, 15·4 – 17·7 GHz, 23·6 – 24 GHz, 24·05 – 24·25 GHz and 33·4 – 36 GHz are also allocated to the fixed and mobile services.
- ADD 407A The band 13·25 – 14·2 GHz may also be used, on a secondary basis, for Earth-
Spa2 to-space transmissions in the space research service, subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- MOD 408 In Sweden, the bands 13·4 – 14 GHz, 15·7 – 17·7 GHz and 33·4 – 36 GHz
Spa2 are also allocated to the fixed and mobile services.
- ADD 408A The use of the bands 14 – 14·3 GHz and 14·3 – 14·4 GHz by the radionaviga-
Spa2 tion service and radionavigation-satellite service respectively, shall be such as to provide sufficient protection to space stations of the fixed-satellite service (see Recommendation No. Spa2 – 15, paragraph 2.14).
- ADD 408B The band 14·4 – 15·35 GHz may also be used, on a secondary basis, for space-
Spa2 to-Earth transmissions in the space research service, subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected.
- ADD 408C Radio astronomy observations on the formaldehyde line (rest frequency 14·489 GHz) are being carried out in a number of countries under national arrangements. In making assignments to stations in the fixed and mobile services, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference in the band 14·485 – 14·515 GHz.
- NOC 409
- SUP 409A 409B

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In the Table of Frequency Allocations, replace the provisions for the band 17.7 – 24.25 GHz by the following:

GHz

Allocation to Services		
Region 1	Region 2	Region 3
17.7 – 19.7	FIXED FIXED-SATELLITE (Space-to-Earth) MOBILE	
19.7 – 21.2	FIXED-SATELLITE (Space-to-Earth) 409E	
21.2 – 22	EARTH EXPLORATION-SATELLITE (Space-to-Earth) FIXED MOBILE	
22 – 22.5	FIXED MOBILE 410A	
22.5 – 23	FIXED MOBILE	22.5 – 23 FIXED MOBILE BROADCASTING-SATELLITE 410B
23 – 23.6	FIXED MOBILE	

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
23·6 – 24	RADIO ASTRONOMY	
	407	
24 – 24·05	AMATEUR AMATEUR-SATELLITE	
	410C	
24·05 – 24·25	RADIOLOCATION <i>Amateur</i>	
	407 410C	

SUP 409D

ADD 409E In Japan, the bands 19·7 – 21·2 GHz and 29·5 – 31 GHz are also allocated
 Spa2 to the fixed and mobile services. This additional use shall not impose any limitation on the power flux density of space stations in the fixed-satellite service.

SUP 410

ADD 410A The band 22·21 – 22·26 GHz is also allocated to the radio astronomy service for observations of a spectral line due to water vapour (rest frequency 22·235 GHz). Administrations are urged to give all practicable protection in this band for future research in radio astronomy.

ADD 410B In Region 3, the broadcasting-satellite service is authorized in the band 22·5 – 23·0 GHz, subject to power flux density limits for the protection of the terrestrial services in this band.

ADD 410C The frequency 24·125 GHz is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 125 MHz of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

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In the Table of Frequency Allocations, replace the provisions for the band 25.25 – 31.3 GHz by the following:

GHz

Allocation to Services		
Region 1	Region 2	Region 3
25.25 – 27.5	FIXED MOBILE	
27.5 – 29.5	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	
29.5 – 31	FIXED-SATELLITE (Earth-to-space) 409E	
31 – 31.3	FIXED MOBILE <i>Space Research</i> 412H 412I	

NOC 412E 412H

ADD 412I Radio astronomy observations in the band 31.2 – 31.3 GHz are carried out
 Spa2 in a number of countries under national arrangements. Administrations are urged to take all practicable steps to protect radio astronomy observations in this band from harmful interference.

In the Table of Frequency Allocations, replace the provisions for the band 36 – 40 GHz by the following:

GHz

Region 1	Region 2	Region 3
36 – 40	FIXED MOBILE	

ANN 3 (ART 5)

In the Table of Frequency Allocations, replace the indication "above 40 (Not allocated)" by the following new Table:

GHz

Allocation to Services		
Region 1	Region 2	Region 3
40 ~ 41	FIXED-SATELLITE (Space-to-Earth)	
41 ~ 43	BROADCASTING-SATELLITE	
43 ~ 48	AERONAUTICAL MOBILE-SATELLITE MARITIME MOBILE-SATELLITE AERONAUTICAL RADIONAVIGATION-SATELLITE MARITIME RADIONAVIGATION-SATELLITE	
48 ~ 50	(Not allocated)	
50 ~ 51	FIXED-SATELLITE (Earth-to-space)	
51 ~ 52	EARTH EXPLORATION-SATELLITE SPACE RESEARCH	
52 ~ 54.25	SPACE RESEARCH (Passive) 412J	
54.25 ~ 58.2	INTER-SATELLITE	

- ADD 412J All emissions in the bands 52 ~ 54.25 GHz, 58.2 ~ 59 GHz, 64 ~ 65 GHz.
 Spa2 86 ~ 92 GHz, 101 ~ 102 GHz, 130 ~ 140 GHz, 182 ~ 185 GHz and 230 ~ 240 GHz are prohibited. The use of passive sensors by other services is also authorized.

ANN 3 (ART 5)

GHz

Allocation to Services		
Region 1	Region 2	Region 3
58·2 - 59	SPACE RESEARCH (Passive)	
	412J	
59 - 64	INTER-SATELLITE	
64 - 65	SPACE RESEARCH (Passive)	
	412J	
65 - 66	EARTH EXPLORATION-SATELLITE	
	SPACE RESEARCH	
66 - 71	AERONAUTICAL MOBILE-SATELLITE	
	MARITIME MOBILE-SATELLITE	
	AERONAUTICAL RADIONAVIGATION-SATELLITE	
	MARITIME RADIONAVIGATION-SATELLITE	
71 - 84	(Not allocated)	
84 - 86	BROADCASTING-SATELLITE	
86 - 92	RADIO ASTRONOMY	
	SPACE RESEARCH (Passive)	
	412J	

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
92 – 95	FIXED-SATELLITE (Earth-to-space)	
95 – 101	AERONAUTICAL MOBILE-SATELLITE MARITIME MOBILE-SATELLITE AERONAUTICAL RADIONAVIGATION-SATELLITE MARITIME RADIONAVIGATION-SATELLITE	
101 – 102	SPACE RESEARCH (Passive) 412J	
102 – 105	FIXED-SATELLITE (Space-to-Earth)	
105 – 130	INTER-SATELLITE 412K	
130 – 140	RADIO ASTRONOMY SPACE RESEARCH (Passive) 412J	
140 – 142	FIXED-SATELLITE (Earth-to-space)	

ADD 412K Radio astronomy observations on the carbon monoxide line at 115-271 GHz
 Spa2 are carried out in a number of countries under national arrangements. In making assignments to other services in the Table, administrations should bear in mind the need to protect radio astronomy observations from harmful interference in the band 115-16 – 115-38 GHz.

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
142 – 150	AERONAUTICAL MOBILE-SATELLITE MARITIME MOBILE-SATELLITE AERONAUTICAL RADIONAVIGATION-SATELLITE MARITIME RADIONAVIGATION-SATELLITE	
150 – 152	FIXED-SATELLITE (Space-to-Earth)	
152 – 170	(Not allocated)	
170 – 182	INTER-SATELLITE	
182 – 185	SPACE RESEARCH (Passive) 412J	
185 – 190	INTER-SATELLITE	
190 – 200	AERONAUTICAL MOBILE-SATELLITE MARITIME MOBILE-SATELLITE AERONAUTICAL RADIONAVIGATION-SATELLITE MARITIME RADIONAVIGATION-SATELLITE	
200 – 220	(Not allocated)	
220 – 230	FIXED-SATELLITE	

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GHz

Allocation to Services		
Region 1	Region 2	Region 3
230 – 240	RADIO ASTRONOMY SPACE RESEARCH (Passive) 412J	
240 – 250	(Not allocated)	
250 – 265	AERONAUTICAL MOBILE-SATELLITE MARITIME MOBILE-SATELLITE AERONAUTICAL RADIONAVIGATION-SATELLITE MARITIME RADIONAVIGATION-SATELLITE	
265 – 275	FIXED-SATELLITE	
Above 275	(Not allocated)	

ANNEX 4

Revision of Article 6 of the Radio Regulations

Article 6 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 415 by the following new text:

MOD 415 § 2. (1) When special circumstances make it indispensable to do so, an administration may, as an exception to the normal methods of working authorized by these Regulations, have recourse to the special methods of working enumerated below, on the sole condition that the characteristics of the stations still conform to those inserted in the Master International Frequency Register:

- a) a fixed station in the terrestrial radiocommunication service or an earth station in the fixed-satellite service may, on a secondary basis, transmit to mobile stations on its normal frequencies;
- b) a land station may communicate, on a secondary basis, with fixed stations in the terrestrial radiocommunication service or earth stations in the fixed-satellite service or other land stations of the same category.

Replace Regulation No. 417 by the following new text:

MOD 417 § 3. Any administration may assign a frequency in a band allocated to the fixed service or allocated to the fixed-satellite service to a station authorized to transmit, unilaterally, from one specified fixed point to one or more specified fixed points provided that such transmissions are not intended to be received directly by the general public.

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ANN 4 (ART 6)

Add the following new text after Regulation No. 419:

- ADD 419A** § 5A. Earth stations on board aircraft are authorized to use frequencies in the bands allocated to the maritime mobile-satellite service for the purpose of communicating, via the stations of that service, with the public telegraph and telephone networks.
-

ANNEX 5

Revision of Article 7 of the Radio Regulations

Article 7 of the Radio Regulations shall be amended as follows:

Add the following new sub-title and text after Section I:

ADD Spa2 **Section IA. Broadcasting-Satellite Service**

ADD 428A § 2A. In devising the characteristics of a space station in the
Spa2 broadcasting-satellite service, all technical means available shall be
used to reduce, to the maximum extent practicable, the radiation over
the territory of other countries unless an agreement has been pre-
viously reached with such countries.

*Replace the title of Section VII by the following new
title:*

MOD Spa2 **Section VII. Terrestrial Radiocommunication Services sharing
Frequency Bands with Space Radiocommunication
Services above 1 GHz**

Choice of Sites and Frequencies

*Replace Regulation No. 470A by the following new
text:*

(MOD) 470A § 18. Sites and frequencies for terrestrial stations, operating in
Spa2 frequency bands shared with equal rights between terrestrial radiocommunication and space radiocommunication services shall be selected having regard to the relevant Recommendations of the C.C.I.R. with respect to geographical separation from earth stations.

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After Regulation No. 470A, add the following new Regulations:

ADD **470AA § 18A.** (1) As far as practicable, sites for transmitting¹ stations, in the fixed or mobile service, employing maximum values of equivalent isotropically radiated power exceeding +35 dBW in the frequency bands between 1 and 10 GHz, should be selected so that the direction of maximum radiation of any antenna will be at least 2° away from the geostationary satellite orbit, taking into account the effect of atmospheric refraction².

ADD **470AB** (2) As far as practicable, sites for transmitting³ stations, in the fixed or mobile service, employing maximum values of equivalent isotropically radiated power exceeding +45 dBW in the frequency bands between 10 and 15 GHz, should be selected so that the direction of maximum radiation of any antenna will be at least 1.5° away from the geostationary satellite orbit, taking into account the effect of atmospheric refraction⁴.

ADD **470AC** (3) In the frequency bands above 15 GHz there shall be no restriction as to the direction of maximum radiation for stations in the fixed or mobile service.

ADD **470AA.1** ¹ For their own protection receiving stations in the fixed or mobile services operating in bands shared with space radiocommunication services (space-to-Earth) should also avoid directing their antennae towards the geostationary satellite orbit if their sensitivity is sufficiently high that interference from space station transmissions may be significant.

ADD **470AA.2** ² Information on this subject is given in the most recent version of C.C.I.R. Report No. 393.

ADD **470AB.1** ³ See No. 470AA.1.

ADD **470AB.2** ⁴ See No. 470AA.2.

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Power Limits

Replace Regulation No. 470B by the following new text:

- MOD 470B § 19. (1) The maximum equivalent isotropically radiated power of a station in the fixed or mobile service shall not exceed +55 dBW.

After Regulation No. 470B, add the following new Regulations:

- ADD 470BA (1A) Where compliance with No. 470AA is impracticable the maximum equivalent isotropically radiated power of a station in the fixed or mobile service shall not exceed:

+47 dBW in any direction within 0·5° of the geostationary satellite orbit; or

+47 dBW to +55 dBW, on a linear decibel scale (8 dB per degree), in any direction between 0·5° and 1·5° of the geostationary satellite orbit, taking into account the effect of atmospheric refraction¹.

Replace Regulation No. 470C by the following new text:

- MOD 470C (2) The power delivered by a transmitter to the antenna of a station in the fixed or mobile service in frequency bands between 1 and 10 GHz, shall not exceed +13 dBW.

After Regulation No. 470C, add the following new Regulation:

- ADD 470CA (2A) The power delivered by a transmitter to the antenna of a station in the fixed or mobile service in frequency bands above 10 GHz shall not exceed +10 dBW.

ADD 470BA.1 ¹ See No. 470AA.2.
Spa2

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Replace Regulation No. 470D by the following new text:

MOD 470D (3) The limits given in Nos. **470AA**, **470B**, **470BA** and **470C** apply in the following frequency bands allocated to the fixed-satellite service and the meteorological-satellite service for reception by space stations, where these bands are shared with equal rights with the fixed or mobile service:

2 655 - 2 690 MHz (for Regions 2 and 3)
5 800 - 5 850 MHz (for the countries mentioned in No. 390)
5 850 - 5 925 MHz (for Regions 1 and 3)
5 925 - 6 425 MHz
7 900 - 7 975 MHz
7 975 - 8 025 MHz (for the countries mentioned in No. 392H)
8 025 - 8 400 MHz

After Regulation No. 470D, add the following new Regulations:

ADD 470DA (4) The limits given in Nos. **470AB**, **470B** and **470CA** apply in the following frequency bands allocated to the fixed-satellite service for reception by space stations, where these bands are shared with equal rights with the fixed or mobile service:

10.95 - 11.20 GHz (Region 1)
12.50 - 12.75 GHz (Regions 1 and 2)
14.175 - 14.300 GHz (for the countries mentioned in No. 407)
14.4 - 14.5 GHz

ADD 470DB (5) The limits given in Nos. **470B** and **470CA** apply in the following frequency bands allocated to the fixed-satellite service for

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reception by space stations, where these bands are shared with equal rights with the fixed or mobile service:

27.5 - 29.5 GHz

29.5 - 31.0 GHz (for the country mentioned in No. 409E)

Replace the title of Section VIII by the following new title:

MOD Spa2 **Section VIII. Space Radiocommunication Services sharing Frequency Bands with Terrestrial Radiocommunication Services above 1 GHz**

Choice of Sites and Frequencies

Replace Regulation No. 470E by the following new text:

(MOD) 470E § 20. Sites and frequencies for earth stations, operating in frequency bands shared with equal rights between terrestrial radiocommunication and space radiocommunication services, shall be selected having regard to the relevant Recommendations of the C.C.I.R. with respect to geographical separation from terrestrial stations.

Power Limits

Replace Regulations Nos. 470F and 470G by the following new texts:

MOD 470F § 21. (1) Earth stations.
Spa2

MOD 470G (2) The equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station operating in frequency bands between 1 and 15 GHz, shall not exceed the following limits except as provided in Nos. 470H or 470GC.

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 $+40 \text{ dBW}$ in any 4 kHz band for $\theta \leqslant 0^\circ$ $+40 + 3\theta \text{ dBW}$ in any 4 kHz band for $0^\circ < \theta \leqslant 5^\circ$

where θ is the angle of elevation of the horizon viewed from the centre of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

After Regulation No. 470G, add the following new Regulations:

- ADD **470GA** (2A) The equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station operating in frequency bands above 15 GHz shall not exceed the following limits except as provided in Nos. **470H** or **470GD**:

 $+64 \text{ dBW}$ in any 1 MHz band for $\theta \leqslant 0^\circ$ $+64 + 3\theta \text{ dBW}$ in any 1 MHz band for $0^\circ < \theta \leqslant 5^\circ$

where θ is as defined in No. **470G**.

- ADD **470GB** (2B) For angles of elevation of the horizon greater than 5° there shall be no restriction as to the equivalent isotropically radiated power transmitted by an earth station towards the horizon.

- ADD **470GC** (2C) As an exception to the limits given in No. **470G**, the equivalent isotropically radiated power towards the horizon for an earth station in the space research service (deep-space) shall not exceed $+55 \text{ dBW}$ in any 4 kHz band.

- ADD **470GD** (2D) As an exception to the limits given in No. **470GA**, the equivalent isotropically radiated power towards the horizon for an

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earth station in the space research service (deep-space) shall not exceed +79 dBW in any 1 MHz band.

Replace Regulation No. 470H by the following new text:

- MOD **470H** (3) The limits given in No. **470G**, No. **470GA**, No. **470GC** and
Spa2 No. **470GD**, as applicable, may be exceeded by not more than 10 dB.
However, when the resulting co-ordination area extends into the territory of another country, such increase shall be subject to agreement by the administration of that country.

Delete Regulation No. 470I.

Replace Regulation No. 470J by the following new text:

- MOD **470J** (3A) The limits given in No. **470G** apply in the following frequency bands allocated to transmission by earth stations in the fixed-satellite service and earth exploration-satellite service, and in particular the meteorological-satellite service, where these bands are shared with equal rights with the fixed or mobile service:

2 655 - 2 690 MHz (Regions 2 and 3)
4 400 - 4 700 MHz
5 800 - 5 850 MHz (for the countries mentioned in No. 390)
5 850 - 5 925 MHz (Regions 1 and 3)
5 925 - 6 425 MHz
7 900 - 7 975 MHz
7 975 - 8 025 MHz (for the countries mentioned in No. 392H)
8 025 - 8 400 MHz
10.95 - 11.20 GHz (Region 1)
12.50 - 12.75 GHz (Regions 2 and 3 and for the countries mentioned in No. 405BD)
14.175 - 14.300 GHz (for the countries mentioned in No. 407)
14.4 - 14.5 GHz

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After Regulation No. 470J, add the following new Regulation:

- ADD **470JA** (3B) The limits given in No. **470GA** apply in the following frequency band allocated to transmission by earth stations in the fixed-satellite service, where this is shared with equal rights with the fixed or mobile service:

27.5 - 29.5 GHz

Minimum Angle of Elevation

Replace Regulations Nos. 470K and 470L by the following new texts:

- MOD **470K** § 22. (1) Earth stations.

Spa2

- MOD **470L** (2) Earth station antennae shall not be employed for transmission at elevation angles of less than 3 degrees measured from the horizontal plane to the direction of maximum radiation, except when agreed to by administrations concerned or those whose services may be affected. In case of reception by an earth station, the above value shall be used for co-ordination purposes if the operating angle of elevation is less than that value.

After Regulation No. 470L, add the following new Regulation:

- ADD **470LA** (2A) As an exception to No. **470L**, earth station antennae in the space research service (near-earth) shall not be employed for transmission at elevation angles of less than 5 degrees, and earth station antennae in the space research service (deep-space) shall not be employed for transmission at elevation angles of less than 10 degrees, both angles being those measured from the horizontal plane to the direction of maximum radiation. In case of reception by an earth

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station, the above values shall be used for co-ordination purposes if the operating angle of elevation is less than those values.

Delete Regulation No. 470M.

Replace the sub-title "Power Flux Density Limits" as well as Regulation No. 470N by the following new sub-title and text:

MOD **Spa2** *Limits of Power Flux Density from Space Stations*

MOD **470N** § 23. (1) Power flux density limits between 1 690 MHz and 1 700
Spa2 MHz.

After Regulation No. 470N, add the following new Regulations:

ADD **470NA** a) The power flux density at the Earth's surface produced by emissions from a space station or reflected from a passive satellite for all conditions and for all methods of modulation shall not exceed -133 dBW/m^2 in any 1.5 MHz band. This limit relates to the power flux density which would be obtained under assumed free-space propagation conditions.

ADD **470NB** b) The limit given in No. **470NA** applies in the frequency band listed in No. **470NC** which is allocated to transmission by space stations in the earth exploration-satellite service and in particular the meteorological-satellite service where this band is shared with equal rights with the meteorological aids service.

ADD **470NC** 1 690 - 1 700 MHz
Spa2

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ADD **470ND** (2) Power flux density limits between 1 670 MHz and 2 535
Spa2 MHz.

ADD **470NE** *a)* The power flux density at the Earth's surface produced
Spa2 by emissions from a space station or reflected from
a passive satellite for all conditions and for all methods
of modulation shall not exceed the following values:

— 154 dBW/m² in any 4 kHz band for angles of
arrival between 0 and 5 degrees above the horizontal
plane;

— $154 + \frac{\delta - 5}{2}$ dBW/m² in any 4 kHz band for
angles of arrival δ (in degrees) between 5 and 25 de-
grees above the horizontal plane;

— 144 dBW/m² in any 4 kHz band for angles of
arrival between 25 and 90 degrees above the horizontal
plane.

These limits relate to the power flux density
which would be obtained under assumed free-space
propagation conditions.

ADD **470NF** *b)* The limits given in No. 470NE apply in the frequency
Spa2 bands listed in No. 470NG which are allocated to
transmission by space stations in the following space
radiocommunication services:

- Earth exploration-satellite service and in particular
meteorological-satellite service (space-to-Earth)
- space research service (space-to-Earth)
- fixed-satellite service (space-to-Earth)

where these bands are shared with equal rights with
the fixed or mobile service:

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ADD **470NG** 1 670 - 1 690 MHz
Spa2 1 690 - 1 700 MHz (for the countries mentioned in No.
354A)
1 700 - 1 710 MHz
1 770 - 1 790 MHz (for the countries mentioned in No.
356AA)
2 200 - 2 290 MHz
2 290 - 2 300 MHz
2 500 - 2 535 MHz

ADD **470NGA** c) The power flux density values given in No. 470NE are
Spa2 derived on the basis of protecting the fixed service using
line-of-sight techniques. Where a fixed service using
tropospheric scatter operates in the bands listed in
No. 470NG and where there is insufficient frequency
separation, there must be sufficient angular separation
between the direction to the space station and the
direction of maximum radiation of the antenna of the
receiving station of the fixed service using tropospheric
scatter to ensure that the interference power at the
receiver input of the station of the fixed service does
not exceed -168 dBW in any 4 kHz band.

ADD **470NH** (3) Power flux density limits between 2 500 MHz and
Spa2 2 690 MHz.

ADD **470NI** a) The power flux density at the Earth's surface produced
Spa2 by emissions from a space station in the broadcasting-
satellite service for all conditions and for all methods
of modulation shall not exceed the following values:

— 152 dBW/m² in any 4 kHz band for angles of arrival
between 0 and 5 degrees above the horizontal plane;

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$- 152 + \frac{3(8-5)}{4}$ dBW/m² in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

— 137 dBW/m² in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

ADD **470NJ**
Spa2

- b) The limits given in No. 470NI apply in the frequency band:

2 500 - 2 690 MHz

which is shared by the broadcasting-satellite service with the fixed or mobile service.

ADD **470NK**
Spa2

- c) The power flux density values given in No. 470NI are derived on the basis of protecting the fixed service using line-of-sight techniques. Where a fixed service using tropospheric scatter operates in the band mentioned in No. 470NJ and where there is insufficient frequency separation, there must be sufficient angular separation between the direction to the space station and the direction of maximum radiation of the antenna of the receiving station of the fixed service using tropospheric scatter to ensure that the interference power at the receiver input of the station of the fixed service does not exceed —168 dBW in any 4 kHz band.

ADD **470NL** (4) Power flux density limits between 3 400 MHz and 7 750
Spa2 MHz.

ADD **470NM**
Spa2

- a) The power flux density at the Earth's surface produced by emissions from a space station or reflected from a

ANN 5 (ART 7)

passive satellite for all conditions and for all methods of modulation shall not exceed the following values:

—152 dBW/m² in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

—152 + $\frac{\delta - 5}{2}$ dBW/m² in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

—142 dBW/m² in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

ADD 470NN
Spa2

b) The limits given in No. 470NM apply in the frequency bands listed in No. 470NO which are allocated to transmission by space stations in the following space radiocommunication services:

— fixed-satellite service (space-to-Earth)

— meteorological-satellite service (space-to-Earth)

where these bands are shared with equal rights with the fixed or mobile service:

ADD 470NO
Spa2

3 400 - 4 200 MHz
7 250 - 7 300 MHz (for the countries mentioned in
No. 392G)
7 300 - 7 750 MHz

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ADD **470NP** (5) Power flux density limits between 8 025 MHz and 11·7 GHz.
Spa2

ADD **470NQ** a) The power flux density at the Earth's surface, produced by emissions from a space station, or reflected from a passive satellite for all conditions and for all methods of modulation shall not exceed the following values:

— 150 dBW/m² in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

— $150 + \frac{\delta - 5}{2}$ dBW/m² in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

— 140 dBW/m² in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

ADD **470NR** b) The limits given in No. **470NQ** apply in the frequency bands listed in No. **470NS** which are allocated to transmission by space stations in the following space radiocommunication services:

- earth exploration-satellite service (space-to-Earth)
- space research service (space-to-Earth)
- fixed-satellite service (space-to-Earth)

where these bands are shared with equal rights with the fixed or mobile service:

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- ADD **470NS** 8 025 - 8 400 MHz
Spa2 8 400 - 8 500 MHz
10.95 - 11.20 GHz
11.45 - 11.70 GHz
- ADD **470NT** (6) Power flux density limits between 12.50 GHz and 12.75 GHz.
Spa2
- ADD **470NU** a) The power flux density at the Earth's surface, produced by emissions from a space station or reflected from a passive satellite for all conditions and for all methods of modulation shall not exceed the following values:
- 148 dBW/m² in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;
- 148 + $\frac{\delta - 5}{2}$ dBW/m² in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;
- 138 dBW/m² in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.
- These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.
- ADD **470NV** b) The limits given in No. 470NU apply in the frequency band indicated in No. 470NW which is allocated to the fixed-satellite service for transmission by space stations where this band is shared with equal rights with the fixed or mobile service:
- ADD **470NW** 12.50 - 12.75 GHz (Region 3 and for the countries mentioned in No. 405BD)

ANN 5 (ART 7)

ADD **470NX** (7) Power flux density limits between 17.7 GHz and 22.0 GHz.
Spa2

ADD **470NY** a) The power flux density at the Earth's surface produced by emissions from a space station or reflected from a passive satellite for all conditions and for all methods of modulation shall not exceed the following values:

—115 dBW/m² in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

—115 + $\frac{8-5}{2}$ dBW/m² in any 1 MHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane;

—105 dBW/m² in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

ADD **470NZ** b) The limits given in No. 470NY apply in the frequency bands listed in No. 470NZA which are allocated to transmission by space stations in the following space radiocommunication services:

— fixed-satellite service (space-to-Earth)

— earth exploration-satellite service (space-to-Earth)

where these bands are shared with equal rights with the fixed or mobile service:

ADD **470NZA** 17.7 - 19.7 GHz
Spa2 21.2 - 22.0 GHz

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ADD **470NZB** (8) The limits given in Nos. **470NA**, **470NE**, **470NI**,
Spa2 **470NM**, **470NQ**, **470NU** and **470NY** may be exceeded on the territory
of any country the administration of which has so agreed.

Delete Regulations No. 470O to 470U.

*Delete note¹ on the foot of page 140 (Radio Regula-
tions—1968 edition)*

Replace Section IX by the following new text:

MOD Spa2 **Section IX. Space Radiocommunication Services**

Cessation of Emissions

MOD **470V** § 24. Space stations shall be fitted with devices to ensure imme-
Spa2 diate cessation of their radio emissions by telecommand, whenever
such cessation is required under the provisions of these Regulations.

ADD **Spa2** *Control of Interference between Geostationary-Satellite Systems
and non-synchronous inclined Orbit-Satellite Systems*

ADD **470VA** § 25. Non-geostationary space stations in the fixed-satellite
Spa2 service shall cease or reduce to a negligible level radio emissions,
and their associated earth stations shall not transmit to them whenever
there is insufficient angular separation between the non-geostationary
satellite and geostationary satellites and unacceptable interference¹
to geostationary satellite space systems operating in accordance
with these Regulations.

ADD **470VA.1** ¹ The level of unacceptable interference shall be fixed by agreement between
Spa2 the administrations concerned, using the relevant C.C.I.R. Recommendations as
a guide.

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ADD **Spa2** *Station Keeping of Space Stations*¹

ADD **470VB** § 26. Space stations on geostationary satellites:
Spa2

ADD **470VC** **Spa2** — shall have the capability of maintaining their positions within ± 1 degree of the longitude of their nominal positions, but efforts should be made to achieve a capability of maintaining their positions at least within ± 0.5 degree of the longitude of their nominal positions;

ADD **470VD** **Spa2** — shall maintain their positions within ± 1 degree of longitude of their nominal positions irrespective of the cause of variation; but

ADD **470VE** **Spa2** — need not comply with No. **470VD** as long as the satellite network to which the space station belongs does not produce an unacceptable level of interference² into any other satellite network whose space station complies with the limits given in No. **470VD**.

ADD **Spa2** *Pointing Accuracy of Antennae on Geostationary Satellites*

ADD **470VF** § 27 The pointing direction of maximum radiation of any earthward beam of antennae on geostationary satellites shall be capable of being maintained within:

10% of the half power beamwidth relative to the nominal pointing direction, or

0.5 degree relative to the nominal pointing direction,

ADD **Spa2** ¹ In the case of space stations on geosynchronous satellites with orbits having an angle of inclination greater than 5 degrees the positional tolerance shall relate to the nodal point.

ADD **470VE.1** **Spa2** ² The level of unacceptable interference shall be fixed by agreement between the administrations concerned, using the relevant C.C.I.R. Recommendations as a guide.

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whichever is greater. This provision applies only when such a beam is intended for less than global coverage.

In the event that the beam is not rotationally symmetrical about the axis of maximum radiation, the tolerance in any plane containing this axis shall be related to the half power beamwidth in that plane.

This accuracy shall be maintained only if it is required to avoid unacceptable interference¹ to other systems.

ADD **Spa2** *Power Flux Density at the Geostationary Satellite Orbit*

ADD **470VG** § 28. In the frequency band 8 025 to 8 400 MHz, which the Earth **Spa2** exploration-satellite service using non-geostationary satellites shares with the fixed-satellite service (Earth-to-space) or the meteorological-satellite service (Earth-to-space), the maximum power flux density produced at the geostationary satellite orbit by any earth exploration-satellite service space station shall not exceed —174 dBW/m² in any 4 kHz band.

ADD **470VF.1** ¹ The level of unacceptable interference shall be fixed by agreement between **Spa2** the administrations concerned, using the relevant C.C.I.R. Recommendations as a guide.

ANNEX 6

Revision of Article 8 of the Radio Regulations

Article 8 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 477 by the following new text:

MOD 477
Spa2

- e) the study, on a long-term basis, of the usage of the radio spectrum, with a view to making recommendations for its more effective use;
-

ANNEX 7

Revision of Article 9 of the Radio Regulations

Article 9 of the Radio Regulations shall be amended as follows:

The title of the article as well as the text of footnote⁰ shown on page 143 of the Radio Regulations (1968 edition) are replaced by the following new title and notes:

MOD Spa² Notification and Recording in the Master International Frequency Register of Frequency Assignments¹ to Terrestrial Radiocommunication Stations²

¹ The expression *frequency assignment*, wherever it appears in this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called *Master Register*).

² For the notification and recording in the Master International Frequency Register of frequency assignments to radio astronomy and space radiocommunication stations, see Article 9A.

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**Section I. Notification of Frequency Assignments and Co-ordination
Procedure to be Applied in Appropriate Cases***Delete Regulation No. 486.1**Replace Regulations Nos. 486, 486.2, 486.3 and
486.4 by the following new texts:*

- (MOD) **486** § 1. (1) Any frequency assignment¹ to a fixed, land, broadcasting², radionavigation land, radiolocation land or standard frequency station, or to a ground-based station in the meteorological aids service, shall be notified to the International Frequency Registration Board:
- if the use of the frequency concerned is capable of causing harmful interference to any service of another administration³; or
 - if the frequency is to be used for international radiocommunication, or
 - if it is desired to obtain international recognition of the use of the frequency³

[(MOD) 487 only concerns the French text]

-
- (MOD) **486.1** ¹ In the case where a frequency is used by numerous stations under the jurisdiction of the same administration, see Appendix 1 (Section E, II, Column 5a, paragraphs 2c and 2d).
- (MOD) **486.2** ² With respect to assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kHz and 26 100 kHz, see Article 10.
- MOD **486.3** ³ The attention of administrations is specifically drawn to the application of the provisions of Nos. 486 a) and 486 c) in those cases where they make a frequency assignment to a terrestrial station, located within co-ordination area of an earth station (see No. 492A), in a band which terrestrial radiocommunication services share with equal rights with space radiocommunication services in the frequency spectrum above 1 GHz.

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Replace Regulations Nos. 490, 491, 492, 492A, 492A.1, 492B, 492B.1, 492C, 492D, 492E and 492F by the following new texts:

- MOD 490 (2) When stations of the same service, such as the land mobile service, use a band of frequencies above 28 000 kHz in a specific area or areas, an individual notice should be drawn up, as prescribed in Section C of Appendix 1, which specifies the basic characteristics to be furnished, for each frequency on which there are assignments within the band; however, the particulars should relate only to a typical station. This does not apply to broadcasting stations or to other terrestrial stations to which the provisions of Sub-Section IIB of this article apply or to other stations of the fixed or mobile service which operate in frequency bands listed in Table II of Appendix 28 with equivalent isotropically radiated power exceeding the corresponding values listed in the table.
- MOD 491 § 3. (1) Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than ninety days before the date on which it is to be brought into use, but in any case not later than thirty days after the date it is actually brought into use. However, for a frequency assignment to one of the terrestrial stations mentioned in Sub-Section IIB of this article or in No. 639AQ, the notice must reach the Board not earlier than three years and not later than ninety days before the date on which the assignment is to be brought into use.
- MOD 492 (2) Any frequency assignment, the notice of which reaches the Board more than thirty days after the notified date of bringing into use, or in the case of a terrestrial station mentioned in Sub-Section IIB of this article, any frequency assignment, the notice of which

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reaches the Board less than ninety days before it is brought into use, shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. 491.

MOD **492A** § 3A. (1) Before an administration notifies to the Board, or brings ^{Spa2} into use any frequency assignment to a terrestrial station ¹ for transmitting in a band allocated with equal rights to terrestrial radiocommunication services and space radiocommunication services (space-to-Earth) in the frequency spectrum above 1 GHz, it shall initiate co-ordination of the proposed assignment with the administration responsible for the receiving earth station concerned if the assignment is for use within the co-ordination area of an existing receiving earth station or of one for which the co-ordination procedure referred to in No. 639AN has been initiated. For the purpose of effecting co-ordination, it shall send to any other such administration, by the fastest possible means, a copy of a diagram drawn to an appropriate scale indicating the location of the terrestrial station and all other pertinent details of the proposed frequency assignment, and the approximate date on which it is planned to bring the station into use.

MOD **492B** (2) An administration with which co-ordination is sought ^{Spa2} under No. 492A shall acknowledge receipt of the co-ordination data immediately by telegram. If no acknowledgement is received within

MOD **492A.1** ¹ Appendix 28 contains criteria relating only to co-ordination between earth stations and stations in the fixed or the mobile service. Until the C.C.I.R., in accordance with Recommendation No. ^{Spa2}-9 provides criteria for other terrestrial radiocommunication services, the criteria to be used in effecting co-ordination between earth stations and terrestrial stations other than those of the fixed or the mobile service, shall be agreed between the administrations concerned.

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fifteen days of dispatch, the administration] seeking co-ordination may dispatch a telegram requesting acknowledgement of receipt of the co-ordination data, to which the receiving administration shall reply. Upon receipt of the co-ordination data an administration shall promptly examine the matter with regard to interference¹ which would be caused to the services rendered by its earth stations operating in accordance with the Convention and these Regulations, or to be so operated within the next three years, with the proviso that in this latter case co-ordination specified in No. 639AN has been effected or that the co-ordination procedure has already been initiated; and shall, within an overall period of sixty days from dispatch of the co-ordination data, either notify the administration requesting co-ordination of its agreement to the proposals or, if this is not possible, indicate the reasons therefor and make such suggestions as it may be able to offer with a view to a satisfactory solution of the problem.

MOD 492C (3) No co-ordination under No. 492A is required when an
Spa2 administration proposes:

- a) to bring into use a terrestrial station which is located, in relation to an earth station, outside the co-ordination area, or
- b) to change the characteristics of an existing assignment in such a way as not to increase the level of interference to the earth stations of other administrations.

ADD 492B.1¹ The criteria to be employed in evaluating interference levels shall be based
Spa2 upon relevant C.C.I.R. Recommendations or, in the absence of such Recommendations, shall be agreed between the administrations concerned.

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MOD **492D** (4) An administration seeking co-ordination may request the Board to endeavour to effect co-ordination, in those cases where:

- a) an administration with which co-ordination is sought under No. **492A** fails to acknowledge receipt under No. **492B** within thirty days of dispatch of the co-ordination data,
- b) an administration which has acknowledged receipt under No. **492B** but fails to give a decision within ninety days of dispatch of the co-ordination data,
- c) there is disagreement between the administration seeking co-ordination and an administration with which co-ordination is sought as to the acceptable level of interference; or
- d) co-ordination between administrations is not possible for any other reason.

In so doing, it shall furnish the Board with the necessary information to enable it to endeavour to effect such co-ordination.

MOD **492E** (5) Either the administration seeking co-ordination or an administration with which co-ordination is sought, or the Board, may request additional information which they may require to assess the level of interference to the services concerned.

MOD **492F** (6) Where the Board receives a request under No. **492D a),** it shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.

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After Regulation No. 492F, add the following new Regulations:

ADD **492FA** (7) Where the Board receives an acknowledgement following Spa2 its action under No. 492F, or where the Board receives a request under No. 492D b), it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.

ADD **492FB** (8) Where the Board receives a request under No. 492D d), Spa2 it shall endeavour to effect co-ordination in accordance with the provisions of No. 492A. Where the Board receives no acknowledgement of its request for co-ordination within the period specified in No. 492B, it shall act in accordance with No. 492F

ADD **492FC** (9) Where an administration fails to reply within thirty days of dispatch of the Board's telegram sent under No. 492F requesting an acknowledgement, or fails to give a decision in the matter within sixty days of dispatch of the Board's telegram of request sent under No. 492FA, it shall be deemed that the administration with which co-ordination was sought has undertaken that no complaint will be made in respect of any harmful interference which may be caused by the terrestrial station being co-ordinated to the service rendered by its earth station.

Replace Regulation No. 492G by the following new text:

MOD **492G** (10) Where necessary, as part of the procedure under No. 492D, Spa2 the Board shall assess the level of interference. In any case, the Board shall inform the administrations concerned of the results obtained.

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After Regulation No. 492G, add the following new Regulations:

- ADD **492GA** (11) In the event of continuing disagreement between one administration seeking to effect co-ordination and one with which co-ordination has been sought, provided that the assistance of the Board has been requested, the administration seeking co-ordination may, after sixty days from the date of the request for the assistance of the Board, taking into consideration the provisions of No. 491, send its notice concerning the proposed assignment to the Board.
- ADD **492GB § 3B.** Where the Board receives information from an administration in accordance with the provisions of No. 639AQ in reply to a request for co-ordination for an earth station, it shall consider as notifications under this Section, only that information relating to assignments to existing terrestrial stations or to those to be brought into use within the time limits defined in No. 491. Such notifications shall be examined by the Board with respect to the provisions of Nos. 570AB and 570AD, as appropriate, and shall be treated accordingly.

Replace No. 493 by the following new text:

- (MOD) **493** § 3C. (1) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.

Replace the title of Sub-Section IIA by the following new title:

- MOD **Spa2** Sub-Section IIA. Procedure to be followed in cases not covered by Sub-Section IIB of this Article

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.....

[(MOD) 501 only concerns the French and the Spanish texts]

.....

Replace the title of Sub-Section IIB by the following new title:

MOD Spa2 Sub-Section IIB. Procedure to be followed in cases where terrestrial stations are in the same frequency band as, and within the co-ordination area of, an existing earth station or one for which co-ordination has been effected or initiated

.....

[(MOD) 570AB only concerns the French and the Spanish texts]

.....

Replace Regulation No. 570AD by the following new text:

(MOD) 570AD Spa2 c) where appropriate, with respect to the probability of harmful interference to the service rendered by an earth receiving station for which a frequency assignment already recorded in the Master Register is in conformity with the provisions of No. 639BM, and if the corresponding frequency assignment to the space trans-

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mitting station has not, in fact, caused harmful interference to any frequency assignment in conformity with No. 501 or 570AB, as appropriate, previously recorded in the Master Register.

Replace Regulation No. 570AG by the following new text:

MOD **570AG** (2) Where the notice includes a specific reference to the fact that ~~Spa2~~ the station will be operated in accordance with the provisions of No. 115, it shall be examined immediately with respect to Nos. 570AC and 570AD.

After Regulation No. 570AG, add the following new Regulations:

ADD **570AGA** (3) If the finding is favourable with respect to No. 570AC or ~~Spa2~~ 570AD, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

ADD **570AGB** (4) If the finding is unfavourable with respect to No. 570AC or ~~Spa2~~ 570AD, as appropriate, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding. Should the administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

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ADD **570AGC** (5) The period of one hundred and twenty days mentioned in
Spa2 Nos. **570AGB** and **570AX** shall count:

- from the date when the assignment to the terrestrial station which received an unfavourable finding is brought into use, if the assignment to the earth station is then in use;
- otherwise, from the date when the assignment to the earth station is brought into use.

But if the assignment to the earth station has not been brought into use by the notified date, the period of one hundred and twenty days shall be counted from that date. Allowance, if necessary, may be made for the additional period mentioned in No. **570BF**.

Replace Regulations Nos. 570AH to 570AK by the following new texts:

(MOD) **570AH** (6) Where the notice does not include a specific reference to
Spa2 the fact that the station will be operated in accordance with the provisions of No. **115**, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

(MOD) **570AI** (7) If the notifying administration resubmits the notice unchanged, it shall be treated in accordance with the provisions of No. **570AH**.

MOD **570AJ** (8) If the notifying administration resubmits the notice with a specific reference to the fact that the station will be operated in accordance with the provisions of No. **115**, it shall be treated in accordance with the provisions of Nos. **570AG** and **570AGA** or No. **570AGB**, as appropriate.

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(MOD) **570AK** (9) If the notifying administration resubmits the notice with
Spa2 modifications which, after re-examination, result in a favourable
finding by the Board with respect to No. 570AB, the notice shall be
treated under the provisions of Nos. 570AL to 570AX. However,
in any subsequent recording of the assignment, the date of receipt
by the Board of the resubmitted notice shall be entered in Column 2d.

[(MOD) 570AM, (MOD) 570AN, (MOD) 570AO and (MOD) 570AP
only concerns the Spanish text]

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[(MOD) **570AV** only concerns the Spanish text]

.....

Replace Regulation No. 570AX by the following new text:

MOD **570AX** (4) Should the notifying administration resubmit the notice, ^{Spa2} either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. **570AW** to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column. The period of one hundred and twenty days shall count from the date indicated in No. **570AGC**.

Delete Regulation No. 570AY.

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Replace Regulation No. 570BA by the following new text:

MOD **570BA** (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Columns 3 and 4a of the Master Register), shall be examined by the Board according to Nos. **570AB** and **570AC** and, where appropriate, No. **570AD**, and the provisions of Nos. **570AF** to **570AX** inclusive applied. Where the change should be recorded, the original assignment shall be amended according to the notice.

Replace Regulation No. 570BC by the following new text:

(MOD) **570BC** § 23H. In applying the provisions of this Sub-Section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board, shall be considered as a new notice.

Replace Regulations Nos. 570BF, 570BG and 570BH by the following new texts:

(MOD) **570BF** (3) If, within the period of thirty days after the projected date of bringing into use, the Board receives confirmation from the notifying administration of the date of bringing into use, the special symbol shall be deleted from the Remarks Column. In the case where the Board, in the light of a request from the notifying administration received before the end of the thirty-day period, finds that exceptional circumstances warrant an extension of this period, the extension shall in no case exceed one hundred and fifty days.

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MOD 570BG (4) In the circumstances described in No. 570AX, and as long as an assignment which received an unfavourable finding cannot be resubmitted as a consequence of the provisions of No. 570AGC, the notifying administration may ask the Board to enter the assignment provisionally in the Master Register, in which event a special symbol to denote the provisional nature of the entry shall be entered in the Remarks Column. The Board shall delete this symbol when it receives from the notifying administration, at the end of the period specified in No. 570AX, the information relating to the absence of complaint of harmful interference.

MOD 570BH (5) If the Board does not receive this confirmation within the period referred to in No. 570BF or at the end of the period referred to in No. 570BG, as appropriate, the entry concerned shall be cancelled. The Board shall advise the notifying administration before taking such action.

Replace Regulation No. 611A by the following new text:

(MOD) 611A (6) If harmful interference to the reception of any station whose assignment is in accordance with No. 639BM is actually caused by the use of a frequency assignment which is not in conformity with No. 501 or 570AB, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

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Section VIII. Miscellaneous Provisions

After Regulation No. 635, add the following new Regulations:

ADD 635A § 47A. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, and if the circumstances appear to warrant, the Board using such means at its disposal as are appropriate in the circumstances, shall render the following assistance:

- a) verification of the diagram showing the co-ordination area referred to in No. 639AN;
- b) computation of the interference level, as referred to in No. 492B;
- c) any other assistance of a technical nature for completion of the procedures in this Article.

ADD 635B (2) In making a request to the Board under No. 635A, the administration shall furnish the Board with the necessary information.

ANNEX 8

Revision of Article 9A of the Radio Regulations

Article 9A of the Radio Regulations shall be amended as follows:

The entire Article 9A is replaced by the following new text:

MOD Spa2

ARTICLE 9A

Co-ordination, Notification and Recording in the Master International Frequency Register of Frequency Assignments¹ to Radio Astronomy and Space Radiocommunication Stations except Stations in the Broadcasting-Satellite Service

Section I. Procedure for the Advance Publication of Information on Planned Satellite Systems

639AA § 1: (1) An administration (or one acting on behalf of a group of Spa2 named administrations) which intends to establish a satellite system shall, prior to the co-ordination procedure in accordance with No. 639AJ where applicable, send to the International Frequency Registration Board not earlier than five years before the date of bringing into service each satellite network of the planned system, the information listed in Appendix 1B.

¹ The expression *frequency assignment*, wherever it appears in this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called *Master Register*).

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639AB (2) Any amendments to the information sent concerning a
Spa2 planned satellite system in accordance with No. 639AA shall also be
sent to the Board as soon as they become available.

639AC (3) The Board shall publish the information sent under
Spa2 Nos. 639AA and 639AB in a special section of its weekly circular and
shall also, when the weekly circular contains such information, so
advise all administrations by circular telegram.

639AD (4) If, after studying the information published under
Spa2 No. 639AC, any administration is of the opinion that interference,
which may be unacceptable, may be caused to its existing or planned
space radiocommunication services, it shall within ninety days after
the date of the weekly circular publishing the information listed in
Appendix 1B, send its comments to the administration concerned.
A copy of these comments shall also be sent to the Board. If no such
comments are received from an administration within the period
mentioned above, it may be assumed that that administration has no
basic objections to the planned satellite network(s) of that system
on which details have been published.

639AE (5) An administration receiving comments sent in accordance
Spa2 with No. 639AD shall endeavour to resolve any difficulties that may
arise.

639AF (6) In case of difficulties arising when any planned satellite
Spa2 network of a system is intended to use the geostationary satellite
orbit:

- a) the administration responsible for the planned system
shall first explore all possible means of meeting its
requirements, taking into account the characteristics
of the geostationary satellite networks of other systems,
and without considering the possibility of adjustment

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to systems of other administrations. If no such means can be found, the administration concerned is then free to apply to other administrations concerned to solve these difficulties;

- b) an administration receiving a request under a) above shall, in consultation with the requesting administration, explore all possible means of meeting the requirements of the requesting administration, for example, by relocating one or more of its own geostationary space stations involved, or by changing the emissions, frequency usage (including changes in frequency bands) or other technical or operational characteristics;
- c) if after following the procedure outlined in a) and b) above there are unresolved difficulties, the administrations concerned shall together make every possible effort to resolve these difficulties by means of mutually acceptable adjustments, for example, to geostationary space station locations and to other characteristics of the systems involved in order to provide for the normal operation of both the planned and existing systems.

639AG (7) In their attempts to resolve the difficulties mentioned above
Spa2 administrations may seek the assistance of the Board.

639AH (8) In complying with the provisions of Nos. 639AE to 639AG,
Spa2 an administration responsible for a planned satellite system shall, if necessary, defer its commencement of the co-ordination procedure, or where this is not applicable, the sending of its notices to the Board, until one hundred and fifty days after the date of the weekly circular containing the information listed in Appendix 1B on the relevant satellite network. However, in respect of those administrations with

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whom difficulties have been resolved or who have responded favourably, the co-ordination procedure, where applicable, may be commenced prior to the expiry of the one hundred and fifty days mentioned above.

639AI (9) An administration on behalf of which details of planned satellite networks in its system have been published, in accordance with the provisions of Nos. 639AA to 639AC, shall periodically inform the Board whether or not comments have been received and of the progress made, with other administrations, in resolving any difficulties. The Board shall publish this information in a special section of its weekly circular and shall also, when the weekly circular contains such information, so inform all administrations by circular telegram.

**Section II. Co-ordination Procedures to be applied
in appropriate Cases**

639AJ § 2. (1) Before an administration notifies to the Board or brings into use any frequency assignment to a space station on a geostationary satellite or to an earth station that is to communicate with a space station on a geostationary satellite, it shall effect co-ordination of the assignment with any other administration whose assignment in the same band for a space station on a geostationary satellite or for an earth station that communicates with a space station on a geostationary satellite is recorded in the Master Register, or has been co-ordinated or is being co-ordinated under the provisions of this paragraph. For this purpose, the administration requesting co-ordination shall send to any other such administration the information listed in Appendix 1A.

639AK (2) No co-ordination under No. 639AJ is required:
Spa2

- a) when the use of a new frequency assignment will cause, to any service of another administration, an increase in the noise temperature of any space station receiver or earth station receiver, or an increase in the equiv-

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alent satellite link noise temperature, as appropriate, not exceeding the predetermined increase of noise temperature calculated in accordance with the method given in Appendix 29; or

- b) when an administration proposes to change the characteristics of an existing assignment in such a way as will, in respect of any service of another administration, meet the requirements of sub-paragraph a) above, or, where this assignment has previously been coordinated, will cause an increase in noise temperature not exceeding the value agreed during co-ordination.

639AL (3) An administration initiating the co-ordination procedure referred to in No. 639AJ shall at the same time send to the Board a copy of the request for co-ordination, with the information listed in Appendix 1A and the name(s) of the administration(s) with which co-ordination is sought. The Board shall publish this information in a special section of its weekly circular, together with a reference to the weekly circular in which details of the satellite system were published in accordance with Section I of this Article. When the weekly circular contains such information, the Board shall so inform all administrations by circular telegram.

639AM (4) An administration believing that it should have been included in the co-ordination procedure under No. 639AJ shall have the right to request that it be brought into the co-ordination procedure.

639AN§ 3. (1) Before an administration notifies to the Board or brings into use any frequency assignment to an earth station, whether for transmitting or receiving, in a particular band allocated with equal

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rights to space and terrestrial¹ radiocommunication services in the frequency spectrum above 1 GHz, it shall effect co-ordination of the assignment with any other administration whose territory lies wholly or partly within the co-ordination area² of the planned earth station. For this purpose it shall send to any other such administration a copy of a diagram drawn to an appropriate scale indicating the location of the earth station and showing the co-ordination areas² of the earth station for the cases of transmission and reception by the earth station and the data on which they are based; including all pertinent details of the proposed frequency assignment, as listed in Appendix 1A, and an indication of the approximate date on which it is planned to begin operations.

639AO (2) An administration with which co-ordination is sought under No. 639AJ shall acknowledge receipt of the co-ordination data immediately by telegram. If no acknowledgement is received within thirty days after the date of the weekly circular publishing the information under No. 639AL, the administration seeking co-ordination shall dispatch a telegram requesting acknowledgement, to which the receiving administration shall reply within a further period of thirty days. Upon receipt of the co-ordination data, an administration shall, having regard to the proposed date of bringing into use of the assignment for which co-ordination was requested,

639AN.1 ¹ Appendix 28 contains criteria relating only to co-ordination between earth stations and stations in the fixed or mobile service. Until the C.C.I.R., in accordance with Recommendation No. Spa2-9 provides criteria relating to other terrestrial radiocommunication services, the criteria to be employed in effecting co-ordination between earth stations and terrestrial radiocommunication stations, other than those of the fixed or mobile service, shall be agreed between the administrations concerned.

639AN.2 ² Calculated, in relation to the fixed or mobile service, in accordance with the procedures described in Appendix 28.

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promptly examine the matter with regard to interference¹ which would be caused to the service rendered by its stations in respect of which co-ordination is sought under No. 639AJ, and shall, within ninety days from the date of the relevant weekly circular, notify the administration requesting co-ordination of its agreement. If the administration with which co-ordination is sought does not agree, it shall, within the same period, send to the administration seeking co-ordination the technical details upon which its disagreement is based, and make such suggestions as it may be able to offer with a view to a satisfactory solution of the problem. A copy of these comments shall also be sent to the Board.

639AP (3) An administration with which co-ordination is sought under No. 639AN shall acknowledge receipt of the co-ordination data immediately by telegram. If no acknowledgement is received within fifteen days of dispatch of the co-ordination data, the administration seeking co-ordination shall dispatch a telegram requesting acknowledgement, to which the receiving administration shall reply within a further period of fifteen days. Upon receipt of the co-ordination data an administration shall, having regard to the proposed date of bringing into use of the assignment for which co-ordination was requested, promptly examine the matter with regard both to:

- a) interference² which would be caused to the service rendered by its terrestrial radiocommunication stations operating in accordance with the Convention and these Regulations, or to be so operated prior to the planned date of bringing the earth station assignment into service, or within the next three years, whichever is the longer; and to

639AO.1 ¹ The criteria to be employed in evaluating interference levels shall be based upon relevant C.C.I.R. Recommendations or, in the absence of such Recommendations, shall be agreed between the administrations concerned.

639AP.1 ² The criteria to be employed in evaluating interference levels shall be based upon relevant C.C.I.R. Recommendations or, in the absence of such Recommendations, shall be agreed between the administrations concerned.

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- b) interference¹ which would be caused to reception at the earth station by the service rendered by its terrestrial radiocommunication stations operating in accordance with the Convention and these Regulations, or to be so operated prior to the planned date of bringing the earth station assignment into service, or within the next three years, whichever is the longer.

The administration with which co-ordination is sought shall then, within sixty days from dispatch of the co-ordination data, notify the administration requesting co-ordination of its agreement. If the administration with which co-ordination is sought does not agree it shall, within the same period, send to the administration seeking co-ordination a copy of a diagram drawn to an appropriate scale showing the location of its terrestrial radiocommunication stations which are or will be within the co-ordination area of the earth transmitting or receiving station, as appropriate, together with all other relevant basic characteristics, and make such suggestions as it may be able to offer with a view to a satisfactory solution of the problem.

639AQ (4) When the administration with which co-ordination is sought sends to the administration seeking co-ordination the information mentioned in No. 639AP, a copy thereof shall also be sent to the Board. The Board shall consider as notifications in accordance with Section I of Article 9, only that information relating to existing terrestrial radiocommunication stations or to those to be brought into use within the next three years.

639AR (5) No co-ordination under No. 639AN is required when an administration proposes:

639AP.1 ¹ The criteria to be employed in evaluating interference levels shall be based upon relevant C.C.I.R. Recommendations or, in the absence of such Recommendations, shall be agreed between the administrations concerned.

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- a) to bring into use an earth station, the co-ordination area of which does not include any of the territory of any other country;
- b) to change the characteristics of an existing assignment in such a way as not to increase the level of interference to or from the terrestrial radiocommunication stations of other administrations;
- c) to operate a mobile earth station. However, if the co-ordination area associated with the operation of such a mobile earth station, in a frequency band referred to in No. 639AN, includes any of the territory of another country, it shall be subject to prior agreement between the administrations concerned in order to avoid harmful interference to existing terrestrial radiocommunication stations of that country. This agreement shall apply to the characteristics of the mobile earth station(s), or to the characteristics of a typical mobile earth station, and shall apply to a specified service area, unless otherwise stipulated in the agreement, it shall apply to any mobile earth stations in the specified service area provided that the probability of harmful interference caused by them shall not be greater than that caused by the typical earth station.

639AS § 4. (1) An administration seeking co-ordination may request the Board to endeavour to effect co-ordination in those cases where:

- a) an administration with which co-ordination is sought under No. 639AJ fails to acknowledge receipt, under

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No. 639AO, within sixty days after the date of the weekly circular publishing the information relating to the request for co-ordination,

- b) an administration with which co-ordination is sought under No. 639AN fails to acknowledge receipt, under No. 639AP, within thirty days of dispatch of the co-ordination data,
- c) an administration has acknowledged receipt under No. 639AO, but fails to give a decision within ninety days from the date of the relevant weekly circular;
- d) an administration has acknowledged receipt under No. 639AP, but fails to give a decision within sixty days from dispatch of the co-ordination data,
- e) there is disagreement between the administration seeking co-ordination and an administration with which co-ordination is sought as to the acceptable level of interference;
- f) co-ordination between administrations is not possible for any other reason.

In so doing, it shall furnish the Board with the necessary information to enable it to endeavour to effect such co-ordination.

639AT (2) Either the administration seeking co-ordination or an administration with which co-ordination is sought, or the Board, may request additional information which they may require to assess the level of interference to the services concerned.
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639AU (3) Where the Board receives a request under No. 639AS *a*)
Spa2 or *b*), it shall forthwith send a telegram to the administration concerned requesting immediate acknowledgement.

639AV (4) Where the Board receives an acknowledgement following Spa2 its action under No. 639AU, or where the Board receives a request under No. 639AS *c*) or *d*), it shall forthwith send a telegram to the administration concerned requesting an early decision in the matter.

639AW (5) Where the Board receives a request under No. 639AS *f*),
Spa2 it shall endeavour to effect co-ordination in accordance with the provisions of Nos. 639AJ and 639AN, as appropriate. The Board shall also, where appropriate, act in accordance with No. 639AL. Where the Board receives no acknowledgement to its request for co-ordination within the periods specified in No. 639AO or 639AP, as appropriate, it shall act in accordance with No. 639AU.

639AX (6) Where an administration fails to reply within thirty days
Spa2 of dispatch of the Board's telegram requesting an acknowledgement sent under No. 639AU, or fails to give a decision in the matter within thirty days of dispatch of the Board's telegram of request under No. 639AV, it shall be deemed that the administration with which co-ordination was sought has undertaken.

- a*) that no complaint will be made in respect of any harmful interference which may be caused to the services rendered by its space or terrestrial radiocommunication stations by the use of the assignment for which co-ordination was requested;
- b*) that its space or terrestrial radiocommunication stations will not cause harmful interference to the use

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of the assignment for which co-ordination was requested.

639AY (7) Where necessary, as part of the procedure under No. 639AS, the Board shall assess the level of interference. In any case, the Board shall inform the administrations concerned of the results obtained.

639AZ § 5. In the event of continuing disagreement between one administration seeking to effect co-ordination and one with which co-ordination has been sought, provided that the assistance of the Board has been requested, the administration seeking co-ordination may, after one hundred and fifty days from the date of the request for co-ordination, taking into consideration the provisions of No. 639BF, send its notice concerning the proposed assignment to the Board.

Section III. Notification of Frequency Assignments

639BA § 6. (1) Any frequency assignment to an earth or space station shall be notified to the Board:

- a) if the use of the frequency concerned is capable of causing harmful interference to any service of another administration, or
- b) if the frequency is to be used for international radio-communications; or
- c) if it is desired to obtain international recognition of the use of the frequency.

639BB (2) Similar notice shall be given for any frequency to be used for the reception of transmissions from earth or space stations by a particular space or earth station in each case where one or more of the conditions specified in No. 639BA are applicable.

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639BC (3) Similar notice may be given for any frequency or frequency band to be used for reception by a particular radio astronomy station, if it is desired that such data should be included in the Master Register.

639BD (4) A notice submitted in accordance with No. **639BA** or **639BB** and relating to a frequency assignment to mobile earth stations in a satellite system shall include the technical characteristics either of each mobile earth station, or of a typical mobile earth station, and an indication of the service area within which these stations are to be operated.

639BE § 7 For any notification under No. **639BA**, **639BB**, **639BC**, or **639BD**, an individual notice for each frequency assignment shall be drawn up as prescribed in Appendix 1A, the various Sections of which specify the basic characteristics to be furnished according to the case. It is recommended that the notifying administration should also supply the additional data called for in Section A of that Appendix, together with such further data as it may consider appropriate.

639BF § 8. (1) For a frequency assignment to an earth or space station, each notice must reach the Board not earlier than three years before the date on which the assignment is to be brought into use. The notice must reach the Board in any case not later than ninety days¹ before this date, except in the case of assignments in the space research service in bands allocated exclusively to this service or in shared bands in which this service is the sole primary service. In the case of such an assignment in the space research service, the notice should, whenever practicable, reach the Board before the date on which the assignment is brought into use, but it must in any case reach the Board not later than thirty days after the date it is actually brought into use.

639BF.1 ¹ The notifying administration shall take this limit into account when deciding, where appropriate, to initiate the co-ordination procedure(s).

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639BG (2) Any frequency assignment to an earth or space station, the notice of which reaches the Board after the applicable period specified in No. 639BF, shall, where it is to be recorded, bear a mark in the Master Register to indicate that it is not in conformity with No. 639BF

Section IV Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register

639BH § 9. Any notice which does not contain at least those basic characteristics specified in Appendix 1A, shall be returned by the Board immediately, by airmail, to the notifying administration with the reasons therefor.

639BI § 10. Upon receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in the weekly circular referred to in No. 497, which shall contain the particulars of all such notices received since the publication of the previous circular.

639BJ § 11. The circular shall constitute the acknowledgement to the notifying administration of the receipt of a complete notice.

639BK § 12. Complete notices shall be considered by the Board in the order of their receipt. The Board shall not postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith, moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until it has reached a finding with respect to such earlier notice.

639BL § 13. The Board shall examine each notice:

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639BM a) with respect to its conformity with the Convention, the Table of Frequency Allocations and the other pro-

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visions of the Radio Regulations (with the exception of those relating to the co-ordination procedures and the probability of harmful interference);

- 639BN** *b)* where appropriate, with respect to its conformity with the provisions of No. 639AJ, relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-a-vis space radiocommunication stations;
- 639BO** *c)* where appropriate, with respect to its conformity with the provisions of No. 639AN relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-a-vis terrestrial radiocommunication stations;
- 639BP** *d)* where appropriate, with respect to the probability of harmful interference to the service rendered by a space radiocommunication station for which a frequency assignment already recorded in the Master Register is in conformity with the provisions of No. 639BM if this frequency assignment has not in fact caused harmful interference to any frequency assignment in conformity with No. 639BM previously recorded in the Master Register;
- 639BQ** *e)* where appropriate, with respect to the probability of harmful interference to the service rendered by a terrestrial radiocommunication station for which a frequency assignment already recorded in the Master Register is in conformity with the provisions of No. 501 or 570AB, as appropriate, if this frequency assignment has not, in fact, caused harmful interference to any frequency assignment in conformity with No. 639BM previously recorded in the Master Register;

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639BR f) where appropriate, with respect to the probability of harmful interference caused to the receiving earth station by a terrestrial radiocommunication station for which a frequency assignment already recorded in the Master Register is in conformity with No. 501 or 570AB, as appropriate.

639BS § 14 When, following an examination of a notice with respect to No. 639BP, the Board reaches an unfavourable finding based upon the probability of harmful interference to a recorded assignment for a space station which the Board has reason to believe may not be in regular use, the Board shall forthwith consult the administration responsible for the registered assignment. If it is established, after such consultation and on the basis of the information available, that the recorded assignment has not been in use for two years, it shall not be taken into account for the purposes of the examination in progress or any other further examination under No. 639BP conducted before the date on which the assignment is brought back into use. Before the assignment is brought back into use, it shall be subject to further co-ordination in accordance with the provisions of No. 639AJ or further examination by the Board with respect to No. 639BP, as appropriate. The date on which the assignment is brought back into use shall then be entered in the Master Register.

639BT § 15. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 639BM, 639BN, 639BO, 639BP, 639BQ and 639BR, as appropriate, further action shall be as follows:

639BU § 16. (1) *Finding favourable with respect to No. 639BM in cases where the provisions of Nos. 639BN and 639BO are not applicable.*

639BV (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

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639BW § 17 (1) *Finding unfavourable with respect to No. 639BM.*

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639BX (2) Where the notice includes a specific reference to the fact
Spa2 that the station will be operated in accordance with the provisions
of No. 115, and the finding is favourable with respect to Nos. 639BN,
639BO, 639BP, 639BQ and 639BR, as appropriate, the assignment
shall be recorded in the Master Register. The date of receipt by the
Board of the notice shall be entered in Column 2d.

639BY (3) Where the notice includes a specific reference to the fact
Spa2 that the station will be operated in accordance with the provisions
of No. 115 and the finding is unfavourable with respect to No. 639BN,
639BO, 639BP, 639BQ or 639BR, as appropriate, the notice shall be
returned immediately by airmail to the notifying administration
with the reasons of the Board for this finding. Should the admin-
istration insist upon reconsideration of the notice, the assignment
shall be recorded in the Master Register. However, this entry shall
be made only if the notifying administration informs the Board that
the assignment has been in use for at least one hundred and twenty
days without any complaint of harmful interference having been
received. The date of receipt by the Board of the original notice
shall be entered in Column 2d. The date of receipt by the Board
of the advice that no complaint of harmful interference has been
received shall be indicated in the Remarks Column.

639BZ (4) The period of one hundred and twenty days mentioned in
Spa2 Nos. 639BY and 639CP shall count:

- from the date when the assignment to the space radio-
communication station which received an unfavourable
finding is brought into use, if the assignment to the
station which was the basis for the unfavourable finding
is then in use;
- otherwise, from the date when the assignment to the
station which was the basis for the unfavourable finding
is brought into use.

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But if the assignment to the station which was the basis for the unfavourable finding has not been brought into use by the notified date, the period of one hundred and twenty days shall be counted from this date. Allowance shall, if necessary, be made for the additional period mentioned in No. 639CY.

639CA (5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 115, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

639CB (6) If the notifying administration resubmits the notice unchanged, it shall be treated in accordance with the provisions of No. 639CA. If it is resubmitted with a specific reference to the fact that the station will be operated in accordance with the provisions of No. 115, it shall be treated in accordance with the provisions of No. 639BX or 639BY, as appropriate. If it is resubmitted with modifications which, after re-examination, result in a favourable finding by the Board with respect to No. 639BM, it shall be treated as a new notice.

639CC § 18. (1) *Finding favourable with respect to No. 639BM in cases where the provisions of No. 639BN or 639BO are applicable.*

639CD (2) Where the Board finds that the co-ordination procedures mentioned in No. 639BN or 639BO have been successfully completed with all administrations whose space or terrestrial radio-communication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

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639CE (3) Where the Board finds that either of the co-ordination procedures mentioned in Nos. 639BN and 639BO has not been applied, and the notifying administration requests the Board to effect the required co-ordination, the Board shall take appropriate action and shall inform the administrations concerned of the results obtained. If the Board's efforts are successful, the notice shall be treated in accordance with No. 639CD. If the Board's efforts are unsuccessful, the notice shall be examined by the Board with respect to the provisions of Nos. 639BP, 639BQ and 639BR, as appropriate.

639CF (4) Where the Board finds that either of the co-ordination procedures mentioned in Nos. 639BN and 639BO has not been applied, and the notifying administration does not request the Board to effect the required co-ordination, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this action and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

639CG (5) Where the notifying administration resubmits the notice and the Board finds that the co-ordination procedures mentioned in Nos. 639BN and 639BO have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

639CH (6) Where the notifying administration resubmits the notice with a request that the Board effect the required co-ordination under No. 639AJ or 639AN, it shall be treated in accordance with the provisions of No. 639CE. However, in any subsequent recording

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of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

639CI (7) Where the notifying administration resubmits the notice and states it has been unsuccessful in effecting the co-ordination, the Board shall inform the administrations concerned thereof. The notice shall be examined by the Board with respect to the provisions of Nos. 639BP, 639BQ and 639BR, as appropriate. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

639CJ § 19. (1) *Finding favourable with respect to Nos. 639BM, 639BP, 639BQ and 639BR, as appropriate.*

639CK (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

639CL (3) However, should the examination show that the level of interference noise and the percentage of time during which it is likely to occur have values slightly greater than those used for assessing the probability of harmful interference (extreme propagation conditions, abnormal atmospheric humidity, etc.), a remark shall be included in the Master Register to show that there may be a slight risk of harmful interference and hence additional precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.

639CM § 20. (1) *Finding favourable with respect to No. 639BM but unfavourable with respect to No. 639BP, 639BQ or 639BR, as appropriate.*

639CN (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this

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finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

639CO (3) Should the notifying administration resubmit the notice
Spa2 with modifications which result, after re-examination, in a favourable finding by the Board with respect to Nos. 639BP, 639BQ and 639BR, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

639CP (4) Should the notifying administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 639CO to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column. The period of one hundred and twenty days shall count from the date indicated in No. 639BZ.

639CQ § 21. (1) Notices relating to radio astronomy stations.

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639CR (2) A notice relating to a radio astronomy station shall not
Spa2 be examined by the Board with respect to Nos. 639BN, 639BO, 639BP, 639BQ and 639BR. Whatever the finding, the assignment

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shall be recorded in the Master Register with a date in Column 2c. The date of receipt by the Board of the notice shall be recorded in the Remarks Column.

639CS § 22. (1) *Change in the basic characteristics of assignments already recorded in the Master Register.*

639CT (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1A (except the name of the station or the name of the locality in which it is situated) shall be examined by the Board according to No. 639BM, and, where appropriate, Nos. 639BN, 639BO, 639BP, 639BQ and 639BR, and the provisions of Nos. 639BU to 639CR inclusive shall apply. Where the change should be recorded, the original assignment shall be amended according to the notice.

639CU (3) However, in the case of a change in the characteristics of an assignment which is in conformity with No. 639BM, should the Board reach a favourable finding with respect to Nos. 639BN, 639BO, 639BP, 639BQ and 639BR, where appropriate, or find that the changes do not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in Column 2d. The date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

639CV § 23. In applying the provisions of this section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board, shall be considered as a new notice.

639CW § 24. (1) *Recording of frequency assignments notified before being brought into use.*

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639CX (2) If a frequency assignment notified in advance of bringing
Spa2 into use has received a favourable finding by the Board with respect
to No. 639BM and, where appropriate, Nos. 639BN, 639BO,
639BP, 639BQ and 639BR, it shall be entered provisionally in the
Master Register with a special symbol in the Remarks Column
indicating the provisional nature of that entry.

639CY (3) If, within thirty days after the projected date of bringing
Spa2 into use, the Board receives confirmation from the notifying adminis-
tration of the date of putting into use, the special symbol shall
be deleted from the Remarks Column. In the case where the
Board, in the light of a request from the notifying administration
received before the end of the thirty-day period, finds that excep-
tional circumstances warrant an extension of this period, the exten-
sion shall in no case exceed one hundred and fifty days.

639CZ (4) In the circumstances described in Nos. 639BY and 639CP,
Spa2 and as long as an assignment which received an unfavourable find-
ing cannot be resubmitted as a consequence of the provisions of
No. 639BZ, the notifying administration may ask the Board to
enter the assignment provisionally in the Master Register, in which
event a special symbol to denote the provisional nature of the entry
shall be entered in the Remarks Column. The Board shall delete
this symbol when it receives from the notifying administration, at
the end of the period specified in No. 639BY or 639CP, as appro-
priate, the information relating to the absence of complaint of
harmful interference.

639DA (5) If the Board does not receive this confirmation within the
Spa2 period referred to in No. 639CY or at the end of the period referred
to in No. 639BY or 639CP, as appropriate, the entry concerned shall
be cancelled. The Board shall advise the administration concerned
before taking such action.

Section V Recording of Findings in the Master Register

639DB § 25. In any case where a frequency assignment is recorded in the
Spa2 Master Register, the finding reached by the Board shall be indicated

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by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.

Section VI. Categories of Frequency Assignments

639DC § 26. (1) The date in Column 2c shall be the date of putting into use
Spa2 notified by the administration concerned. It is given for information only.

639DD (2) If harmful interference is actually caused to the reception
Spa2 of any space radiocommunication station whose frequency assignment has been recorded in the Master Register as a result of a favourable finding with respect to Nos. **639BM**, **639BN**, **639BO**, **639BP**, **639BQ** and **639BR**, as appropriate, by the use of a frequency assignment to a space radiocommunication station subsequently recorded in the Master Register in accordance with the provisions of No. **639CP**, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

639DE (3) If harmful interference to the reception of any station whose
Spa2 assignment is in accordance with No. **501**, **570AB** or **639BM**, as appropriate, is actually caused by the use of a frequency assignment which is not in conformity with No. **639BM**, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

Section VII. Review of Findings

639DF § 27 (1) The review of a finding by the Board may be undertaken:
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— at the request of the notifying administration;

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- at the request of any other administration interested in the question, but only on the grounds of actual harmful interference;
- on the initiative of the Board itself when it considers this is justified.

639DG (2) The Board, in the light of all the data at its disposal shall review the matter, taking into account No. 639BM and, where appropriate, Nos. 639BN, 639BO, 639BP, 639BQ and 639BR and shall render an appropriate finding, informing the notifying administration prior either to the promulgation of its finding or to any recording action.

639DH § 28. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to No. 639BP, 639BQ or 639BR, this administration may request the Board to review the finding. Thereupon, the Board shall review the matter, having first consulted the administrations concerned.

639DI (2) If the finding of the Board is then favourable it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

639DJ (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.

Section VIII. Modification, Cancellation and Review of Entries in the Master Register

639DK § 29 (1) Where the use of a recorded assignment to a space station is suspended for a period of eighteen months, the notifying administration shall, within this eighteen-month period, inform the Board

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of the date on which such use was suspended and of the date on which the assignment is to be brought back into regular use.

639DL (2) Whenever it appears to the Board, whether or not as a result of action under No. **639DK**, that a recorded assignment to a space station has not been in regular use for more than eighteen months, the Board shall inquire of the notifying administration as to when the assignment is to be brought back into regular use.

639DM (3) If no reply is received within six months of action by the Board under No. **639DL**, or if the reply does not confirm that the assignment to a space station is to be brought back into regular use within this six-month limit, a mark shall be applied against the entry in the Master Register. Thereafter, the assignment shall be treated in accordance with No. **639BS** as one which has been established as having been out of regular use for two years.

639DN § 30. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within ninety days of such discontinuance, whereupon the entry shall be removed from the Master Register.

639DO § 31. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall either cancel or suitably modify the entry.

639DP § 32. If, in connection with an inquiry by the Board under No. **639DO**, the notifying administration has failed to supply the

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Board within forty-five days with the necessary or pertinent information, the Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation.

Section IX. Studies and Recommendations

639DQ § 33. (1) If it is requested by any administration, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of cases of alleged contravention or non-observance of these Regulations, or of harmful interference.

639DR (2) The Board shall thereupon prepare and forward to the administration concerned a report containing its findings and recommendations for the solution of the problem.

639DS § 34. In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of ninety days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer. If it was the requesting administration which failed to answer within this period, the Board shall close the study.

Section X. Miscellaneous Provisions

639DT § 35. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall render the following assistance:

- a) computation of the increases in noise temperatures in accordance with No. 639AK,

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- b) preparation of diagrams showing the co-ordination areas as in No. 639AN;
- c) any other assistance of a technical nature for completion of the procedures in this Article.

639DU (2) In making a request to the Board under No. 639DT, the administration shall furnish the Board with the necessary information.

639DV § 36. The technical standards of the Board shall be based upon the relevant provisions of these Regulations and the Appendices thereto, the decisions of Administrative Conferences of the Union, as appropriate, the Recommendations of the C.C.I.R., the state of the radio art and the development of new transmission techniques.

639DW § 37 The Board shall promulgate to administrations its findings and reasons therefor, together with all changes made to the Master Register, through the weekly circular referred to in No. 497.

639DX § 38. In case a Member or Associate Member of the Union avails itself of the provisions of Article 28 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

ANNEX 9

Revision of Article 14 of the Radio Regulations

Article 14 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 695 by the following new text:

MOD **695** § 3. In order to avoid interference:

Spa2

- locations of transmitting stations and, where the nature of the service permits, locations of receiving stations shall be selected with particular care;
- radiation in and reception from unnecessary directions shall be minimized, where the nature of the service permits, by taking the maximum practical advantage of the properties of directional antennae;
- the choice and use of transmitters and receivers shall be in accordance with the provisions of Article 12;
- the conditions specified under No. **470V** shall be fulfilled.

ANNEX 10

Revision of Article 15 of the Radio Regulations

Article 15 of the Radio Regulations shall be amended as follows:

Replace Regulation No. 717 by the following new text:

MOD 717 (2) In such a case, the administration concerned may also request the Board to act in accordance with the provisions of Sections VII and VIII of Article 9 and Sections IX and X of Article 9A, but it shall then supply the Board with the full facts of the case, including all the technical and operational details and copies of the correspondence.

ANNEX 11

Revision of Article 27 of the Radio Regulations

Article 27 of the Radio Regulations shall be amended as follows:

Replace Nos. 951 and 952 by the following new texts:

- MOD **951** § 3. (1) Stations on board aircraft may communicate with stations of the maritime mobile or maritime mobile-satellite services. They shall conform to those provisions of these Regulations which relate to these services.
- MOD **952** (2) For this purpose stations on board aircraft should use the frequencies allocated to the maritime mobile or maritime mobile-satellite services. However, having regard to interference which may be caused by aircraft stations at high altitudes, maritime mobile frequencies in the bands above 30 MHz shall not be used by aircraft stations in any specific area without the prior agreement of all the administrations of the area in which interference is likely to be caused. In particular, aircraft stations operating in Region I should not use frequencies in the bands above 30 MHz allocated to the maritime mobile service by virtue of any agreement between administrations in that Region.
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ANNEX 12

Revision of Article 41 of the Radio Regulations

Article 41 of the Radio Regulations shall be amended as follows:

After Regulation No. 1567, add the following new Regulation.

ADD 1567A § 6. Space stations in the amateur-satellite service operating in ~~Spa2~~ bands shared with other services shall be fitted with appropriate devices for controlling emissions in the event that harmful interference is reported in accordance with the procedure laid down in Article 15. Administrations authorizing such space stations shall inform the I.F.R.B., and shall insure that sufficient earth command stations are established before launch to guarantee that any harmful interference that might be reported can be terminated by the authorizing Administration (see No. 470V).

ANNEX 13

Revision of Appendix 1 to the Radio Regulations

Appendix 1 to the Radio Regulations shall be amended as follows:

Section A. Basic Characteristics to be furnished for Notification under No. 486 of the Regulations

Replace the paragraph "Supplementary information" by the following

MOD Spa2 Supplementary information:

- a) reference frequency, if any, and any co-ordination required by No. 492A,
- b) the name of any administration with which an agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

Section B. Basic Characteristics to be furnished for Notification under No. 487 of the Regulations

Replace the paragraph "Supplementary information" by the following

MOD Spa2 Supplementary information.

- a) any co-ordination required by No. 492A,
- b) the name of any administration with which an agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

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Section C. Basic Characteristics to be furnished for Notification under No. 490 of the Regulations

Replace the paragraph "Supplementary information" by the following.

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MOD Spa2 Supplementary information:

- a) any co-ordination required by No. 492A,
 - b) the name of any administration with which an agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.
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ANNEX 14

Revision of Appendix 1A to the Radio Regulations

Appendix 1A to the Radio Regulations shall be amended as follows:

The entire Appendix 1A is replaced by the following new text.

MOD Spa2

APPENDIX 1A

Notices relating to Space Radiocommunication and Radio Astronomy Stations

(See Article 9A)

Section A. General Instructions

1. A separate notice shall be sent to the International Frequency Registration Board for notifying:
 - each new frequency assignment;
 - any change in the characteristics of a frequency assignment recorded in the Master International Frequency Register (hereinafter called the *Master Register*);
 - any total deletion of a frequency assignment recorded in the Master Register.
2. When submitting notices under No. 639BA for earth and space transmitting assignments and under No. 639BB for space and earth receiving assignments, separate notices shall be submitted to the Board for each assignment to an earth or space station. In the case of a passive satellite system, only earth transmitting and receiving assignments shall be notified.
3. In the case of a satellite system employing multiple space stations with the same general characteristics, a separate notice shall be submitted for each space station:

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- when it is aboard a geostationary satellite; or
- when it is aboard a non-geostationary satellite except when a number of satellites have the same radio frequency characteristics and orbital characteristics (excluding the ascending node position); in the latter case, one notice covering all such space stations may be submitted.

4. The following basic information shall be shown on the notice:

- a) the serial number of the notice and the date on which the notice is sent to the Board,
- b) the name of the notifying administration,
- c) sufficient data to identify the particular satellite network in which the earth or space station will operate;
- d) whether the notice reflects:
 - 1) the first use of a frequency by a station;
 - 2) a change in the characteristics of a frequency assignment recorded in the Master Register (indicate whether the change is a replacement, addition or deletion of existing characteristics); or
 - 3) a deletion of an assignment in all of its notified characteristics;
- e) reference to the I.F.R.B. weekly circular providing the advance publication information required in accordance with No. 639AA,
- f) basic characteristics as outlined in Section B, C, D, E, or F as appropriate;
- g) any other information which the administration considers to be relevant, e.g., any factors taken into account when applying Appendix 28 for determination of the co-ordination area and also any indication that the assignment concerned would be operating

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in accordance with No. 115, information concerning the use of the notified frequency if such use is restricted, or, in the case of notices pertaining to space stations, if the transmissions of the station are to be permanently switched off after a certain period.

Section B. Basic Characteristics to be furnished in Notices relating to Frequencies used by earth Stations for Transmitting

Item 1 Assigned frequency

Indicate the assigned frequency as defined in Article 1, in kHz up to 30000 kHz inclusive, and in MHz above 30 000 kHz (see No. 85).

Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. 89).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) of bringing the frequency assignment into use.

b) Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4 *a*), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

Item 4 Identity and location of the transmitting earth station

a) Indicate the name by which the station is known or the name of the locality in which it is situated.

b) Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.

c) Indicate the geographical co-ordinates (in degrees and minutes) of the transmitter site.

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Item 5 Station(s) with which communication is to be established

Identify the associated receiving space station(s) by reference to the notification thereof or in any other appropriate manner, or, in the case of a passive satellite, the identity of the satellite and the location of the associated receiving earth station(s).

Item 6 Class of station and nature of service

Indicate the class of station and nature of service performed, using the symbols shown in Appendix 10.

Item 7 Class of emission, necessary bandwidth and description of transmission

In accordance with Article 2 and Appendix 5

- a) indicate the class of emission;
- b)¹ indicate the carrier frequency or frequencies of the emission(s);
- c)¹ indicate for each carrier, the class of emission, necessary bandwidth and description of transmission.

Item 8 Power characteristics of the transmission

a)¹ Indicate for each carrier, the peak power supplied to the input of the antenna.

b) Indicate the total peak power and the maximum power density per Hz supplied to the input of the antenna averaged over the worst 4 kHz band for carriers below 15 GHz, or averaged over the worst 1 MHz band for carriers above 15 GHz.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 9 Transmitting antenna characteristics

- a) Indicate the isotropic gain (dB) of the antenna in the direction of maximum radiation (see No. 100).
- b) Indicate the beamwidth in degrees between the half power points (describe in detail if not symmetrical).
- c) Either attach the measured radiation diagram of the antenna (taking as a reference the direction of maximum radiation) or indicate the reference radiation diagram to be used for co-ordination.
- d) Indicate graphically the horizon elevation angle for each azimuth around the earth station.
- e) Indicate in degrees from the horizontal plane the planned minimum operating angle of elevation of the antenna in the direction of maximum radiation.
- f) Indicate in degrees, clockwise from true north, the planned range of operating azimuthal angles for the direction of maximum radiation.
- g)¹ Indicate the type of polarization of the transmitted wave in the direction of maximum radiation, also indicate the sense in the case of circular polarization and the plane in the case of linear polarization.
- h) Indicate the altitude (metres) of the antenna above mean sea level.

Item 10¹ Modulation characteristics

For each carrier, according to the nature of the signal modulating the carrier and the type of modulation, indicate the following characteristics:

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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- a) carrier frequency modulated by a frequency-division multi-channel telephony baseband (FDM-FM) or by a signal that can be represented by a multichannel telephony baseband. indicate the lowest and highest frequencies of the baseband and the r.m.s. frequency deviation of the test tone as a function of baseband frequency;
- b) carrier frequency modulated by a television signal. indicate the standard of the television signal (including, where appropriate, the standard used for colour), the frequency deviation for the reference frequency of the pre-emphasis characteristic and the pre-emphasis characteristic itself. Also indicate, where applicable, the characteristics of the multiplexing of the video signal with the sound signal(s) or other signals;
- c) carrier phase-shift modulated by a pulse code modulation signal (PCM/PSK): indicate the bit rate and the number of phases;
- d) amplitude modulated carrier (including single sideband): indicate as precisely as possible the nature of the modulating signal and the kind of amplitude modulation used,
- e) for all other types of modulation, provide such particulars as may be useful for an interference study;
- f) for any type of modulation as applicable, indicate the characteristics of energy dispersal.

Item 11 Maximum hours of operation

Indicate in G.M.T. the maximum hours of operation on the frequency of each carrier.

Item 12 Co-ordination

Give the name of any administration with which the use of this frequency has been successfully co-ordinated in accordance

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with Nos. 639AJ and 639AN and, if appropriate, the name of any administration with which co-ordination has been sought but not effected.

Item 13 Agreements

Give, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations, and the contents of such agreement.

Item 14 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic address of the administration to which communications should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of stations (see Article 15).

Section C. Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Earth Stations*Item 1 Assigned frequency*

Indicate the assigned frequency of the emission to be received, as defined in Article 1, in kHz up to 30 000 kHz inclusive, and in MHz above 30 000 kHz (see No. 85).

Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. 89).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) when reception of the assigned frequency begins.

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b) Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4 *a*)), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

Item 4 Identity and location of the receiving earth station

a) Indicate the name by which the receiving earth station is known or the name of the locality in which it is situated.

b) Indicate the country in which the receiving earth station is located. Symbols from the Preface to the International Frequency List should be used.

c) Indicate the geographical co-ordinates (in degrees and minutes) of the receiver site.

Item 5 Station(s) with which communication is to be established

Identify the associated transmitting space station(s) by reference to the notification thereof or in any other appropriate manner, or, in the case of a passive satellite, the identity of the satellite and the associated transmitting earth station(s).

Item 6 Class of station and nature of service

Indicate the class of station and nature of service performed, using the symbols shown in Appendix 10.

Item 7 Class of emission, necessary bandwidth and description of the transmission to be received

In accordance with Article 2 and Appendix 5

a) indicate the class of emission of the transmission to be received,

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b)¹ indicate the carrier frequency or frequencies of the transmission to be received,

c)¹ indicate, for each carrier to be received, the class of emission, necessary bandwidth and description of the transmission.

Item 8 Earth station receiving antenna characteristics

a) Indicate the isotropic gain (dB) of the antenna in the direction of maximum radiation (see No. 100).

b) Indicate the beamwidth in degrees between the half power points (describe in detail if not symmetrical).

c) Either attach the measured radiation diagram of the antenna (taking as a reference the direction of maximum radiation) or indicate the reference radiation diagram to be used for co-ordination.

d) Indicate graphically the horizon elevation angle for each azimuth around the earth station.

e) Indicate in degrees from the horizontal plane the planned minimum operating angle of elevation of the antenna in the direction of maximum radiation.

f) Indicate in degrees, clockwise, from True North, the planned range of operating azimuthal angles for the direction of maximum radiation.

g) Indicate the altitude (metres) of the antenna above mean sea level.

Item 9 Noise temperature

Indicate the lowest equivalent satellite link noise temperature in kelvins (see No. 103A) under "quiet sky conditions". This

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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value shall be indicated for the nominal value of the angle of elevation when the associated transmitting station is aboard a geostationary satellite and, in other cases, for the minimum value of angle of elevation.

Item 10 Maximum hours of reception

Indicate in G.M.T. the maximum hours of reception of the frequency of each carrier.

Item 11 Co-ordination

Give the name of any administration with which the use of this frequency has been successfully co-ordinated in accordance with Nos. 639AJ and 639AN and, if appropriate, the name of any administration with which co-ordination has been sought but not effected.

Item 12 Agreements

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations, and the contents of such agreement.

Item 13 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article 15).

Section D. Basic Characteristics to be furnished in Notices relating to Frequencies used by Space Stations for Transmitting*Item 1 Assigned frequency*

Indicate the assigned frequency as defined in Article 1, in kHz up to 30 000 kHz inclusive, and in MHz above 30 000 kHz (see

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No. 85). At least one separate assignment notice should be made out for each antenna radiation beam.

Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. 89).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) of bringing the frequency assignment into use.

b) Whenever the assignment is changed in any of its basic characteristics as shown in this Section (except in the case of a change in Item 4), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

Item 4 Identity of the space station(s)

Indicate the identity of the space station(s).

Item 5 Orbital information

a) In the case of a space station aboard a geostationary satellite indicate the nominal geographical longitude on the geostationary satellite orbit and the longitudinal and inclination tolerances. Indicate also

- 1) the arc of the geostationary satellite orbit over which the space station is visible, at a minimum angle of elevation of 10° at the Earth's surface, from its associated earth stations or service areas; and
- 2) the arc of the geostationary satellite orbit within which the space station could provide the required service to its associated earth stations or service areas; and

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- 3) in the event that the arc defined in paragraph 2) above is less than the arc defined in paragraph 1) above, provide the reasons therefor.

Note: The arcs specified in 1) and 2) will be indicated by the geographical longitude of the extremes of these arcs on the geostationary satellite orbit.

- b) In the case of space station(s) aboard non-geostationary satellite(s), indicate the angle of inclination of the orbit, the period, the altitudes in kilometres of the apogee and perigee of the space station(s) and the number of satellites used.

Item 6 Service area

Indicate the service area or areas on the Earth or the name of the locality and country in which the associated receiving station(s) is (are) located.

Item 7 Class of station and nature of service

Indicate the class of station and nature of service performed, using the symbols shown in Appendix 10.

Item 8 Class of emission, necessary bandwidth and description of transmission

In accordance with Article 2 and Appendix 5.

- a) indicate the class of emission of the transmission,
b)¹ indicate the carrier frequency or frequencies of the transmission,
c)¹ indicate, for each carrier, the class of emission, necessary bandwidth and description of transmission.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 9 Power characteristics of the transmission

- a)¹ Indicate for each carrier the peak power supplied to the input of the antenna.
- b) Indicate the total peak power and the maximum power density per Hz at the input of the antenna averaged over the worst 4 kHz band for carriers below 15 GHz or averaged over the worst 1 MHz band for carriers above 15 GHz.

Item 10 Space station transmitting antenna characteristics

For each service area.

- a) in the case of a space station aboard a geostationary satellite, indicate the gain of the space station transmitting antenna by means of gain contours plotted on a map of the Earth's surface. The isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB and at 10 dB intervals thereafter as necessary, below the maximum gain, shall be indicated;
- b) in the case of a space station aboard a non-geostationary satellite, indicate the isotropic gain of the space station transmitting antenna in the main direction of radiation and indicate the antenna radiation pattern in those directions which can intersect with the Earth's surface, taking the gain in the main direction of radiation as a reference;
- c)¹ indicate the type of polarization of the antenna, the sense in the case of circular polarization, and the plane in the case of linear polarization; also indicate the worst case axial ratio in the half power beam,
- d) for a geostationary satellite, indicate the pointing accuracy of the antenna.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 11¹ Modulation characteristics

For each carrier, according to the nature of the signal modulating the carrier and the type of modulation, indicate the following characteristics:

- a) carrier frequency modulated by a frequency-division multi-channel telephony baseband (FDM-FM) or by a signal that can be represented by a multichannel telephony baseband. indicate the lowest and highest frequencies of the baseband and the r.m.s. frequency deviation of the test tone as a function of baseband frequency;
- b) carrier frequency modulated by a television signal: indicate the standard of the television signal (including, where appropriate, the standard used for colour), the frequency deviation for the reference frequency of the pre-emphasis characteristic and the pre-emphasis characteristic itself. Also indicate, where applicable, the characteristics of the multiplexing of the video signal with the sound signal(s) or other signals;
- c) carrier phase-shift-modulated by a pulse code modulation signal (PCM/PSK): indicate the bit rate and the number of phases;
- d) amplitude modulated carrier (including single sideband): indicate as precisely as possible the nature of the modulating signal and the kind of amplitude modulation used;
- e) for all other types of modulation, provide such particulars as may be useful for an interference study;
- f) for any type of modulation as applicable, indicate the characteristics of energy dispersal.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 12 Maximum hours of operation

Indicate in G.M.T. the maximum hours of operation on the frequency of each carrier.

Item 13 Co-ordination

Give the name of any administration or group of administrations with which the use of the satellite network to which the space station belongs has been successfully co-ordinated in accordance with No. 639AJ.

Item 14 Agreements

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

Item 15 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of stations (see Article 15).

Section E. Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Space Stations*Item 1 Assigned frequency*

Indicate the assigned frequency of the emission to be received, as defined in Article 1, in kHz up to 30 000 kHz inclusive, and in MHz above 30 000 kHz (see No. 85). At least one separate assignment notice should be made out for each antenna radiation beam.

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Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. 89).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) when reception of the assigned frequency begins.

b) Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4, the date to be given shall be that of the latest change (actual or foreseen, as appropriate)).

Item 4 Identity of the receiving space station(s)

Indicate the identity of the receiving space station(s).

Item 5 Orbital information

a) In the case of a space station aboard a geostationary satellite, indicate the planned nominal geographical longitude on the geostationary satellite orbit and the planned longitudinal and inclination tolerances. Indicate also:

- 1) the arc of the geostationary satellite orbit over which the space station is visible, at a minimum angle of elevation of 10° at the Earth's surface, from its associated earth stations or service areas; and
- 2) the arc of the geostationary satellite orbit within which the space station could provide the required service to its associated earth stations or service areas; and
- 3) in the event that the arc defined in paragraph 2) above is less than the arc defined in paragraph 1) above, provide the reasons therefor.

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Note: The arcs specified in 1) and 2) will be indicated by the geographical longitude of the extremes of these arcs on the geostationary satellite orbit.

- b) In the case of space station(s) aboard non-geostationary satellite(s), indicate the angle of inclination of the orbit, the period, the altitudes in kilometres of the apogee and perigee of the space station(s) and the number of satellites used.

Item 6 Associated transmitting earth station(s)

Identify the associated transmitting earth station(s) by reference to the notification thereof or in any other appropriate manner.

Item 7 Class of station and nature of service

Indicate the class of station and nature of service performed, using the symbols shown in Appendix 10.

Item 8 Class of emission, necessary bandwidth and description of the transmission(s) to be received

In accordance with Article 2 and Appendix 5

- a) indicate the class of emission of the transmission(s) to be received,
- b)¹ indicate the carrier frequency or frequencies of the transmission(s) to be received;
- c)¹ indicate, for each carrier to be received, the class of emission, necessary bandwidth and description of the transmission(s) to be received.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 9 Space station receiving antenna characteristics

For each receiving beam:

- a) in the case of a space station aboard a geostationary satellite, indicate the gain of the space station receiving antenna by means of gain contours plotted on a map of the Earth's surface. The isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB and at 10 dB intervals thereafter as necessary, below the maximum gain, shall be indicated;
- b) in the case of a space station aboard a non-geostationary satellite, indicate the isotropic gain of the space station receiving antenna in the main direction of radiation and indicate the antenna radiation pattern in those directions which can intersect with the Earth's surface, taking the gain in the main direction of radiation as a reference;
- c)¹ indicate the type of polarization of the antenna, the sense in the case of circular polarization, and the plane in the case of linear polarization, also indicate the worst case axial ratio in the half power beam,
- d) indicate, for a geostationary satellite, the pointing accuracy of the antenna.

Item 10 Noise temperature

Indicate the total receiving system noise temperature (in kelvins) at the input of the space station receiver.

Item 11 Maximum hours of reception

Indicate in G.M.T. the maximum hours of reception of the frequency of each carrier.

¹ This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

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Item 12 Co-ordination

Give the name of any administration or group of administrations with which the use of the satellite network to which the space station belongs has been successfully co-ordinated in accordance with No. 639AJ.

Item 13 Agreements

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

Item 14 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article 15).

Section F Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Radio Astronomy Stations*Item 1 Observed frequency*

Indicate the centre of the frequency band observed, in kHz up to 30 000 kHz inclusive, and in MHz above 30 000 kHz.

Item 2 Date of bringing into use

a) Indicate the date (actual or foreseen, as appropriate) when reception of the frequency band begins.

b) Whenever there is a change in any of the basic characteristics, as shown in this Section (except in the case of a change in Item 3 b)), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

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Item 3 Name and location of the station

a) Indicate the letters "RA".

b) Indicate the name by which the station is known or the name of the locality in which it is situated or both.

c) Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.

d) Indicate the geographical co-ordinates (in degrees and minutes) of the station site.

Item 4 Bandwidth

Indicate the width of the frequency band (in kHz) observed by the station.

Item 5 Antenna characteristics

Indicate the antenna type and dimensions, effective area and angular coverage in azimuth and elevation.

Item 6 Maximum hours of reception

Indicate in G.M.T. the maximum hours of reception of the frequency band shown in Item 4.

Item 7 Noise temperature

Indicate the over-all receiving system noise temperature (in kelvins).

Item 8 Class of observations

Indicate the class of observations to be taken on the frequency band shown in Item 4. Class A observations are those in which the sensitivity of the equipment is not a primary factor. Class B

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observations are those of such a nature that they can be made only with advanced low-noise receivers using the best techniques.

Item 9 Operating administration or company

Indicate the identity of the operating administration or company and the postal and telegraphic addresses of the administration to which communication should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article 15).

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Section G. Form of Notice (Earth Station)

Form of Notice (1)
for use when notifying to the International Frequency Registration Board a Frequency Assignment
or a Change to an Assignment recorded in the Master International Frequency Register
(see Article 9A)

EARTH STATION		for transmitting (E), see Section B of Appendix 1A { for receiving (R), see Section C of Appendix 1A
1	Assigned frequency	
2	Assigned frequency band in kHz	<input type="text"/> kHz
3	Name of earth station	<input type="text"/>
4a	(d1) New assignment	<input type="text"/>
4b	(d2) Change	<input type="text"/>
4c	(d3) Deletion of an assignment	<input type="text"/>
		(a) Notice No. (b) Date (c) Identity of satellite network (d) Reference of weekly circular relating to No. 639.AA
For I.F.R.B. use		

(2) This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

(3) NOTE: For *radiation diagram* 8c(R), 9c(E) and *horizon elevation angle diagram* 8d(R), 9d(E), attach the relevant information to this form.

11(R), 12(E) COORD/
12(R), 13(E) Agreements:
(c) Other information:

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Section H. Form of Notice (Space Station)

Form of Notice (1)
for use when notifying to the International Frequency Registration Board a Frequency Assignment
or a Change to an Assignment recorded in the Master International Frequency Register
(see Article 9A)

SPACE STATION	for transmitting (E), see Section D of Appendix 1A or receiving (R), see Section E of Appendix 1A	
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(b) Notifying administration	(a) [Notice No. Date]
<input type="text"/> kHz MHz	(c) Identity of satellite network
1 Assigned frequency	(d1) New assignment
2 Assigned frequency band in kHz	(d2) Change
3 Date of bringing into use	(d3) Deletion of an assignment
4 Name of space station	(e) Reference of weekly circular relating to No. 639AA I.F.R.B.
5 Orbital information	(f) For I.F.R.B. use

Satellite's nominal longitude and longitudinal and inclination tolerances Longitude _____ Tolerances _____		Angle of inclination of orbit 5a	Period of object in space 5b	Altitudes of apogee and perigee (km) 5b	Number of space stations 5b
Class of station and nature of service performed	Class of emission of assignment				

Service area(s) or station(s) with which communication is to be established	Carrier frequency (frequencies) (2)	Class of emission, necessary bandwidth and description of transmission (2)	Power characteristics		Antenna characteristics (4)		Modulation characteristics (2)	Receiving system noise temperature (G.M.T.)	Maximum hours of operation on each carrier (G.M.T.)	Supplementary information (8)
			Peak power (2)	Total peak power	Peak power density	Polarization (2)				
6	8a	8b	9a(E)	9b(E)	9c(R)	9d(R)	10c(E)	11(E)	10(R)	11(R)
.....									

(2) This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.
(3) Information on visible arc, service arc and reasons if service arc is less than visible are to be attached (5a.1, 5a.2, 5a.3).

(4) NOTE: For antenna characteristics 10a(E) or 10b(E) and 9a(R) or 9b(R), attach the relevant information to this form.

14(R), 15(E) } Operating administration or company

Name and address of administration

(1) The actual size of the notice is a matter for individual administrations.

12(R), 13(E) COORD/
13(R), 14(E) Agreements/

(5) Other information:

ANNEX 15**Addition of a new Appendix (Appendix 1B) to the Radio Regulations**

The following new Appendix 1A shall be added to the Radio Regulations after Appendix 1A:

ADD Spa2 APPENDIX 1B

Advance Publication Information to be furnished for a Satellite Network

(see Article 9A)

Section A. General Instructions

Item 1 Information shall be provided separately for each satellite network.

Item 2 Information to be furnished for each satellite network shall include general characteristics (Section B), and, as applicable, characteristics in the Earth-to-space direction (Section C), characteristics in the space-to-Earth direction (Section D), and characteristics for space-to-space relay (Section E).

Section B. General Characteristics to be furnished for a Satellite Network

Item 1 Identity of the satellite network

Clearly identify the satellite network and, if applicable, identify the satellite system of which it will form a part.

Item 2 Date of bringing into use

Indicate the date by which the satellite network is expected to be brought initially into use.

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Item 3 Administration or group of administrations submitting the advance information

Give the name of the administration or the names of the administrations in the group submitting the advance information on the satellite network and the postal and telegraphic addresses of the administration(s) to which any communication should be sent.

Item 4 Orbital information relating to the space station(s)

- a) In the case of a space station aboard a geostationary satellite, give the planned nominal geographical longitude on the geostationary satellite orbit and the planned longitudinal and inclination tolerances. Indicate also:
 - 1) the arc of the geostationary satellite orbit over which the space station is visible, at a minimum angle of elevation of 10° at the Earth's surface, from its associated earth stations or service areas;
 - 2) the arc of the geostationary satellite orbit within which the space station could provide the required service to its associated earth stations or service areas; and
 - 3) in the event that the arc defined in paragraph 2) above is less than the arc defined in paragraph 1) above, provide the reasons therefor.

Note: The arcs specified in 1) and 2) will be indicated by the geographical longitude of the extremes of these arcs on the geostationary satellite orbit.

- b) In the case of space station(s) aboard non-geostationary satellite(s), indicate the angle of inclination of the orbit, the period, the altitudes in kilometres of the apogee and perigee

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of the space station(s) and the number of satellites used having the same characteristics.

Section C. Characteristics of the Satellite Network in the Earth-to-Space direction***Item 1 Earth-to-space service area(s)***

Indicate the service area(s) on the Earth associated with each receiving antenna of the space station.

Item 2 Class of stations and nature of service

For each Earth-to-space service area, indicate the class of the stations in the satellite network and the nature of the service to be performed, using the symbols shown in Appendix 10.

Item 3 Frequency range

For each Earth-to-space service area, indicate the frequency range within which the carriers will be located.

Item 4 Power characteristics of the transmitted wave

a) For each Earth-to-space service area indicate the maximum spectral power density (W/Hz) to be delivered to the antenna of the transmitting earth stations (the bandwidth over which this is averaged depends on the nature of the service concerned).

b) If available, indicate, for each Earth-to-space service area, the actual radiation pattern (relative to isotropic) of the transmitting earth station antenna having the highest offbeam equivalent isotropically radiated spectral power density.

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Item 5 Characteristics of space station receiving antennae

For each Earth-to-space service area:

- a) in the case of a space station aboard a geostationary satellite, indicate the estimated gain of the space station receiving antenna by means of gain contours plotted on a map of the Earth's surface; the isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB and at 10 dB intervals thereafter as necessary, below the maximum gain, shall be indicated;
- b) in the case of a space station aboard a non-geostationary satellite, indicate the estimated isotropic gain of the space station receiving antenna in the main direction of reception and indicate the antenna radiation pattern in those directions which can intersect with the Earth's surface, taking the gain in the main direction of radiation as a reference.

Item 6 Noise temperature of the receiving space station

For each Earth-to-space service area, when other than a simple frequency changing transponder is used aboard the space station indicate the lowest total receiving system noise temperature.

Section D. Characteristics of the Satellite Network in the Space-to-Earth Direction*Item 1* Space-to-Earth service area(s)

Indicate the service area(s) on the Earth associated with each transmitting antenna of the space station.

Item 2 Class of stations and nature of service

For each space-to-Earth service area, indicate the class of the stations in the satellite network and the nature of the service to be performed, using the symbols shown in Appendix 10.

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Item 3 Frequency range

For each space-to-Earth service area, indicate the frequency range within which the carriers will be located.

Item 4 Power characteristics of the transmission

For each space-to-Earth service area, indicate the maximum spectral power density (W/Hz) to be delivered to the transmitting antenna of the space station (the bandwidth over which this is averaged depends on the nature of the service concerned).

Item 5 Characteristics of space station transmitting antennae

For each space-to-Earth service area:

- a) in the case of a space station aboard a geostationary satellite, indicate the estimated gain of the space station transmitting antenna by means of gain contours plotted on a map of the Earth's surface; the isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB and at 10 dB intervals thereafter as necessary, below the maximum gain, shall be indicated;
- b) in the case of space station aboard a non-geostationary satellite, indicate the estimated isotropic gain of the space station transmitting antenna in the main direction of transmission and indicate the antenna radiation pattern in those directions which can intersect with the Earth's surface, taking the gain in the main direction of transmission as a reference.

Item 6 Characteristics of receiving earth stations

- a) For each space-to-Earth service area, when other than a simple frequency changing transponder is used aboard the space station, indicate the lowest total receiving system noise temperature of the earth stations.

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For each space-to-Earth service area and for each projected usage¹, when simple frequency changing transponders are used on the space station, indicate the lowest equivalent satellite link noise temperature and the associated value of transmission gain evaluated from the output of the receiving antenna of the space station to the output of the receiving antenna of the earth station. For each projected usage, indicate also the receiving antenna(e) of the space station to which each simple frequency changing transponder will be connected.

- b) If available, indicate for each space-to-Earth service area the actual radiation pattern (relative to isotropic) of the receiving earth station antenna having the highest off beam level. When simple frequency changing transponders are used on the space station, indicate also, if available, the pattern associated with each equivalent satellite link noise temperature indicated above.

Section E. Characteristics to be furnished for Space-to-Space Relay

Where the satellite network is connected to one or more satellite networks by means of space-to-space relay, indicate the following:

- a) identity or identities of the other satellite network(s) to which the satellite network is connected;
- b) transmit and receive frequency bands;
- c) classes of emission;
- d) nominal equivalent isotropically radiated power(s) on the beam axis.

¹ A different usage will be considered to take place when different types of carriers are employed (different by virtue of maximum power spectral density), or when different types of receiving earth stations are employed (different by virtue of receiving antenna gain).

ANNEX 16**Revision of Appendix 9 to the Radio Regulations**

Appendix 9 to the Radio Regulations shall be amended as follows:

Replace the title of Appendix 9 by the following:

APPENDIX 9**MOD Spa2****Service Documents**

(See Articles 8, 9, 9A, 10 and 20)

List I. International Frequency List

Replace footnotes 1 to 8 by the following (footnotes 3 and 5 are unchanged):

MOD Spas2 In the case of television broadcasting stations in Region I, the frequency in this column is that of the sound and vision carriers (See Appendix I to the Radio Regulations). * See Nos. 607 and 608 of the Radio Regulations. * A symbol instead of a date indicates an assignment notified pursuant to No. 272 of the Extraordinary Administrative Radio Conference Agreement (Geneva, 1951), or, in the frequency bands above 27 500 kHz, an assignment for which the notice was received by the I.F.R.B. before 1st April 1952. * See Appendix I to the Radio Regulations. * Columns 12a and 12b contain numbers or letters which are explained in the Preface to the International Frequency List. * See Article 9, Section II and Article 9A, Section IV, of the Radio Regulations. * See Nos. 516, 517, 621, 622, 639BS, 639DM, 639DO and 639DP of the Radio Regulations. * Including dates referred to in Section II of Article 9 and Section IV of Article 9A of the Radio Regulations.

Replace the title of List VIII A by the following:

MOD Spas2 **List VIII A. — List of Space Radiocommunication Stations and Radio Astronomy Stations¹**

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Replace the title of Section 1 by the following:

1 - Earth stations in the fixed-satellite service

Replace the column heads of Section I by the following:

Geographical co-ordinates (in degrees and minutes) of the transmitting site									
Name by which the station is known or the name of the locality in which it is situated									
Geographic and administrative details of the transmitting site									
Frequency (MHz or GHz)									1
Power (kW)									2
Telecommunications									3a
Where applicable									3b
Class of transmission, necessary bandwidth and description									4a
Frequency (MHz or GHz)									4b
Power (kW)									4c
Telecommunications									5a
Class of transmission, necessary bandwidth and description									5b
Frequency (MHz or GHz)									6a
Power (kW)									7a
Class of transmission, necessary bandwidth and description									7b
Frequency (MHz or GHz)									8
Power (kW)									9
Telecommunications									10
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									
Class of transmission, necessary bandwidth and description									
Frequency (MHz or GHz)									
Transmission									
Frequency (MHz or GHz)									
Power (kW)									
Telecommunications									

For the cases where these data must be supplied, see Nos. 639BA, 639BB and 639BC.

Replace the title of Section 2 by the following:

2 = Space stations in the fixed-satellite service

Replace the column heads of Section 2 by the following:

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Replace the title of Section 3 by the following:

3 — Earth stations in the earth exploration-satellite service

Replace the column heads of Section 3 by the following:

MOD Spaz									MOD Spaz2								
Name by which the station is known or the name of the locality in which it is situated									Geographical co-ordinates (in degrees and minutes) of the transmitter site								
Frequency (MHz or GHz)									Class of transmission, necessary bandwidth and description of transmission								
Power (kW)									Telecommand and where appropriate								
Frequency (MHz or GHz)									Tracking								
Frequency (MHz or GHz)									Class of emission, necessary bandwidth and description of transmission								
Frequency (MHz or GHz)									Information on earth exploration								
Information on the associated space station(s) with which communication is to be established									Information on the operating administration or company								
Remarks									Special methods of modulation.								
1	2	3a	3b	3c	4a	4b	5a	5b	6a	6b	7	8	9				

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Replace the title of Section 4 by the following:

4 — Space stations in the earth exploration-satellite service

Replace the column heads of Section 4 by the following:

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Replace the title of Section 5 by the following:

5—Earth stations in the radiodetermination-satellite service

Replace the column heads of Section 5 by the following:

MOD Spa2	MOD Spa2	Transmission									Reception									Remarks											
		Frequency (MHz or GHz)			Power (kW)			Telemetry			Tracking			Frequency (MHz or GHz)			Class of transmission, necessary bandwidth and description of emission, necessary bandwidth and description of transmission			Supplementary information, necessary bandwidth and description of the radiofrequency system			Class of transmission, necessary bandwidth and description of emission, necessary bandwidth and description of transmission			Operational administration or company identity of the associated space station(s) with which communication is to be established			Special methods of modulation.		
—	—	1	2	3a	3b	3c	4a	4b	5a	5b	6a	6b	7	8	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Replace the title of Section 6 by the following:

6 — Space stations in the radiodetermination-satellite service

Replace the column heads of Section 6 by the following:

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Replace the title of Section 7 by the following:

MOD_Spa2

7—Earth stations in the space research service

Replace the column heads of Section 7 by the following:

Name by which the station is known or the name of the locality in which it is situated		Geographical co-ordinates (in degrees and minutes) of the transmitter site		Frequency (MHz or GHz)		Class of transmission, necessary bandwidth and description of transmission		Telecommand and where appropriate		Power (kW)		Frequency (MHz or GHz)		Class of transmission, necessary bandwidth and description of transmission		Telemetering		Frequency (MHz or GHz)		Class of transmission, necessary bandwidth and description of transmission		Tracking		Frequency (MHz or GHz)		Class of transmission, necessary bandwidth and description of transmission		Reception		be established by the associated space station(s) with which communication is to be established		Identify of the associated space station(s) with which communication is to be established		Operating administration or company		Any special characteristics of the station and scope of research.		Remarks																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40													
1	2	3	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	3l	3m	3n	3o	3p	3q	3r	3s	3t	3u	3v	3w	3x	3y	3z	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n	4o	4p	4q	4r	4s	4t	4u	4v	4w	4x	4y	4z

Replace the title of Section 8 by the following:

8 — Space stations in the space research service

Replace the column heads of Section 8 by the following:

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Replace the title of Section 9 by the following:

9—Stations in the radio astronomy service

MOD Spa2

ANNEX 17

Revision of Appendix 10 to the Radio Regulations

Appendix 10 to the Radio Regulations shall be amended as follows:

Delete the symbol FE.

*Replace the symbols EC, TC, TH, TM and TN by
the following:*

MOD	EC	Space station in the fixed-satellite service
MOD	TC	Earth station in the fixed-satellite service
MOD	TH	Earth station in the space research service
MOD	TM	Earth station in the meteorological-satellite service
MOD	TN	Earth station in the radionavigation-satellite service

Add, in alphabetical order, the following new symbols:

ADD	EA	Space station in the amateur-satellite service
ADD	EB	Space station in the broadcasting-satellite service (sound broadcasting)
ADD	EV	Space station in the broadcasting-satellite service (television)
ADD	TA	Space operation earth station in the amateur-satellite service
ADD	TE	Transmitting earth station
ADD	TF	Fixed earth station in the radiodetermination-satellite service
ADD	TL	Mobile earth station in the radiodetermination-satellite service
ADD	TP	Receiving earth station
ADD	TT	Earth station in the space operation service

ANNEX 18

Addition of a new Appendix (Appendix 28) to the Radio Regulations

The following new Appendix 28 shall be added to the Radio Regulations after Appendix 27:

APPENDIX 28

Procedure for Determination of the Co-ordination Area around an Earth Station in Frequency Bands between 1 and 40 GHz shared between Space and Terrestrial Radiocommunication Services

1. Objectives

The co-ordination area (see No. 103D) is determined by calculating, in all directions of azimuth from the earth station, the co-ordination distances (see No. 103B), and drawing to scale on an appropriate map the co-ordination contour (see No. 103C).

It must be emphasized that the presence or installation of a terrestrial station within the co-ordination area of an earth station would not necessarily preclude the successful operation of either the earth station or that terrestrial station, since the procedure is based on the most unfavourable case assumptions as regards interference.

For the determination of the co-ordination area two cases may have to be considered:

- 1) for the earth station when it is receiving (and hence capable of being interfered with by terrestrial stations);
- 2) for the earth station when it is transmitting (and hence capable of interfering with terrestrial stations).

Where an earth station is intended to operate with a variety of classes of emissions, the earth station parameters to be used in the determination of the co-ordination contour shall be those which lead to the greatest co-ordination distances, for each earth station antenna beam and in each allocated frequency band which the earth station proposes to share with the terrestrial services.

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The procedure given in this Appendix for the determination of the co-ordination area is fairly complex. For this reason, it is considered useful to present in Annex A a simplified version of this procedure which will assist a user in following the necessary steps to produce co-ordination contours. The simplified presentation is given for certain allocated frequency bands.

It is suggested to draw, together with the co-ordination contour, auxiliary contours based on less unfavourable assumptions than those chosen for determination of the co-ordination contour. These auxiliary contours may be used during subsequent negotiations between the administrations concerned with a view to eliminating from the discussions (without the need for more precise calculations) the case of certain existing or planned stations located within the co-ordination area. The determination and use of these auxiliary contours is explained in Annex B to this Appendix.

2. Permissible values of interference

The permissible interference power (in dBW) in the reference bandwidth to be exceeded for no more than p percent of the time at the receiver input of a station suffering interference, from each source of interference, is given by the general formula below:

$$P_r(p) = 10 \log_{10} (kT_r B) + J + M(p) - W \quad (1)$$

where

$$\text{with } M(p) \equiv M(p_0/n) = M_0(p_0) \quad (1a)$$

k = Boltzmann's constant (1.38×10^{-23} joule per K);

T_r = thermal noise temperature of the receiving system (K);

B = reference bandwidth (in Hz) (bandwidth, of concern to the interfered with system, over which the interference power can be averaged);

J = ratio (in dB) of the permissible long term (20% of the time) interfering power to the thermal noise power in the receiving system (¹);

(¹) see note (¹) on following page.

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p_0 = percentage of the time during which the interference from all sources may exceed the permissible value;

n = number of expected entries of interference, assumed to be uncorrelated;

p = percentage of the time during which the interference from one source may exceed the permissible value; since the entries are not likely to occur simultaneously
 $p = p_0/n$;

$M_0(p_0)$ = ratio (in dB) between the permissible interference powers during $p_0\%$ and 20% of the time respectively, for all entries of interference (2);

$M(p)$ = ratio (in dB) between the permissible interference powers during $p\%$ of the time for one entry of interference, and during 20% of the time for all entries of interference, respectively;

Notes

(1) The factor J (in dB) is defined as the ratio of total permissible long-term (20% of the time) interference power in the system, to the long-term thermal noise power in a single receiver. For example, in a 50-hop terrestrial line-of-sight radio relay hypothetical reference circuit, the total allowable additive interference power is 1 000 pW0p (C.C.I.R. Recommendation 357-1) and the mean thermal noise power in a single hop may be assumed to be 25 pW0p. Therefore, since in a FDM/FM system the ratio of the interference noise power to the thermal noise power in a 4 kHz band is the same before and after demodulation, $J = 16$ dB. In a satellite link in the fixed-satellite service, the total allowable interference power is also 1 000 pW0p (C.C.I.R. Recommendation 356-2), but the thermal noise contribution of the down path is not likely to exceed 7 000 pW0p, hence $J \geq -8.5$ dB. In digital systems it may be necessary to protect each communication path individually, and in that case, long term interference power may be of the same order of magnitude as long-term thermal noise, hence $J = 0$ dB.

(2) $M_0(p_0)$ (in dB) is the "interference margin" between the long-term (20%) and the short-term ($p_0\%$) allowable interference powers. For analogue radio-relay and fixed-satellite systems in bands between 1 and 15 GHz, this is the ratio (in dB) between 50 000 and 1 000 pW0p (17 dB). In the case of digital systems, $M_0(p_0)$ may tentatively be set equal to the fading margin which depends, inter alia, on the local rain climate.

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W = equivalence factor (in dB) relating the effect of interference to that of thermal noise of equal power in the reference bandwidth ⁽¹⁾.

Tables I and II list values for the above parameters.

3. Determination of co-ordination distance for near great circle propagation mechanisms

When determining the co-ordination distance for an earth station, a number of mechanisms of radio-wave propagation need to be considered. This section deals with the determination of co-ordination distance in conditions associated with super-refraction, ducting, scattering and reflection due to irregularities in the refractive index of the lower atmosphere in the absence of precipitation. The determination of the co-ordination distance associated with propagation due to scattering from hydrometeors is discussed in Section 4.

⁽¹⁾ The factor W (in dB) is the ratio of thermal noise power to interference power, in the reference bandwidth, producing the same interference effect after demodulation (e.g. in a FDM/FM system it would be expressed for equal voice channel performance; in a digital system it would be expressed for equal bit error probabilities). For FM signals, it is defined as follows:

$$W = 10 \log_{10} \left\{ \frac{\text{Interfering power in the receiving system after demodulation}}{\text{Thermal noise power in the receiving system after demodulation}} \times \frac{\text{Thermal noise power at the receiver input in the reference bandwidth}}{\text{Interfering power at the radio frequency in the reference bandwidth}} \right\}$$

Also, when the wanted signal uses FM modulation with r.m.s. modulation indices which are greater than unity, W is approximately 4 dB, regardless of the characteristics of the interfering signal. For low-index FDM/FM systems a very small reference bandwidth (4 kHz) has been used in order to avoid the necessity of dealing with a large range of characteristics of both wanted and unwanted signals upon which, for greater reference bandwidths, the value of W would depend.

When the wanted signal is digital, W is usually equal to or less than 0 dB, regardless of the characteristics of the interfering signal.

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3.1 Normalized basic transmission loss $L_o(0\cdot01)$

To facilitate the graphical determination of the co-ordination distance, it is convenient to normalize the percentage of time to 0·01% and the frequency to 4 GHz.

The first step in the determination of the co-ordination distance is the calculation of a normalized basic transmission loss $L_o(0\cdot01)$ given by:

$$L_o(0\cdot01) = P_{t'} + G_{t'} + G_r - P_r(p) - F(p) - 20 \log_{10} (f/4) \quad (2)$$

where

$P_{t'}$ = maximum available transmitting power (in dBW) in reference bandwidth B at the input to the antenna of an interfering station *;

$G_{t'}$ = gain (in dB relative to isotropic) of the transmitting antenna of the interfering station. If the interfering station is an earth station, this is the isotropic gain in the pertinent direction. If it is a terrestrial station, $P_{t'}$ and $G_{t'}$ are combined in the main beam equivalent isotropically radiated power E , for which the values given in Table II shall be used. When $G_{t'}$ is the gain in the main direction of radiation it is denoted $G_{t,max.}$;

G_r = gain (in dB relative to isotropic) of the receiving antenna of the station suffering interference. If that station is an earth station, this is the isotropic gain in the pertinent direction; in the case of a terrestrial station, the maximum antenna gain is to be used. When G_r is the main beam gain, it is denoted $G_{r,max.}$ (In the case of terrestrial stations, see Table I);

$F(p)$ = correction factor in dB to relate the effective percentage of the time p to 0·01% (see Figure 1);

f = operating frequency in GHz.

The "pertinent direction" referred to in the definitions of $G_{t'}$ and G_r is usually the direction toward the physical horizon on the azimuth

* Primes refer to the parameters associated with the interfering station.

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considered (see Section 3.2) except when an earth station points its main beam at elevation angles below 12°. In the latter case, the path of minimum transmission loss may not be the horizon path but rather the main beam path (see Section 3.6).

When considering moving satellites, G_t' or G_r (whichever pertains to the earth station antenna) is variable with time. In such cases, it is suggested that an equivalent time-invariant earth station antenna gain * should be used. This equivalent gain is either 10 dB less than the maximum horizon antenna gain or is that value of horizon antenna gain exceeded for no more than 10% of the time, whichever is the greater.

3.2 *Antenna gain at the earth station horizon for geostationary satellites*

The gain component of the earth station antenna in the direction of the physical horizon around an earth station is a function of the angular separation φ between the antenna main beam direction and the horizon direction under consideration. Therefore, knowledge of the angle φ is required for each azimuth.

The elevation ϵ and azimuth α of geostationary satellites as seen from an earth station at a latitude λ are uniquely related. Figure 2 shows the "permissible" location arcs of geostationary satellites in a rectangular *elevation/azimuth* plot, each arc corresponding to an earth station latitude.

Specific relative satellite longitudes may not be known beforehand, but even when they are, the possibility of the addition of a new satellite, or the repositioning of an existing one suggests that all or a portion of the applicable arc be considered to hold satellites.

* This equivalent antenna gain should not be used when the earth station antenna points in the same direction for appreciable periods of time (e.g., when working to deep space probes or to satellites which are almost geostationary).

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With the correct arc or segment of arc chosen and suitably marked, the horizon profile $\theta(\alpha)$ is superimposed on the plot of Figure 3, which shows an example for an earth station located at 45°N latitude for a satellite expected to be located somewhere between relative longitudes of 10°E and 45°W, with the site horizon profile drawn as shown.

For each point on the local horizon $\theta(\alpha)$, the smallest distance to the arc is determined and measured on the elevation scale. The example of Figure 3 shows the determination of the off-beam angle φ at an azimuth $\alpha_0 = 210^\circ$ with a horizon elevation $\theta = 4^\circ$.

If this is done for all azimuths (in suitable increments, e.g. 5°), a relationship $\varphi(\alpha)$ results. The relationship $\varphi(\alpha)$ may be used to derive a function for the horizon antenna gain, $G(\alpha)$, by using the actual earth station antenna pattern, or a formula giving a good approximation; for example, in cases where the ratio between the antenna diameter and the wavelength exceeds 100, the following equation should be used:

$$\begin{aligned} G(\varphi) &= 32 - 25 \log_{10} \varphi \text{ (dB)} & (1^\circ \leq \varphi < 48^\circ) \\ &= -10 \text{ dB} & (48^\circ \leq \varphi \leq 180^\circ) \end{aligned}$$

The application of this gain equation to the $\varphi(\alpha)$ plot yields the desired horizon antenna gain as a function of azimuth.

The parameters used above are defined as follows:

- α = azimuthal angle under consideration, east of True North;
- φ = the smaller angle in degrees between the main beam direction of the earth station antenna and the straight line connecting the earth station to the physical horizon on azimuth α ;
- ϵ = earth station main beam elevation angle above horizontal plane;
- λ = latitude of earth station;
- θ = elevation angle of the physical horizon above the horizontal plane on azimuth α .

ANN 18 (APP 28)**3.3 Radio-climatic Zones**

The world has been divided into three basic radio-climatic regions termed Zones A, B and C, respectively.

These zones are defined as follows:

- Zone A: land, with the exception of a coastal strip the width of which is either 100 km or that distance from the actual coast at which the terrain begins to exceed an altitude of 1000 m, whichever is the lesser distance;
- Zone B: sea, at latitudes greater than 23.5° (North or South), excluding the Mediterranean and Black Seas, but including the coastal strip defined above wherever land borders on sea at latitudes greater than 23.5°;
- Zone C: sea, at latitudes smaller than 23.5° (North or South), including the Mediterranean and Black Seas, and the coastal strip defined above wherever land borders on sea at latitudes smaller than 23.5°.

3.4 Procedure for the determination of the co-ordination distance for propagation mode (a)

To obtain the co-ordination distance for Zone A, it is necessary to subtract from $L_o(0.01)$ a correction ΔL which accounts for the difference in basic transmission loss over paths that have different horizon elevation angles at the earth station. ΔL is computed in two steps. First a correction ΔL_o for unit elevation angle (i.e., for a 1° elevation angle) is obtained from Figure 4 as a function of the normalized basic transmission loss and the frequency. Linear interpolation should be used between the curves of Figure 4 for frequencies not shown.

For any other horizon elevation angle θ , the horizon angle correction ΔL (in dB) is obtained from Figure 5 using the value of ΔL_o previously obtained from Figure 4. If values are required at elevation angles

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other than those indicated, linear interpolation should again be used. In cases where the elevation angle is less than 0.2°, ΔL is always 0 dB.

The horizon angle correction ΔL so obtained should be subtracted from the normalized basic transmission loss to result in a "co-ordination loss" L_c :

$$L_c = L_o(0.01) - \Delta L \quad (3)$$

This co-ordination loss, used with the appropriate frequency in Figure 6, yields the co-ordination distance.

In a similar manner, the Zone B and Zone C co-ordination distance can be determined using Figures 7, 8 and 9 for Zone B and Figures 10, 11 and 12 for Zone C.

Distances so obtained are, for reference purposes, to be labelled d_{aA} , d_{aB} and d_{aC} for Zones A, B and C, respectively.

3.5 Co-ordination distance for mixed paths

3.5.1 Two Zones

The procedure to be followed in the case of a mixed path involving two zones is illustrated by the example shown in Figure 13b. The earth station is situated in Zone A at a distance of 75 km from Zone B. The graphical presentation described below is particularly useful where more than one boundary between zones may be involved, as in this example.

It is assumed that, at a frequency of 4 GHz, the normalized basic transmission loss $L_o(0.01)$ is 200 dB, and that the horizon elevation angle is zero degrees. This results in identical values of 200 dB for L_c in any zone (which would, of course, not be the case if the horizon elevation angle were greater than 0.2°). The procedure is as follows:

- i) determine the distance entirely in Zone A that would give the co-ordination loss. Mark this distance (in this case it is 350 km) from the origin along the abscissa axis of linear graph paper as indicated by the point A (Figure 13a);

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- ii) determine the distance entirely in Zone B that would give the same co-ordination loss. Mark this distance (in this case it is 530 km) from the origin along the ordinate axis of the chart as indicated by the point B;
- iii) draw a straight line between points A and B representing these distances from the origin;
- iv) starting from the origin, the distance of 75 km from the earth station to Zone B is set off along the abscissa axis of the chart as indicated by the point A₁;
- v) starting from point A₁ the Zone B path length of 375 km is then set off parallel to the ordinate axis of the chart as indicated by the point B₁;
- vi) the further distance in the next Zone A region is then measured parallel to the abscissa axis from the point B₁ to the point of intersection of the mixed path curve as indicated by X. On Figure 13a, this distance is 30 km;
- vii) the co-ordination distance is the sum of the distances OA₁, A₁B₁ and B₁X and is equal to

$$75 + 375 + 30 = 480 \text{ km}$$

The distance B₁X can also, more precisely, be found numerically from the total distance of the two parts in Zone A, OA₁ + B₁X given by

$$OA_1 + B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right)$$

whence:

$$B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right) - OA_1$$

hence,

$$B_1X = 350 \left(1 - \frac{375}{530} \right) - 75 = 27 \text{ km}$$

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3.5.2 *Three Zones*

In some special cases, the mixed path involves all three radio-climatic Zones A, B and C. A solution to this problem can be found in adding a third dimension to the procedure to be followed for mixed paths involving only two zones. Theoretically, it means that the third coordinate has to be determined for a point having coordinates corresponding to the known distances in the first two zones and lying in a plane defined by three points on the axes X, Y and Z, corresponding to distances in Zones A, B and C, respectively, that would give the required basic transmission loss.

In practice, the procedure can be reduced to a simple graphical method shown in Figure 14, assuming for example a co-ordination loss (L_c) of 200 dB at a frequency of 4 GHz. It is required to find the co-ordination distance from the earth station in the direction given in Figure 14a. Here an earth station is situated in Zone A at a distance of 75 km in a given azimuthal direction from Zone B. In the same azimuthal direction Zone B is 375 km long and followed by an unknown portion in Zone C (Figure 14a).

In this case, the procedure to be applied should be as follows (Figure 14b):

- i) repeat the same procedure as for mixed paths involving only two zones, given in steps (i) to (v) above, and continue as follows:
- ii) from the point B_1 draw a line parallel to the line AB to intersect the abscissa axis as indicated by the point D;
- iii) determine the distance entirely in Zone C that would give the co-ordination loss. Mark this distance (in this case it is 930 km) from the origin along the ordinate axis of the chart as indicated by the point C. Draw a straight line between the points C and A;
- iv) at the point D, draw a line parallel to the ordinate axis to intersect the line CA as indicated by X;
- v) the distance between the points D and X, which is the unknown distance in Zone C, is found to be 75 km;

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vi) the co-ordination distance is then the sum of the distances $OA_1 + A_1B_1 + DX$ and in this example is equal to

$$75 + 375 + 75 = 525 \text{ km}$$

The distance DX can also, more precisely, be found numerically from the formula:

$$DX = OC \left(1 - \frac{OA_1}{OA} - \frac{A_1B_1}{OB} \right)$$

hence,

$$DX = 930 \left(1 - \frac{75}{350} - \frac{375}{530} \right) = 73 \text{ km}$$

The distance obtained from either the single zone case (Section 3.4), or the multi-zone case (Section 3.5), whichever is applicable, is to be labelled d_a .

3.6 Determination of the co-ordination distance for propagation mode (b)

If the main beam of the earth station antenna is elevated less than 12° for long periods of time, as may be the case in operation with geostationary satellites, the co-ordination distance in the azimuthal direction of the main beam is determined in the same manner as above but the antenna elevation angle ϵ is used instead of the horizon elevation angle θ , and the antenna main beam gain is used instead of the gain towards the horizon. *In all such cases, the Zone A curves should be used irrespective of the actual zone involved.*

This procedure yields a distance for propagation mode (b), to be labelled d_b .

When considering non-geostationary satellites, interference via the main beam path should only be considered when the earth station antenna points in the same direction for appreciable periods of time (e.g., when working to deep space probes or to satellites which are almost geostationary).

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3.7 *Evaluation of results from propagation modes (a) and (b)*

If propagation mode (b) is applicable, then the distance obtained for propagation mode (b) is compared with that of propagation mode (a) and where the co-ordination distance resulting from the main beam calculation exceeds that from the horizon path calculation, the procedure illustrated in Figure 15 should be used as follows to obtain the co-ordination contour for great circle propagation mechanisms:

- i) draw two straight lines from the earth station at azimuthal angles of $\pm 5^\circ$ relative to the azimuth of the main beam till they intersect the co-ordination contour obtained according to propagation mode (a);
- ii) from the point corresponding to the co-ordination distance derived according to propagation mode (b) in the azimuthal direction of the main beam, draw two straight lines to join these two intersections;
- iii) these two lines so drawn constitute the part of the co-ordination contour to be used in the sector $\pm 5^\circ$ relative to the azimuthal direction of the main beam;
- iv) outside the preceding sector $\pm 5^\circ$ the co-ordination contour for the great circle propagation mechanisms is the one obtained for propagation mode (a).

For reference purposes, the distances obtained after application of procedures set forth in Sections 3.4 to 3.7 are to be labelled d_{ab} .

4. *Determination of co-ordination distance for propagation mode (c) (scattering from hydrometeors)*

The determination of co-ordination distance for scattering from hydrometeors (rain scatter) is predicated on a path geometry which is substantially different from that of the great circle propagation mechanisms.

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4.1 *Normalized transmission loss $L_1(0\cdot01)$*

To determine the co-ordination distance associated with rain scatter, it is necessary to calculate a "normalized transmission loss", given by:

$$L_1(0\cdot01) = P_{t'} + \Delta G - P_r(p) - F_1(p,f) \quad (4)$$

where:

ΔG = difference (in dB) between the maximum gain of terrestrial station antennae in the frequency band under investigation and the value of 42 dB. When the earth station is a transmitting station, the values shown in Table I should be used; when it is a receiving station, the values shown in Table II should be used.

$F_1(p,f)$ = correction factor (in dB) to relate the effective percentage of the time p to 0.01%, in the frequency band under consideration (see Figure 16).

All other parameters have been defined in Section 2. For terrestrial stations, values of $P_{t'}$ are listed in Table II.

4.2 *Rain-climatic Zones*

The world has been divided into five basic rain-climatic zones numbered 1 to 5 as shown in Figure 17.

4.3 *Procedure for the determination of rain scatter co-ordination distance*

To obtain the rain scatter co-ordination distance for rain-climatic Zone 1, the normalized transmission loss (obtained by solving equation (4)), is used together with the appropriate frequency in Figure 18 to yield the rain scatter distance d_{cr} .

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Figures 19 to 21 show corresponding curves for rain-climatic Zones 2 to 5. In all cases that rain climate is to be chosen which corresponds to the location of the earth station. Due to the peculiar geometry associated with rain scatter propagation, the centre of the rain scatter co-ordination contour does not coincide with the location of the earth station by a distance Δd .

The rain scatter distance d_{cr} , together with the elevation angle ϵ of the main beam of the earth station antenna are used in Figure 22 to obtain the distance denoted Δd . The distance Δd is measured from the earth station location along the azimuth of the main beam of the earth station antenna; a circle of radius d_{cr} is drawn around the point so reached. The circle is the rain scatter contour.

The rain scatter co-ordination distance, to be labelled d_c , is the distance from the earth station site to the rain scatter co-ordination contour on the azimuth under consideration.

5. Minimum value of co-ordination distance

In the process of determining the co-ordination distance for propagation mode (a) or (b), if values result which would require the co-ordination distance curves to be extended to distances of less than 100 km, the co-ordination distance (d_a or d_b) for the propagation mode under consideration shall be 100 km.

In the process of determining the co-ordination distance for propagation mode (c), if values result which would require the rain scatter distance curves to be extended to distances of less than 100 km, the rain scatter distance (d_{cr}) shall be 100 km, used with the appropriate value of Δd .

6. The co-ordination distance

On any azimuth, the greatest of the co-ordination distances d_a , d_b or d_c , for any of the three propagation modes, represents the co-ordination

TABLE I

Parameters required for the Determination of Co-ordination Distance for a Transmitting Earth Station

Space radiocommunication service designation	Space Operation (Telecommand)	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite	Fixed-Satellite
Frequency bands (GHz)	1.427-1.429	2.655-2.690	4.400-4.700	5.850-6.425	7.900-7.975 8.025-8.400	10.95-11.20	12.50-12.75	14.4-14.5	27.5-29.5
Modulation of terrestrial station ⁽¹⁾	A	A	A	A	A	A	A	A	N
Interference parameters and criteria	p_o (%)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.003
	n	2	1	1	2	2	2	2	1
	p (%)	0.005	0.01	0.01	0.005	0.005	0.005	0.005	0.003
	J (dB)	16	9	9	16	16	16	16	0
	$M_o(p_o)$ (dB)	17	17	17	17	17	17	17	30
	W (dB)	0	0	0	0	0	0	0	0
Terrestrial station parameters	B (Hz)	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	1×10^6
	G_r (dB) ⁽²⁾	35	52 ⁽³⁾	52 ⁽³⁾	45	47	50	50	50
	ΔG (dB)	-7	10 ⁽³⁾	10 ⁽³⁾	3	5	8	8	8
	T_r (K)	750	500 ⁽³⁾	500 ⁽³⁾	750	750	1500	1500	3200
Auxiliary parameters	S (dBW)	166	192	192	176	178	178	178	154
	$P_r(p)$ (dBW) in B	-131	-140	-140	-131	-131	-128	-128	-104

⁽¹⁾ A = analogue modulation; N = digital modulation.

⁽²⁾ Feeder losses are not included in the values for G_r .

⁽³⁾ In these bands the parameters for the terrestrial station associated with transhorizon systems have been used.

Table II
Parameters required for the Determination of Co-ordination Distance for a Receiving Earth Station

Space Radiocommunication Service designation		Space Operation (Telemetering) ⁽¹⁾		Fixed-Satellite		Fixed-Satellite		Earth Exploration-Satellite ⁽¹⁾		Space Research		Fixed-Satellite		Fixed-Satellite		Earth Exploration-Satellite ⁽¹⁾			
				Near Earth	Deep Space; Manned	Space Research	Meteorological-Satellite ⁽¹⁾												
Frequency band (GHz)		1.525-1.535	1.670-1.690	1.700-1.710	2.500-2.535	3.400-4.200	7.300-7.750	8.025-8.400	8.400-8.500	10.95-11.20	11.70-12.20	11.45-12.50	11.70-12.75	11.70-12.20	11.70-12.75	11.70-12.20	11.70-12.75		
Modulation at earth station ⁽²⁾				—	—	A	N	A	N	—	—	A	N	A	N	N			
						p _o (%)		0.1	0.001	0.03	0.003	0.03	0.003	0.1	0.001	0.03	0.003	0.003	
	n							2	1	3	3	3	3	2	1	2	1	1	
Interference parameters and criteria						p (%)		0.05	0.001	0.01	0.01	0.001	0.001	0.05	0.001	0.015	0.003	0.003	
	J (dB)							—	—	-8	-8	0	-8	—	—	-8	0	0	
	M ₀ (p _o) (dB)							—	—	17	17	5 ⁽³⁾	17	5 ⁽³⁾	—	—	17	5 ⁽³⁾	5 ⁽³⁾
	W (dB)							—	—	4	4	0	4	—	—	4	0	0	
	E (dBW) in B							55	55	62 ⁽⁴⁾ ⁽⁶⁾	62 ⁽⁴⁾ ⁽⁶⁾	92 ⁽⁴⁾	55	55	25 ⁽⁴⁾	25 ⁽⁴⁾	55	55	35 ⁽⁵⁾
Terrestrial station parameters	P _{t'} (dBW) in B							13	13	10 ⁽⁴⁾ ⁽⁶⁾	10 ⁽⁴⁾ ⁽⁶⁾	40 ⁽⁴⁾	13	13	-17 ⁽⁴⁾	-17 ⁽⁴⁾	5	5	-15 ⁽⁶⁾
	ΔG (dB)							0	0	10 ⁽⁶⁾	10 ⁽⁶⁾	0	0	0	0	0	0	0	0
Reference bandwidth	B (Hz)							—	1	10 ⁽⁶⁾	10 ⁽⁶⁾	10 ⁶	10 ⁶	10 ⁶	1	1	10 ⁶	10 ⁶	10 ⁶
Permissible interference power	P _{r(p)} (dBW) in B							-220	-220	—	—	—	—	-220	-220	—	—	—	

⁽¹⁾ Parameters associated with these services may vary over a rather wide range. Further study is required before representative values become available.

⁽²⁾ A = analogue modulation; N = digital modulation.

⁽³⁾ See note (2) in Section 2. $M_0(p_o)$ may assume values between 5 and 40 dB, depending on frequency, rain-climatic zone and system design.

⁽⁴⁾ These values are estimated for 1 Hz bandwidth and are 30 dB below the total power assumed for emission.

⁽⁵⁾ These values assume an r.f. bandwidth of no less than 100 MHz, and are 20 dB below total power assumed per emission.

⁽⁶⁾ In these bands, the parameters for the terrestrial stations associated with transhorizon systems have been used.

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distance and is to be used for the co-ordination procedure.

An example of a co-ordination contour is shown in Figure 23.

7. Parameters for calculation

The values of parameters necessary for the determination of the co-ordination contour are given in Table I in the case of a transmitting earth station, and in Table II in the case of a receiving earth station.

In certain cases, an administration may have reason to believe that, for its specific earth station, a departure from the values associated with the earth station, as listed in Table II, may be justified. Attention is drawn to the fact that for specific systems the bandwidths B or, as for instance in the case of demand assignment systems, the percentages of the time p and p_0 may have to be changed from the values given in Table II.

To aid in subsequent negotiations between administrations (as discussed in Annex B), it has been found useful to isolate from equation (2) two composite parameters associated only with terrestrial stations, an interference sensitivity factor $S = G_r - P_r(p)$ for the case of transmitting earth stations, and the e.i.r.p. $E = P_{r'} + G_{r'}$ for the case of receiving earth stations. The values to be used for S and E are given in Tables I and II, respectively.

If it becomes necessary to calculate the co-ordination distance in a band not shown in Table I or II, the values associated with the nearest allocated frequency band for the same service should be used.

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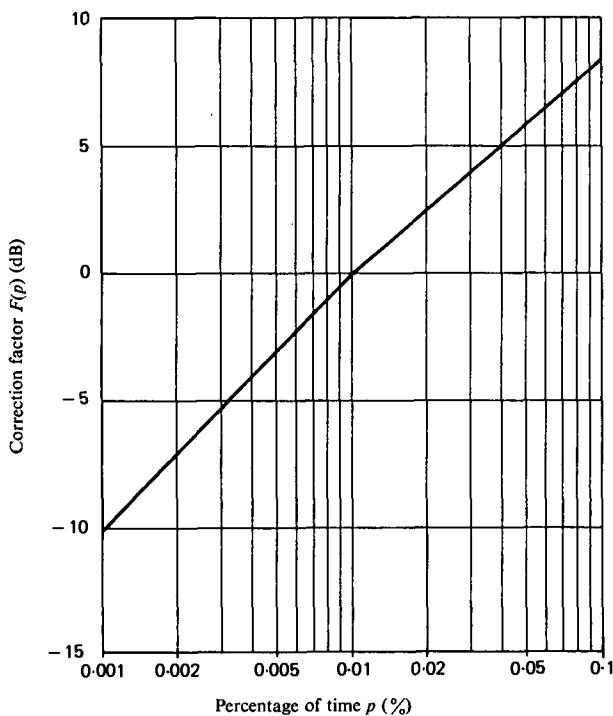


FIGURE 1

Correction factor $F(p)$ for percentages of the time p other than 0.01%

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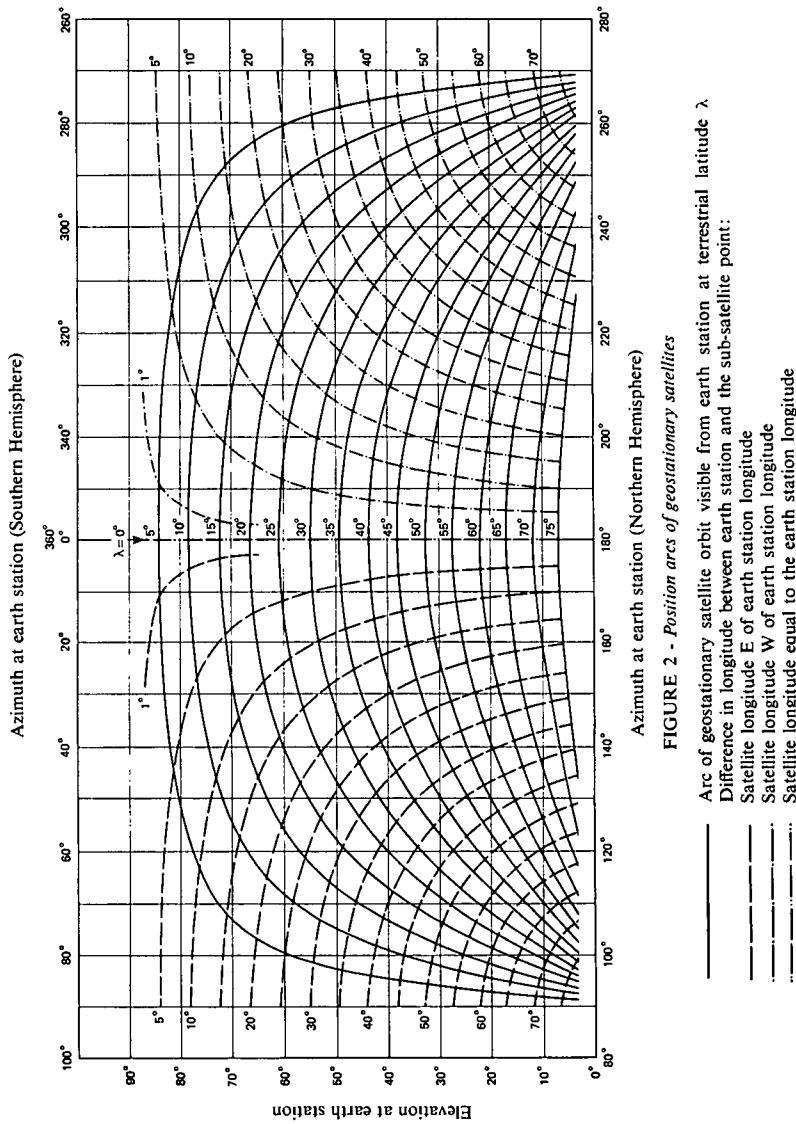


FIGURE 2 - Position arcs of geostationary satellites

Arc of geostationary satellite orbit visible from earth station at terrestrial latitude λ
 Difference in longitude between earth station and the sub-satellite point:
 Satellite longitude E of earth station longitude
 Satellite longitude W of earth station longitude
 Satellite longitude equal to the earth station longitude

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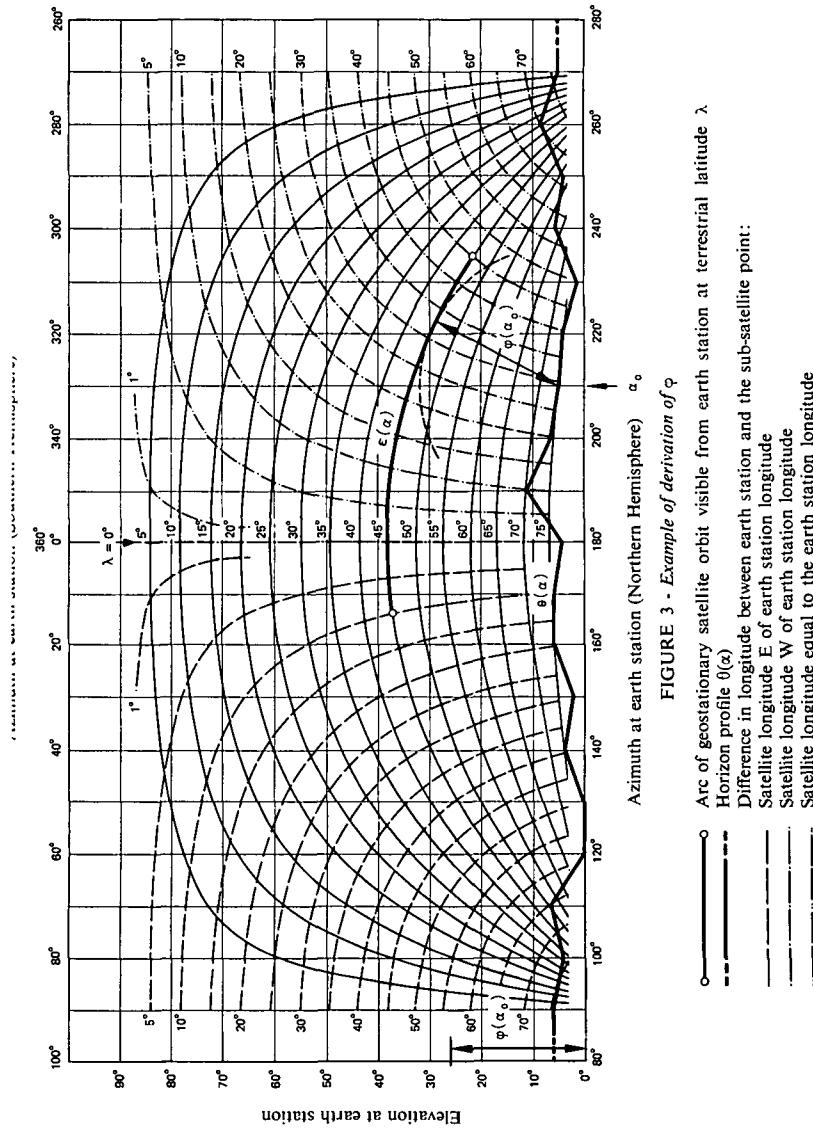


FIGURE 3 - Example of derivation of φ

Arc of geostationary satellite orbit visible from earth station at terrestrial latitude λ
 Horizon profile $\varphi(x)$
 Difference in longitude between earth station and the sub-satellite point:
 Satellite longitude E of earth station longitude
 Satellite longitude W of earth station longitude
 Satellite longitude equal to the earth station longitude

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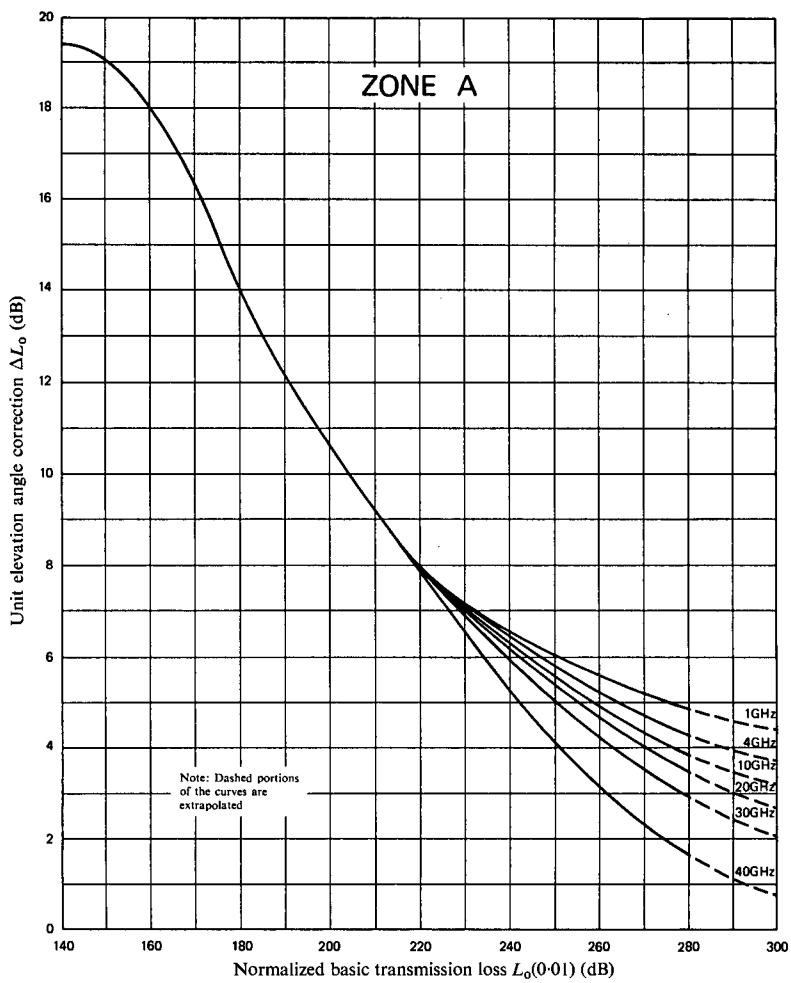


FIGURE 4
Unit elevation angle correction as a function of normalized basic transmission loss and frequency — Zone A

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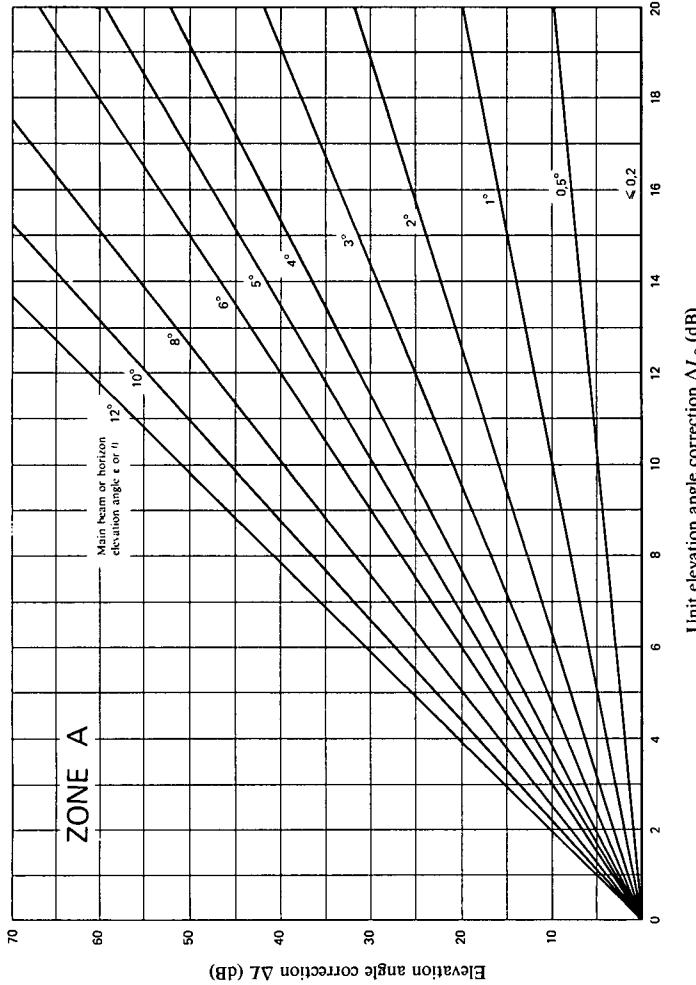


FIGURE 5
Elevation angle correction — Zone A

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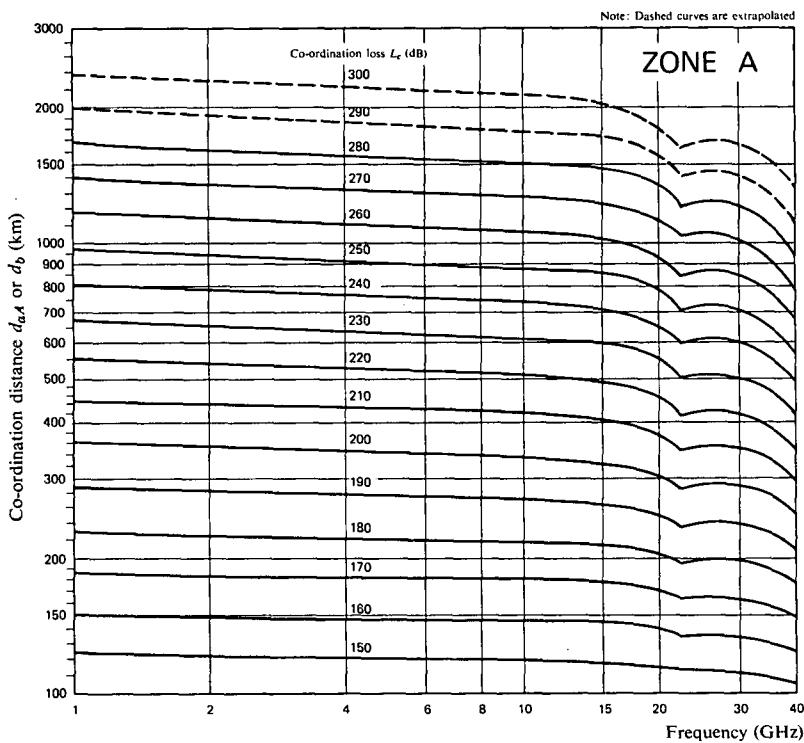


FIGURE 6
Co-ordination distance d_{aA} or d_b as a function of frequency and co-ordination loss — Zone A

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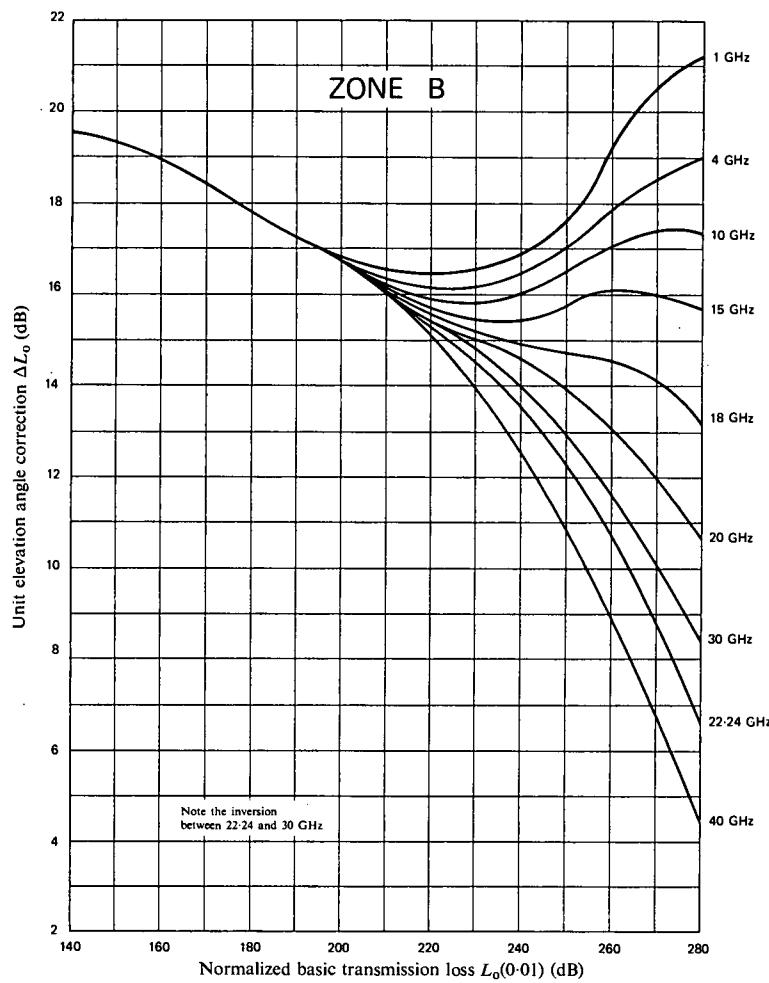


FIGURE 7

Unit elevation angle correction as a function of normalized basic transmission loss and frequency — Zone B

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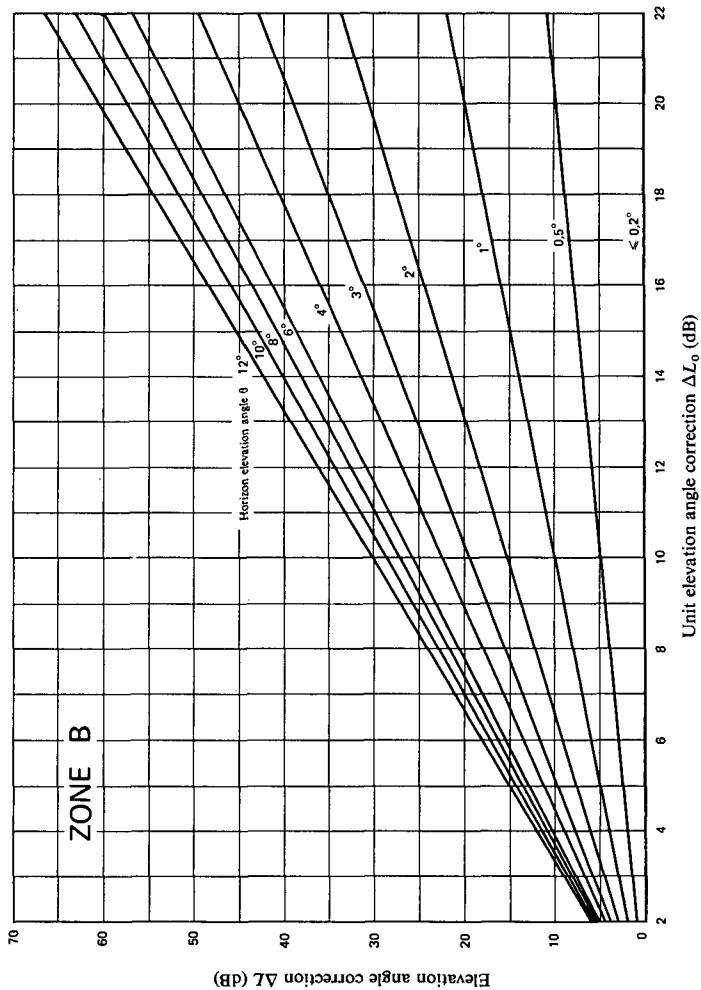


FIGURE 8
Elevation angle correction — Zone B

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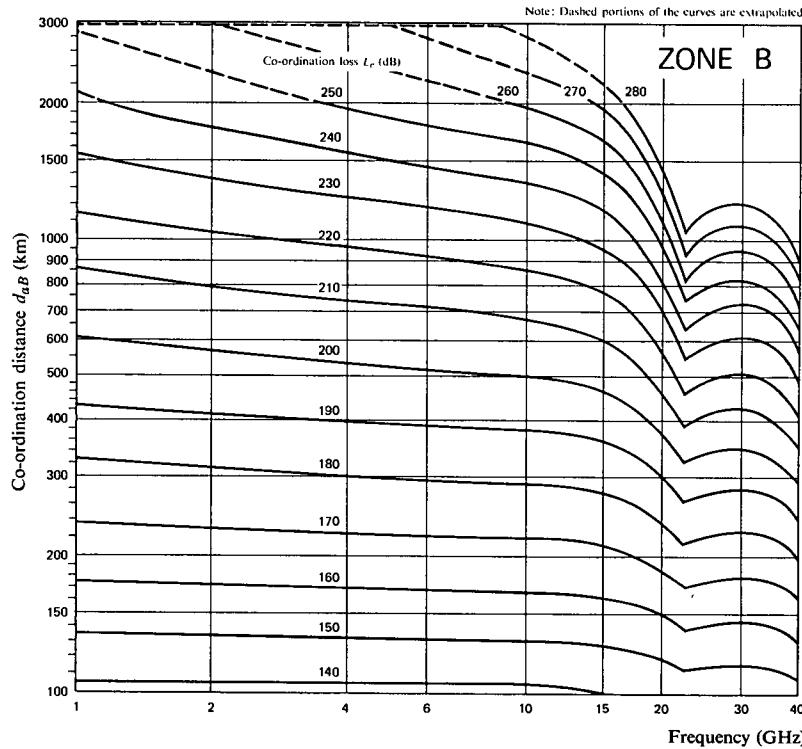


FIGURE 9

Co-ordination distance d_{aB} as a function of frequency and co-ordination loss — Zone B

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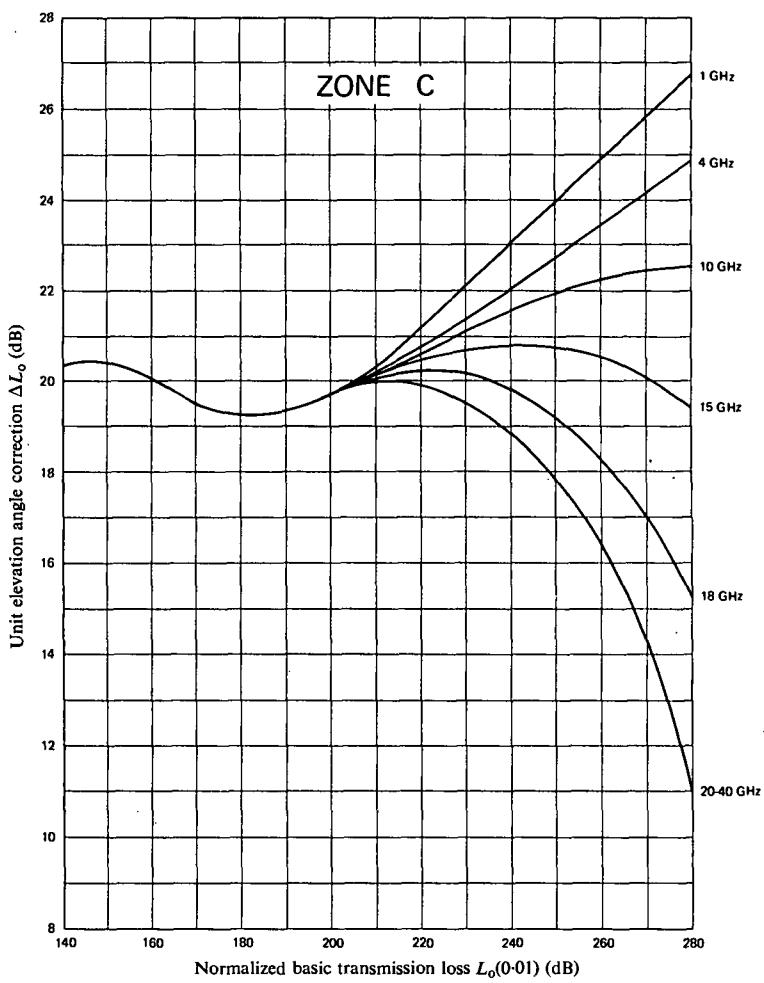


FIGURE 10

Unit elevation angle correction as a function of normalized basic transmission loss and frequency — Zone C

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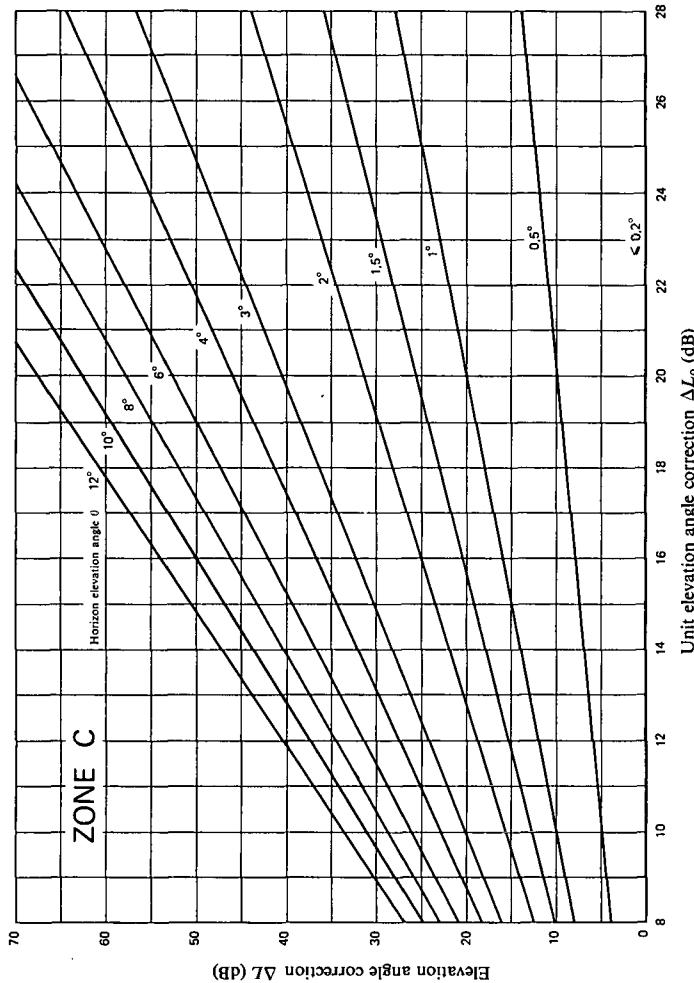


FIGURE 11
Elevation angle correction — Zone C

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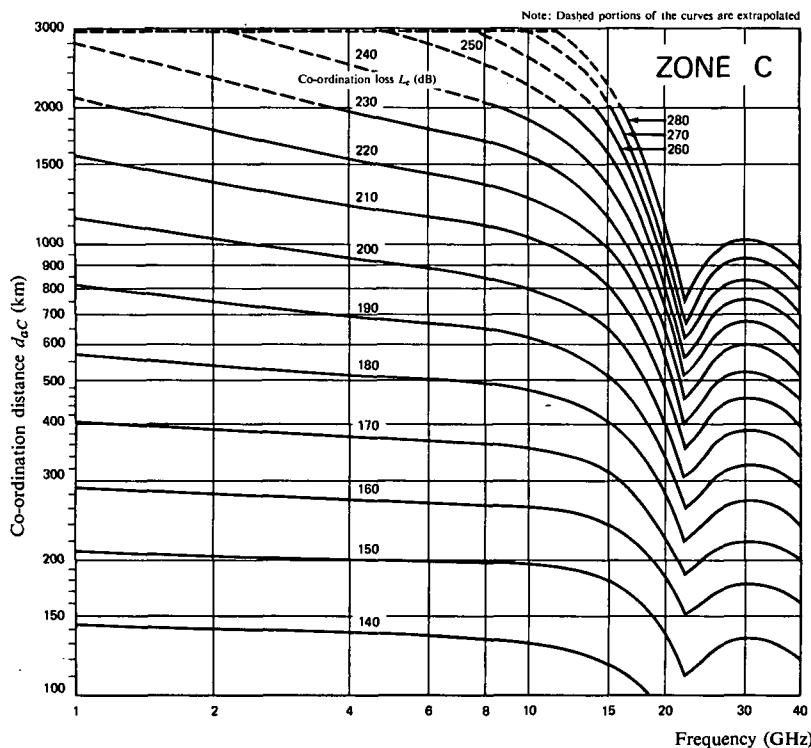


FIGURE 12
Co-ordination distance d_{0C} as a function of frequency and co-ordination loss — Zone C

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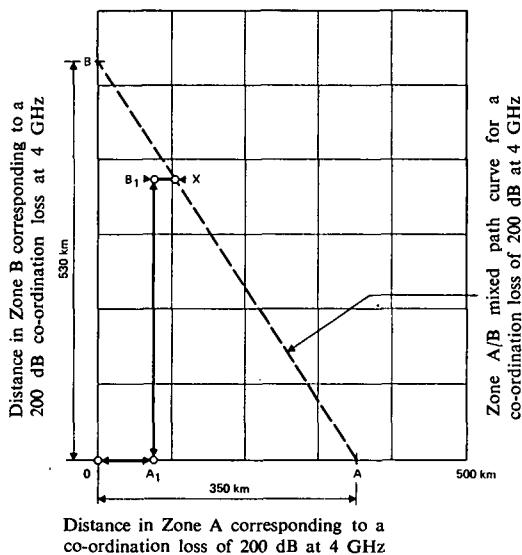


FIGURE 13a

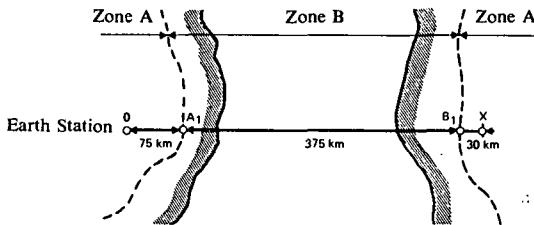


FIGURE 13b

FIGURE 13

Example of the determination of co-ordination distance for a mixed path involving two zones

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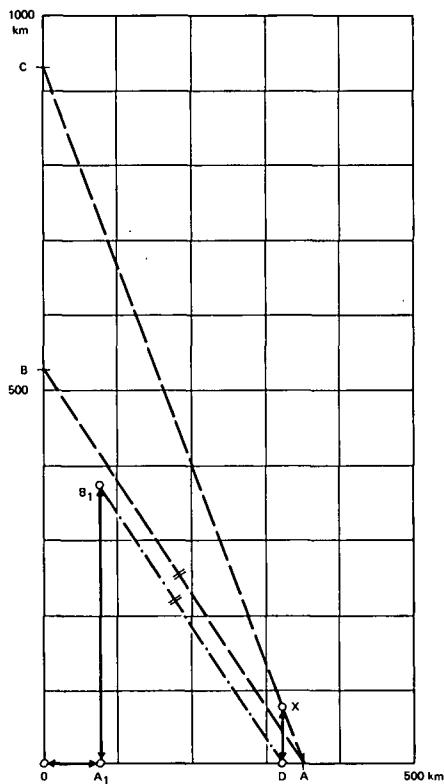


FIGURE 14b

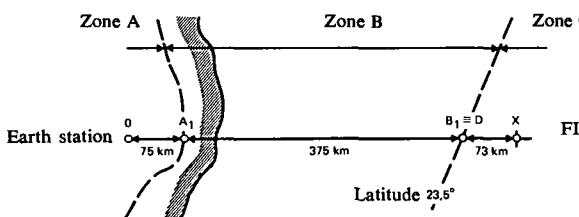


FIGURE 14a

FIGURE 14
Example of the determination of co-ordination distance for a mixed path involving the three zones

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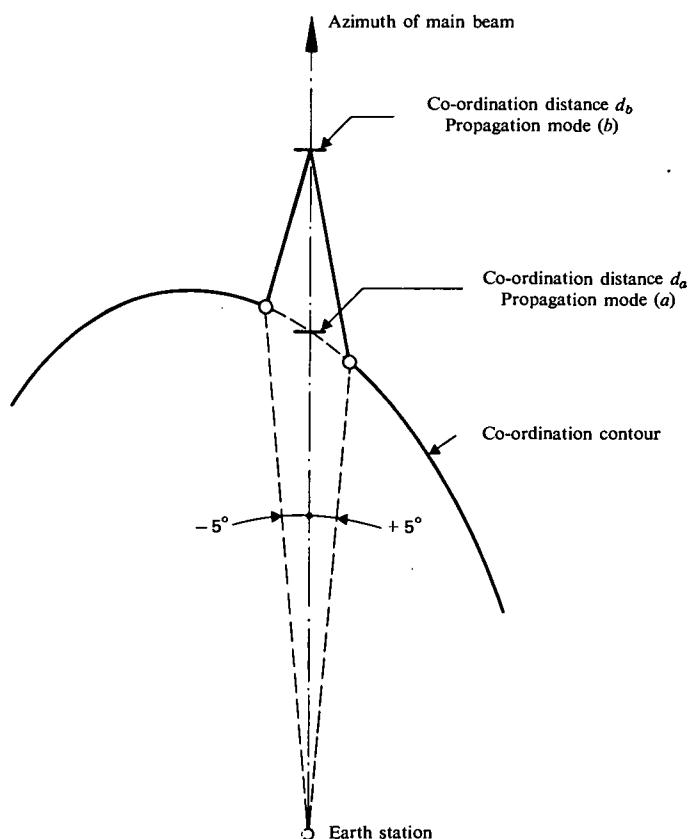


FIGURE 15

*Example of the determination of the co-ordination distance
in the case where the elevation of the earth station main beam
is less than 12°*

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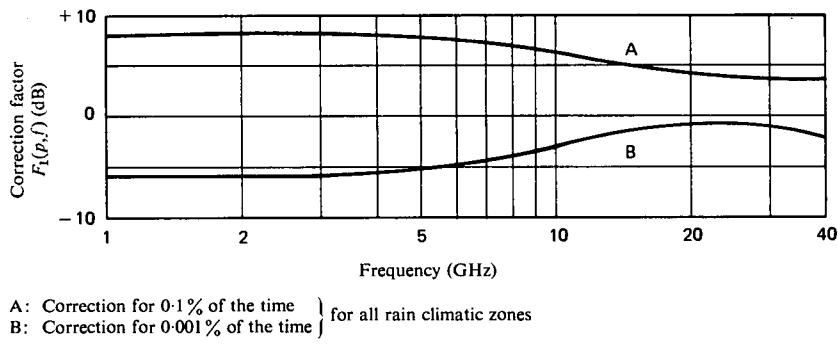
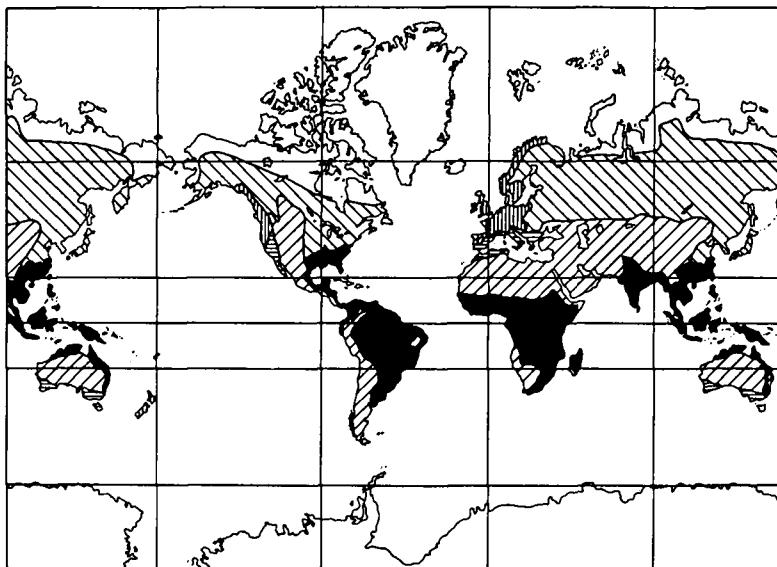


FIGURE 16

Correction factor $F_1(p,f)$ to relate the effective percentage of time to 0·01%, as a function of frequency for propagation mode (c)

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- Zone 1
- ▨ Zone 2
- ▨ Zone 3
- ▨ Zone 4
- ▨ Zone 5

FIGURE 17
Rain-climatic zones of the world

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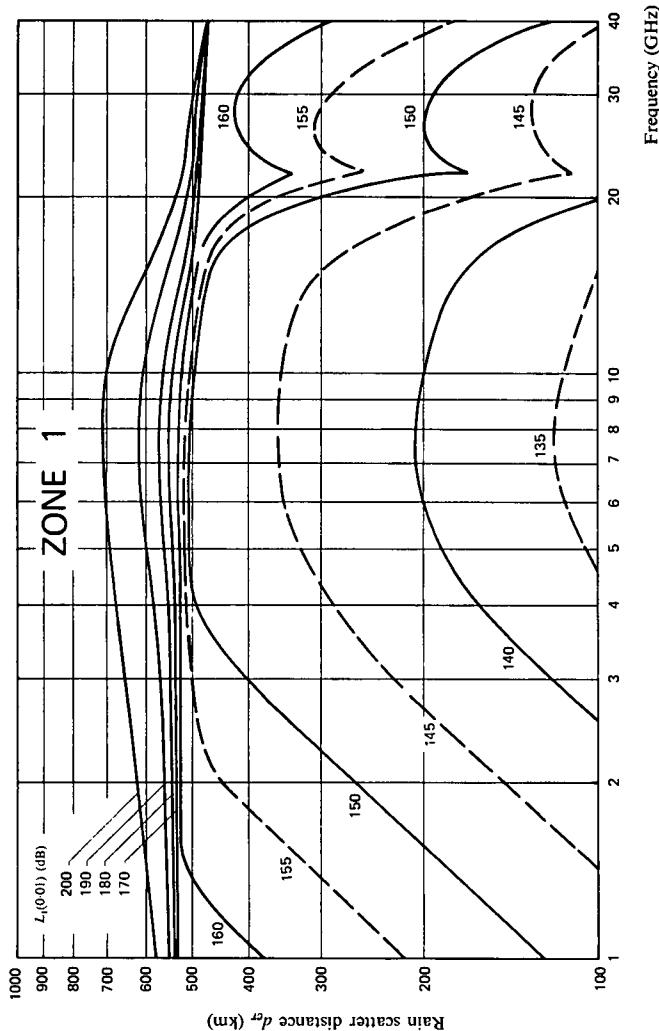


FIGURE 18

Rain scatter distance as a function of frequency and normalized transmission loss — Rain climatic Zone 1 (see figure 17)

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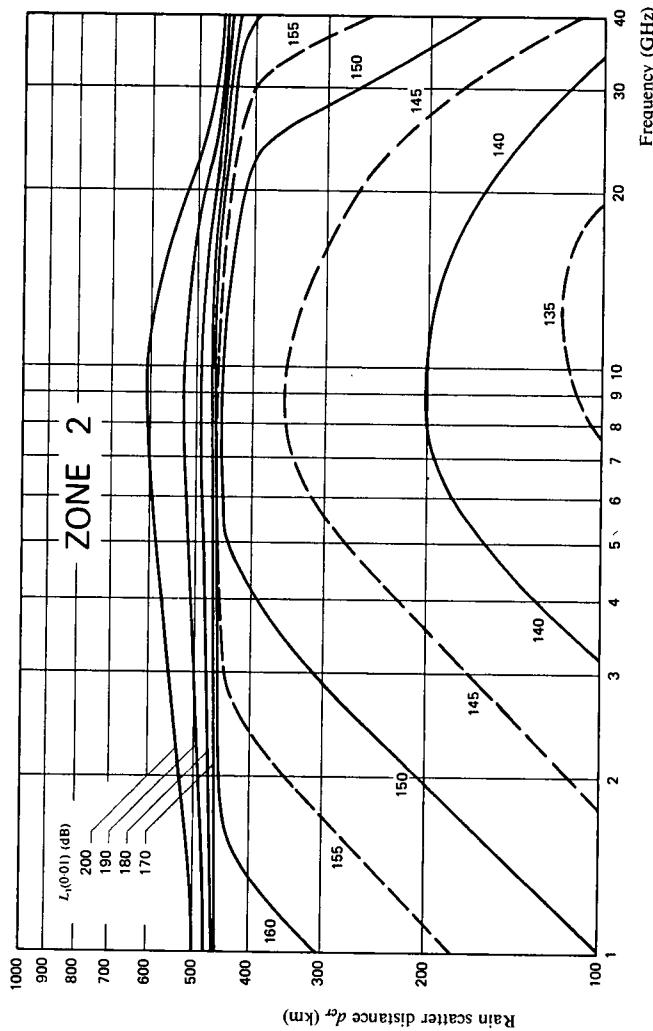


FIGURE 19

Rain scatter distance as a function of frequency and normalized transmission loss — Rain climatic Zone 2 (see figure 17)

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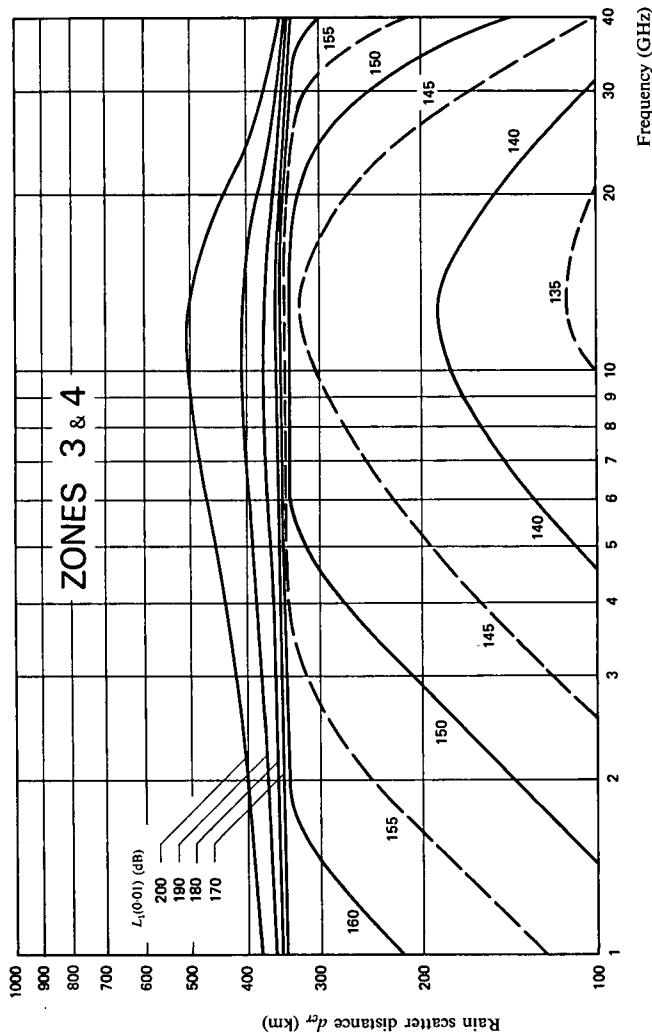


FIGURE 20
Rain scatter distance as a function of frequency and normalized transmission loss — Rain climatic Zones 3 and 4 (see figure 17)

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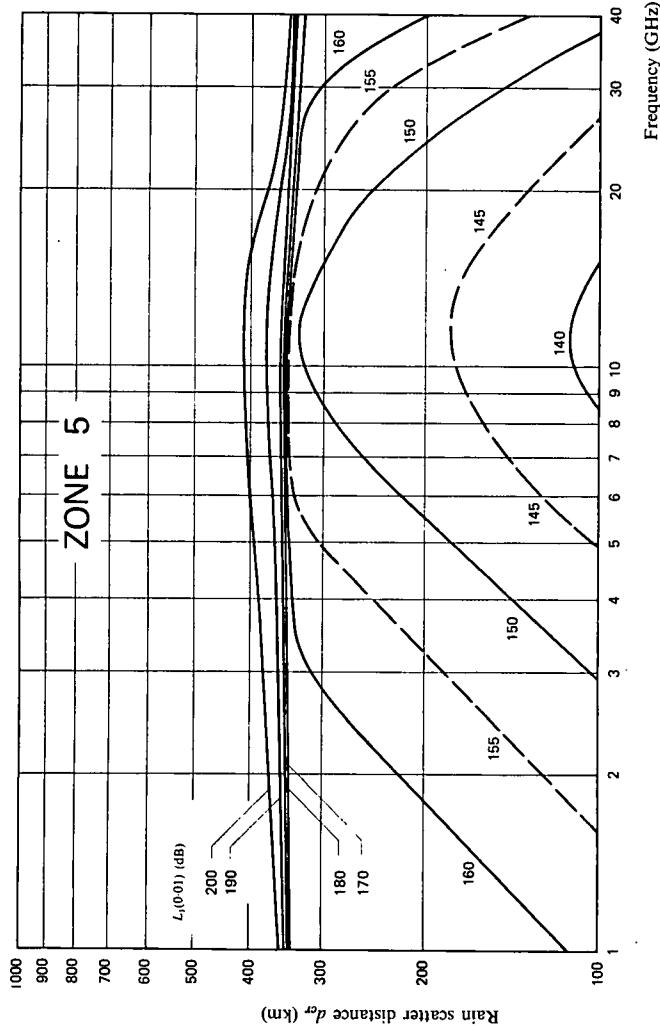


FIGURE 21

Rain scatter distance as a function of frequency and normalized transmission loss — Rain climatic Zone 5 (see figure 17)

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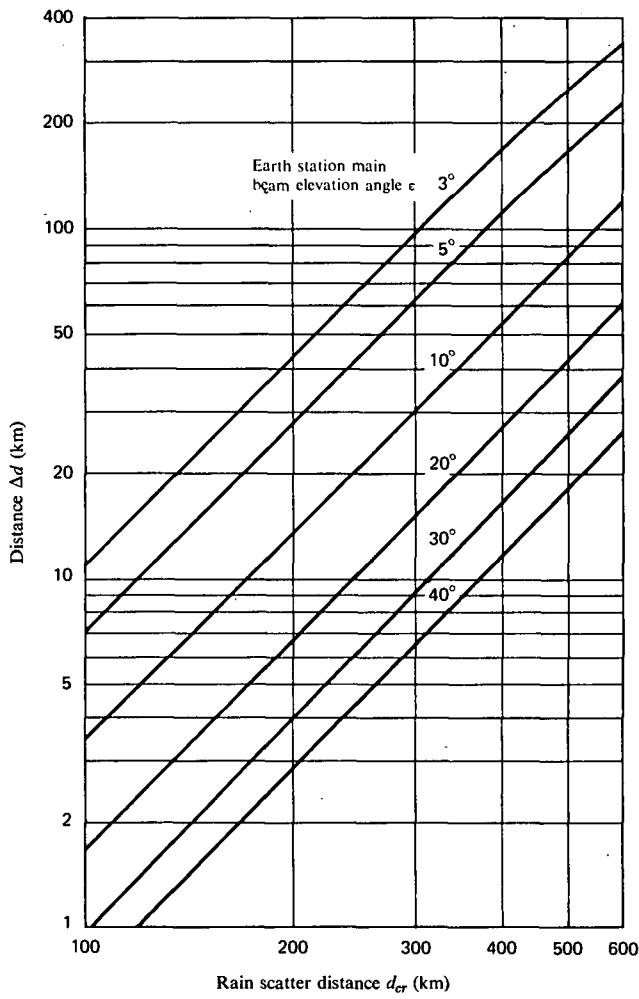
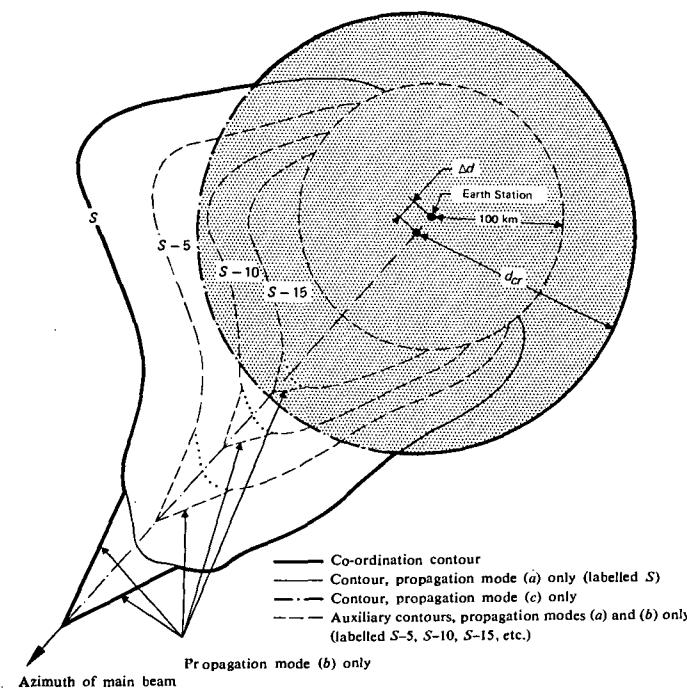


FIGURE 22

Distance Δd as a function of rain scatter distance d_{cr} and earth station main beam elevation angle ϵ

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If by using the auxiliary contours it is seen that a terrestrial station can be eliminated with respect to the great circle propagation mechanism then:

- if that terrestrial station is outside of the shaded area (rain-scatter mode), it may be eliminated from any further consideration;
- if that terrestrial station is within the shaded area (rain-scatter mode), it must still be considered, but simply for the rain-scatter propagation mode only.

FIGURE 23
Example of contours for a transmitting earth station

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ANNEX A TO APPENDIX 28

**Determination of Co-ordination Distance
in allocated Frequency Bands**

1. Article 9A of the Radio Regulations requires co-ordination distances to be determined only in the particular frequency bands given in Article 5 of these Regulations and listed in Tables III and IV of this Annex. For each of these frequency bands it is convenient to combine those parameters which depend only upon the frequency and types of system using the band. The resulting value of the combined parameters is then a given constant for a particular allocated frequency band and type of earth station.

Earth station transmission

2. In the bands allocated for earth station transmission (Table III), use is made of constants C_1 and C_2 derived in the following manner:

For propagation by modes (a) and (b):

$$\begin{aligned} C_1 &= G_r - P_r(p) - 20 \log_{10}(f/4) - F(p) \\ &= S - 20 \log_{10}(f/4) - F(p) \end{aligned}$$

For propagation by mode (c):

$$C_2 = -P_r(p) - F_1(p, f) + \Delta G$$

The normalized basic transmission loss $L_o(0.01)$ and the normalized transmission loss $L_1(0.01)$ are given by:

$$\begin{aligned} L_o(0.01) &= P_r + G_r + C_1 \\ L_1(0.01) &= P_r + C_2 \end{aligned}$$

The values of C_1 and C_2 for bands allocated for earth station transmission are given in Table III, together with the reference bandwidth (B) which is used in calculating P_r .

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Earth station reception

3. In the bands allocated for earth station reception (see Table IV) use is made of constants C_3 and C_4 which are derived in the following manner:

For propagation by modes (a) and (b):

$$C_3 = E - (10 \log_{10} kB + J - W) - F(p) - 20 \log_{10}(f/4)$$

For propagation by mode (c):

$$C_4 = P_r - (10 \log_{10} kB + J - W) - F_1(p,f) + \Delta G$$

The normalized basic transmission loss $L_o(0\cdot01)$ and the normalized transmission loss $L_1(0\cdot01)$ are given by:

$$L_o(0\cdot01) = G_r + C_3 - 10 \log_{10} T_r - M(p)$$

$$L_1(0\cdot01) = C_4 - 10 \log_{10} T_r - M(p)$$

The values of C_3 and C_4 for bands allocated for earth station reception are given in Table IV.

Flow Diagrams

4. The procedure for determining co-ordination distance is illustrated by Flow Diagrams 1 and 2 in this Annex. The steps required to determine co-ordination distances for a transmitting earth station are shown in Flow Diagram 1, and those for a receiving earth station are shown in Flow Diagram 2. The symbols used in these diagrams are defined in the main text of Appendix 28.

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TABLE III

Earth station Transmission (See Flow Diagram 1)

Allocated Frequency Bands (GHz)	C_1 (dBW)	C_2 (dBW)	Reference Bandwidth B (Hz)
1.427 - 1.429	178	127	4×10^3
2.655 - 2.690	196	150	4×10^3
4.400 - 4.700	191	150	4×10^3
5.850 - 6.425	175	136	4×10^3
7.900 - 7.975 8.025 - 8.400 }	175	138	4×10^3
10.95 - 11.20	172	137	4×10^3
12.50 - 12.75	171	137	4×10^3
14.40 - 14.50	170	137	4×10^3
27.5 - 29.5	142	112	1×10^6

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TABLE IV
Earth Station Reception (see Flow Diagram 2)

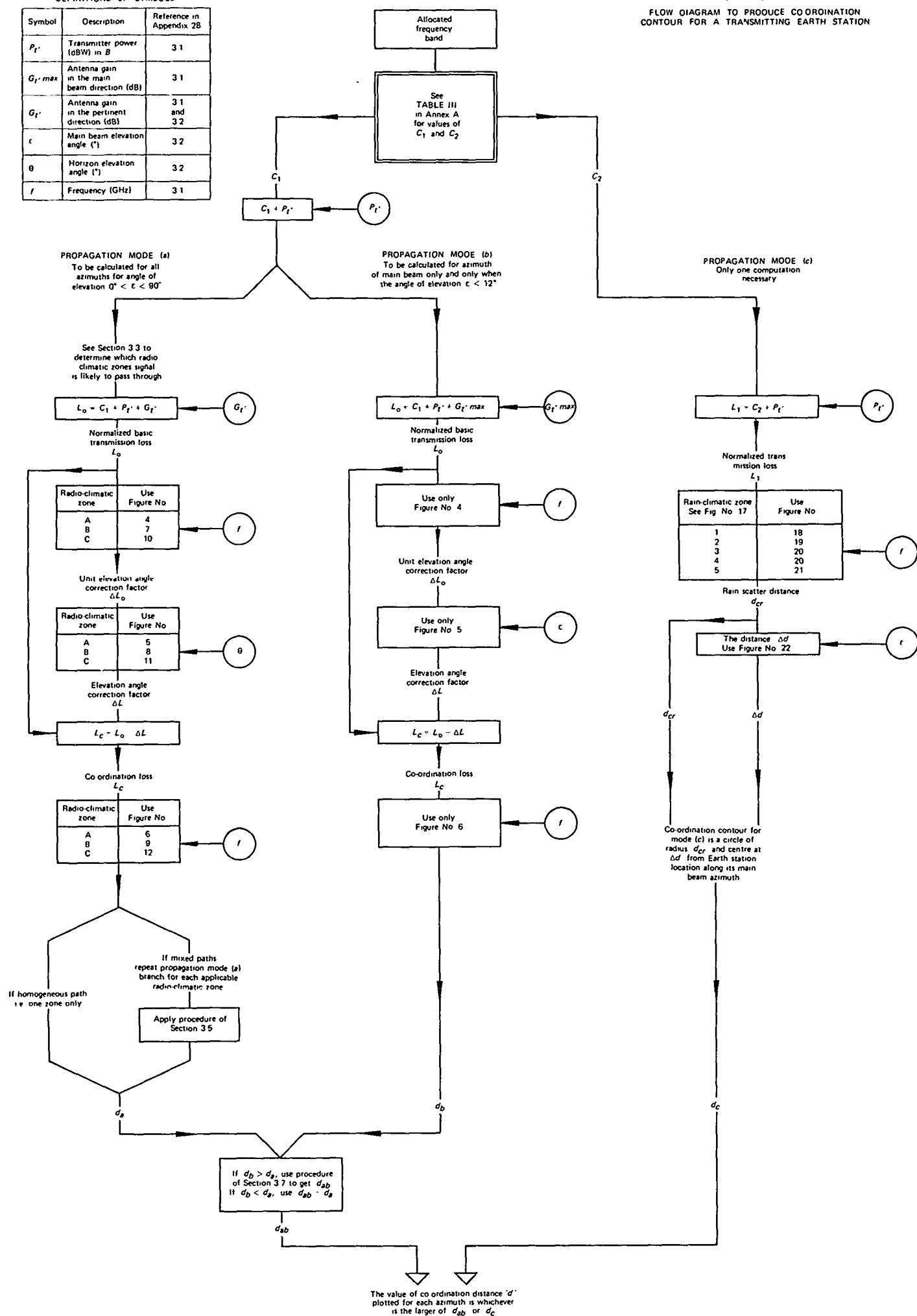
Allocated frequency Bands (GHz)	Designation of space radiocommunication service	Type of modulating signal ⁽¹⁾	C ₃ (dBW)	C ₄ (dBW)
1.525 - 1.535	Space operation (Telemetering)			
1.670 - 1.690	Meteorological-satellite			
1.700 - 1.710 2.290 - 2.300	Space research	Near Earth		
		Deep space, manned		
2.500 - 2.535	Fixed-satellite	A	277	231
3.400 - 4.200	Fixed-satellite	A	236	194
		N	234	188
7.300 - 7.750	Fixed-satellite	A	230	194
		N	228	186
8.025 - 8.400	Earth exploration-satellite			
8.400 - 8.500	Space research	Near Earth		
		Deep space		
10.95 - 11.20 11.45 - 11.70	Fixed-satellite	A	225	184
		N	220	176
11.70 - 12.20 12.50 - 12.75	Fixed-satellite	A	224	184
		N	219	176
17.7 - 19.7	Fixed-satellite	N	196	154
21.2 - 22.0	Earth exploration-satellite			

⁽¹⁾ A = Analogue Modulation; N = Digital Modulation.

DEFINITIONS OF SYMBOLS

Symbol	Description	Reference in Appendix 2B
$P_{t'}$	Transmitter power (dBW) in B	3.1
$G_{t'} \max$	Antenna gain in the main beam direction (dB)	3.1
$G_{t'}'$	Antenna gain in the pertinent direction (dB)	3.1 and 3.2
ϵ	Main beam elevation angle ($^{\circ}$)	3.2
θ	Horizon elevation angle ($^{\circ}$)	3.2
f	Frequency (GHz)	3.1

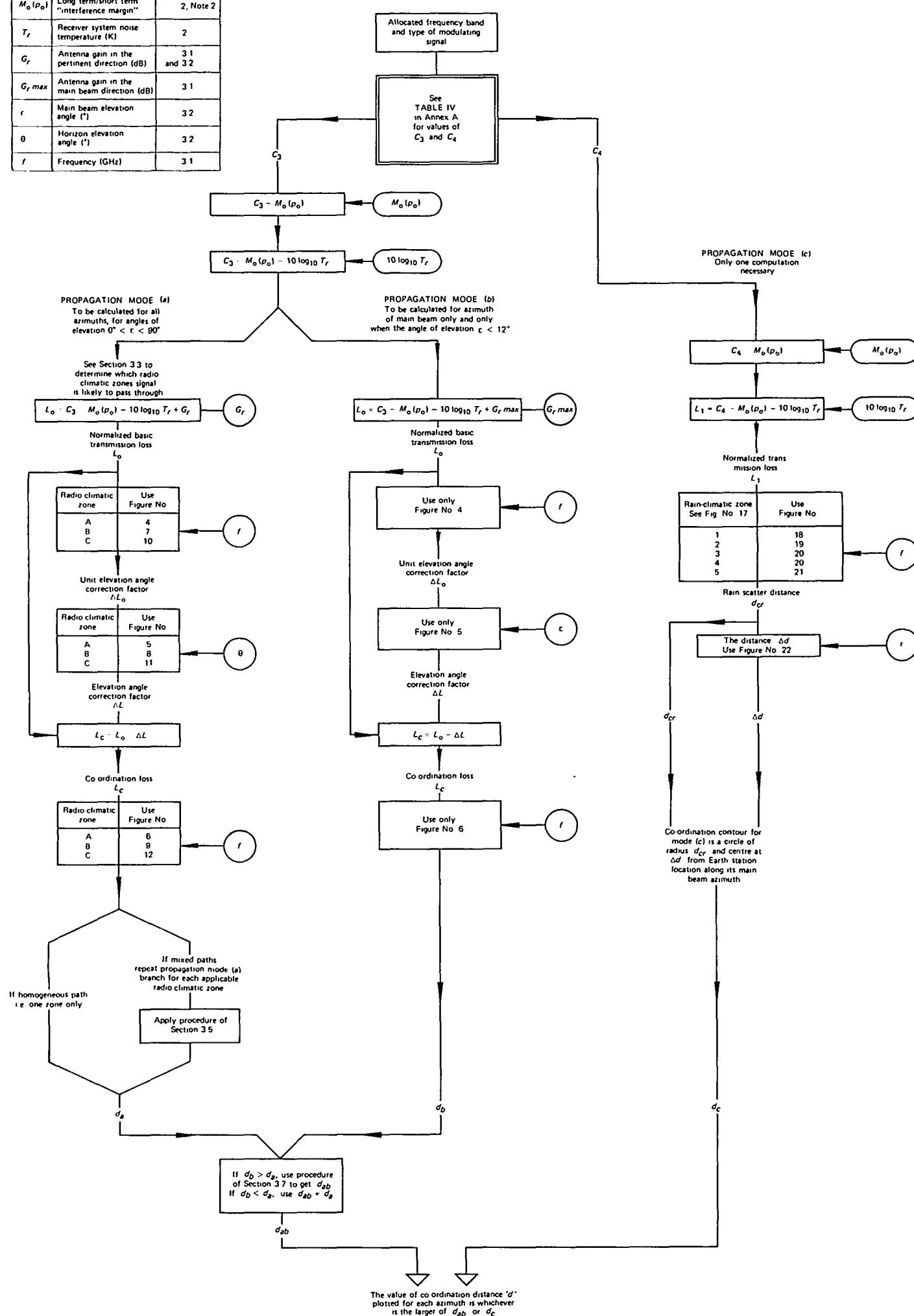
FLOW DIAGRAM 1
FLOW DIAGRAM TO PRODUCE COORDINATION CONTOUR FOR A TRANSMITTING EARTH STATION



DEFINITIONS OF SYMBOLS

Symbol	Description	Reference in Appendix 28
$M_0(p_0)$	Long term/short term "interference margin"	2, Note 2
T_r	Receiver system noise temperature (K)	2
G_r	Antenna gain in the pertinent direction (dB)	3.1 and 3.2
$G_{r\max}$	Antenna gain in the main beam direction (dB)	3.1
ϵ	Main beam elevation angle ($^{\circ}$)	3.2
θ	Horizon elevation angle ($^{\circ}$)	3.2
f	Frequency (GHz)	3.1

FLOW DIAGRAM 2
FLOW DIAGRAM TO PRODUCE COORDINATION CONTOUR FOR A RECEIVING EARTH STATION



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ANNEX B TO APPENDIX 28

Determination and Use of auxiliary Contours**1. Introduction**

For great circle propagation mechanisms, modes (*a*) and (*b*), auxiliary contours are of great value in eliminating certain existing or planned terrestrial stations falling within the co-ordination area without recourse to precise and arduous calculations. The work of both the earth station administration and the affected administrations is therefore eased during subsequent negotiations if these auxiliary contours are supplied.

2. Determination of the auxiliary contours

Two types of contours can be determined, depending on whether the earth station is used for transmission or reception.

2.1 Transmitting earth station

The contours are determined in the same way as the corresponding co-ordination contour for propagation modes (*a*) and (*b*), but using terrestrial station interference sensitivity factor *S* values (in dBW) which are 5, 10, 15, 20 dB, etc. lower than the value (given in Table I of Appendix 28) corresponding to the co-ordination contour.

2.2 Receiving earth station

The contours are determined in the same way as the corresponding co-ordination contour, for propagation modes (*a*) and (*b*), but using terrestrial station e.i.r.p. values *E* (in dBW) which are 5, 10, 15, 20 dB, etc. lower than the value (given in Table II of Appendix 28) corresponding to the co-ordination contour.

3. Use of auxiliary contours

The auxiliary contours, the co-ordination contour for great circle propagation (modes (*a*) and (*b*)) and the co-ordination contour for

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rain scatter (mode (c)) are all plotted on the same diagram for a given shared band. An illustrated example is given in Figure 23 of Appendix 28 for a transmitting earth station.

For each terrestrial station situated within the co-ordination area, a two-stage procedure may be applied, one for the great circle propagation mechanism and the other for rain scatter.

3.1 Great circle propagation mechanism (modes (a) and (b))

If a transmitting terrestrial station is outside the co-ordination area corresponding to modes (a) and (b), it need not be considered further with respect to modes (a) and (b).

For each transmitting terrestrial station situated within the co-ordination area corresponding to modes (a) and (b), the e.i.r.p. value in the direction of the earth station is determined. If this value is less than the value associated with the nearest contour defining an area outside of which the station is situated, the station may be considered not to cause more than a permissible level of interference and therefore may be eliminated from further considerations with respect to modes (a) and (b).

For each receiving terrestrial station, the analogous procedure may be applied, using the interference sensitivity factor instead of the e.i.r.p. value.

3.2 Elimination of a terrestrial station and rain scatter mechanism (mode (c))

Terrestrial stations eliminated by the above procedure from further consideration with regard to propagation modes (a) and (b) need, nevertheless, be further considered with regard to propagation mode (c) when they lie within the rain scatter co-ordination area.

ANNEX 19

Addition of a new Appendix (Appendix 29) to the Radio Regulations

The following new Appendix shall be added to the Radio Regulations after the new Appendix 28:

APPENDIX 29

Method of Calculation to evaluate the Degree of Interference between geostationary Satellite Networks Sharing the same Frequency Bands

1. Introduction

The method of calculating interference is based on the concept that the noise temperature of the system receiving interference increases as the level of the interference increases. It can, therefore, be applied irrespective of the modulation characteristics of these satellite networks, and of the precise frequencies used.

In this method, the apparent increase in the equivalent satellite link noise temperature⁽¹⁾ resulting from interference caused by a given system is calculated and this value is compared with a predetermined increase in the noise temperature (see section 3 below).

2. Calculation of the increase in noise temperature of the satellite link receiving interference

Let A and A' be the satellite links⁽²⁾ of the two satellite networks considered. Primes indicate the parameters of satellite link A'; the notation without primes is used for the parameters of satellite link A.

The parameters are defined as follows (for satellite link A):

ΔT_s = increase in the receiver noise temperature of the satellite S caused by interference in the receiver of this satellite (K);

⁽¹⁾ See No. 103A.

⁽²⁾ See No. 84AFC.

ΔT_e = increase in the receiver noise temperature of the earth station e_r caused by interference in the receiver of this station (K);

p_s = maximum power density per Hz delivered to the antenna of satellite S (averaged over the worst 4 kHz band for a carrier frequency below 15 GHz or over the worst 1 MHz band above 15 GHz) (W/Hz);

$g_s(\eta_{e'})$ = transmitting antenna gain of satellite S in the direction of the receiving earth station e'_r of satellite link A' (numerical power ratio);

Note: the product $p_s g_s(\eta_{e'})$ is the maximum equivalent isotropically radiated power per Hz of satellite S in the direction of the receiving earth station e'_r of satellite link A';

p_t = maximum power density per Hz delivered to the antenna of the transmitting earth station e_t (averaged over the worst 4 kHz band for a carrier frequency below 15 GHz or over the worst 1 MHz band above 15 GHz) (W/Hz);

$g_2(\delta_{e'})$ = receiving antenna gain of satellite S in the direction of the transmitting earth station e'_t (numerical power ratio);

$g_1(\theta)$ = transmitting antenna gain of the earth station e_t in the direction of satellite S' (numerical power ratio);

$g_4(\theta)$ = receiving antenna gain of the earth station e_r in the direction of satellite S' (numerical power ratio);

k = Boltzmann's constant (J/K);

l_d = free-space transmission loss on the down-path (numerical power ratio) (*);

l_u = free-space transmission loss on the up-path (numerical power ratio) (*);

(*) To simplify the calculation it was assumed that:

- basic transmission loss on the down-path is the same regardless of the satellite and earth station considered;
- basic transmission loss on the up-path is the same regardless of the earth station and satellite considered.

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- γ = transmission gain of the satellite link evaluated from the output of the receiving antenna of the space station S to the output of the receiving antenna of the earth station e_R (numerical power ratio, usually less than 1);
- θ = geocentric angular separation between two satellites (degrees) (*).

The parameters ΔT_s and ΔT_e are given by the following equations:

$$\Delta T_s = \frac{p'_e g'_1(\theta) g_2(\delta_{e'})}{k l_u} \quad (1)$$

$$\Delta T_e = \frac{p'_s g'_3(\eta_e) g_4(\theta)}{k l_d} \quad (2)$$

The symbol ΔT will be used to denote the apparent increase in the equivalent noise temperature for the entire satellite link at the receiver input of the receiving station e_R due to interference from link A'.

This increase is the result of interference entering at both the satellite and earth station receiver of link A and can accordingly be expressed as:

$$\Delta T = \gamma \Delta T_s + \Delta T_e \quad (3)$$

Hence,

$$\Delta T = \gamma \frac{p'_e g'_1(\theta) g_2(\delta_{e'})}{k l_u} + \frac{p'_s g'_3(\eta_e) g_4(\theta)}{k l_d} \quad (4)$$

Equation (4) combines both the up-path and the down-path interference. If there is a change of modulation in the satellite or if the translation frequencies of the wanted and interfering satellites are different then it may be necessary to treat up and down paths separately using equations (1) and (2).

(*) To simplify the calculation it was assumed that the topocentric angular separation between the two satellites as seen from any earth station is identical to the geocentric angular separation between the two satellites.

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In the foregoing equations, the gains $g_1(\theta)$ and $g_4(\theta)$ are those of the earth stations concerned. Unless more precise actual data are available, an appropriate reference radiation pattern may be used to express the gain $g_1'(\theta)$ and $g_4'(\theta)$ in a direction forming an angle θ with the direction of maximum radiation. In the event that precise numerical data are not available, the reference radiation pattern $32 - 25 \log_{10}\theta$ shall be used for earth station antennae for which the ratio *diameter/wavelength* exceeds 100.

In the same way, the increase $\Delta T'$ in the equivalent noise temperature for the entire satellite link at the receiver input of the receiving earth station e'_R under the effect of the interference caused by satellite link A is given by the following equations:

$$\Delta T'_{s'} = \frac{p_e g_1(\theta) g_2'(\delta_e)}{kl_u} \quad (5)$$

$$\Delta T'_{e'} = \frac{p_s g_3(\eta_e) g_4'(\theta)}{kl_d} \quad (6)$$

$$\Delta T' = \gamma' \frac{p_e g_1(\theta) g_2'(\delta_e)}{kl_u} + \frac{p_s g_3(\eta_e) g_4'(\theta)}{kl_d} \quad (7)$$

For two multiple-access satellites this calculation must be made for each of the satellite links established via one satellite in relation to each of the satellite links established via the other satellite.

3. Comparison between calculated and predetermined percentage increase in equivalent satellite link noise temperature

The calculated values of ΔT and $\Delta T'$ shall be compared with the corresponding predetermined values. These predetermined values are taken as 2% of the appropriate equivalent satellite link noise temperatures:

— if the calculated value of ΔT is less than the predetermined one, the interference level from satellite link A' to satellite link A is permissible irrespective of the modulation characteristics of the two satellite links and of the precise frequencies used;

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— if the calculated value of ΔT is more than the predetermined one, a detailed calculation shall be carried out following the methods and techniques set out in the relevant C.C.I.R. Reports and Recommendations.

The comparison of $\Delta T'$ with the predetermined value shall be carried out in a similar manner.

As an example, it can be seen that in the case of a satellite link operating in accordance with current C.C.I.R. Recommendations, using FM telephony and having a total noise in a telephone channel of 10 000 pW0p including 1 000 pW0p interference noise from terrestrial radio-relay systems and 1 000 pW0p interference noise from other satellite links, a 2% increase in equivalent noise temperature would correspond to 160 pW0p of interference noise.

The list of basic characteristics to be furnished for each network is given in Appendix 1B to the Radio Regulations. A detailed illustration of the interference calculation in the case of two geostationary satellite links is given in the Annex to this Appendix.

4. Determination of the satellite links to be considered in calculating the increase in equivalent satellite link noise temperature from the data furnished for the advance publication of a satellite network

The greatest increase in equivalent satellite link noise temperature caused to any link of another satellite network, existing or planned, by interference produced by the proposed satellite network must be determined.

The most unfavourably sited transmitting earth station of the interfering satellite network should be determined for each satellite receiving antenna of the network suffering interference by superimposing the "Earth-to-space" service areas of the interfering network on the space station receiving antenna gain contours plotted on a map of the Earth's surface. The most unfavourably sited transmitting earth station is the one in the direction of which the satellite receiving antenna gain of the network interfered with is the greatest.

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The most unfavourably sited receiving earth station of the network suffering interference should be determined in an analogous manner for each "space-to-Earth" service area of that network. The most unfavourably sited receiving earth station is the one in the direction of which the satellite transmitting antenna gain of the interfering network is the greatest.

When the satellite of the network suffering interference is equipped with simple frequency-translating transponders the above determinations are made in pairs, one for the receiving antenna of a particular transponder and one for the "space-to-Earth" service area associated with the transmitting antenna of that transponder.

The calculation procedure described above may be used to determine the greatest increase in equivalent noise temperature caused to any satellite link in a proposed satellite network by interference produced by any other satellite network.

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ANNEX TO APPENDIX 29

**Example of an Interference Calculation between two geostationary
Satellite Links Sharing the same Frequency Band**

A. General

In this example, for simplicity, two identical satellite networks are assumed with $\theta = 6^\circ$ geocentric angular spacing between the satellites. For this angular separation the reference radiation pattern of the earth station antenna ($32 - 25 \log_{10}\theta$) gives a gain of 12.5 dB in the direction of the satellite of the other network.

The calculations have been performed in dB, which means that numerical multiplications thus become dB additions and numerical divisions become dB subtractions. In each step, the contributing factors have been introduced in a sequence corresponding to the propagation direction. The first three steps define the system parameters for each link. Steps 4, 5 and 6 perform the actual interference calculations.

To determine the equivalent link noise temperature it is necessary to know the ratio between the total internal link noise and the thermal noise of the down-path. The noise budget for this example is assumed as follows:

Noise budget

Internal noise 8 000 pW0p	Thermal noise (down-path)	5 000 pW0p
	Thermal noise (up-path)	1 000 pW0p
	Intermodulation noise	2 000 pW0p
External noise 2 000 pW0p	Interference noise from links using other satellites	1 000 pW0p
	Interference noise from terrestrial systems	<u>1 000 pW0p</u>
	Total noise	10 000 pW0p

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It may be noted that since both satellites use global beams, essentially no antenna discrimination between wanted and unwanted signals is obtained at the satellite and that this constitutes a worst case.

B. System parameters

	Symbol	Link A or A'	Unit
Step 1) <i>Up-path at 6 175 MHz</i>			
Maximum power density per Hz delivered to the antenna of the transmitting earth station in the worst 4 kHz band	p_e	-37	dBW/Hz
Earth station antenna gain	g_1	62.5	dB
Free space loss 38 500 km at 6 175 MHz	l_u	200	dB
Satellite antenna gain (using global beam)	g_2	15.5	dB
Receiver input at satellite $p_e + g_1 - l_u + g_2$		-159	dBW/Hz
Step 2) <i>Down-path at 3 950 MHz</i>			
Maximum power density per Hz delivered to the satellite antenna in the worst 4 kHz band	p_s	-57	dBW/Hz
Satellite transmitting antenna gain	g_3	15.5	dB
Free space loss for 38 500 km at 3 950 MHz	l_d	196	dB
Earth station receiv. antenna gain	g_4	58.5	dB
Receiver input at earth station $p_s + g_3 - l_d + g_4$		-179	dBW/Hz
Step 3) <i>Link calculations</i>	γ	-20	dB
Transmission gain from satellite receiver input to earth station receiver input 159 dB - 179 dB			

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	Symbol	Link A or A'	Unit
Earth station noise temperature (giving G/T = 40.7 dB)		60	K
Thermal noise down-path (see noise budget)		5 000	pW0p
Total internal link noise (see noise budget)		8 000	pW0p
Equivalent link noise temperature $\frac{8\ 000}{5\ 000} \times 60$	T	96	K

C. Interference calculation

Step 4) <i>Up-path interference</i>			
Interfering earth station power density (as in Step 1)	p'_e	-37	dBW/Hz
Interfering earth station antenna gain towards interfered satellite (6° off beam)	$g'_1(\theta)$	12.5	dB
Free space loss for 38 500 km at 6 175 MHz (see Step 1)	l_u	200	dB
Satellite antenna gain in the direction of the interfering earth station	$g_2(\delta_e')$	15.5	dB
Boltzmann's constant 1.38×10^{-23} J/K	k	-228.6	dBW/K
Increase in receiver noise temperature of the satellite $p'_e + g'_1(\theta) - l_u + g_2(\delta_e') - k$ (in logarithmic units)		19.6	
Increase in receiver noise temperature of the satellite	ΔT_s	91	K
Step 5) <i>Down-path interference</i>			
Interfering satellite transmitter power density (as in Step 2)	p'_s	-57	dBW/Hz

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		Symbol	Link A or A'	Unit
	Interfering satellite antenna gain towards interfered earth station	$g'_3(\eta_e)$	15.5	dB
	Free space loss for 38 500 km at 3 950 MHz (see Step 2)	I_a	196	dB
	Earth station antenna gain in the direction of the interfering satellite (6° off beam)	$g_4(0)$	12.5	dB
	Boltzmann's constant $1.38 \times 10^{-23} \text{ J/K}$	k	-228.6	dBW/K
	Increase in receiver noise temperature of the earth station $p'_s + g'(\eta_e) - I_a + g_4(0) - k$ (in logarithmic units)		3.6	
	Increase in receiver noise temperature of the earth station	ΔT_e	2.29	K
Step 6)	<i>Total link interference</i>			
	Increase in satellite noise temperature (from Step 4)	ΔT_s	91	K
	Numerical value for γ (from Step 3)	γ	0.01	numerical
	Increase in receiver noise temperature of the earth station (from Step 5)	ΔT_e	2.29	K
	Increase in equivalent link noise temperature $\gamma\Delta T_s + \Delta T_e = 0.01 \times 91 + 2.29$	ΔT	3.2	K
	Percentage increase $\frac{3.2}{96} \times 100\%$	$(\Delta T/T) \times 100\%$	3.33	%
	Increase in link noise due to interference $(3.33/100) \times 8 000 \text{ pW0p}$		266	pW0p

D. Conclusions

In the example shown, the increase in equivalent satellite link noise temperature is 3.33%. Since it exceeds the predetermined value of 2%, the amount of noise introduced can no longer be considered permissible and therefore co-ordination between the two networks is required. More precise calculations should now be made using, in particular, the actual

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antenna patterns of the earth stations, the topocentric angular separation of the satellites, and the precise basic transmission losses. There may be additional factors such as polarization discrimination, frequency interleaving, spectral distribution of the interference which all reduce the calculated interference.

It can be shown that for this example a larger satellite spacing of 7.4° would have caused only 2% increase in equivalent link noise temperature and thus obviated the need for any co-ordination.

FINAL PROTOCOL

At the time of signing the Final Acts of the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) the undersigned delegates take note of the following statements made by signatory delegations:

GENERAL

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) decided that the following statement by India should be included in the Final Protocol forming part of the Final Acts of the Conference:

"In India, the band 845-935 MHz is also used in the experimentation of satellite broadcasting of television with frequency modulation including energy dispersal, subject to agreement with the administrations having services operating in accordance with the Table of Frequency Allocations which may be affected.

For the protection of terrestrial television services the power flux-density limit given in Radio Regulation 332A will apply; and for the protection of fixed and mobile services operating in this band, the power flux-density limit given in Radio Regulation 470NI and the power flux-density limit in Radio Regulation 470NK will apply."

FEDERAL REPUBLIC OF CAMEROON

The Delegation of the Federal Republic of Cameroon to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), unable at the present state of its development to make pertinent comments on the proposed allocation of frequency bands between 40 and 275 GHz yet earnestly wishing to encourage technological progress,

signs the Final Acts of the present Conference but reserves for its Government the right to take such action as it may consider necessary to safeguard its interests, and to protect its telecommunication network

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should certain Members or Associate Members fail to comply with the provisions of the Radio Regulations thus revised and amplified.

CENTRAL AFRICAN REPUBLIC

The Delegation of the Central African Republic to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) signs the Final Acts of the present Conference but reserves for the Government of the Central African Republic the right to take such action as it may consider necessary to safeguard its interests should certain Members or Associate Members fail in any way to comply with the decisions of the present Conference or should action resulting from the reservations made by other countries jeopardize the efficient operation of its telecommunication services.

CEYLON

The Delegation of Ceylon reserves for its Government the right to take such action as it may consider necessary to safeguard its interests should certain Members fail in any way to comply with the decisions of the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), or should reservations by other countries jeopardize its telecommunication services.

CHILE

The Chilean Delegation reserves the right for the Republic of Chile to take, in cooperation with the International Telecommunication Union, such action as it may consider legitimate to safeguard its sovereignty and interests should any Member or Associate Member fail to comply with any or all of the provisions of the revised Radio Regulations (Geneva, 1971) and the Montreux Convention (1965) or should reservations made by other countries affect directly or indirectly the interests and/or telecommunication systems of the Republic of Chile.

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DEMOCRATIC REPUBLIC OF THE CONGO

The Delegation of the Democratic Republic of the Congo to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) reserves for its Government the right, in co-operation with the International Telecommunication Union, to take such action as it may consider necessary to safeguard its interests should certain Members or Associate Members fail to comply with the provisions of the revised Radio Regulations, or should reservations made by other countries jeopardize the efficient operation of its telecommunication services.

REPUBLIC OF THE IVORY COAST

The Delegation of the Ivory Coast wishes to declare that, by virtue of the powers conferred on it, it reserves for its Government the right to take such action as it may consider necessary, in co-operation with the International Telecommunication Union, to safeguard its interests should certain Members or Associate Members fail in any way whatever to comply with the provisions in the revised version of the Radio Regulations (Geneva, 1959), prepared by the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), or should reservations made by other countries jeopardize the efficient operation of its telecommunication services.

REPUBLIC OF INDONESIA

The Indonesian Delegation is of the firm belief that only through close international co-operation on as broad a basis as possible could the tremendous potential of satellite communications be realized.

Indonesia being an archipelago with a vast land and sea area looks forward with great hope to the expansion of satellite communications as to help solving its tremendous communication problems.

The great importance of satellite communications in helping to diffuse education, information, and other public services to the people in places far away from the capitals is being fully recognized by the developing countries.

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There is, however, great need for the developing countries to fully participate in the discussions and in important decisions concerning the future of the satellite systems. They need to be continuously informed with regard to its further progress and development.

Furthermore, the developing countries should not be left with a feeling as being dependent on the goodwill of a small group in order to enjoy the progress of this technology. The use of the satellite system should not be limited to a few rich; assistance measures have therefore to be devised so as to allow even the poorest among the developing countries to take advantage of the progress in the satellite communication systems.

If the progress of this technology is to benefit mankind as a whole and if it is to become a substantial contribution towards the success of the Second Development Decade, then it is necessary that more attention be given to the interest of the developing countries.

Indonesia is grateful to the I.T.U. and the U.N.D.P. for the assistance given so far in the improvement of its communication system. There are, however, projects which are still to be completed such as: the regional telecommunication network in South East Asia, educational projects, telecommunication projects in West Irian in the framework of the Funds for Development for West Irian and others for which further assistance is being required. It is the sincere hope of Indonesia that it could be given technical assistance in developing its own national satellite communication system.

IRAN

The Imperial Government of Iran reserves the right to take such action as it may consider necessary to protect and use its services as operated at present or to be brought into operation in the future should they be affected by the services of other countries.

It also reserves the right not to accept the I.F.R.B. procedures for registering the frequencies now used or to be used in the future in respect of its equipment and on its territory.

The Delegation of Iran therefore reserves for its country the right to take such action as may be necessary to meet its requirements in telecommunications and to protect its existing and future services without restriction

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of any sort as to the equipment used or to be used in the future in all frequency bands.

JAMAICA

The Delegation of Jamaica reserves for its Government the right to take such action as it may consider necessary to safeguard its interests should any Member fail in any way to comply with the decisions of the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971) and in so doing jeopardize the telecommunication services of Jamaica.

ISLAMIC REPUBLIC OF MAURITANIA

The Delegation of the Islamic Republic of Mauritania to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), in signing the Final Acts of this Conference, reserves for its Government the right, in co-operation with the International Telecommunication Union, to take such action as it may consider necessary to:

- safeguard its interests, or
- protect, in all the frequency bands concerned, its existing, projected or future telecommunication network, should certain Members or Associate Members fail in any way to comply with the revised and supplemented provisions of the Radio Regulations, or should reservations made by other countries jeopardize the normal operation of its telecommunication services.

REPUBLIC OF THE NIGER

The Delegation of the Republic of the Niger reserves for its Government the right to take any steps it may deem fit and adequate to safeguard its interests should any country fail in any way to comply with the provisions contained in the Final Acts of this Conference or should reservations made by any country jeopardize the efficient operation of its telecommunications.

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PAKISTAN

In signing the Final Acts of the World Administrative Radio Conference for Space Telecommunications, (Geneva, 1971), the Delegation of Pakistan reserves the right of its Government to adhere to all or to some of the provisions of the revised Radio Regulations (Geneva, 1959).

The Delegation of Pakistan further declares that it reserves the right of its Government in accepting implications that may arise through the non-adherence by any other country Member of the Union to the provisions of these revised Radio Regulations.

REPUBLIC OF RWANDA

The Delegation of the Republic of Rwanda, in signing the Final Acts of the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), reserves for its Government the right to take such action as it may consider necessary to safeguard its interests, should any Members or Associate Members fail in any way to comply with the provisions of the Radio Regulations (Geneva, 1959) as revised by this Conference or should reservations made by other countries jeopardize the efficient operation of its telecommunication services.

REPUBLIC OF THE SENEGAL

The Delegation of the Republic of the Senegal to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), in signing the Final Acts of this Conference, reserves for its Government the right to take such action as it may consider useful or necessary:

- to safeguard its interests in the use of the frequency bands above 40 GHz;
- or should certain Members fail in any way to comply with the decisions of this Conference or should acts deriving from reservations made by other Members jeopardize the efficient operation of its telecommunication services.

FINAL PROTOCOL**REPUBLIC OF SINGAPORE**

In signing the Final Acts of the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), the Delegation of the Republic of Singapore reserves for its Government the right to take such action as it may consider necessary to safeguard its interests should any country fail in any way to comply with the requirements of the Final Acts of this Conference or should reservations made by any country jeopardize the telecommunication services of the Republic of Singapore.

REPUBLIC OF VENEZUELA

The Delegation of the Republic of Venezuela to the World Administrative Radio Conference for Space Telecommunications (Geneva, 1971), declares that, in signing the Final Acts of the Conference, it expressly reserves the right for its Government to adopt or not to adopt the conclusions of the Conference and to take any steps that it may deem fit to safeguard its interests and to protect its telecommunication networks should any Member or Associate Member fail to comply with the provisions of the Radio Regulations as amended or supplemented at the date mentioned above.

(The signatures follow)

(The signatures which follow the Final Protocol are the same as those reproduced on pages 5 to 36 of this volume.) [¹]

¹ Pp. 1537-1568 herein. [Footnote added by the Department of State.]

[RELATED DOCUMENTS]

RESOLUTION No. Spa2-1

Relating to the Use by all Countries, with equal Rights, of Frequency Bands for Space Radiocommunication Services

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

that all countries have equal rights in the use of both the radio frequencies allocated to various space radiocommunication services and the geostationary satellite orbit for these services;

taking into account

that the radio frequency spectrum and the geostationary satellite orbit are limited natural resources and should be most effectively and economically used;

having in mind

that the use of the allocated frequency bands and fixed positions in the geostationary satellite orbit by individual countries or groups of countries can start at various dates depending on requirements and readiness of technical facilities of countries;

resolves

1. that the registration with the I.T.U. of frequency assignments for space radiocommunication services and their use should not provide any permanent priority for any individual country or groups of countries and should not create an obstacle to the establishment of space systems by other countries;

RES Spa2-1, 2

2. that, accordingly, a country or a group of countries having registered with the I.T.U. frequencies for their space radiocommunication services should take all practicable measures to realize the possibility of the use of new space systems by other countries or groups of countries so desiring;

3. that the provisions contained in paragraphs 1 and 2 of this Resolution should be taken into account by the administrations and the permanent organs of the Union.

RESOLUTION No. Spa2-2

**Relating to the Establishment of Agreements and Associated
Plans for the Broadcasting-Satellite Service**

The World Administrative Radio Conference for Space Telecommunication (Geneva, 1971),

considering

a) that it is important to make the best possible use of the geostationary-satellite orbit and of the frequency bands allocated to the broadcasting-satellite service;

b) that the great number of receiving installations using such directional antennae as could be set up for a broadcasting-satellite service may be an obstacle to changing the location of space stations in that service on the geostationary-satellite orbit, from the date of their bringing into use;

c) that satellite broadcasts may create harmful interference over a large area of the Earth's surface;

d) that the other services with allocations in the same band need to use the band before the broadcasting-satellite service is set up;

RES Spa2-2, 3

resolves

1. that stations in the broadcasting-satellite service shall be established and operated in accordance with agreements and associated plans adopted by World or Regional Administrative Conferences, as the case may be, in which all the administrations concerned and the administrations whose services are liable to be affected may participate;
2. that the Administrative Council be requested to examine as soon as possible the question of a World Administrative Conference, and/or Regional Administrative Conferences as required, with a view to fixing suitable dates, places and agenda;
3. that during the period before the entry into force of such agreements and associated plans the administrations and the I.F.R.B. shall apply the procedure contained in Resolution No. Spa2-3.

RESOLUTION No. Spa2-3

Relating to the Bringing into Use of Space Stations in the Broadcasting-Satellite Service, prior to the Entry into Force of Agreements and Associated Plans for the Broadcasting-Satellite Service

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that while Resolution No. Spa2-2 has been adopted by this Conference, envisaging plans for the broadcasting-satellite service, some administrations might nevertheless feel the need to bring stations in that service into use prior to such plans being established;
- b) that administrations should, as far as possible, avoid proliferation of space stations in the broadcasting-satellite service before such plans have been established;
- c) that a space station in the broadcasting-satellite service may cause harmful interference to terrestrial stations operating in the same frequency

RES Spa2-3

band, even if the latter are outside the service area of the space station;

d) that the procedure specified in Article 9A of the Radio Regulations contains no provisions for co-ordination between space stations in the broadcasting-satellite service and terrestrial stations and between space stations in that service and space systems of other administrations;

resolves

1. that the following procedure shall be applied until agreements and associated plans pursuant to Resolution No. Spa2-2 enter into force:

Section A: Co-ordination Procedure between Space Stations in the Broadcasting-Satellite Service and Terrestrial Stations

2.1 Before an administration notifies to the I.F.R.B. or brings into use any frequency assignment to a space station in the broadcasting-satellite service in a frequency band where this frequency band is allocated, with equal rights, to the broadcasting-satellite service and to a terrestrial radiocommunication service, either in the same Region or sub-Region or in different Regions or sub-Regions, it shall co-ordinate the use of this assignment with any other administration whose terrestrial radiocommunication services may be affected. For this purpose, it shall inform the Board of all the technical characteristics of the station, as listed in the relevant sections of Appendix 1A to the Radio Regulations, which are necessary to assess the risk of interference to a terrestrial radiocommunication service¹.

2.2 The Board shall publish this information in a special section of

¹ The technical data to be used in effecting co-ordination should be based on the most recent C.C.I.R. Recommendations as accepted by the administrations concerned under the terms of Resolution No. Spa2-6. In the absence of relevant C.C.I.R. Recommendations, the technical data to be used in effecting co-ordination shall be determined by agreement among the administrations concerned.

RES Spa2-3

its weekly circular and shall also, when the weekly circular contains such information, so advise all administrations by circular telegram.

2.3 Any administration which considers that its terrestrial radiocommunication services may be affected shall forward its comments to the administration seeking co-ordination and, in any case, to the Board. These comments must be forwarded within one hundred and twenty days from the date of the relevant I.F.R.B. weekly circular. It shall be deemed that any administration which has not forwarded comments within that period considers that its terrestrial radiocommunication services are unlikely to be affected.

2.4 Any administration which has forwarded comments on the projected station shall either give its agreement or, if this is not possible, send to the administration seeking co-ordination all the data on which its comments are based as well as any such suggestions as it may be able to offer with a view to a satisfactory solution of the problem.

2.5 The administration which plans to bring into use a space station in the broadcasting-satellite service as well as any other administration which believes that its terrestrial radiocommunication services are likely to be affected by the station in question may request the assistance of the Board at any time during the co-ordination procedure.

2.6 If the assistance of the Board has been sought and there is a continuing disagreement between the administration seeking co-ordination and the administration which has forwarded its comments, the administration seeking co-ordination may, after a total period of one hundred and eighty days, from the date of the relevant I.F.R.B. weekly circular, send to the Board its notice concerning the frequency assignment in question.

**Section B: Co-ordination Procedure between Space Stations in the
Broadcasting-Satellite Service and Space Systems of
other Administrations**

3. An administration intending to bring into use a space station in the broadcasting-satellite service shall, for the purpose of co-ordination

RES Spa2-3

with space systems of other administrations, apply the following provisions of Article 9A of the Radio Regulations:

3.1 Nos. 639AA to 639AI inclusive.

3.2.1 No. 639AJ¹.

3.2.2 No co-ordination under paragraph 3.2.1 is required when an administration proposes to change the characteristics of an existing assignment in such a way as not to increase the probability of harmful interference to stations in the space radiocommunication service of other administrations.

3.2.3 Nos. 639AL, 639AM, 639AO, 639AS a), c), e), f), 639AT, 639AU, 639AV, 639AW, 639AX, 639AY, 639AZ.

Section C: Notification, Examination and Recording in the Master Register of Assignments to Space Stations in the Broadcasting-Satellite Service dealt with under this Resolution

4.1 Any frequency assignment² to a space station in the broadcasting-satellite service shall be notified to the Board. The notifying administration shall apply for this purpose the provisions of Nos. 639BE, 639BF and 639BG of the Radio Regulations.

¹ The technical data to be used in effecting co-ordination should be based on the most recent C.C.I.R. Recommendations as accepted by the administrations concerned under the terms of Resolutions No. Spa2-6. In the absence of relevant C.C.I.R. Recommendations, the technical data to be used in effecting co-ordination shall be determined by agreement among the administrations concerned.

² The expression *frequency assignment*, wherever it appears in this Resolution, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called *Master Register*).

RES Spa2-3

4.2 Notices made under paragraph 4.1 shall initially be treated in accordance with No. 639BH of the Radio Regulations.

5.1 The Board shall examine each notice with respect to:

- 5.2 a) its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the co-ordination procedures and to the probability of harmful interference);
- 5.3 b) its conformity, where applicable, with the provisions of paragraph 2.1 of Section A above, relating to co-ordination of the use of the frequency assignment with the other administrations concerned;
- 5.4 c) its conformity, where applicable, with the provisions of paragraph 3.2.1 of Section B above, relating to co-ordination of the use of the frequency assignment with the other administrations concerned;
- 5.5 d) where appropriate, the probability of harmful interference to the service rendered by a station in a space or terrestrial radiocommunication service for which a frequency assignment has already been recorded in the Master Register in conformity with the provisions of No. 501 or 639BM of the Radio Regulations as appropriate, if that assignment has not, in fact, caused harmful interference to the service rendered by a station for which an assignment has been previously recorded in the Master Register and which itself is in conformity with No. 501 or 639BM as appropriate.

6.1 Depending upon the findings of the Board subsequent to the examination prescribed in paragraphs 5.2, 5.3, 5.4 and 5.5, further action shall be as follows:

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6.2 Where the Board reaches an unfavourable finding with respect to paragraph 5.2 the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to a satisfactory solution of the problem.

6.3 Where the Board reaches a favourable finding with respect to paragraph 5.2, or where it reaches the same finding after resubmission of the notice, it shall examine the notice with respect to the provisions of paragraphs 5.3 and 5.4.

6.4 Where the Board finds that the co-ordination procedures mentioned in paragraphs 5.3 and 5.4 have been successfully completed with all administrations whose services may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d of the Master Register with an entry in the Remarks column indicating that such recording does not prejudge in any way the decisions to be included in the agreements and associated plans referred to in Resolution No. Spa2-2.

6.5 Where the Board finds that the co-ordination procedures mentioned in paragraph 5.3 or 5.4 have not, as appropriate, been applied or have been unsuccessfully applied, the notice shall be returned immediately by airmail to the notifying administration with the reason for its return and with such suggestions as the Board may be able to offer with a view to a satisfactory solution of the problem.

6.6 Where the notifying administration resubmits the notice and the Board finds that the co-ordination procedures have been successfully completed with all administrations whose services may be affected, the assignment shall be treated as indicated in paragraph 6.4.

6.7 Where the notifying administration resubmits the notice and states that it has been unsuccessful in endeavouring to effect the co-ordination, the notice shall be examined by the Board with respect to paragraph 5.5

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6.8 Where the Board reaches a favourable finding with respect to paragraph 5.5, the assignment shall be recorded in the Master Register. The appropriate symbol indicating the finding by the Board shall indicate that the co-ordination procedures, as appropriate, referred to in paragraph 2.1 or 3.2.1 were not successfully completed. The date of receipt by the Board of the notice shall be entered in Column 2d of the Master Register, with the remark mentioned in paragraph 6.4.

6.9 Where the Board reaches an unfavourable finding with respect to paragraph 5.5, the notice shall be returned immediately by airmail to the notifying administration with the reasons for the Board's finding and with such suggestions as the Board may be able to offer with a view to a satisfactory solution of the problem.

6.10 If the administration resubmits the notice unchanged with the insistence that it be reconsidered, but should the Board's unfavourable finding under paragraph 5.5 remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d of the Master Register, with the remark mentioned in paragraph 6.4. An appropriate remark shall be placed in Column 13 to indicate that the assignment is not in conformity with the provisions of paragraphs 5.2, 5.3, 5.4 or 5.5, as appropriate. In the event that the administration concerned receives no complaint of harmful interference concerning the operation of the station in question for a period of one year from the commencement of operation, the Board shall review its finding.

6.11 If harmful interference is actually caused to the reception of any space station in the broadcasting-satellite service whose frequency assignment has been recorded in the Master Register as a result of a favourable finding with respect to paragraphs 5.2, 5.3, 5.4 and 5.5 of this Resolution, as appropriate, by the use of a frequency assignment to a space station which has been subsequently recorded in the Master Register in accordance with the provisions of paragraph 6.10 of this Resolution or of No. 639CP

RES Spa2-3

of the Radio Regulations, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

6.12 If harmful interference is actually caused to the reception of any space radiocommunication station using an assignment recorded in the Master Register as a result of a favourable finding with respect to Nos. **639BM**, **639BN**, **639BO**, **639BP**, **639BQ** and **639BR** of the Radio Regulations, as appropriate, by the use of an assignment to a space station in the broadcasting-satellite service which has been subsequently recorded in the Master Register in accordance with the provisions of paragraph 6.10 of this Resolution, the station using the latter assignment must, on receipt of advice thereof, immediately eliminate this harmful interference.

6.13 If harmful interference is actually caused to the reception of any terrestrial station using an assignment recorded in the Master Register as a result of a favourable finding with respect to No. **501** of the Radio Regulations, by the use of an assignment to a space station in the broadcasting-satellite service which has been subsequently recorded in the Master Register in accordance with the provisions of paragraph 6.10 of this Resolution, the station using the latter assignment must, on receipt of advice thereof, immediately eliminate this harmful interference.

6.14 If harmful interference to the reception of any station whose assignment is in accordance with paragraph 5.2 of this Resolution, is actually caused by the use of a frequency assignment which is not in conformity with paragraph 5.2 of this Resolution, or with No. **501**, **570AB** or **639BM** of the Radio Regulations, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

RES Spa2-4

RESOLUTION No. Spa2-4

Relating to the experimental Use of Radio Waves by Ionospheric Research Satellites

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that research into the Earth's ionosphere is very important in the study of the relationship between the Sun and the Earth and also for the effective use of radio-wave transmission via the ionosphere;
- b) that successful research has been conducted with satellites such as Alouette 1 and 2 and ISIS 1 and 2 in which top-side sounding equipment is installed;
- c) that similar ionospheric research satellites will be used for further research into the ionosphere and beyond;
- d) that top-side sounding equipment is operated mostly in a frequency-sweeping pulse mode;
- e) that these types of satellite are usually operated intermittently during a limited period each day according to the orbital characteristics;
- f) that operation of the sounder can be accurately commanded at will by the earth station concerned;

resolves

that administrations may continue to permit the transmission of radio waves from ionospheric research satellites in orbit above the ionosphere in the MF and HF bands provided that suitable means are available for controlling the transmission from these satellites as required by No. 470V of the Radio Regulations to prevent harmful interference to other services.

RES Spa2-5

RESOLUTION No. **Spa2-5****Relating to the Use of the Band 156–174 MHz by the Maritime Mobile-Satellite Service**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that there is a need to develop the use of space radiocommunication techniques to meet the future requirements of the maritime mobile service;
- b) that, of the bands used at present by the maritime mobile service, there may be advantages in using for the maritime mobile-satellite service narrow channels between 156 and 174 MHz for safety and distress;

recognizing

- a) that the maritime mobile bands between 156 and 174 MHz are also used for other services;
- b) that the power flux densities laid down by maritime satellites in this band may cause harmful interference to terrestrial receivers and that the satellite receiver may suffer harmful interference from terrestrial radiocommunication transmissions;
- c) that the terrestrial maritime mobile service makes extensive use of the channels given in Appendix 18 to the Radio Regulations;

is of the opinion

that it is important for the maritime mobile satellite service to be able to use some narrow channels, on an exclusive basis, for safety and distress as soon as practicable;

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having provided for

the possible use of narrow channels for safety and distress by the maritime mobile-satellite service in bands 157-3125 - 157-4125 MHz and 161-9125 - 162-0125 MHz not earlier than 1 January 1976 (see No. 287A of the Radio Regulations);

resolves

that the World Administrative Radio Conference for Maritime Mobile Telecommunications to be held in 1974 be invited to consider this matter further and to decide if and to what extent the maritime mobile-satellite service should be introduced in the above bands on an exclusive basis and to make any consequential changes in the Radio Regulations and in the provisions governing the use of the channels in Appendix 18 to the Radio Regulations;

requests the Secretary-General

to transmit this Resolution to Members and Associate Members and to the Administrative Council for inclusion in the draft agenda for the 1974 Maritime Conference.

RESOLUTION No. Spa2-6

**Relating to the Technical Criteria recommended by the C.C.I.R.
for Sharing Frequency Bands between Space Radiocommunication and
Terrestrial Radiocommunication Services or between Space
Radiocommunication Services**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

RES Spa2-6

considering

- a) that, in frequency bands shared with equal rights by space radiocommunication and terrestrial radiocommunication services, it is necessary to impose certain technical limitations and co-ordination procedures on each of the sharing services in the interest of controlling mutual interference;
- b) that, in frequency bands shared by space stations located on geostationary satellites, it is necessary to impose co-ordination procedures in the interest of controlling mutual interference;
- c) that the technical criteria and co-ordination procedures referred to in a) and b) above, and as set out in the Radio Regulations, are mainly based upon Recommendations of the C.C.I.R.;
- d) that, in recognition of the successful sharing of frequency bands by space radiocommunication and terrestrial radiocommunication services, and the continuing improvements in space technology, each Plenary Assembly of the C.C.I.R. subsequent to the Xth Plenary Assembly, Geneva, 1963, has improved upon some of the technical criteria recommended by the preceding Plenary Assembly;
- e) that Plenary Assemblies of the C.C.I.R. are held triennially whereas Administrative Radio Conferences, which are empowered to modify the Radio Regulations making substantial use of the Recommendations of the C.C.I.R., are in practice held less frequently and with much less regularity;
- f) that the International Telecommunication Convention (Montreux, 1965) recognizes the right of Members and Associate Members of the Union to make special agreements on telecommunication matters; however, such agreements shall not be in conflict with the terms of the Convention or of the Regulations annexed thereto, so far as concerns the harmful interference to the radio services of other countries;

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is of the opinion

- a) that subsequent Plenary Assemblies of the C.C.I.R. are likely to make further changes in the recommended technical criteria; and
- b) that administrations should be afforded the opportunity to take advantage of the current C.C.I.R. Recommendations on sharing criteria when planning systems for use in frequency bands shared with equal rights by space radiocommunication and terrestrial radiocommunication services, or between radiocommunication services;

therefore resolves that

1. each Plenary Assembly of the C.C.I.R. should arrange for the Secretary-General of the I.T.U. to be informed of those Recommendations of the C.C.I.R. affecting the technical criteria relating to sharing between space radiocommunication and terrestrial radiocommunication services or between space radiocommunication services;
2. following the distribution to administrations of the relevant C.C.I.R. texts, the Secretary-General shall write to administrations asking them to indicate within one hundred and twenty days, to which of the C.C.I.R. Recommendations or to which specific technical criteria defined in the Recommendations referred to in 1 above they agree for use in the application of the pertinent provisions of the Radio Regulations;
3. the administrations which do not respond to the Secretary-General's consultation within one hundred and twenty days shall be deemed to wish the specific technical criteria referred to in the current Radio Regulations to be applied for the time being;
4. in those cases where an administration, in its reply to the Secretary-General's consultation, indicates that a specific C.C.I.R. Recommendation or a specific technical criterion defined in those Recommendations is not

RES Spa2-6

acceptable to it, or where an administration has not replied to the Secretary-General's consultation as in paragraph 3 above, the relevant technical criteria defined in the Radio Regulations shall continue to apply with respect to cases involving that administration;

5. the Secretary-General shall publish, for the information of all administrations, a consolidated list prepared by the I.F.R.B. on the basis of the replies to the enquiry, of the C.C.I.R. Recommendations or of the specific relevant technical criteria defined in those Recommendations, and to which administrations each of those Recommendations or specific relevant technical criteria are acceptable or are not acceptable. This list shall also include those administrations mentioned in paragraph 3 above;

6. the I.F.R.B. be directed to take into account:

- a) the applicability of the C.C.I.R. technical criteria in accordance with the list referred to in 5 above, when making technical examinations with respect to cases involving only administrations to which such criteria are acceptable;
- b) the applicability of the technical criteria defined in the Radio Regulations in accordance with the list referred to in 5 above, when making technical examinations with respect to cases involving an administration which does not accept the relevant C.C.I.R. technical criteria;

7. if, at a later date, questions arise concerning the application of the relevant technical criterion or criteria to a case involving administrations described in paragraph 3 above, the I.F.R.B. shall enquire of the administrations concerned whether or not they would agree to the application of the technical criterion or criteria defined in the relevant C.C.I.R. Recommendations referred to in paragraph 1 above. The list published pursuant to paragraph 5 above shall be updated on the basis of the reply of the administration or of the absence of reply.

RES Spa2-7

RESOLUTION No. Spa2-7

**Relating to the Inclusion of additional Sections
in List VIIIA (Article 20, Appendix 9)**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that it has modified the definitions which appeared in the Radio Regulations and has adopted a series of new definitions for the services;
- b) that, within the framework of these modifications, it has changed, in Appendix 9 to Radio Regulations, the headings and the contents of the existing nine Sections of List VIIIA (List of Space Radiocommunication Stations and Radio Astronomy Stations);
- c) that however, in List VIIIA so modified, it is not possible to include all the categories of earth and space stations notified to the I.F.R.B. for inclusion in the Master International Frequency Register;
- d) that the Conference has not had the time to make the required modifications;

decides

to invite the Secretary-General, in collaboration with the I.F.R.B., to take the necessary steps, on the basis of the existing Sections of List VIIIA, to have additional Sections added to this List, so that the particulars of all the earth and space stations notified to the I.F.R.B. under Article 9A of the Radio Regulations, for recording in the Master International Frequency Register, be included.

RES Spa2-8

RESOLUTION No. Spa2-8

**Relating to the Abrogation of obsolete Resolutions and
Recommendations of the Extraordinary Administrative Radio
Conference to allocate Frequency Bands for
Space Radiocommunication Purposes, Geneva, 1963 and a
Recommendation of the Administrative Radio Conference, Geneva, 1959**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

a) that all necessary action has been taken on the following Resolutions and Recommendations of the Extraordinary Administrative Radio Conference (Geneva, 1963):

Resolution No. Spa 1 Relating to the Provision and Use of Information regarding International Satellite Systems;

Resolution No. Spa 2 Relating to Space Vehicles in Distress and Emergency;

Resolution No. Spa 3 Relating to the Category of the Fixed and Mobile Services in the Band 1 525 - 1 540 Mc/s;

Recommendation No. Spa 1 Relating to the Calculation of Co-ordination Distance for Earth Stations;

Recommendation No. Spa 2 to the C.C.I.R. and to Administrations Relating to the Calculation of the Probability of Interference between Stations within Co-ordination Distance;

b) that Recommendation No. Spa 6 of the Extraordinary Administrative Radio Conference (Geneva, 1963) Relating to the Frequency Requirements in the HF Bands Exclusively Allocated to the Aeronautical Mobile (R) Service, is now obsolete;

RES **Spa2-8**

- c) that paragraphs 3 and 4 of Recommendation No. Spa 9 of the Extraordinary Administrative Radio Conference (Geneva, 1963) Relating to the Review of Progress in the Field of Space Radiocommunications, are now obsolete;
- d) that Recommendation No. Spa 3 of the Extraordinary Administrative Radio Conference (Geneva, 1963) to the C.C.I.R. and to Administrations Relating to Frequency Bands shared between Space and Terrestrial Services has been replaced by Recommendation No. **Spa2-15** of the present Conference;
- e) that Recommendation No. 36 of the Administrative Radio Conference (Geneva, 1959) Relating to the Convening of an Extraordinary Administrative Radio Conference to allocate Frequency Bands for Space Radiocommunication Purposes, is no longer necessary;

resolves

that the said Resolutions and Recommendations or parts of Recommendation are abrogated.

RECOMMENDATION No. Spa2-1

**Relating to the Examination by World Administrative Radio Conferences
of the Situation with Regard to Occupation
of the Frequency Spectrum in Space Radiocommunications**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that the frequency bands available for space applications are limited in number and size;
- b) that the possible positions for a satellite whose main purpose is to establish telecommunication links are limited in number and that certain positions are more favourable than others for certain links;
- c) that all administrations should be enabled to establish the space links which they deem necessary;
- d) that the scale and cost of space networks or systems are such that their operation and development must be hindered as little as possible;
- e) that technology is steadily and rapidly evolving and that the best possible use should be made of resources in space radiocommunications;
- f) that administrations should ensure that frequency assignments for space applications are utilized in the most efficient manner possible consistent with developing technology and that such assignments are relinquished when no longer in use;
- g) that despite the provisions of Article 9A of the Radio Regulations and the principles adopted by this Conference, which provide for full consultation and co-ordination between administrations with a view to the optimum accommodation of all space systems, it is possible that as the use of frequencies and orbital positions increases, administrations may encounter

REC **Spa2-1, 2**

undue difficulty in one or more frequency bands in meeting their requirements for space radiocommunication;

recommends

that the next appropriate World Administrative Radio Conference be empowered to deal with the situation described in Considering g), if it arises;

invites

the Administrative Council, in the event of such a situation arising, to include in the agenda for the next appropriate World Administrative Radio Conference specific provisions enabling it to examine all aspects of the use of the frequency band(s) concerned including, *inter alia*, the relevant frequency assignments recorded in the Master International Frequency Register and to find a solution to the problem.

RECOMMENDATION No. **Spa2 - 2****Relating to the preferred Frequency
Bands for Tropospheric Scatter Systems**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

the technical and operational difficulties pointed out by the C.C.I.R., particularly in the Report of the Special Joint Meeting (Geneva, 1971) in bands shared by tropospheric scatter systems and space systems;

REC Spa2-2, 3

recognizing, however,

that administrations will wish to continue to use tropospheric scatter systems in order to satisfy certain telecommunication requirements;

noting

that the proliferation of such systems in all frequency bands, particularly those shared with space systems, will only serve to aggravate an already difficult situation;

requests

that the C.C.I.R. urgently study the radio-frequency requirements for tropospheric scatter systems and recommend the preferred radio frequencies for such systems;

invites the Administrative Council

to arrange that a future World Administrative Radio Conference consider which frequency bands of the fixed service shall be preferably used by new tropospheric scatter systems, taking into account the allocations to the space radiocommunication services.

RECOMMENDATION No. Spa2-3

Relating to the future Use of Bands allocated to the Inter-Satellite Service

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that the bands 54.25 - 58.2 GHz, 59 - 64 GHz, 105 - 130 GHz, 170 - 182 GHz and 185 - 190 GHz have been allocated to the inter-satellite service;

REC Spa2-3, 4

b) that all the foregoing bands are located in parts of the radio-frequency spectrum close to peaks of atmospheric absorption;

and recognizing

that the inter-satellite and terrestrial radiocommunication services are protected from mutual interference by the attenuation due to atmospheric absorption;

recommends

that a future World Administrative Radio Conference should consider allocating these bands also to terrestrial radiocommunication (except the aeronautical mobile) services.

RECOMMENDATION No. Spa2 - 4

**Relating to the future Use of certain Frequency Bands
between 40 and 275 GHz**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

that the 43 - 48 GHz, 66 - 71 GHz, 95 - 101 GHz, 142 - 150 GHz, 190 - 200 GHz and 250 - 265 GHz bands have been allocated to the following services:

- aeronautical mobile-satellite
- maritime mobile-satellite
- aeronautical radionavigation-satellite
- maritime radionavigation-satellite;

recognizing

that it is not desirable for compatibility considerations that at a later date these bands should be shared with terrestrial radiocommunications.

REC Spa2-4, 5

tion services other than the aeronautical and maritime mobile services and/or the aeronautical and maritime radionavigation services;

recommends

that a future competent World Administrative Radio Conference should consider allocating, in addition, the 43-48 GHz, 66-71 GHz, 95-101 GHz, 142-150 GHz, 190-200 GHz and 250-265 GHz bands to the following services:

- aeronautical mobile
- maritime mobile
- aeronautical radionavigation
- maritime radionavigation

in an appropriate manner.

RECOMMENDATION No. Spa2 - 5**Relating to the future Use of the 41-43 GHz Band by
the Fixed and Mobile Services**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

that the 41-43 GHz band has been allocated to the broadcasting-satellite service;

recognizing

that it is possible, by appropriate co-ordination, for a frequency band to be shared by the broadcasting-satellite service, on the one hand, and the fixed and mobile services, on the other;

REC Spa2-5, 6

recommends

that a future competent World Administrative Radio Conference should consider allocating, in addition, the 41-43 GHz band to the fixed and mobile services.

RECOMMENDATION No. Spa2-6**Relating to future Frequency Allocation Requirements for the Maritime Mobile-Satellite Service**

The World Administrative Radio Conference for Space Telecommunications, (Geneva, 1971),

having noted

that the Inter-Governmental Maritime Consultative Organization (I.M.C.O.) has stated a requirement for frequencies of the order of 400 MHz, believing that small vessels in particular may be unable to use satellite radiocommunications if such frequencies are not made available;

further noting

that the C.C.I.R. Special Joint Meeting (Geneva, 1971) concluded that the present Conference should be invited to examine the possibility of providing exclusive channels for the maritime mobile-satellite service at about 400 MHz and that provision of such channels is desirable;

considering

- a) that ship stations and survival craft stations are completely dependent upon the use of radio for communication;
- b) that the use of space techniques will provide the maritime mobile service with a reliable and more efficient method of communication;

REC Spa2-6

- c) that reliable maritime mobile-satellite service communications will greatly assist in the saving of lives and property;
- d) that although the Conference has made certain provisions for the maritime mobile-satellite service, there is some uncertainty with respect to the adequacy and usefulness of these provisions, particularly insofar as small ships and survival craft are concerned;
- e) that general participation of small ships in a service using space techniques would not only benefit the efficient and safe operation of these ships but would also improve the safety service for larger ships and survival craft;
- f) that future conferences might find it necessary to make additional allocations for such uses nearer to the optimum portions of the spectrum;
- g) that for some communications functions, such as certain broadcasting and fixed applications, other means than radio could be used, thereby making portions of the spectrum available for services which are dependent on radio;

recommends

1. that administrations and appropriate international organizations continue to review the requirements for the maritime mobile-satellite service and the suitability of current frequency allocations in meeting those requirements;
2. that the C.C.I.R. continue its studies to determine the optimum portions of the frequency spectrum and related sharing conditions to accommodate maritime mobile-satellite service requirements, taking into consideration advances in space radiocommunication technology;
3. that a competent World Administrative Radio Conference review the requirements of the maritime mobile-satellite and safety services, and if necessary, provide the frequency allocations to satisfy these requirements.

REC Spa2-7

RECOMMENDATION No. Spa2-7

**Relating to the future Provision of a Band near 10 MHz
for the Radio Astronomy Service**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) the requirements of the radio astronomy service, as expressed by the Inter-Union Commission on Frequency Allocations for Radio Astronomy and Space Science (I.U.C.A.F.), for a frequency allocation near 10 MHz;
- b) that the use of the standard frequency guard bands has not satisfied the needs of the radio astronomy service at a frequency near 10 MHz;
- c) that propagation conditions at a frequency near 10 MHz are such that a transmitter operating anywhere on the Earth might cause interference to the radio astronomy service and as a consequence an exclusive world-wide allocation is necessary for long term observations;
- d) that successful radio astronomy measurements have, at times, been made at frequencies near 10 MHz;
- e) that I.U.C.A.F. is co-ordinating the needs of radio astronomers for frequency allocations;

recommends

1. that administrations keep under review the possibility of releasing a band of frequencies 50 kHz wide for the use of the radio astronomy service between 10 MHz and 15 MHz;
2. that administrations give close attention to any future recommendation of the I.U.C.A.F. concerning the specific frequency band between 10 MHz and 15 MHz required by the radio astronomy service;
3. that a future World Administrative Radio Conference consider granting to the radio astronomy service an exclusive allocation in this region of the spectrum.

REC Spa2-8

RECOMMENDATION No. Spa2-8**Relating to the Protection of Radio Astronomy Observations on the Shielded Area of the Moon**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that radio astronomy observations at frequencies below the ionospheric critical frequencies and above 100 GHz are hampered or prevented by absorption in the Earth's atmosphere;
- b) that successful radio astronomy observations require complete freedom from harmful interference;
- c) that the shielded area of the Moon offers unique opportunities for observations which are not affected by such absorption;
- d) that the shielded area of the Moon appears to be the potentially most useful area accessible to man which is completely free from interference from terrestrial transmissions;
- e) that the shielded area of the Moon refers to the area of the Moon which is more than 23.2° beyond the mean limb of the Moon as seen from the centre of the Earth;
- f) that the transmissions by radio of data from observation stations to collection points will be in the frequency bands allocated for this purpose;

noting

the desirability of maintaining the shielded area of the Moon as an area of maximum value for observations by the radio astronomy service and by passive space research and consequently as free as possible from transmissions;

TIAS 7485

REC Spa2-8, 9

recommends

1. that the C.C.I.R. study the frequency bands most suitable for radio astronomy observations on the shielded area of the Moon and work out recommendations concerning these bands as well as criteria for their application and protection;
2. that in the meantime, administrations, in accordance with the intent of this Recommendation, take all practicable steps to ensure that there will be no interference to radio astronomy observations on the shielded area of the Moon; and
3. that administrations apply such Recommendations as may be provided on this matter by the C.C.I.R. pending the convening of the next World Administrative Radio Conference.

RECOMMENDATION No. Spa2-9

Relating to the Co-Ordination of Earth Stations

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that under the terms of Article 9A of the Radio Regulations, frequency assignments to earth stations in certain bands shared with equal rights between terrestrial radiocommunication services and space radiocommunication services must be co-ordinated with a view to preventing mutual harmful interference;

REC Spa2-9

- b) that the calculation [method described in Appendix 28 to the Radio Regulations applies solely to frequencies in the 1 - 40 GHz range;
- c) that Tables I and II of this Appendix do not show numerical values for all the necessary parameters of certain space radiocommunication services and terrestrial radiocommunication services sharing frequency bands with equal rights;

invites the C.C.I.R.

to continue as a matter of urgency its study:

- of data not included in Tables I and II of Appendix 28 to the Radio Regulations, relating to the space radiocommunication services and terrestrial radiocommunication services sharing frequency bands with equal rights;
- of the formulation of calculation methods for determining the co-ordination area of earth stations at frequencies below 1 GHz and above 40 GHz;

recommends to administrations

that until the next competent World Administrative Radio Conference they should use:

- any C.C.I.R. Recommendation, if applicable, for the values missing from Tables I and II of Appendix 28 to the Radio Regulations;
- the methods of determining the co-ordination area for frequencies below 1 GHz and above 40 GHz, which may be the subject of a C.C.I.R. Recommendation.

REC Spa2-10

RECOMMENDATION No. Spa2-10

**Relating to the Criteria to be applied for Frequency Sharing
between the Broadcasting-Satellite Service and the Terrestrial
Broadcasting Service in the Band 620 - 790 MHz**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that, within the band 620 - 790 MHz, assignments may be made to television stations using frequency modulation in the broadcasting-satellite service;
- b) that it is necessary to have a power flux density limit which will provide adequate protection to the terrestrial broadcasting service;

taking into account

- a) that the conclusions of the Special Joint Meeting of the C.C.I.R. (Geneva, 1971), indicated that the following power flux density limits are necessary to protect the terrestrial broadcasting service:

-121 dBW/m ²	$\delta \leqslant 20^\circ$
-121 + 0.4 ($\delta - 20$) dBW/m ²	$20^\circ < \delta \leqslant 60^\circ$
-105 dBW/m ²	$60^\circ < \delta \leqslant 90^\circ$

where δ is the angle of arrival above the horizontal plane (in degrees);

- b) that additional tests carried out by one administration after the Special Joint Meeting of the C.C.I.R., indicated that the following more conservative power flux density limits may be necessary:

-130 dBW/m ²	$\delta \leqslant 20^\circ$
-130 + 0.4 ($\delta - 20$) dBW/m ²	$20^\circ < \delta \leqslant 60^\circ$
-114 dBW/m ²	$60^\circ < \delta \leqslant 90^\circ$

where δ is the angle of arrival above the horizontal plane (in degrees);

REC Spa2-10

- c) that additional information is required on the protection ratio for interference from an FM television signal into a VSB television signal for both the 625- and 525-line systems;
- d) that with terrestrial television receiving systems using current technology, the minimum field strength to be protected may in some cases be less than the values included in C.C.I.R. Recommendation 417-2;
- e) that account may have to be taken of ground reflections;
- f) that energy dispersal techniques may reduce the required protection ratio and should be used if shown to be effective;

recommends

1. that in view of the absence of sufficient information on tests under operational conditions and in order to provide sharing criteria, on a provisional basis, the maximum power flux density produced at the surface of the Earth within the service area of a terrestrial broadcasting station (see C.C.I.R. Recommendation 417-2), by a space station in the broadcasting-satellite service in the band 620 - 790 MHz should not exceed:

$$\begin{array}{ll} -129 \text{ dBW/m}^2 & \delta \leqslant 20^\circ \\ -129 + 0.4(\delta - 20) \text{ dBW/m}^2 & 20^\circ < \delta \leqslant 60^\circ \\ -113 \text{ dBW/m}^2 & 60^\circ < \delta \leqslant 90^\circ \end{array}$$

where δ is the angle of arrival above the horizontal plane (in degrees);

2. that these limits be not exceeded on the territory of a country except with the agreement of its administration;
3. that the transmission of unmodulated carriers should be avoided;
4. that the C.C.I.R. urgently study the sharing criteria to be applied to frequency sharing between the broadcasting-satellite service and the terrestrial broadcasting service in the band 620 - 790 MHz and prepare a Recommendation on power flux densities to be used in lieu of the above provisional limits;

REC Spa2-10; 11

5. that in its studies the C.C.I.R. consider in particular the following aspects:

- 5.1 the required protection ratio for both 525- and 625-line systems for interference from an FM television signal into a VSB television signal;
- 5.2 the minimum field strength to be protected for the terrestrial television service taking into account the current state of the art;
- 5.3 the effect of ground reflections;
- 5.4 the number of broadcasting satellites that may be visible from a terrestrial broadcasting receiver;
- 5.5 the effect of polarization discrimination;
- 5.6 the effect of antenna directivity;

6. that in its studies the C.C.I.R. should consider the advantages of energy dispersal techniques in the broadcasting-satellite service (television).

RECOMMENDATION No. Spa2 - 11

**Relating to Carrier Energy Dispersal in Systems in the
Fixed-Satellite Service**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that use of carrier energy dispersal techniques in systems in the fixed-satellite service can result in a substantial reduction of interference to stations of a terrestrial service operating in the same frequency bands;

REC **Spa2-11, 12**

- b)* that the use of such techniques can result in a substantial reduction in the level of interference between systems in the fixed-satellite service operating in the same frequency bands;
- c)* that such techniques are being regularly and successfully employed in systems in the fixed-satellite service without noticeable deterioration of the quality of operation;

recommends

1. that systems in the fixed-satellite service employing angle modulation by analogue signals should use carrier energy dispersal techniques as far as is practicable with a view to spreading energy at all times and in a manner consistent with the satisfactory operation of the systems;
2. that systems in the fixed-satellite service employing digital modulation should use carrier energy dispersal techniques when this becomes technically feasible and is practical.

RECOMMENDATION No. **Spa2-12**

**Relating to Technical Standards for the Assessment
of harmful Interference in the Frequency Bands above 28 MHz**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a)* that the definition of harmful interference (No. 93 of the Radio Regulations), being of a qualitative nature, leads to a purely subjective estimation of the nuisance;

REC Spa2-12

- b)* that, for the accomplishment of its regulatory tasks, the I.F.R.B. has adopted in its technical standards, for the frequency bands below 28 MHz, values for the ratio between the wanted signal and the interfering signal, below which harmful interference may be expected,
- c)* that "harmful interference" implies a considerable degree, or probability, of interference;
- d)* that, as a consequence, it is desirable to determine the level of interference by which any emission, radiation or induction affects a radio-communication service beyond specific limits established to ensure the quality and reliability of performance required by the nature of the service;
- e)* that the assessment of interference levels is related to various factors such as the nature of the services concerned, number of interference sources, percentages of time during which the interfering signal affects the wanted signal;

and noting

- a)* that the I.F.R.B. has been considering the maximum allowable values of interference given in the pertinent C.C.I.R. Recommendations to be values which ensure a satisfactory service;
- b)* that, however, the I.F.R.B. does not possess data on the extent to which these recommended values and the associated percentages of time may be exceeded without affecting a service beyond the specific limits established to ensure the quality and reliability of performance required by the nature of the service;

invites the C.C.I.R.

to study this subject and to recommend the technical criteria for the frequency bands above 28 MHz, allocated to space radiocommunication, radio astronomy, and the terrestrial radiocommunication services concerned, in order to enable the I.F.R.B. and administrations to apply such criteria for these bands;

REC Spa2-12, 13

and invites the I.F.R.B.

to publish, for the information of administrations, its technical standards based upon the relevant provisions of the Radio Regulations and Appendices thereto, the decisions of Administrative Conferences of the Union as appropriate, the Recommendations of the C.C.I.R., the state of the radio art, and the development of transmission techniques.

RECOMMENDATION No. Spa2-13

**Relating to the Use of Space Radiocommunication Systems
in the Event of natural Disasters, Epidemics, Famines and similar
Emergencies**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

considering

- a) that in the case of natural disasters, epidemics, famines and similar emergencies lives can be saved by prompt and effective relief;
- b) that rapid and reliable telecommunications are essential for relief operations;
- c) that, through damage or from other causes, the normal telecommunications facilities in disaster areas are often inadequate for relief operations and cannot be restored or supplemented quickly through local resources;
- d) that use of space radiocommunication systems is one of the means by which rapid and reliable telecommunications could be provided for relief operations;

REC Spa2-13

noting

- a) that known planning of space radiocommunication systems makes no provision for specific frequencies or channels for emergency communications;
- b) that in the absence of such planning it is not feasible to proceed with specifications for rapidly transportable, universally operable earth stations;

recommends

1. that administrations, individually or in collaboration, provide for the needs of eventual relief operations in planning their space radiocommunication systems and identify for this purpose preferred radio-frequency channels and facilities which could quickly be made available for relief operations;
2. that administrations concerned waive the coordination procedures provided for in the Radio Regulations in the case of transportable earth stations used for relief operations;

invites

the C.C.I.R. to study standard specifications and preferred frequencies for transportable earth stations and for compatible mobile and transportable fixed radiocommunications equipment for relief operations;

requests

the Secretary-General to bring this Recommendation to the attention of the United Nations, the Specialized Agencies, and other International Organizations concerned, in order to ensure full cooperation in the implementation of this Recommendation.

REC Spa2-14

RECOMMENDATION No. Spa2-14

**Relating to a revised Presentation of the Sections of Article 1
of the Radio Regulations**

The World Administrative Radio Conference for Space Telecommunications, (Geneva, 1971),

considering

- a) that, as a result of the amendments made to Article 1 of the Radio Regulations, the terms specified in that Article are no longer arranged in logical order;
- b) that it would therefore be desirable to rearrange Article 1 of the Radio Regulations in a more appropriate form;

recognizing

that this Conference was unable to perform this task;

recommends

that the next World Administrative Radio Conference which is competent to revise Article 1 of the Radio Regulations should consider the rearrangement of Article 1 in a more logical manner, for example, on the lines of the Annex to this Recommendation, and further amendments to this Article, as necessary.

* * *

ANNEX TO RECOMMENDATION No. Spa2 - 14

ARTICLE 1

Section I. General Terms

Section II. Radio Systems

REC Spa2-14, 15

Section III. Radio Services and Stations

Sub-Section IIIA. Terrestrial Radiocommunication

Sub-Section IIIB. Space Radiocommunication

Sub-Section IIIC. Radio Astronomy

Section IV Technical Characteristics

RECOMMENDATION No. Spa2 - 15

**To the C.C.I.R. and to Administrations relating to Frequency Bands
shared between Space Radiocommunication Services and between
Space and Terrestrial Radiocommunication Services**

The World Administrative Radio Conference for Space Telecommunications (Geneva, 1971),

recognizing

- a) the value to the Conference of the material contained in Document No. 64 (results of C.C.I.R. studies relating to space telecommunications concluded at its Special Joint Meeting, Geneva, 1971);
- b) that further studies on a wide range of problems dealing with space radiocommunications form the subject of C.C.I.R. Questions and Study Programmes approved by the XIIth Plenary Assembly;

considering however

- a) that certain C.C.I.R. Recommendations, listed below, call for further work and study:

REC Spa2-15

Recommendation 355-1

“FREQUENCY SHARING BETWEEN ACTIVE COMMUNICATION-SATELLITE SYSTEMS AND TERRESTRIAL RADIO SERVICES IN THE SAME FREQUENCY BANDS”

Recommendation 465

“GENERALIZED EARTH-STATION ANTENNA RADIATION PATTERN FOR USE IN INTERFERENCE CALCULATIONS, INCLUDING COORDINATION PROCEDURES, IN THE FREQUENCY RANGE 2-10 GHz”

Recommendation 466

“COMMUNICATION-SATELLITE SYSTEMS FOR TELEPHONY USING FREQUENCY-DIVISION MULTIPLEX. MAXIMUM ALLOWABLE VALUES OF INTERFERENCE IN A TELEPHONE CHANNEL OF A GEOSTATIONARY COMMUNICATION-SATELLITE SYSTEM EMPLOYING FREQUENCY MODULATION, CAUSED BY OTHER GEOSTATIONARY COMMUNICATION-SATELLITE SYSTEMS”

b) that as a result of the deliberations of this Conference, particularly in relation to the provisions of Article 7, Sections VII, VIII and IX, and to other relevant Articles of the Radio Regulations, further information is required to reply to the following current Questions and Study Programmes of the C.C.I.R..

Question I-1/4

“ANTENNAE FOR SPACE SYSTEMS”

under Decides 2:

the state of development in antenna design and fabrication,

under Decides 3:

the state of development of antennae with improved side- and back-lobe characteristics;

under Decides 4:

the polarization characteristics of antennae, particularly in the side-lobe regions and in planes other than the principal planes.

REC Spa2-15

Question 2-1/4

"TECHNICAL CHARACTERISTICS OF COMMUNICATION-SATELLITE SYSTEMS FOR FIXED AND MOBILE, EXCLUDING AERONAUTICAL AND MARITIME MOBILE, SERVICES"

- under Decides 3 under what conditions and to what extent would it be feasible for communication-satellites, operating in the same system or operating in different systems, to share preferred frequency bands;
- under Decides 4: under what conditions and to what extent would it be feasible for communication-satellite systems to share preferred frequency bands with terrestrial services.

Study Programme 2-1A-1/4 "FEASIBILITY OF FREQUENCY SHARING BETWEEN COMMUNICATION-SATELLITE SYSTEMS AND TERRESTRIAL SERVICES"

- under Decides 2: the determination of the preferred technical characteristics of transmitting and receiving antennae for earth stations at fixed locations, from the standpoint of spectrum sharing with other radio services.

Study Programme 2-1C/4 "COMMUNICATION-SATELLITE SYSTEMS. FEASIBILITY OF FREQUENCY SHARING AMONG COMMUNICATION-SATELLITE SYSTEMS"

- under Decides 1. the criteria which affect interference among communication-satellites in a given system and between communication-satellite systems, taking into account the two directions of transmission,
- under Decides 2: the preferred technical characteristics of transmitting and receiving antennae for earth stations, from the standpoint of frequency sharing

REC Spa2-15

within the same system and with other communication-satellite systems.

Study Programme 2-1J/4

"COMMUNICATION-SATELLITE SYSTEMS. TECHNICAL FACTORS INFLUENCING THE EFFICIENCY OF USE OF THE GEOSTATIONARY SATELLITE ORBIT BY COMMUNICATION-SATELLITES SHARING THE SAME FREQUENCY BANDS"

under Decides 1

the technical characteristics of communication-satellite systems which affect the utilization of the geostationary satellite orbit, and the interrelationships between them,

under Decides 3.

the extent to which it may be feasible and desirable to adopt preferred technical characteristics for different geostationary communication-satellites and earth stations;

under Note 1

Some of the factors which should be taken into account in carrying out these studies:

- the tolerable levels of interference noise in different communication-satellite systems;
- the radiation patterns of the earth station and satellite antennae;
- factors affecting the multiple use of the same frequencies within a single communication satellite;
- polarization discrimination,

c) that it would be useful to have a clear definition of the term "system noise temperature",

d) that it would be useful to have clear definitions of the terms "acceptable (or unacceptable) interference" and "harmful interference" for the space radiocommunication, radio astronomy, and terrestrial radiocommunication services;

REC Spa2-15

- e) that it would be useful to have specific numerical values of power flux density from space stations of the broadcasting-satellite service which would permit differentiation between "individual reception" and "community reception" in the broadcasting-satellite service;
- f) that frequency sharing between the radionavigation service and the fixed-satellite service (Earth-to-space) has been adopted in the frequency band 14.0 to 14.3 GHz, and between the radionavigation-satellite service and the fixed-satellite service (Earth-to-space) in the frequency band 14.3 to 14.4 GHz;

recommends

- 1. that administrations, recognized private operating agencies, and other participants in the work of the C.C.I.R., consider as a matter of priority, the submission of contributions on these subjects, so that draft Recommendations on them can be prepared at the meetings of the relevant Study Groups for consideration by the Plenary Assembly of the C.C.I.R.,
- 2. that the C.C.I.R. study or, as appropriate, continue to study:
 - 2.1 the reference antenna patterns for earth station antennae, which may be appropriate for setting minimum standards of performance with a view to recommending specific patterns for this purpose, in order to improve utilization of the bands shared between the fixed-satellite service and terrestrial radiocommunication services, and of the bands shared by space radiocommunication services, and to improve the utilization of the geostationary satellite orbit,
 - 2.2 the reference antenna patterns for satellite antennae, which may be appropriate for setting minimum standards of performance, particularly outside the main beam, in order to improve the utilization of the geostationary satellite orbit and to increase the possibilities for frequency re-use;
 - 2.3 the reference cross-polarization antenna patterns which may be

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appropriate for setting minimum standards of performance and, in this connection, further study.

- 2.3.1 the portions of the spectrum within which linear-orthogonal or circular-orthogonal polarizations might be most appropriate;
- 2.3.2 the relative desirability, taking into account technical and orbit utilization factors, of using orthogonal polarizations within a single satellite as against with two satellites;
- 2.4 the necessary limitation of spurious emissions and the frequency tolerances to be observed in both the terrestrial and space radio-communication services insofar as they may affect sharing of frequency bands;
- 2.5 the criteria of permissible interference for the various space radio-communication services and terrestrial radiocommunication services sharing the frequency bands allocated by the present Conference, in order to permit the determination of:
 - 2.5.1 the co-ordination distance and the probability of interference between stations within that distance;
 - 2.5.2 the necessary limits of power flux density set up at the Earth's surface by space stations;
- 2.6. the maximum permissible level of interference into a geostationary satellite link from any other single interfering geostationary satellite network and from the aggregate of all other geostationary satellite networks, particularly in the case of:
 - 2.6.1 frequency-modulated telephony signals;
 - 2.6.2 frequency-modulated television signals;
 - 2.6.3 digitally-modulated signals

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and the most appropriate manner in which permissible interference should be specified in these and other cases;

- 2.7 the interference criteria applicable to frequency sharing between non-geostationary satellite networks and geostationary satellite networks;
- 2.8 the possibility of establishing a technical criterion for expressing the efficiency of use of the geostationary satellite orbit;
- 2.9 the possibility of improving and simplifying the method of determining the co-ordination area as described in Appendix 28 to the Radio Regulations;
- 2.10 the conditions for frequency sharing in those bands allocated to the broadcasting-satellite service by the present Conference with a view to issuing appropriate Recommendations as soon as possible so that administrations and the International Frequency Registration Board shall have the necessary technical data required to carry out examination procedures, in particular regarding Articles 9 and 9A of the Radio Regulations and those in Resolution No. Spa2-3;
- 2.11 the term "system noise temperature" with a view to formulating a clear definition of this term applicable to space radiocommunication systems;
- 2.12 the terms "acceptable (or unacceptable) interference" and "harmful interference" with a view to formulating clear definitions appropriate to the radio astronomy service and to the various space radiocommunication and terrestrial radiocommunication services;
- 2.13 the power flux densities required for individual and community reception in the broadcasting-satellite service, with a view to specifying numerical values which will differentiate between these types of reception;

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- 2.14 the criteria for frequency sharing between the radionavigation service and the fixed-satellite service (Earth-to-space) in the frequency band 14.0 to 14.3 GHz and between the radionavigation-satellite service and the fixed-satellite service (Earth-to-space) in the frequency band 14.3 to 14.4 GHz.

MR

ACTES FINALS

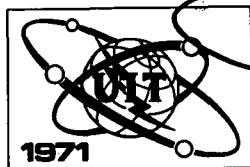
DE LA
CONFÉRENCE ADMINISTRATIVE
MONDIALE DES TÉLÉCOMMUNICATIONS
SPATIALES

GENÈVE, 1971

C O P I E

certifiée conforme à l'original
Genève, le 6 JAN. 1972

Le Secrétaire général
de l'Union internationale des
télécommunications



ABRÉVIATIONS

Les abréviations suivantes sont utilisées dans les annexes, pour caractériser la nature des amendements apportés lors de la révision partielle du Règlement des radiocommunications :

Symbole	Signification
MOD	Modification
SUP	Suppression
ADD	Adjonction
NOC	Sans changement

Note: Si une modification n'affecte que la rédaction d'un numéro sans en modifier le fond, on utilise le symbole:

(MOD)

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Genève, 1971

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¹ Not printed herein. [Footnote added by the Department of State.]

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RÉVISION PARTIELLE DU RÈGLEMENT DES RADIOPHONIQUES¹

Dans sa Recommandation N° Spa 9, la Conférence administrative extraordinaire des radiocommunications chargée d'attribuer des bandes de fréquences pour les radiocommunications spatiales, qui a eu lieu à Genève en 1963, a recommandé que le Conseil d'administration de l'Union examine à chacune de ses sessions annuelles les progrès accomplis par les administrations dans le domaine des radiocommunications spatiales, ainsi que les rapports et recommandations à cet égard émanant des organismes permanents de l'Union. Elle a recommandé également que le Conseil d'administration, compte tenu de l'examen annuel des progrès accomplis, et à une date qu'il déterminerait, recommande aux administrations la convocation d'une Conférence administrative chargée d'élaborer de nouveaux accords concernant la réglementation internationale de l'utilisation des bandes de fréquences attribuées aux radiocommunications spatiales par la Conférence de 1963.

Lors de sa 23^e session, en 1968, le Conseil d'administration, dans sa Résolution N° 632, a recommandé la convocation, pour la fin de 1970 ou le début de 1971, d'une Conférence administrative mondiale des radiocommunications et il a invité les administrations à faire parvenir au Secrétaire général leurs propositions concernant l'ordre du jour de ladite conférence.

¹ Il s'agit du Règlement des radiocommunications de Genève (1959), tel qu'il a été partiellement révisé par la Conférence administrative extraordinaire des radiocommunications chargée d'attribuer des bandes de fréquences pour les radiocommunications spatiales (Genève, 1963), par la Conférence administrative extraordinaire des radiocommunications chargée d'élaborer un plan d'allotissement révisé pour le service mobile aéronautique (R) (Genève, 1966) et par la Conférence administrative mondiale des radiocommunications chargée de traiter de questions concernant le service mobile maritime (Genève, 1967).

En vertu des dispositions des numéros 56 et 64 de la Convention internationale des télécommunications (Montreux, 1965), le Conseil d'administration, lors de sa session de 1969, avec l'accord de la majorité des Membres de l'Union, a établi dans sa Résolution N° 653 l'ordre du jour de la Conférence administrative mondiale des télécommunications spatiales et décidé qu'elle se réunirait à Genève le 7 juin 1971 pour une durée de six semaines, avec, au besoin, la possibilité d'une semaine supplémentaire.

Cependant, en 1970, le Conseil d'administration, tenant compte des dispositions de la Résolution N° 40 de la XII^e Assemblée plénière du C.C.I.R. relatives à la convocation, avant la conférence, d'une Réunion spéciale mixte de commissions d'études de ce Comité, a décidé dans sa Résolution N° 665 que la durée de la conférence serait de six semaines.

* * *

Réunie en conséquence à la date fixée, la Conférence administrative mondiale des télécommunications spatiales a examiné et révisé, conformément à son ordre du jour, les parties pertinentes du Règlement des radiocommunications. Les détails de la révision du Règlement des radiocommunications figurent dans les annexes 1 à 19 ci-jointes.

Les dispositions du Règlement des radiocommunications ainsi révisées font partie intégrante du Règlement des radiocommunications annexé à la Convention internationale des télécommunications. Elles entreront en vigueur le premier janvier 1973, date à laquelle seront abrogées les dispositions du Règlement des radiocommunications annulées ou modifiées en conséquence de cette révision.

* * *

En signant la présente révision du Règlement des radiocommunications, les délégués respectifs déclarent que si une administration formule des réserves au sujet de l'application d'une ou plusieurs dispositions révisées du Règlement des radiocommunications, aucune autre administration n'est obligée d'observer cette ou ces dispositions dans ses relations avec l'administration qui a formulé de telles réserves.

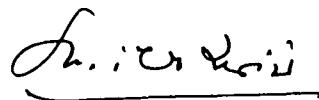
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Les Membres et Membres associés de l'Union doivent informer le Secrétaire général de leur approbation de la révision du Règlement des radiocommunications par la Conférence administrative mondiale des télécommunications spatiales de Genève (1971). Le Secrétaire général notifiera ces approbations aux Membres et Membres associés au fur et à mesure de leur réception.

En foi de quoi, les délégués des Membres de l'Union représentés à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) ont signé, au nom de leurs pays respectifs, la présente révision du Règlement des radiocommunications, dont l'exemplaire unique restera dans les archives de l'Union internationale des télécommunications et dont une copie certifiée conforme sera remise à chacun des Membres et Membres associés de l'Union.

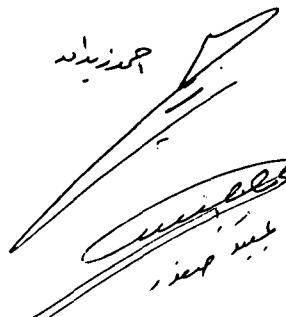
Fait à Genève, le 17 juillet 1971.

Pour l'Algérie (République Algérienne Démocratique et Populaire):



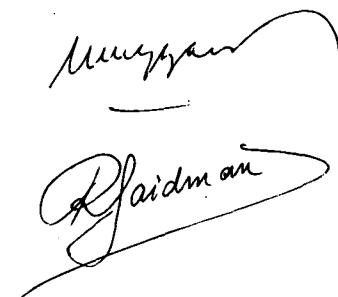
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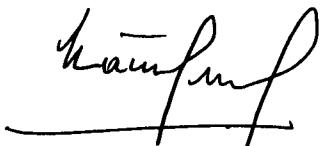
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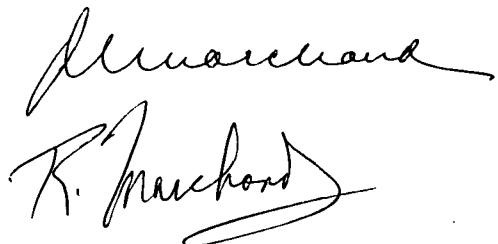
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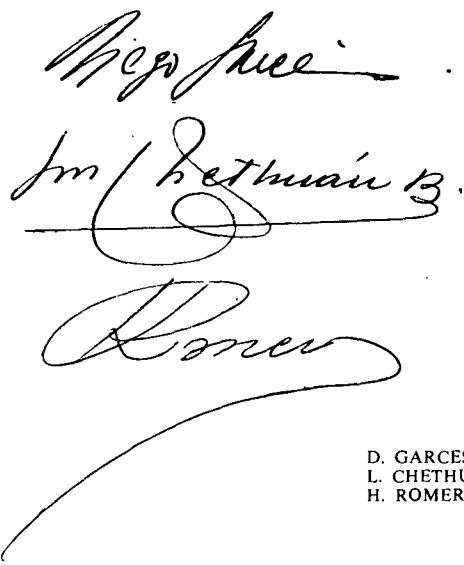
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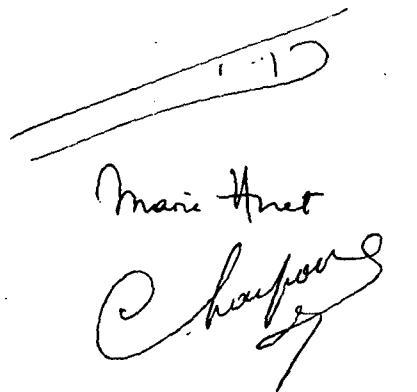
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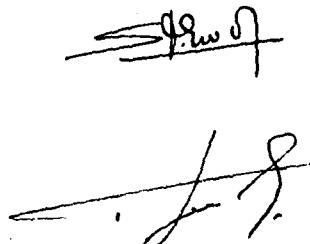
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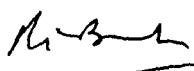
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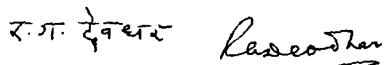
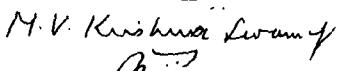
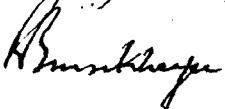
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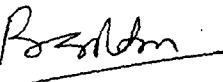
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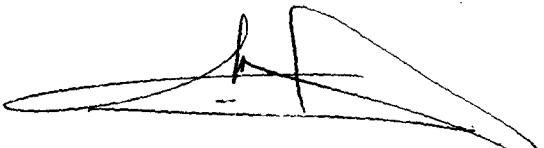
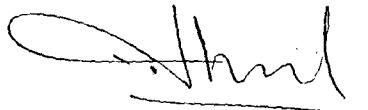
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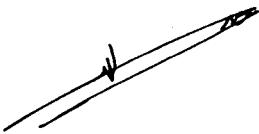

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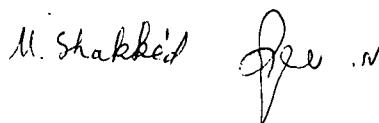
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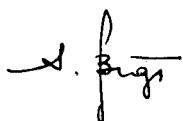
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S. OSKARSSON

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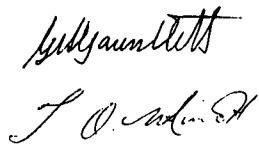
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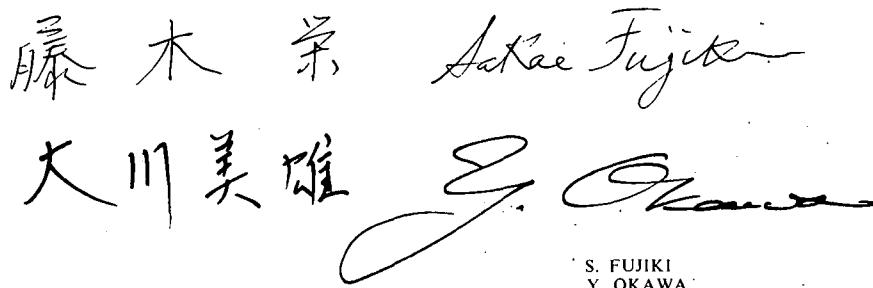
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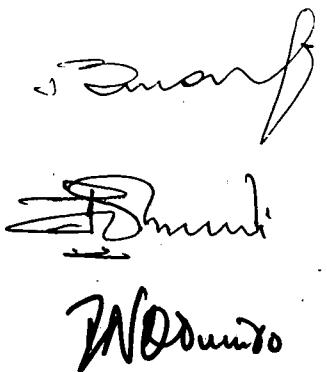
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T. O. MINOTT

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Y. OKAWA

Pour le Kenya:



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A. M. ALSABEJ
A. A. ALAYOUB
J. A. ALMAZEEDI

Pour la République du Libéria:

S. H. BUTLER

Pour la République Arabe Libyenne:

N. S. TULTI

Pour la Principauté de Liechtenstein:



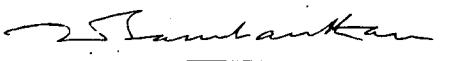
M. LEDEBUR

Pour le Luxembourg:

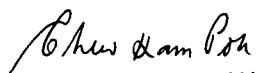


P. FABER

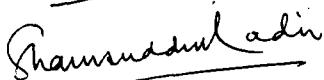
Pour la Malaisie:



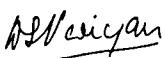
Tun V. T. Sambanthan



K. P. Chew



S. bin Abdul Kadir



D. S. Variyan

Tun V. T. SAMBANTHAN
K. P. CHEW
S. bin ABDUL KADIR
D. S. VARIYAN

Pour la République du Mali:

A handwritten signature consisting of two parts. The top part is a stylized 'K' or 'M' followed by a 'D'. The bottom part is a cursive signature of 'M. L. KANE' and 'M. M. KEITA'.

M. L. KANE
M. M. KEITA

Pour le Royaume du Maroc:

A handwritten signature enclosed in a circle, reading 'مکیت' (Moukite).

M. MOUKITE

Pour la République Islamique de Mauritanie:

A handwritten signature consisting of a stylized 'A' and 'D' followed by a long horizontal stroke.

A. DUFFAU

Pour le Mexique:

A handwritten signature consisting of a stylized 'J' and 'H' followed by a long horizontal stroke.

J. HERNÁNDEZ

Pour Monaco:



C. C. SOLAMITO

Pour le Nicaragua:



A. A. MULLHAUPT

Pour la République du Niger:



M. ABBA

Pour la République Fédérale de Nigeria:

A. A. BODEDE

Pour la Norvège:

H. NYMOEN
A. BØE

Pour la Nouvelle-Zélande:

D. C. ROSE
R. J. BUNDLE

Pour l'Ouganda:

P. O. OKUNDI

Pour le Pakistan:

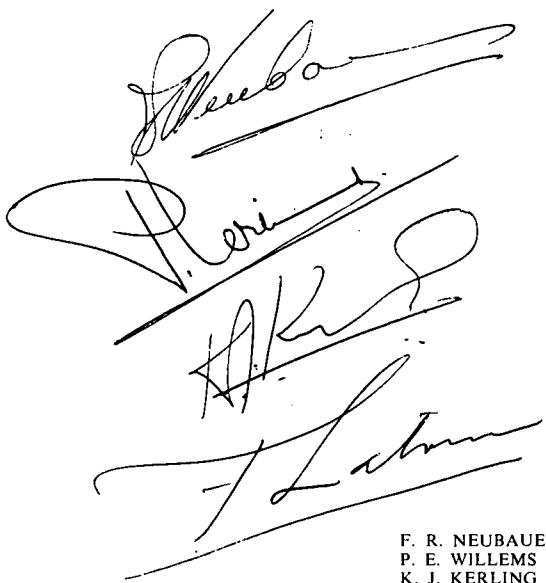
A. KHAN
S. A. AZIZ
A. ZAIDI

Pour le Paraguay:

C. M. GAONA VELAZCO

TIAS 7435

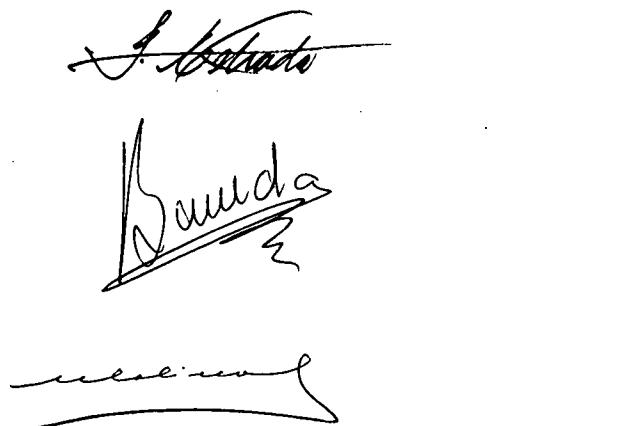
Pour le Royaume des Pays-Bas:



The block contains four distinct handwritten signatures, each with a diagonal line underneath it, representing the signatories from the Netherlands.

F. R. NEUBAUER
P. E. WILLEMS
K. J. KERLING
F. S. LATOUR

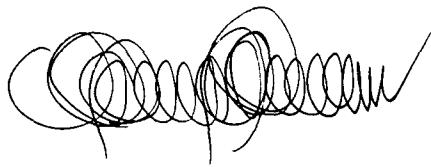
Pour le Pérou:



The block contains three handwritten signatures, each with a diagonal line underneath it, representing the signatories from Peru.

J. ESTRADA GOMEZ SANCHEZ
J. E. BARREDA DELGADO
M. COLINA-MARIE

Pour la République des Philippines:



C. S. CARREON
L. A. GARCIA

Pour la République Populaire de Pologne:



K. KOZŁOWSKI

Pour le Portugal:

F. de Alcambar Pereira

Domingos Alvim Pires Fran

José de Oliveira Leandro

Araújo Marini Castanheira

Manuel José Lopes da Silva

F. DE ALCAMBAR PEREIRA
D. A. PIRES FRANCO
J. O. LEANDRO
A. MARINI CASTANHEIRA
M. J. LOPEZ DA SILVA

Pour les Provinces portugaises d'Outre-Mer:

F. de Alcambar Pereira

Therry Leandro

Jean de Alcântara Leandro

F. DE ALCAMBAR PEREIRA
J. D. FERRAZ DE CARVALHO
J. O. LEANDRO

Pour la République Arabe Syrienne:

N. Kisrawi

Mouyad

N. KISRAWI
M. HAMMOODE

Pour la République Arabe Unie:

Elgarhi Elkashlan

Nabil Khodair

E. ELKASHLAN
N. KHODAIR

Pour la République Fédérale d'Allemagne:



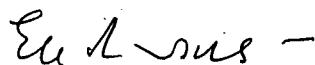
J. KUPPER

Pour la République Socialiste Soviétique de l'Ukraine:



I. E. TIMCHENKO

Pour la République Socialiste de Roumanie:



G. AIRINEI
L. CONSTANTINESCU

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, les îles Anglo-Normandes et l'île de Man:

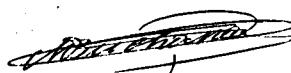
D. E. Baptiste

C. W. Sowton

S. G. Hicks

D. E. BAPTISTE
C. W. SOWTON.
S. G. HICKS

Pour la République Rwandaise:



M. BUCYANA

Pour la République du Sénégal:



L. Dia

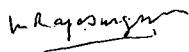


A. M'BODJI

L. DIA

I. N'DOYE

Pour la République de Singapour:



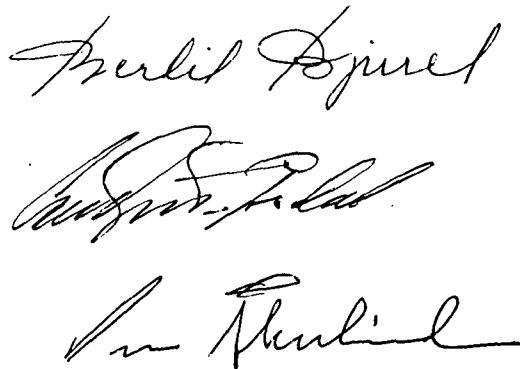
R. G. RAJASINGAM

Pour la République Sudafricaine:



A. BIRRELL
P. H. de V. VAN TONDER

Pour la Suède:



B. BJUREL
C.-G. ÅSDAL
P. ÅKERLIND

Pour la Confédération Suisse:

F. Locher
H. R. Probst.
C. Steffen
H. A. Kieffer

F. LOCHER
H. R. PROBST
C. STEFFEN
H. A. KIEFFER

Pour la République Unie de Tanzanie:

R. M. Yusuf
P. O. Okundi

Pour la République Socialiste Tchécoslovaque:

J. Maršíček
M. Zahradníček
J. Vrba

J. MARŠÍČEK
M. ZAHRADNÍČEK
J. VRBA

Pour les Territoires des Etats-Unis d'Amérique:

W. E. DENNY

Pour les Territoires d'Outre-Mer dont les relations internationales sont assurées par le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord:

T. F. H. HOWARTH

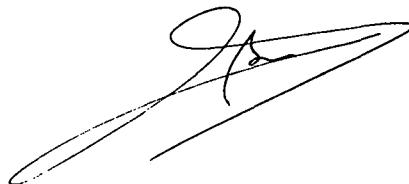
Pour la Thaïlande:

P. SURASIDHI
P. KASEMSRI
C. KANCHANINDU

Pour la République Togolaise:

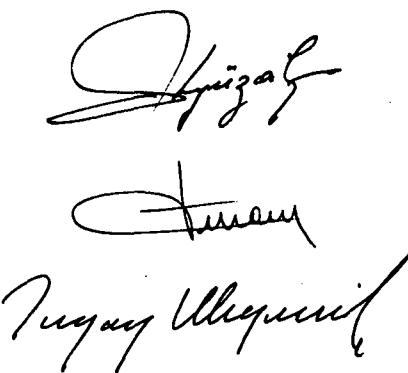
A. AITHNARD

Pour la Tunisie:



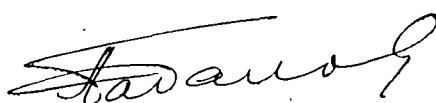
B. KHOUADJA

Pour la Turquie:



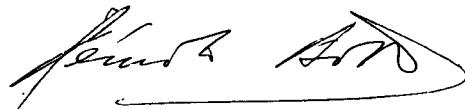
N. AKYÜZALP
O. TURAN
T. ULUÇEVİK

Pour l'Union des Républiques Socialistes Soviétiques:



A. L. BADALOV

Pour la République Orientale de l'Uruguay:



R. BOTTO

Pour la République de Venezuela:



C. J. MARTINEZ
R. ZERPA

Pour la République du Viet-Nam:



VUONG QUANG NGHIA
PHAM VAN TRINH
NGUYEN CONG ANH-TUAN

Pour la République Socialiste Fédérative de Yougoslavie:



M. DAKIĆ

ANNEXE 1

Révision de l'article 1 du Règlement des radiocommunications*

L'article 1 du Règlement des radiocommunications est révisé comme suit:

Section II. Systèmes, services et stations radioélectriques

Les nouveaux numéros suivants sont ajoutés à la suite du numéro 21:

ADD 21A
Spa2

Station spatiale

Station située sur un objet qui se trouve, est destiné à aller, ou est allé, au-delà de la partie principale de l'atmosphère terrestre.

* Note du Secrétariat général

Dans certains cas, la Conférence a procédé à un regroupement des définitions en leur attribuant de nouveaux numéros, soit en les modifiant, soit en les maintenant sans changement.

Il s'agit des définitions suivantes:

<i>Nouveau numéro</i>	<i>Définition</i>	<i>Ancien numéro</i>	<i>Remarques</i>
21A	Station spatiale	84AE	MOD
21B	Station terrienne	84AD	MOD
21C	Radiocommunication spatiale	84AC	MOD
21D	Radiocommunication de Terre	84AA	MOD
21E	Station de Terre	84AB	MOD
84AFA	Système à satellites	84AL	MOD
84ATD	Service de recherche spatiale	84AM	MOD
84ATE	Service d'exploitation spatiale	84AC	MOD
84ATF	Service inter-satellites	84AC	MOD
84BAA	Engin spatial	84BH	MOD
84BAC	Satellite actif	84AJ	NOC
84BAD	Satellite passif	84AK	NOC

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- ADD **21B** *Station terrienne*
Spa2
Station située soit sur la surface de la Terre, soit dans la partie principale de l'atmosphère terrestre, et destinée à communiquer:
— avec une ou plusieurs stations spatiales;
— ou avec une ou plusieurs stations de même nature, à l'aide d'un ou plusieurs satellites passifs ou autres objets spatiaux.
- ADD **21C** *Radiocommunication spatiale*
Spa2
Toute radiocommunication assurée au moyen d'une ou plusieurs stations spatiales, ou au moyen d'un ou plusieurs satellites passifs ou autres objets spatiaux.
- ADD **21D** *Radiocommunication de Terre*¹
Spa2
Toute radiocommunication autre que les radiocommunications spatiales ou la radioastronomie.
- ADD **21D.1** ¹Dans le présent Règlement, sauf spécification contraire, tout service de radiocommunication se rapporte aux radiocommunications de Terre.
Spa2
- ADD **21E** *Station de Terre*¹
Spa2
Station assurant une radiocommunication de Terre.
- ADD **21E.1** ¹Dans le présent Règlement, sauf spécification contraire, toute station est une station de Terre.
Spa2
- Le numero 69 est remplacé par le nouveau texte suivant:*
- MOD **69** *Service de sécurité*
Spa2
Service de radiocommunication exploité de façon permanente ou temporaire pour assurer la sauvegarde de la vie humaine et des biens sur la surface de la Terre, dans l'atmosphère terrestre ou dans l'espace.

ANN 1 (ART 1)

Les numeros 84AA et 84AB sont biffés.

Section II A. Systèmes, services et stations spatiaux

Les numeros 84AC, 84AD et 84AE sont biffés.

Le numero 84AF est remplacé par le nouveau texte suivant:

MOD 84AF *Système spatial*
Spa2

Tout ensemble de stations terriennes et/ou spatiales coopérant pour assurer des radiocommunications spatiales à des fins déterminées.

...

Les nouveaux numeros suivants sont ajoutés à la suite du numero 84AF

ADD 84AFA *Système a satellites*
Spa2

Système spatial utilisant un ou plusieurs satellites artificiels de la Terre.

ADD 84AFB *Réseau à satellite*
Spa2

Système a satellites ou partie d'un système a satellites, composé d'un seul satellite et des stations terriennes associées.

ADD 84AFC *Liaison par satellite*
Spa2

Liaison radioélectrique entre une station terrienne émettrice et une station terrienne réceptrice par l'intermédiaire d'un satellite.

Une liaison par satellite comprend un trajet montant et un trajet descendant.

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ADD **84AFD**
Spa2

Liaison multisatellite

Liaison radioélectrique entre une station terrienne émettrice et une station terrienne receptrice par l'intermédiaire d'au moins deux satellites, sans aucune station terrienne intermédiaire.

Une liaison multisatellite comprend un trajet montant, un ou plusieurs trajets entre satellites et un trajet descendant.

Le numero 84AG est remplacé par le nouveau texte suivant:

MOD **84AG**
Spa2

Service fixe par satellite

Service de radiocommunication.

- entre stations terriennes situées en des points fixes déterminés, lorsqu'il est fait usage d'un ou plusieurs satellites; dans certains cas, ce service comprend des liaisons entre satellites, qui peuvent également être assurées au sein du service inter-satellites;
- pour la connexion entre une ou plusieurs stations terriennes situées en des points fixes déterminés et des satellites utilisés pour un service autre que le service fixe par satellite (par exemple le service mobile par satellite, le service de radiodiffusion par satellite, etc.).

Les nouveaux numéros suivants sont ajoutés à la suite du numéro 84AG:

ADD **84AGA**
Spa2

Service mobile par satellite

Service de radiocommunication.

- entre des stations terriennes mobiles et une ou plusieurs stations spatiales, ou entre des stations spatiales utilisées par ce service;
- ou entre des stations terriennes mobiles, par l'intermédiaire d'une ou plusieurs stations spatiales;
- et, si le système utilisé l'exige, pour la connexion entre ces stations spatiales et une ou plusieurs stations terriennes situées en des points fixes déterminés.

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ADD **84AGB** *Service mobile aeronautique par satellite*
Spa2

Service mobile par satellite dans lequel les stations terriennes mobiles sont situées a bord d'aéronefs. Les stations d'engin de sauvetage et les stations de radiobalise de localisation des sinistres peuvent également participer à ce service.

ADD **84AGC** *Service mobile maritime par satellite*
Spa2

Service mobile par satellite dans lequel les stations terriennes mobiles sont situées a bord de navires. Les stations d'engin de sauvetage et les stations de radiobalise de localisation des sinistres peuvent également participer à ce service.

ADD **84AGD** *Service mobile terrestre par satellite*
Spa2

Service mobile par satellite dans lequel les stations terriennes mobiles sont situées à Terre.

Les numeros 84AH a 84AO sont biffés.

Le numero 84AP est remplacé par le nouveau texte suivant:

MOD **84AP** *Service de radiodiffusion par satellite*
Spa2

Service de radiocommunication dans lequel des signaux émis ou retransmis par des stations spatiales sont destinés à être reçus directement¹ par le public en général.

ADD **84AP.1** ¹ Dans le service de radiodiffusion par satellite, le terme « reçus directement » s'applique à la fois à la réception individuelle et à la réception communautaire.
Spa2

ANN I (ART I)

Les nouveaux numeros suivants sont ajoutes a la suite du numero 84AP.

ADD **84APA** *Reception individuelle* (dans le service de radiodiffusion par satellite)

Réception des émissions d'une station spatiale de radiodiffusion par satellite au moyen d'installations domestiques simples et notamment d'installations munies d'antennes de faibles dimensions.

ADD **84APB** *Reception communautaire* (dans le service de radiodiffusion par satellite)

Réception des émissions d'une station spatiale du service de radiodiffusion par satellite au moyen d'installations réceptrices pouvant, dans certains cas, être complexes et avoir des antennes de plus grandes dimensions que celles utilisées pour la réception individuelle, et destinées à être utilisées:

- par un groupe du public en général, en un même lieu;
- ou au moyen d'un système de distribution desservant une zone limitée.

ADD **84APC** *Service de radioreperage par satellite*
Spa2

Service de radiocommunication impliquant l'utilisation du radiorepérage et l'utilisation d'une ou plusieurs stations spatiales.

Le numero 84AQ est remplace par le nouveau texte suivant:

MOD **84AQ** *Service de radionavigation par satellite*
Spa2

Service de radioreperage par satellite utilisé pour les mêmes fins que le service de radionavigation, dans certains cas, ce service

ANN 1 (ART 1)

comprend l'émission ou la retransmission de renseignements complémentaires nécessaires pour l'exploitation de systèmes de radionavigation.

Les nouveaux numeros suivants sont ajoutés a la suite du numero 84AQ.

ADD	84AQA Spa2	<i>Service de radionavigation aéronautique par satellite</i> Service de radionavigation par satellite dans lequel les stations terriennes mobiles sont situées a bord d'aéronefs.
ADD	84AQB Spa2	<i>Service de radionavigation maritime par satellite</i> Service de radionavigation par satellite dans lequel les stations terriennes mobiles sont situées à bord de navires.

Les numeros 84AR et 84AS sont biffés.

Le nouveau numero suivant est ajouté avant le numero 84AT

ADD	84ASA Spa2	<i>Service d'exploration de la Terre par satellite</i> Service de radiocommunication entre des stations terriennes et une ou plusieurs stations spatiales dans lequel:
		<ul style="list-style-type: none">— des renseignements relatifs aux caractéristiques de la Terre et de ses phénomènes naturels sont obtenus à partir d'instruments situés sur des satellites de la Terre;— des renseignements analogues sont recueillis à partir de plateformes aéroportées ou situées sur la Terre;— ces renseignements peuvent être distribués à des stations terriennes appartenant au même système;— les plateformes peuvent également être interrogées.

ANN 1 (ART 1)

Le numéro 84AT est remplacé par le nouveau texte suivant:

- MOD **84AT** *Service de météorologie par satellite*
Spa2 Service d'exploration de la Terre par satellite pour les besoins de la météorologie.
- Les nouveaux numéros suivants sont ajoutés à la suite du numero 84AT*
- ADD **84ATA** *Service d'amateur par satellite*
Spa2 Service de radiocommunication faisant usage de stations spatiales situées sur des satellites de la Terre pour les mêmes fins que le service d'amateur.
- ADD **84ATB** *Service des fréquences étalon par satellite*
Spa2 Service de radiocommunication faisant usage de stations spatiales situées sur des satellites de la Terre pour les mêmes fins que le service des fréquences étalon.
- ADD **84ATC** *Service des signaux horaires par satellite*
Spa2 Service de radiocommunication faisant usage de stations spatiales situées sur des satellites de la Terre pour les mêmes fins que le service des signaux horaires.
- ADD **84ATD** *Service de recherche spatiale*
Spa2 Service de radiocommunication dans lequel on utilise des engins spatiaux ou d'autres objets spatiaux aux fins de recherche scientifique ou technique.
- ADD **84ATE** *Service d'exploitation spatiale*
Spa2 Service de radiocommunication destiné exclusivement à l'exploitation des engins spatiaux, en particulier la poursuite, la télémétrie et la télécommande.
Ces fonctions seront normalement assurées au sein du service dans lequel fonctionne la station spatiale.

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ADD **84ATF** *Service inter-satellites*
Spa2 Service de radiocommunication assurant des liaisons entre des satellites artificiels de la Terre.

Les numeros 84AU et 84AV sont biffés.

Section IIB. Espace, orbites et types d'objets spatiaux

Le numero 84BA est remplacé par le nouveau texte suivant:

MOD **84BA** *Espace lointain*
Spa2 Région de l'espace située a des distances de la Terre supérieures ou approximativement égales a la distance entre la Terre et la Lune.

Les nouveaux numeros suivants sont ajoutés a la suite du numero 84BA.

ADD **84BAA** *Engin spatial*
Spa2 Engin construit par l'homme et destiné a aller au-delà de la partie principale de l'atmosphère terrestre.

ADD **84BAB** *Satellite*
Spa2 Corps¹ tournant autour d'un autre corps de masse prépondérante et dont le mouvement est principalement déterminé, d'une façon permanente, par la force d'attraction de ce dernier.

ADD **84BAB.1** ¹ Un corps répondant à cette définition et qui tourne autour du Soleil est
Spa2 appelé planète ou planétoïde.

ADD **84BAC** *Satellite actif*
Spa2 Satellite de la Terre portant une station destinée a émettre ou retransmettre des signaux de radiocommunication.

ANN 1 (ART 1)

ADD **84BAD** *Satellite passif*
Spa2
Satellite de la Terre destiné à transmettre des signaux de radiocommunication par réflexion.

Les numeros 84BB a 84BE sont remplaces par les nouveaux textes suivants:

MOD **84BB** *Orbite*
Spa2
1. Trajectoire que décrit, par rapport à un système de référence spécifié, le centre de gravité d'un satellite ou autre objet spatial soumis aux seules forces naturelles, essentiellement les forces de gravitation.
2. Par extension, trajectoire que décrit le centre de gravité d'un objet spatial soumis aux forces naturelles auxquelles s'ajoutent éventuellement des actions correctives de faible énergie, exercées par un dispositif de propulsion et destinées à obtenir et conserver une trajectoire désirée.

MOD **84BC** *Inclinaison d'une orbite* (d'un satellite de la Terre)
Spa2
Angle du plan contenant une orbite et du plan de l'équateur terrestre.

MOD **84BD** *Période* (d'un satellite)
Spa2
Intervalle de temps compris entre deux passages consécutifs d'un satellite ou d'une planète en un point caractéristique de son orbite.

MOD **84BE** *Altitude de l'apogee* (du perigee)
Spa2
Altitude de l'apogee (du périhélie) au-dessus d'une surface de référence spécifiée servant à la représentation de la surface de la Terre.

Le numero 84BF est biffé.

ANN 1 (ART 1)

Le nouveau numero suivant est ajoute avant le numero 84BG.

ADD **84BFA**
Spa2

Satellite geosynchrone

Satellite de la Terre dont la période de révolution est égale à la période de rotation de la Terre autour de son axe.

Le numero 84BG est remplacé par le nouveau texte suivant:

MOD **84BG**
Spa2

Satellite geostationnaire

Satellite dont l'orbite circulaire est dans le plan de l'équateur terrestre et qui tourne autour de l'axe des pôles de la Terre dans le même sens et avec la même période que ceux de la rotation de la Terre.

L'orbite sur laquelle doit être placé un satellite pour qu'il soit géostationnaire est appelée « orbite des satellites géostationnaires ».

Le numero 84BH est biffé.

Section III. Caractéristiques techniques

Le nouveau numero suivant est ajoute a la suite du numero 98:

ADD **98A**
Spa2

Puissance isotrope rayonnee equivalente (p.i.r.e.)

Produit de la puissance d'une émission, telle qu'elle est fournie à une antenne, par le gain de cette antenne par rapport à une antenne isotrope, dans une direction donnée.

Les nouveaux numeros suivants sont ajoutés à la suite du numero 103

ADD **103A**
Spa2

Temperature de bruit equivalente d'une liaison par satellite

Température de bruit à l'entrée du récepteur de la station terrienne, correspondant à la puissance de bruit radioélectrique qui

ANN 1 (ART 1)

produit le bruit total observé à la sortie de la liaison par satellite, compte non tenu du bruit dû aux brouillages causés par des liaisons par satellite utilisant d'autres satellites et par des systèmes de Terre.

- ADD **103B** *Distance de coordination*
Spa2 Distance mesurée a partir d'une station terrienne, dans un azimut donné, et en deçà de laquelle une station de Terre partageant la même bande de fréquences peut provoquer ou subir un brouillage dont le niveau est supérieur à la valeur admissible.
- ADD **103C** *Contour de coordination*
Spa2 Ligne joignant les points qui se trouvent, dans chaque azimut autour d'une station terrienne, à une distance de cette station égale à la distance de coordination dans cet azimut.
- ADD **103D** *Zone de coordination*
Spa2 Zone entourant une station terrienne et comprise à l'intérieur du contour de coordination.
-

ANNEXE 2

Révision de l'article 2 du Règlement des radiocommunications

L'article 2 du Règlement des radiocommunications est révisé comme suit:

Section III. Nomenclature des bandes de fréquences et des longueurs d'onde employées en radiocommunications

Le numero 112 est remplacé par le nouveau texte suivant:

MOD 112 § 7 Le spectre des fréquences radioélectriques est subdivisé en Spa2 neuf bandes de fréquences, désignées par des nombres entiers consécutifs, conformément au tableau ci-après. Les fréquences sont exprimées:

- en kilohertz (kHz) jusqu'à 3000 kHz inclus,
- en mégahertz (MHz) au-delà, jusqu'à 3000 MHz inclus,
- en gigahertz (GHz) au-delà, jusqu'à 3000 GHz inclus.

Toutefois, dans les cas où l'observation de ces règles donnerait lieu à de sérieuses difficultés, par exemple pour la notification et l'enregistrement des fréquences, dans les questions relatives aux listes de fréquences et dans les questions connexes, on pourra s'en écarter dans une mesure raisonnable.

ANN 2 (ART 2)

Numéro de la bande	Gamme de fréquences (limite inférieure exclue, limite supérieure incluse)	Subdivision métrique correspondante
4	3 à 30 kHz	ondes myriamétriques
5	30 à 300 kHz	ondes kilométriques
6	300 à 3000 kHz	ondes hectométriques
7	3 à 30 MHz	ondes décamétriques
8	30 à 300 MHz	ondes métriques
9	300 à 3000 MHz	ondes décimétriques
10	3 à 30 GHz	ondes centimétriques
11	30 à 300 GHz	ondes millimétriques
12	300 à 3000 GHz ou 3 THz	ondes décimillimétriques

Note 1: La « bande N » s'étend de $0,3 \times 10^N$ à 3×10^N Hz.

Note 2: Symboles et préfixes:

Hz = hertz

k = kilo (10^3), M = méga (10^6), G = giga (10^9), T = téra (10^{12}).

Note 3: Abréviations qualificatives pouvant servir à désigner les bandes:

Bande 4 = VLF Bande 8 = VHF

Bande 5 = LF Bande 9 = UHF

Bande 6 = MF Bande 10 = SHF

Bande 7 = HF Bande 11 = EHF

ANNEXE 3

Revision de l'article 5 du Règlement des radiocommunications

L'article 5 du Règlement des radiocommunications est révisé comme suit:

Le titre de l'article 5 est remplacé par le nouveau texte suivant:

MOD Spa2

**Attribution¹ des bandes de fréquences
entre 10 kHz et 275 GHz**

Section I. Régions et Zones

Le numero 125 est remplacé par le nouveau texte suivant:

(MOD) **125** § 1. Du point de vue de l'attribution des bandes de fréquences, Spa2 le monde a été divisé en trois Régions² (voir l'appendice 24).

La nouvelle note de bas de page suivante est ajoutée:

ADD Spa2 ¹ Voir la Résolution n° 6.

Le numero 125.I est remplacé par le nouveau texte suivant:

(MOD) **125.1** ² Il convient de noter que, lorsque les mots «région» et «régional» sont employés dans le présent Règlement sans R majuscule, ils ne concernent pas les trois Régions définies ici aux fins de l'attribution des bandes de fréquences.

ANN 3 (ART 5)

MOD Spa2 **Section IV Tableau d'attribution des bandes de fréquences entre 10 kHz et 275 GHz**

Le Tableau d'attribution des bandes de fréquences entre 1 800 kHz et 2 000 kHz est remplacé par le suivant pour les Régions 2 et 3:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
NOC	1 800 – 2 000 AMATEUR FIXE MOBILE sauf mobile aéronautique RADIONAVIGATION. 198	

NOC **198**

SUP **199 199.1**

Le Tableau d'attribution des bandes de fréquences entre 2 170 kHz et 2 194 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
	2 170 – 2 194 MOBILE (détresse et appel) 201 201A	

NOC **201**

ADD **201A** Les fréquences 2 182 kHz, 3 023,5 kHz, 5 680 kHz, 8 364 kHz, 121,5 MHz, 156,8 MHz et 243 MHz peuvent, de plus, être utilisées, conformément aux procédures en vigueur pour les services de radiocommunications de Terre, pour les opérations de recherche et de sauvetage des véhicules spatiaux habités.

Spa2 Il en est de même pour les fréquences 10 003 kHz, 14 993 kHz et 19 993 kHz mais, pour chacune de celles-ci, les émissions doivent être limitées à une bande de de ± 3 kHz de part et d'autre de la fréquence.

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 2 498 kHz et 2 502 kHz pour la Région 1 et entre 2 495 kHz et 2 505 kHz pour les Régions 2 et 3 est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
2 300 – 2 498 NOC	2 300 – 2 495 NOC	
2 498 – 2 502 FRÉQUENCE ÉTALON 203 203A	2 495 – 2 505 FRÉQUENCE ÉTALON 203 203A	
2 502 – 2 625 NOC	2 505 – 2 625 NOC	

NOC 203

ADD 203A Les bandes 2 501 – 2 502 kHz, 5 003 – 5 005 kHz, 10 003 – 10 005 kHz, Spa2 15 005 – 15 010 kHz, 19 990 – 19 995 kHz, 20 005 – 20 010 kHz et 25 005 – 25 010 kHz sont, de plus, attribuées, à titre secondaire, au service de recherche spatiale.

SUP 204

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 2 850 kHz et 3 025 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
2 850 – 3 025		
	MOBILE AÉRONAUTIQUE (R)	
	201A	

Le Tableau d'attribution des bandes de fréquences entre 4 995 kHz et 5 005 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
4 995 – 5 005		
	FRÉQUENCE ÉTALON	
	203A 210	

NOC 210

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 5 480 kHz et 5 730 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
5 480 – 5 680	MOBILE AÉRONAUTIQUE (R) 201A	
5 680 – 5 730	MOBILE AÉRONAUTIQUE (OR) 201A	

Le Tableau d'attribution des bandes de fréquences entre 7 000 kHz et 7 100 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
7 000 – 7 100	AMATEUR AMATEUR PAR SATELLITE	

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 8 195 kHz et 8 815 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
8 195 – 8 815		
	MOBILE MARITIME	
	201A 213	

NOC 213

Le Tableau d'attribution des bandes de fréquences entre 9 995 kHz et 10 100 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
9 995 – 10 005		
	FRÉQUENCE ÉTALON	
	201A 203A 214	
10 005 – 10 100		
	MOBILE AÉRONAUTIQUE (R)	
	201A	

NOC 214

SUP 215 215A

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 14 000 kHz et 14 350 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
14 000 – 14 250	AMATEUR AMATEUR PAR SATELLITE	
14 250 – 14 350	AMATEUR	218

NOC 218

Le Tableau d'attribution des bandes de fréquences entre 14 990 kHz et 15 010 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
14 990 – 15 010	FRÉQUENCE ÉTALON	

NOC 219

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 15 762 kHz et 15 768 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
15 762 – 15 768	FIXE	

Le Tableau d'attribution des bandes de fréquences entre 18 030 kHz et 20 010 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
18 030 – 18 052	FIXE	
18 052 – 18 068	FIXE <i>Recherche spatiale</i>	
18 068 – 19 990	FIXE	
19 990 – 20 010	FRÉQUENCE ÉTALON 201A 203A 220	

NOC 220

SUP 221 221A

TIAS 7435

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 21 000 kHz et 21 450 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
21 000 – 21 450		
AMATEUR		
AMATEUR PAR SATELLITE		

Le Tableau d'attribution des bandes de fréquences entre 21 850 kHz et 22 000 kHz est remplacé par le suivant:

kHz

Région 1	Région 2	Région 3
21 850 – 21 870	RADIOASTRONOMIE	
221B		
21 870 – 22 000	FIXE AÉRONAUTIQUE	
	MOBILE AÉRONAUTIQUE (R)	

- ADD **221B** En Bulgarie, Hongrie, Pologne, Roumanie, Tchécoslovaquie et en U.R.S.S.,
 Spa2 la bande 21 850 – 21 870 kHz est, de plus, attribuée aux services fixe aéronautique et mobile aéronautique (R). Les administrations intéressées prendront toutes les mesures pratiquement possibles en vue de protéger de tout brouillage nuisible, les observations de radioastronomie faites dans cette bande.

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 23 350 kHz et 25 010 kHz est remplacé par le suivant:

kHz

Attribution aux services		
Région 1	Région 2	Région 3
23 350 – 24 990		
	FIXE MOBILE TERRESTRE 222 222A	
24 990 – 25 010		FRÉQUENCE ÉTALON
		203A 223

NOC **222**

ADD **222A** En Argentine et en Uruguay, la bande 24 528 – 24 538 kHz peut être utilisée par le service de recherche spatiale sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.

Spa2 **222A**

En Argentine et en Uruguay, la bande 24 528 – 24 538 kHz peut être utilisée par le service de recherche spatiale sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.

NOC **223**

o C

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 28 MHz et 47 MHz pour la Région 1, entre 28 MHz et 50 MHz pour la Région 2 et entre 28 MHz et 44 MHz pour la Région 3 est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
28 - 29,7		
	AMATEUR	
	AMATEUR PAR SATELLITE	
29,7 - 30,005		
	FIXE 228 229 231 232	
	MOBILE	
30,005 - 30,01		
	EXPLOITATION SPATIALE (Identification des satellites)	
	FIXE 228 229 231	
	MOBILE	
	RECHERCHE SPATIALE	
30,01 - 37,75		
	FIXE 228 229 230 231	
	MOBILE	
		233A

NOC 228 229 230 231 232

SUP 233

ADD 233A En Argentine et en Uruguay, les bandes 36,65 - 36,85 MHz, 41,15 - 41,35 MHz, Spa² 45,65 - 45,85 MHz et en Argentine, au Brésil et en Uruguay, la bande 170,55 - 170,95 MHz, sont attribuées au service de radioastronomie et aucune fréquence de ces bandes ne doit être assignée à une station du service fixe ou du service mobile.

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
37,75 – 38,25		
	FIXE 228 229 231 MOBILE <i>Radioastronomie</i> 233B	
38,25 – 41		
	FIXE 228 229 230 231 MOBILE 235 236 236A	
41 – 47 RADIODIFFUSION <i>Fixe</i> 228 237 <i>Mobile</i> 236A 238 239 240 241	41 – 50 FIXE 228 231 237 MOBILE 233A 236A	41 – 44 FIXE 228 237 MOBILE 236A 44 – 50 NOC

- ADD 233B En assignant des fréquences aux stations des autres services auxquels les bandes Spa2 37,75 – 38,25 MHz, 150,05 – 153 MHz, 406,1 – 410 MHz, 2 690 – 2 700 MHz et 4 700 – 5 000 MHz sont attribuées, les administrations sont instamment priées de prendre toutes les mesures pratiquement possibles pour protéger les observations de radioastronomie contre les brouillages nuisibles.
- MOD 235 La bande 39,986 – 40,02 MHz est, de plus, attribuée, à titre secondaire, au Spa2 service de recherche spatiale.
- NOC 236
- ADD 236A La bande 40,98 – 41,015 MHz est, de plus, attribuée, à titre secondaire, au Spa2 service de recherche spatiale, notamment pour permettre des mesures de l'effet Faraday différentiel.
- NOC 237 238 239 240 241

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 80 MHz et 100 MHz pour la Région 3 est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
NOC	NOC	80 – 87 Fixe MOBILE 254 255 256 257 261 266
NOC	NOC	87 – 100 Fixe MOBILE RADIODIFFUSION 254 267 268

NOC 254 255 256 257 261 266

MOD 267 En Nouvelle-Zélande, les bandes 87 – 88 MHz et 94 – 108 MHz sont attribuées aux services fixe et mobile.

NOC 268

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 117,975 MHz et 174 MHz pour la Région 1, entre 117,975 MHz et 146 MHz et entre 148 MHz et 174 MHz pour la Région 2, entre 117,975 MHz et 146 MHz et entre 148 MHz et 170 MHz pour la Région 3 est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
117,975 – 132		
	MOBILE AÉRONAUTIQUE (R)	
	201A 273 273A	
132 – 136		
	MOBILE AÉRONAUTIQUE (R)	
	273A 274 274A 274B 275	
136 – 137		
	RECHERCHE SPATIALE (espace vers Terre).	
	281A 281AA	
137 – 138		
	EXPLOITATION SPATIALE (Télémétrie et poursuite)	
	MÉTÉOROLOGIE PAR SATELLITE	
	RECHERCHE SPATIALE (espace vers Terre)	
	275A 279A 281C 281E	

NOC 273 273A

MOD 274 En Bulgarie, au Japon, en Pologne, au Portugal, dans les Provinces portugaises d'Outre-Mer de la Région 1 au sud de l'équateur, en Roumanie, Suède, Tchécoslovaquie et en U.R.S.S., les stations existantes du service mobile aéronautique (OR) dans la bande 132 – 136 MHz peuvent continuer à fonctionner, à titre primaire, pendant une période indéterminée.

ADD 274A: Dans les Régions 2 et 3, les stations des services fixe et mobile peuvent continuer à utiliser la bande 132 – 136 MHz jusqu'au 1^{er} janvier 1976. Jusqu'à cette date, les assignations de fréquence aux stations du service mobile aéronautique (R) sont coordonnées entre les administrations intéressées et sont protégées contre les brouillages nuisibles.

ANN 3 (ART 5)

ADD 274B A Cuba et au Mexique, la bande 132 – 136 MHz est, de plus, attribuée aux
Spa2 services fixe et mobile.

MOD 275 Au Burundi, en Ethiopie, Gambie, au Malawi, au Nigeria, dans les Provinces
Spa2 portugaises d'Outre-Mer de la Région 1 au sud de l'équateur, en Rhodésie, au Rwanda, en Sierra Leone et dans la République Sud-africaine, la bande 138 –
144 MHz est attribuée aux services fixe et mobile. Dans ces pays, les stations des services fixe et mobile existantes peuvent continuer à fonctionner dans la bande 132 – 136 MHz jusqu'au 1^{er} janvier 1976.

NOC 275A

SUP 276 277

MOD 278 En Nouvelle-Zélande, la bande 138 – 144 MHz est attribuée au service mobile
Spa2 aéronautique (OR).

SUP 279

NOC 279A 281A

ADD 281AA En Bulgarie, Chine, à Chypre, en Corée, Espagne, Ethiopie, au Ghana, en
Spa2 Hongrie, Inde, Indonésie, Iran, Iraq, au Kenya, à Koweït, en Malaisie, Ouganda, au Pakistan, aux Philippines, en Pologne, au Portugal, en République Arabe Unie, Roumanie, au Sénégal, en Syrie, Tanzanie, Tchécoslovaquie et en U.R.S.S., la bande 136 – 137 MHz est, de plus, attribuée aux services fixe et mobile.

SUP 281B

MOD 281C En Bulgarie, Hongrie, à Koweït, au Liban, en Pologne, République Arabe
Spa2 Unie, Roumanie, Tchécoslovaquie, U.R.S.S. et en Yougoslavie, la bande 137 – 138 MHz est, de plus, attribuée au service mobile aéronautique (OR).

SUP 281D

MOD 281E En Malaisie, au Pakistan et aux Philippines, la bande 137 – 138 MHz est, de
Spa2 plus, attribuée aux services fixe et mobile.

SUP 281F

ANN 3 (ART 5)

MHz

Attribution aux services					
Région 1		Région 2		Région 3	
138 – 143,6		138 – 143,6		138 – 143,6	
MOBILE		FIXE		FIXE	
AÉRONAUTIQUE (OR)		MOBILE		MOBILE	
		Radiolocalisation		<i>Recherche spatiale</i>	
				(espace vers Terre)	
275	281G	282A	283	283A	278 279A 284

- ADD **281G** En R. F d'Allemagne, la bande 138 – 140 MHz est, de plus, attribuée, à titre secondaire, au service de recherche spatiale (espace vers Terre).
- SUP **282**
- ADD **282A** En Belgique, France, Israël, Italie, au Liechtenstein, aux Pays-Bas, au Royaume-Uni et en Suisse, les bandes 138 – 143,6 MHz et 143,65 – 144 MHz sont, de plus, attribuées, à titre secondaire, au service de recherche spatiale (espace vers Terre).
- MOD **283** En Autriche, au Danemark, en Grèce, Norvège, aux Pays-Bas, au Portugal, en R. F d'Allemagne, au Royaume-Uni, en Suède, Suisse et en Turquie, la bande 138 – 144 MHz est, de plus, attribuée au service fixe et au service mobile sauf mobile aéronautique (R).
- ADD **283A** En Argentine, la fréquence 138,54 MHz \pm 7,5 kHz et la bande 143,6 – 143,65 MHz peuvent être utilisées par le service de recherche spatiale (télé-commande), sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- NOC **284**

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
143,6 – 143,65 MOBILE AÉRONAUTIQUE (OR) RECHERCHE SPATIALE (espace vers Terre)	143,6 – 143,65 FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre) Radiolocalisation	143,6 – 143,65 FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre)
275 283	283A	278 279A 284
143,65 – 144 MOBILE AERONAUTIQUE (OR)		
	143,65 – 144 FIXE MOBILE Radiolocalisation <i>Recherche spatiale</i> (espace vers Terre)	143,65 – 144 FIXE MOBILE <i>Recherche spatiale</i> (espace vers Terre)
275 282A 283		278 279A 284
144 – 146 AMATEUR AMATEUR PAR SATELLITE		
146 – 149,9 FIXE MOBILE sauf mobile aéronautique (R)	146 – 148 NOC	
	148 – 149,9 FIXE MOBILE	
285 285A	285A 290	
149,9 – 150,05 RADIONAVIGATION PAR SATELLITE		
	285B 285C	

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
150,05 – 151 FIXE MOBILE sauf mobile aéronautique (R) RADIOASTRONOMIE 233B 285 286A	150,05 – 174 FIXE MOBILE	150,05 – 170 FIXE MOBILE
151 – 153 FIXE MOBILE sauf mobile aéronautique (R) RADIOASTRONOMIE Auxiliaires de la météorologie 233B 285 286A		
153 – 154 FIXE MOBILE sauf mobile aéronautique (R) Auxiliaires de la météorologie 285		
154 – 156 FIXE MOBILE sauf mobile aéronautique (R) 285		201A 287 287A 290
156 – 174 FIXE MOBILE sauf mobile aéronautique 201A 285 287 287A 288	201A 233A 287 287A	170 – 174 NOC

ANN 3 (ART 5)

SUP 284A

NOC 285

MOD 285A L'utilisation de fréquences comprises dans la bande 148 – 149,9 MHz peut être autorisée pour la télécommande spatiale, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés. La largeur de bande d'une émission ne doit pas dépasser ± 15 kHz.

Spa2 MOD 285B En Autriche, Bulgarie, à Cuba, en Hongrie, Iran, à Koweït, au Pakistan, en Pologne, République Arabe Unie, Roumanie et en Yougoslavie, la bande 149,9 – 150,05 MHz est, de plus, attribuée aux services fixe et mobile (voir la Recommandation N° Spa 8).

ADD 285C Les émissions du service de radionavigation par satellite dans les bandes 149,9 – 150,05 MHz et 399,9 – 400,05 MHz peuvent, de plus, être utilisées par les stations terrestres de réception du service de recherche spatiale.

Spa2 SUP 286 (*voir ADD 233B*)

NOC 286A 287

ADD 287A Dans les bandes de fréquences désignées pour le service mobile maritime selon les dispositions de l'appendice 18 au présent Règlement, l'utilisation de systèmes à satellites pour la sécurité et la détresse peut être autorisée à titre exclusif dans certaines voies, de la bande 157,3125 – 157,4125 MHz pour les transmissions de navires vers les satellites et de la bande 161,9125 – 162,0125 MHz pour les transmissions de satellites vers les navires. La date de mise en service des systèmes à satellites ne sera pas antérieure au 1^{er} janvier 1976 (Voir la Resolution N° Spa2 – 5).

NOC 288 289 290

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 235 MHz et 470 MHz et entre 582 MHz et 790 MHz pour la Région 1, entre 235 MHz et 942 MHz pour la Région 2, entre 235 MHz et 470 MHz et entre 585 MHz et 890 MHz pour la Région 3 est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
235 – 267		
FIXE		
MOBILE		
	201A 305 305A 308A 309	
267 – 272		
FIXE		
MOBILE		
	<i>Exploitation spatiale (Télémesure) 309A 309B</i>	
	308A	
272 – 273		
	EXPLOITATION SPATIALE (Télémesure) 309A	
FIXE		
MOBILE		
	308A	
273 – 328,6		
FIXE		
MOBILE		
	308A 310 310A	
328,6 – 335,4		
	RADIONAVIGATION AÉRONAUTIQUE	
	311	

ANN 3 (ART 5)

NOC 305

ADD 305A En Nouvelle-Zélande, la bande 235 – 239,5 MHz est, de plus, attribuée au
Spa2 service de radionavigation aéronautique.ADD 308A Les bandes 240 – 328,6 MHz et 335,4 – 399,9 MHz, peuvent, de plus, être
Spa2 utilisées par le service mobile par satellite. L'utilisation et le développement de ce
service feront l'objet d'accord entre les administrations intéressées et celles dont
les services fonctionnant conformément au présent Tableau sont susceptibles
d'être défavorablement influencées.

NOC 309 309A 309B

MOD 310 Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux,
Spa2 des observations de radioastronomie dans la bande 322 – 328,6 MHz. Il convient
que dans l'utilisation de cette bande, les administrations ne négligent pas les besoins
du service de radioastronomie.ADD 310A En Inde, la bande 322 – 328,6 MHz est, de plus, attribuée au service de
Spa2 radioastronomie.

NOC 311

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
335,4 – 399,9	Fixe Mobile 308A	
399,9 – 400,05	RADIONAVIGATION PAR SATELLITE 285C 311A	
400,05 – 400,15	FRÉQUENCE ÉTALON PAR SATELLITE 312B 313 314	
400,15 – 401	AUXILIAIRES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (Télémesure de maintenance) RECHERCHE SPATIALE (Télémesure et poursuite) 313 314	

- MOD **311A** En Bulgarie, à Cuba, en Grèce, Hongrie, Indonésie, Iran, à Koweit, au Liban, Spa2 en République Arabe Unie, Syrie et en Yougoslavie, la bande 399,9 – 400,05 MHz est, de plus, attribuée aux services fixe et mobile (voir la Recommandation N° Spa 8).
- SUP **312A**
- ADD **312B** Dans cette bande, la fréquence étalon est 400,1 MHz. Les émissions doivent Spa2 être limitées à une bande de ± 25 kHz de part et d'autre de cette fréquence.
- NOC **313 314**

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
401 - 402	AUXILIAIRES DE LA MÉTÉOROLOGIE EXPLOITATION SPATIALE (Télémesure) 315A <i>Fixe</i> <i>Météorologie par satellite</i> (Terre vers espace) <i>Mobile</i> sauf mobile aéronautique	314 315 315B 315C 316
402 - 403	AUXILIAIRES DE LA MÉTÉOROLOGIE <i>Fixe</i> <i>Météorologie par satellite</i> (Terre vers espace) <i>Mobile</i> sauf mobile aéronautique	314 315 315C 316
403 - 406	AUXILIAIRES DE LA MÉTÉOROLOGIE <i>Fixe</i> <i>Mobile</i> sauf mobile aéronautique	314 315 316

NOC 315 315A 315B

ADD 315C La bande 401 - 403 MHz peut, de plus, être utilisée pour les applications du service d'exploration de la Terre par satellite autres que celles du service de météorologie par satellite, pour les transmissions Terre vers espace, à condition qu'il n'en résulte pas de brouillage nuisible aux stations qui fonctionnent conformément au présent Tableau.

Spa2 NOC 316

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
406 – 406,1	MOBILE PAR SATELLITE (Terre vers espace)	
	314 317A 317B	
406,1 – 410	FIXE MOBILE sauf mobile aéronautique RADIOASTRONOMIE	
	233B 314	
410 – 420	FIXE MOBILE sauf mobile aéronautique	
	314	

SUP **317.** (*voir ADD 233B*)

ADD **317A** La bande 406 – 406,1 MHz est réservée uniquement à l'utilisation et au développement de systèmes de radiobalises de localisation des sinistres à faible puissance (n'excédant pas 5 W) faisant appel à des techniques spatiales.
Spa2

ADD **317B** En Autriche, Bulgarie, au Chili, à Cuba, en Ethiopie, Hongrie, Inde, Iran, au Kenya, à Koweït, au Liechtenstein, en Malasie, Ouganda, Pologne, République Arabe-Unie, au Rwanda, en Suède, Suisse, Syrie, Tanzanie, Tchécoslovaquie et en U.R.S.S., la bande 406 – 406,1 MHz est, de plus, attribuée aux services fixe et mobile sauf mobile aéronautique.
Spa2

TIAS 7485

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
420 – 430 FIXE MOBILE sauf mobile aéronautique <i>Radiolocalisation</i> 318 319	420 – 450	
430 – 440 AMATEUR RADIOLOCALISATION 318 319 319B 320 320A 321 322		RADIOLOCALISATION <i>Amateur</i>
440 – 450 FIXE MOBILE sauf mobile aéronautique <i>Radiolocalisation</i> 318 319 319A		318 319A 319B 320A 323 324
450 – 460 FIXE MOBILE 318 319A		
460 – 470 FIXE MOBILE <i>Météorologie par satellite</i> (espace vers Terre) 318A 324B		

ANN 3 (ART 5)

- MOD 318 Les radioaltimètres peuvent, de plus, être utilisés jusqu'au 31 décembre 1974 dans la bande 420 – 460 MHz. Toutefois, après cette date, ils peuvent être autorisés à continuer à fonctionner à titre secondaire, sauf en U.R.S.S. où ils continueront à fonctionner à titre primaire.
- NOC 318A 319
- MOD 319A La bande 449,75 – 450,25 MHz peut être utilisée pour la télécommande spatiale et la recherche spatiale (Terre vers espace), sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- ADD 319B En France et dans le Département français de la Guyane (Région 2), la fréquence $434 \text{ MHz} \pm 0,25 \text{ MHz}$ peut être utilisée pour l'exploitation spatiale dans le sens Terre vers espace sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- NOC 320
- ADD 320A Le service d'amateur par satellite peut être autorisé dans la bande 435 – 438 MHz à condition qu'il n'en résulte pas de brouillage nuisible aux autres services fonctionnant conformément au présent Tableau. Les administrations qui autoriseront cette utilisation doivent faire en sorte que tout brouillage nuisible causé par les émissions d'un satellite d'amateur soit immédiatement éliminé, conformément aux dispositions du numéro 1567A.
- NOC 321
- MOD 322 Au Danemark, en Norvège et en Suède, les bandes 430 – 432 MHz et 438 – 440 MHz sont, de plus, attribuées aux services fixe et mobile.
- NOC 323 324
- (MOD) 324A Il est prévu que les stations spatiales de satellite de météorologie fonctionnant dans la bande 1 670 – 1 690 MHz émettront vers des stations terrestres spécialement choisies. L'emplacement de ces stations terrestres est à déterminer par voie d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- ADD 324B Les bandes 460 – 470 MHz et 1 690 – 1 700 MHz peuvent, de plus, être utilisées pour les applications du service d'exploration de la Terre par satellite autres que celles du service de météorologie par satellite, pour les transmissions espace vers Terre, à condition qu'il n'en résulte pas de brouillage nuisible aux stations qui fonctionnent conformément au présent Tableau.

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
470 – 582 NOC	470 – 890 RADIODIFFUSION	470 – 585 NOC
582 – 606 RADIODIFFUSION RADIONAVIGATION 325 327 328 329		585 – 610 RADIONAVIGATION 330B 336 337
606 – 790 RADIODIFFUSION 329 330 330A 331 332 332A		610 – 890 FIXE MOBILE RADIODIFFUSION 330B 332 332A 338 339
790 – 890 NOC	329A 332 332A	
890 – 942 NOC	890 – 942 FIXE RADIOLOCALISATION 339A 340	890 – 942 NOC

NOC 325

SUP 326

ANN 3 (ART 5)

NOC 327 328 329

ADD 329A En Argentine et en Uruguay, la bande 602 – 608 MHz est attribuée au service de radioastronomie.

NOC 330 330A

ADD 330B En Inde, la bande 608 – 614 MHz est, de plus, attribuée au service de radioastronomie.

NOC 331 332

ADD 332A Des fréquences comprises dans la bande 620 – 790 MHz peuvent être assignées à des stations de télévision à modulation de fréquence du service de radiodiffusion par satellite, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés (voir les Résolutions N° Spa2 – 2 et N° Spa2 – 3). De telles stations ne devront pas produire une densité surfacique de puissance supérieure à —129 dBW/m² pour les angles d'arrivée inférieurs à 20° (voir la Recommandation N° Spa2 – 10) à l'intérieur des territoires des autres pays sans le consentement des administrations de ceux-ci.

NOC 336 337 338 339 339A

MOD 340 Dans la Région 2, la fréquence 915 MHz est utilisée pour les applications industrielles, scientifiques et médicales. L'énergie radioélectrique émise par ces applications doit être contenue dans les limites de la bande s'étendant à ± 13 MHz de cette fréquence. Les services de radiocommunication fonctionnant à l'intérieur de ces limites doivent accepter les brouillages nuisibles qui peuvent se produire du fait de ces applications.

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 1 350 MHz et 1 400 MHz est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
1 350 – 1 400 FIXE MOBILE RADIOLOCALISATION 349 349A	1 350 – 1 400 RADIOLOCALISATION 349 349A	

NOC 349

ADD 349A Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie sur la raie de l'hydrogène déplacée vers les basses fréquences. Il convient que, dans leur planification de l'utilisation future de la bande 1 350 – 1 400 MHz, les administrations ne négligent pas les besoins du service de radioastronomie.

Le Tableau d'attribution des bandes de fréquences entre 1 427 MHz et 1 429 MHz est remplacé par le suivant:

MHz

Région 1	Région 2	Région 3
1 427 – 1 429	EXPLOITATION SPATIALE (Télécommande) FIXE MOBILE sauf mobile aéronautique	

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 1 525 MHz et 2 300 MHz est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
1 525 – 1 535	1 525 – 1 535	1 525 – 1 535
EXPLOITATION SPATIALE (Télémesure) 350A	EXPLOITATION SPATIALE (Télémesure) 350A	EXPLOITATION SPATIALE (Télémesure) 350A
Fixe 350B	<i>Exploration de la Terre par satellite</i>	Fixe 350B
<i>Exploration de la Terre par satellite</i>	Fixe	<i>Exploration de la Terre par satellite</i>
Mobile sauf mobile aéronautique 350C	Mobile 350D	Mobile

MOD 350A Les stations spatiales qui utilisent, pour les besoins de la télémesure, des
Spa2 fréquences de la bande 1 525 – 1 535 MHz peuvent également émettre des signaux
de poursuite dans cette bande.

NOC 350B 350C 350D

SUP 350E

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
1 535 – 1 542,5		
	MOBILE MARITIME PAR SATELLITE	
	352 352D 352E	
1 542,5 – 1 543,5		
	MOBILE AÉRONAUTIQUE PAR SATELLITE (R)	
	MOBILE MARITIME PAR SATELLITE	
	352 352D 352F	
1 543,5 – 1 558,5		
	MOBILE AÉRONAUTIQUE PAR SATELLITE (R)	
	352 352D 352G	
1 558,5 – 1 636,5		
	RADIONAVIGATION AÉRONAUTIQUE	
	352 352A 352B 352D 352K	
1 636,5 – 1 644		
	MOBILE MARITIME PAR SATELLITE	
	352 352D 352H	
1 644 – 1 645		
	MOBILE AÉRONAUTIQUE PAR SATELLITE (R)	
	MOBILE MARITIME PAR SATELLITE	
	352 352D 352I	
1 645 – 1 660		
	MOBILE AÉRONAUTIQUE PAR SATELLITE (R)	
	352 352D 352J	

ANN 3 (ART 5)

SUP 351

NOC 352

MOD 352A Les bandes 1 558,5 – 1 636,5 MHz, 4 200 – 4 400 MHz, 5 000 – 5 250 MHz et 15,4 – 15,7 GHz sont réservées, dans le monde entier, pour l'utilisation et le développement d'aides électroniques à la navigation aéronautique installées à bord des aéronefs ainsi que pour l'utilisation et le développement des installations terrestres ou sur satellites qui leur sont directement associées.

MOD 352B Les bandes 1 558,5 – 1 636,5 MHz, 5 000 – 5 250 MHz et 15,4 – 15,7 GHz sont, de plus, attribuées au service mobile aéronautique (R) pour l'utilisation et le développement de systèmes faisant appel à des techniques de radiocommunication spatiale. Cette utilisation et ce développement font l'objet d'accord et de mesures de coordination entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.

SUP 352C

NOC 352D

ADD 352E L'utilisation de la bande 1 535 – 1 542,5 MHz est limitée aux transmissions dans le sens stations spatiales-stations terriennes du service mobile maritime par satellite pour les communications et/ou le radiorepérage. Les transmissions directes de stations côtières à stations de navire ou entre stations de navire sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies de stations de satellite à stations de navire.

ADD 352F L'utilisation de la bande 1 542,5 – 1 543,5 MHz est limitée aux transmissions dans le sens stations spatiales-stations terriennes des services mobile aéronautique par satellite (R) et maritime par satellite pour les communications et/ou le radiorepérage. Les transmissions directes de stations terrestres à stations mobiles ou entre stations mobiles du service mobile aéronautique (R) et du service mobile maritime sont, de plus, autorisées. L'utilisation de cette bande est subordonnée à une coordination préalable sur le plan opérationnel entre les deux services.

ADD 352G L'utilisation de la bande 1 543,5 – 1 558,5 MHz est limitée aux transmissions dans le sens stations spatiales-stations terriennes du service mobile aéronautique par satellite (R) pour les communications et/ou le radiorepérage. Les transmissions directes de stations aéronautiques de Terre à stations d'aéronef ou entre stations d'aéronef du service mobile aéronautique (R) sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies de stations de satellite à stations d'aéronef.

ADD 352H L'utilisation de la bande 1 636,5 – 1 644 MHz est limitée aux transmissions dans le sens stations terriennes-stations spatiales du service mobile maritime par satellite pour les communications et/ou le radiorepérage. Les transmissions directes de stations de navire à stations côtières ou entre stations de navire sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies de stations de navire à stations de satellite.

ANN 3 (ART 5)

- ADD 352I L'utilisation de la bande 1 644 – 1 645 MHz est limitée aux transmissions dans le sens stations terriennes-stations spatiales des services mobile aéronautique par satellite (R) et maritime par satellite pour les communications et/ou le radiorepérage. Les transmissions directes de stations mobiles à stations terrestres ou entre stations mobiles du service mobile aéronautique (R) et du service mobile maritime sont, de plus, autorisées. L'utilisation de cette bande est subordonnée à une coordination préalable sur le plan opérationnel entre les deux services.
- ADD 352J L'utilisation de la bande 1 645 – 1 660 MHz est limitée aux transmissions dans le sens stations terriennes-stations spatiales du service mobile aéronautique par satellite (R) pour les communications et/ou le radiorepérage. Les transmissions directes de stations d'aéronef du service mobile aéronautique (R) à stations aéronautiques de Terre, ou entre stations d'aéronef, sont, de plus, autorisées lorsqu'elles servent à étendre ou à compléter les liaisons établies de stations d'aéronef à stations de satellite.
- ADD 352K Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie d'importantes raies spectrales dues au radical oxyhydrile OH sur les fréquences 1 612,231 MHz et 1 720,530 MHz. Les bandes dans lesquelles ont lieu les observations sont les bandes 1 611,5 – 1 612,5 MHz et 1 720 – 1 721 MHz. Il convient que, dans leur planification de l'utilisation future des bandes 1 558,5 – 1 636,5 MHz et 1 710 – 1 770 MHz, les administrations ne négligent pas les besoins du service de radioastronomie.

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
1 660 – 1 670	AUXILIAIRES DE LA MÉTÉOROLOGIE RADIOASTRONOMIE 353A 354 354A 354B	
1 670 – 1 690	AUXILIAIRES DE LA MÉTÉOROLOGIE FIXE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) 324A MOBILE sauf mobile aéronautique 354	
1 690 – 1 700 AUXILLIAIRES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) <i>Fixe</i> <i>Mobile</i> sauf mobile aéronautique 324B 354A	1 690 – 1 700 AUXILIAIRES DE LA MÉTÉOROLOGIE MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) 324B 354A 354C	
1 700 – 1 710 FIXE RECHERCHE SPATIALE (espace vers Terre) <i>Mobile</i> 354D	1 700 – 1 710 FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre) 354D	

ANN 3 (ART 5)

SUP 353

MOD 353A En raison des succès obtenus par les radioastronomes dans l'observation de deux raies spectrales de l'oxydrile au voisinage de 1 665 MHz et 1 667 MHz, Spa2 les administrations sont instamment priées d'accorder toute la protection pratiquement possible dans la bande 1 660 – 1 670 MHz en vue des futures recherches de radioastronomie, notamment en éliminant, dès que faire se pourra, les émissions air-sol du service des auxiliaires de la météorologie faites dans la bande 1 664,4 – 1 668,4 MHz.

NOC 354

MOD 354A En Bulgarie, à Cuba, en Ethiopie, Hongrie, Israël, Jordanie, au Kenya, à Spa2 Koweït, au Liban, en Ouganda, au Pakistan, en Pologne, République Arabe-Unie, Roumanie, en Syrie, Tanzanie, Tchécoslovaquie, U.R.S.S. et en Yougoslavie, les bandes 1 660 – 1 670 MHz et 1 690 – 1 700 MHz sont, de plus, attribuées au service fixe et au service mobile sauf mobile aéronautique.

NOC 354B 354C

ADD 354D La bande 1 700 – 1 700,2 MHz peut être utilisée, à titre secondaire, pour Spa2 émettre à bord de satellites des fréquences en relation harmonique avec celles qui sont émises dans les bandes 149,9 – 150,05 MHz et 399,9 – 400,05 MHz pour les besoins de la recherche ionosphérique et de la géodésie.

SUP 355A

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
1 710 – 1 770 FIXE <i>Mobile</i> 352K 356	1 710 – 1 770 FIXE MOBILE 352K 356A	
1 770 – 1 790 FIXE <i>Météorologie par satellite</i> 356AA <i>Mobile</i> 356	1 770 – 1 790 FIXE MOBILE <i>Météorologie par satellite</i> 356AA 356A	
1 790 – 2 290 FIXE <i>Mobile</i> 356 356AB 356ABA 356AC	1 790 – 2 290 FIXE MOBILE 356A 356AB 356ABA	
2 290 – 2 300 FIXE RECHERCHE SPATIALE (espace vers Terre) <i>Mobile</i> 356C	2 290 – 2 300 FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre)	

ANN 3 (ART 5)

- MOD 356 En Suisse, la bande 1 710 – 2 290 MHz est attribuée au service fixe et au service mobile sauf mobile aéronautique et la bande 1 770 – 1 790 MHz est, de plus, attribuée, à titre secondaire, au service de météorologie par satellite.
- MOD 356A Dans la Région 2, en Australie et au Japon, la bande 1 750 – 1 850 MHz peut, de plus, être utilisée pour les transmissions dans le sens Terre vers espace et, dans les Régions 2 et 3, la bande 2 200 – 2 290 MHz peut, de plus, être utilisée pour les transmissions dans le sens espace vers Terre du service de recherche spatiale, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- (MOD) 356AA En Bulgarie, à Cuba, en Hongrie, Pologne, Roumanie, Tchécoslovaquie et en U.R.S.S., le service de la météorologie par satellite est un service primaire dans la bande 1 770 – 1 790 MHz, sous réserve de coordination avec les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être affectés par la situation des stations terriennes.
- ADD 356AB Dans les Régions 2 et 3 et en Espagne, dans la bande 2 025 – 2 120 MHz, les émissions du service d'exploration de la Terre par satellite peuvent être autorisées, dans le sens Terre vers espace, sur la base de l'égalité des droits avec les autres services de radiocommunications spatiales dans cette bande et sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- ADD 356ABA Dans la Région 2, en Australie et en Espagne, dans la bande 2 025 – 2 120 MHz et, dans les Régions 1 et 3, dans la bande 2 110 – 2 120 MHz, le service de recherche spatiale peut être autorisé à faire des émissions dans le sens Terre vers espace, sur la base de l'égalité des droits avec les autres services de radiocommunications spatiales dans ces bandes, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- ADD 356AC Dans la Région 1, dans la bande 2 096 – 2 120 MHz, les émissions du service d'exploration de la Terre par satellite peuvent être autorisées, dans le sens Terre vers espace, sur la base de l'égalité des droits avec les autres services de radiocommunications spatiales dans cette bande et sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés (voir le numéro 356AB).
- SUP 356B
- NOC 356C

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 2 450 MHz et 2 700 MHz est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
2 450 – 2 500 FIXE MOBILE <i>Radiolocalisation</i> 357 361	2 450 – 2 500 FIXE MOBILE RADIOLOCALISATION 357	
2 500 – 2 550 FIXE 364C MOBILE sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 361B	2 500 – 2 535 FIXE 364C FIXE PAR SATELLITE (espace vers Terre) MOBILE sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 361B 361A 364E 364F	
	2 535 – 2 550 FIXE 364C MOBILE sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 361B 361A 364F	
2 550 – 2 655 FIXE 364C MOBILE sauf mobile aéronautique RADIODIFFUSION PAR SATELLITE 361B 362 363 364 364F		

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
2 655 – 2 690	2 655 – 2 690	
FIXE 364C 364D	FIXE 364C 364D	
MOBILE sauf mobile aéronautique	FIXE PAR SATELLITE (Terre vers espace)	
RADIODIFFUSION PAR SATELLITE 361B 364H	MOBILE sauf mobile aéronautique	
363 364 364F 364G	RADIODIFFUSION PAR SATELLITE 361B 364H	
	364E 364F 364G	
2 690 – 2 700		
	RADIOASTRONOMIE	
	233B 363 364A 364B	

NOC 357

MOD 361 En France et au Royaume-Uni, la bande 2 450 – 2 500 MHz est attribuée, à titre primaire, au service de radiolocalisation et, à titre secondaire, aux services fixe et mobile.

ADD 361A En France, la bande 2 500 – 2 550 MHz est, de plus, attribuée, à titre primaire, au service de radiolocalisation et, à titre secondaire, aux services fixe et mobile.. Au Canada, la bande 2 500 – 2 550 MHz est, de plus, attribuée, à titre primaire, au service de radiolocalisation.

ADD 361B L'utilisation de la bande 2 500 – 2 690 MHz par le service de radiodiffusion par satellite est limitée aux systèmes nationaux et régionaux pour la réception communautaire; cette utilisation fait l'objet d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés (voir les Résolutions N° Spa2 – 2 et N° Spa2 – 3). La densité surfacique de puissance à la surface de la Terre ne doit pas dépasser les valeurs spécifiées aux numéros 470NH à 470NK.

MOD 362 Au Royaume-Uni, la bande 2 500 – 2 600 MHz est, de plus, attribuée, à titre secondaire, au service de radiolocalisation.

NOC 363

ANN 3 (ART 5)

- MOD 364 Dans la Région 1, les systèmes utilisant la diffusion troposphérique peuvent fonctionner dans la bande 2 550 – 2 690 MHz sous réserve d'accord entre les administrations intéressées et celles dont les services de radiocommunications de Terre fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- MOD 364A En Bulgarie, à Cuba, en Hongrie, Inde, Israël, à Koweït, au Liban, Maroc, Pakistan, aux Philippines, en Pologne, République Arabe Unie, Roumanie, Tchécoslovaquie, U.R.S.S. et en Yougoslavie, la bande 2 690 – 2 700 MHz est, de plus, attribuée aux services fixe et mobile.
- NOC 364B
- ADD 364C Lors de la planification de nouveaux faisceaux hertziens utilisant la diffusion troposphérique dans la bande 2 500 – 2 690 MHz, toutes les mesures possibles seront prises pour éviter de diriger les antennes vers l'orbite des satellites géostationnaires.
- ADD 364D Les administrations doivent faire tous les efforts pratiquement possibles pour éviter le développement de nouveaux systèmes à diffusion troposphérique dans la bande 2 655 – 2 690 MHz.
- ADD 364E L'utilisation des bandes 2 500 – 2 535 MHz et 2 655 – 2 690 MHz par le service fixe par satellite est limitée aux systèmes nationaux et régionaux; cette utilisation fait l'objet d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés (voir l'article 9A). Dans le sens espace vers Terre, la densité surfacique de puissance à la surface de la Terre ne doit pas dépasser les valeurs spécifiées au numéro 470NE.
- ADD 364F En Bulgarie, en Iran, au Portugal et en U.R.S.S., la bande 2 500 – 2 690 MHz est attribuée au service fixe et au service mobile sauf mobile aéronautique.
- ADD 364G Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie dans la bande 2 670 – 2 690 MHz. Il convient que, dans leur planification de l'utilisation future de cette bande, les administrations ne négligent pas les besoins du service de radioastronomie.
- ADD 364H Dans la conception de systèmes de radiodiffusion par satellite, les administrations sont instantanément priées de prendre toutes les mesures nécessaires pour protéger le service de radioastronomie dans la bande 2 690 – 2 700 MHz.
- SUP 365 (*voir ADD 233B*)

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 3 400 MHz et 5 250 MHz est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
3 400 – 3 600 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE <i>Radiolocation</i> 372 373 374 375	3 400 – 3 500 FIXE PAR SATELLITE (espace vers Terre) RADIOLOCALISATION <i>Amateur</i> 376	
3 600 – 4 200 FIXE FIXE PAR SATELLITE (espace vers Terre) <i>Mobile</i>	3 500 – 3 700 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE RADIOLOCALISATION <i>Fixe</i> <i>Mobile</i> 377 378	
	3 700 – 4 200 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 379	
4 200 – 4 400 RADIONAVIGATION AÉRONAUTIQUE 352A 379A 381 382 383		
4 400 – 4 700 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE		

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
4 700 – 4 990		
FIXE MOBILE		
233B 354 382A 382B		
4 990 – 5 000	4 990 – 5 000	4 990 – 5 000
FIXE MOBILE RADIOASTRONOMIE	RADIOASTRONOMIE	FIXE MOBILE RADIOASTRONOMIE
233B	383A	233B
5 000 – 5 250	RADIONAVIGATION AÉRONAUTIQUE	
	352A 352B 383B	

NOC 372

(MOD) 373 Au Danemark, en Norvège, en Suède et en Suisse, les services fixe et mobile, le service de radiolocalisation et le service fixe par satellite fonctionnent sur la base de l'égalité des droits dans la bande 3 400 – 3 600 MHz.
 Spa2

NOC 374

SUP 374A

NOC 375 376

MOD 377 En Chine et au Japon, la bande 3 500 – 3 700 MHz est, de plus, attribuée aux services fixe et mobile.
 Spa2

NOC 378

(MOD) 379 En Australie, la bande 3 700 – 3 770 MHz est attribuée au service de radiolocalisation et au service fixe par satellite.
 Spa2

ANN 3 (ART 5)

- ADD 379A Les services des fréquences étalon par satellite et des signaux horaires par satellite peuvent être autorisés à utiliser la fréquence 4 202 MHz pour des émissions dans le sens espace vers Terre et la fréquence 6 427 MHz pour des émissions dans le sens Terre vers espace. L'énergie radioélectrique émise doit être contenue dans les limites s'étendant à ± 2 MHz de ces fréquences. De plus, les émissions en question doivent faire l'objet d'accords entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- NOC 381 382
- ADD 382A Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie de la raie du formaldéhyde (fréquence de repos: 4 829,649 MHz). Il convient que, dans leur planification de l'utilisation future de la bande 4 825 – 4 835 MHz, les administrations ne négligent pas les besoins du service de radioastronomie.
- ADD 382B Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie dans la bande 4 950 – 4 990 MHz. Il convient que, dans leur planification de l'utilisation future de cette bande, les administrations ne négligent pas les besoins du service de radioastronomie.
- NOC 383
- (MOD) 383A A Cuba, la bande 4 990 – 5 000 MHz est, de plus, attribuée aux services fixe et mobile, et les dispositions du numéro 233B s'appliquent.
- ADD 383B La bande 5 000 – 5 250 MHz est, de plus, attribuée au service fixe par satellite pour la connexion entre une ou plusieurs stations terriennes situées en des points fixes déterminés sur la Terre et des satellites utilisés par le service mobile aéronautique (R) et/ou de radiorepérage. Cette utilisation et son développement font l'objet d'accords et de mesures de coordination entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 5 725 MHz et 7 750 MHz pour les Régions 1 et 3, entre 5 725 MHz et 5 850 MHz et entre 5 925 MHz et 7 750 MHz pour la Région 2 est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
5 725 – 5 850 FIXE PAR SATELLITE (Terre vers espace) RADIOLOCALISATION <i>Amateur</i> 354 388 390 391 391A	5 725 – 5 850 RADIOLOCALISATION <i>Amateur</i> 389 391 391A	

NOC 388 389

(MOD) 390 En Albanie, Bulgarie, Hongrie, Pologne, Roumanie, Tchécoslovaquie et en Spa2 U.R.S.S., la bande 5 800 – 5 850 MHz est attribuée aux services fixe et mobile et au service fixe par satellite.

NOC 391

ADD 391A Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, Spa2 des observations de radioastronomie dans les bandes 5 750 – 5 770 MHz et 36,458 – 36,488 GHz. Les administrations sont instamment priées de prendre toutes les mesures pratiquement possibles pour protéger de tout brouillage nuisible les observations de radioastronomie faites dans ces bandes.

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
5 850 – 5 925 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 391	5 850 – 5 925 NOC	5 850 – 5 925 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE <i>Radiolocalisation</i> 391
5 925 – 6 425 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE		
6 425 – 7 250 FIXE MOBILE 379A 392AA 392B 393		
7 250 – 7 300 FIXE PAR SATELLITE (espace vers Terre) 392D 392G		

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
7 300 – 7 450		
FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 392D		
7 450 – 7 550		
FIXE FIXE PAR SATELLITE (espace vers Terre) MÉTÉOROLOGIE PAR SATELLITE (espace vers Terre) MOBILE 392D		
7 550 – 7 750		
FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE 392D		

ANN 3 (ART 5)

SUP 392A

ADD 392AA Au Brésil, Canada et aux Etats-Unis d'Amérique, la bande 6 625 – 7 125 MHz est, de plus, attribuée, à titre secondaire, au service fixe par satellite (espace vers Terre). Dans la Région 2, la densité surfacique de puissance produite dans cette bande par les stations spatiales doit être conforme aux dispositions du numéro 470NM. Dans les Régions 1 et 3, elle doit être d'au moins 6 dB plus faible. Les stations terriennes de réception fonctionnant dans cette bande ne peuvent pas imposer des restrictions en ce qui concerne le choix des emplacements et des caractéristiques techniques des stations de Terre existantes ou prévues dans les autres pays.

MOD 392B La bande 7 145 – 7 235 MHz peut être utilisée pour les transmissions Terre vers espace dans le service de recherche spatiale, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.

SUP 392C

MOD 392D A titre d'exception, lorsque le service fixe par satellite fait usage de satellites passifs, il peut, de plus, utiliser la bande 7 250 – 7 750 MHz, sous réserve:

- a) d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés;
- b) de l'application des procédures de coordination, telles qu'elles sont définies aux articles 9 et 9A.

Dans ce cas, les stations de ce service ne doivent pas causer, dans les stations terriennes recevant les émissions de satellites actifs, des brouillages plus importants que ceux qui seraient causés par les services fixe et mobile. Les limites de la densité surfacique de puissance à la surface de la Terre, après réflexion sur les satellites passifs du service fixe par satellite, ne doivent pas dépasser les valeurs limites prescrites dans le présent Règlement pour le service fixe par satellite faisant usage de satellites actifs.

SUP 392F

NOC 392G 392H 393

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 7 900 MHz et 8 500 MHz est remplacé par le suivant:

MHz

Attribution aux services		
Région 1	Région 2	Région 3
7 900 – 7 975		
FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE		
7 975 – 8 025		
FIXE PAR SATELLITE (Terre vers espace) 392H		

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
8 025 – 8 175 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre) 394B	8 025 – 8 175 EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE	8 025 – 8 175 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre)
8 175 – 8 215 FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre) 394B	8 175 – 8 215 EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE	8 175 – 8 215 FIXE FIXE PAR SATELLITE (Terre vers espace) MÉTÉOROLOGIE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre)
8 215 – 8 400 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre) 394 394B	8 215 – 8 400 EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre) FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE	8 215 – 8 400 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE <i>Exploration de la Terre</i> <i>par satellite</i> (espace vers Terre) 394

ANN 3 (ART 5)

MHz

Attribution aux services		
Région 1	Région 2	Région 3
8 400 – 8 500	FIXE MOBILE RECHERCHE SPATIALE (espace vers Terre)	394A 394D

(MOD) 394 En Australie et au Royaume-Uni, la bande 8 250 – 8 400 MHz est attribuée
Spa2 au service de radiolocalisation et au service fixe par satellite.

MOD 394A Au Royaume-Uni, la bande 8 400 – 8 500 MHz est attribuée aux services
Spa2 de radiolocalisation et de recherche spatiale.

(MOD) 394B En Israël, la bande 8 025 – 8 400 MHz est attribuée, à titre primaire, aux
Spa2 services fixe et mobile et, à titre secondaire, au service fixe par satellite.

SUP 394C

NOC 394D

ANN.3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 10,55 GHz et 15,35 GHz est remplacé par le suivant:

GHz

Attribution aux services		
Région 1	Région 2	Région 3
10,55 – 10,6	NOC	
10,6 – 10,68	FIXE MOBILE RADIOASTRONOMIE <i>Radiolocalisation</i> 404A	
10,68 – 10,7	RADIOASTRONOMIE 405B	

ADD 404A En R.F. d'Allemagne, dans la bande 10,6 – 10,68 GHz, la radioastronomie
 Spa2 est un service secondaire.

SUP 405A

NOC 405B

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Région 2	Région 3
10,7 – 10,95 FIXE MOBILE		
10,95 – 11,2 FIXE FIXE PAR SATELLITE (espace vers Terre) (Terre vers espace) MOBILE	10,95 – 11,2 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE	
11,2 – 11,45 FIXE MOBILE		
11,45 – 11,7 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE		

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Région 2	Région 3
11,7 – 12,5 FIXE MOBILE sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE	11,7 – 12,2 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 405BB 405BC	11,7 – 12,2 FIXE MOBILE sauf mobile aéronautique RADIODIFFUSION RADIODIFFUSION PAR SATELLITE 405BA
405BA	12,2 – 12,5 FIXE MOBILE sauf mobile aéronautique RADIODIFFUSION	
12,5 – 12,75 FIXE PAR SATELLITE (espace vers Terre) (Terre vers espace) 405BD 405BE	12,5 – 12,75 FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE sauf mobile aéronautique	12,5 – 12,75 FIXE FIXE PAR SATELLITE (espace vers Terre) MOBILE sauf mobile aéronautique
12,75 – 13,25 FIXE MOBILE		
13,25 – 13,4 RADIONAVIGATION AÉRONAUTIQUE 406 407 407A		
13,4 – 14 RADIOLOCALISATION 407 407A 408 409		

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Région 2	Région 3
14 – 14,3		
	FIXE PAR SATELLITE (Terre vers espace) RADIONAVIGATION 408A 407 407A	
14,3 – 14,4		
	FIXE PAR SATELLITE (Terre vers espace) RADIONAVIGATION PAR SATELLITE 408A	
14,4 – 14,5		
	FIXE FIXE PAR SATELLITE (Terre vers espace) MOBILE 408B 408C	
14,5 – 15,35		
	FIXE MOBILE 408B 408C	

- ADD 405BA** Dans la bande 11,7 – 12,2 GHz, dans la Région 3, et dans la bande 11,7 – 12,5 GHz, dans la Region 1, le service de radiodiffusion, le service fixe et le service mobile, existants et futurs, ne doivent pas causer de brouillage nuisible aux stations de radiodiffusion par satellite fonctionnant conformément aux décisions de la conférence qui sera chargée d'élaborer un plan d'assignation de fréquences à la radiodiffusion (voir la Résolution N° **Spa2** – 2) et cette conférence devra, dans ses décisions, tenir compte de cette nécessité.
- ADD 405BB** Dans la bande 11,7 – 12,2 GHz, dans la Region 2, les services de radiocommunications de Terre ne seront introduits qu'après élaboration et approbation de plans pour les services de radiocommunications spatiales, afin d'assurer la compatibilité entre les usages auxquels cette bande sera destinée dans chaque pays.
- ADD 405BC** L'utilisation de la bande 11,7 – 12,2 GHz dans la Région 2 par le service de radiodiffusion par satellite et par le service fixe par satellite est limitée aux systèmes nationaux et doit faire l'objet d'accord préalable entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés (voir l'article 9A et la Résolution N° **Spa2** – 3).

ANN 3 (ART 5)

- ADD 405BD** En Bulgarie, au Cameroun, Congo (Brazzaville), en Côte-d'Ivoire, au Gabon, Spa2 Ghana, en Hongrie, Iraq, Israël, Jordanie, à Koweit, en Libye, au Mali, Niger, en Pologne, Syrie, République Arabe Unie, Roumanie, au Sénégal, en Tchécoslovaquie, au Togo et en U.R.S.S., la bande 12,5 – 12,75 GHz est, de plus, attribuée aux services fixe et mobile sauf mobile aéronautique.
- ADD 405BE** En Algérie, Belgique, au Danemark, en Espagne, Ethiopie, Finlande, France, Spa2 Grèce, au Kenya, Liechtenstein, Luxembourg, à Monaco, en Norvège, Ouganda, aux Pays-Bas, au Portugal, en R.F d'Allemagne, Suède, Suisse, Tanzanie et en Tunisie, la bande 12,5 – 12,75 GHz est, de plus, attribuée, à titre secondaire, aux services fixe et mobile sauf mobile aéronautique.
- NOC 406**
- MOD 407** En Albanie, Bulgarie, Hongrie, Pologne, Roumanie, Tchécoslovaquie et en U.R.S.S., les bandes 13,25 – 13,5 GHz, 14,175 – 14,3 GHz, 15,4 – 17,7 GHz, 23,6 – 24 GHz, 24,05 – 24,25 GHz et 33,4 – 36 GHz sont, de plus, attribuées aux services fixe et mobile.
- ADD 407A** La bande 13,25 – 14,2 GHz peut, de plus, être utilisée, à titre secondaire, pour Spa2 les transmissions dans le sens Terre vers espace du service de recherche spatiale, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- MOD 408** En Suède, les bandes 13,4 – 14 GHz, 15,7 – 17,7 GHz et 33,4 – 36 GHz sont, Spa2 de plus, attribuées aux services fixe et mobile.
- ADD 408A** L'utilisation des bandes 14 – 14,3 GHz et 14,3 – 14,4 GHz respectivement par Spa2 le service de radionavigation et par le service de radionavigation par satellite se fera de manière qu'une protection suffisante soit assurée aux stations spatiales du service fixe par satellite (voir la Recommandation N° Spa2 – 15, paragraphe 2.14).
- ADD 408B** La bande 14,4 – 15,35 GHz peut, de plus, être utilisée, à titre secondaire, Spa2 pour les transmissions dans le sens espace vers Terre du service de recherche spatiale, sous réserve d'accord entre les administrations intéressées et celles dont les services fonctionnant conformément au présent Tableau sont susceptibles d'être défavorablement influencés.
- ADD 408C** Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, Spa2 des observations de radioastronomie sur la raie du formaldéhyde (fréquence de repos: 14,489 GHz). En assignant des fréquences aux stations du service fixe et du service mobile, les administrations sont instantanément priées de prendre toutes les mesures pratiquement possibles pour protéger contre tout brouillage nuisible les observations de radioastronomie faites dans la bande 14,485 – 14,515 GHz.
- NOC 409**
- SUP 409A 409B**

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 17,7 GHz et 24,25 GHz est remplacé par le suivant:

GHz

Attribution aux services		
Région 1	Région 2	Région 3
17,7 – 19,7		
	FIXE	
	FIXE PAR SATELLITE (espace vers Terre)	
	MOBILE	
19,7 – 21,2		
	FIXE PAR SATELLITE (espace vers Terre)	
	409E	
21,2 – 22		
	EXPLORATION DE LA TERRE PAR SATELLITE (espace vers Terre)	
	FIXE	
	MOBILE	
22 – 22,5		
	FIXE	
	MOBILE	
	410A	
22,5 – 23		22,5 – 23
	FIXE	
	MOBILE	
		RADIODIFFUSION
		PAR SATELLITE 410B
23 – 23,6		
	FIXE	
	MOBILE	

ANN 3 (ART 5)

GHz

Attribution aux services		
Region 1	Region 2	Region 3
23,6 – 24		
	RADIOASTRONOMIE	
	407	
24 – 24,05		
	AMATEUR	
	AMATEUR PAR SATELLITE	
	410C	
24,05 – 24,25		
	RADIOLOCALISATION	
	<i>Amateur</i>	
	407 410C	

SUP 409D

ADD 409E Au Japon, les bandes 19,7 – 21,2 GHz et 29,5 – 31 GHz sont, de plus, attribuées aux services fixe et mobile. Cette utilisation additionnelle ne doit pas imposer de limitation de densité surfacique de puissance aux stations spatiales du service fixe par satellite.

SUP 410

ADD 410A La bande 22,21 – 22,26 GHz est, de plus, attribuée au service de radioastronomie pour les observations d'une raie spectrale due à la vapeur d'eau (fréquence de repos: 22,235 GHz). Les administrations sont instamment priées d'accorder toute la protection pratiquement possible dans cette bande en vue des futures recherches de radioastronomie.

ADD 410B Dans la Région 3, le service de radiodiffusion par satellite est autorisé dans la bande 22,5 – 23 GHz sous réserve de limites de densité surfacique de puissance pour la protection des services de Terre dans cette bande.

ADD 410C La fréquence 24,125 GHz est à utiliser pour les applications industrielles, scientifiques et médicales. L'énergie radioélectrique émise par ces applications doit être contenue dans les limites de la bande s'étendant à ± 125 MHz de cette fréquence. Les services de radiocommunication désirant fonctionner à l'intérieur de ces limites doivent accepter les brouillages nuisibles qui peuvent se produire du fait de ces applications.

ANN 3 (ART 5)

Le Tableau d'attribution des bandes de fréquences entre 25,25 GHz et 31,3 GHz est remplacé par le suivant:

GHz

Attribution aux services		
Région 1	Région 2	Région 3
25,25 – 27,5		
FIXE		
MOBILE		
27,5 – 29,5		
FIXE		
FIXE PAR SATELLITE (Terre vers espace)		
MOBILE		
29,5 – 31		
FIXE PAR SATELLITE (Terre vers espace)		
409E		
31 – 31,3		
FIXE		
MOBILE		
<i>Recherche spatiale</i>		
412H 412I		

NOC **412E 412H**ADD **412I**

Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie dans la bande 31,2 – 31,3 GHz. Les administrations sont instantanément priées de prendre toutes les mesures pratiquement possibles pour protéger contre tout brouillage nuisible les observations de radioastronomie faites dans cette bande.

Le Tableau d'attribution des bandes de fréquences entre 36 GHz et 40 GHz est remplacé par le suivant:

GHz

Région 1	Région 2	Région 3
36 – 40		
FIXE		
MOBILE		
391A 412E		

ANN 3 (ART 5)

Dans le Tableau d'attribution des bandes de fréquences, remplacer « au-dessus de 40 (Pas d'attribution) » par ce qui suit:

GHz

Attribution aux services		
Région 1	Région 2	Région 3
40 – 41	FIXE PAR SATELLITE (espace vers Terre)	
41 – 43	RADIODIFFUSION PAR SATELLITE	
43 – 48	MOBILE AÉRONAUTIQUE PAR SATELLITE MOBILE MARITIME PAR SATELLITE RADIONAVIGATION AÉRONAUTIQUE PAR SATELLITE RADIONAVIGATION MARITIME PAR SATELLITE	
48 – 50	(Pas d'attribution)	
50 – 51	FIXE PAR SATELLITE (Terre vers espace)	
51 – 52	EXPLORATION DE LA TERRE PAR SATELLITE RECHERCHE SPATIALE	
52 – 54,25	RECHERCHE SPATIALE (passive) 412J	
54,25 – 58,2	INTER-SATELLITES	

ADD 412J Toutes les émissions sont interdites dans les bandes 52 – 54,25 GHz, 58,2 – 59 GHz, 64 – 65 GHz, 86 – 92 GHz, 101 – 102 GHz, 130 – 140 GHz, 182 – 185 GHz et 230 – 240 GHz. L'utilisation de capteurs passifs par d'autres services est, de plus, autorisée.

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Région 2	Région 3
58,2 – 59	RECHERCHE SPATIALE (passive) 412J	
59 – 64	INTER-SATELLITES	
64 – 65	RECHERCHE SPATIALE (passive) 412J	
65 – 66	EXPLORATION DE LA TERRE PAR SATELLITE RECHERCHE SPATIALE	
66 – 71	MOBILE AÉRONAUTIQUE PAR SATELLITE MOBILE MARITIME PAR SATELLITE RADIONAVIGATION AÉRONAUTIQUE PAR SATELLITE RADIONAVIGATION MARITIME PAR SATELLITE	
71 – 84	(Pas d'attribution)	
84 – 86	RADIODIFFUSION PAR SATELLITE	
86 – 92	RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 412J	

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Region 2	Region 3
92 – 95	FIXE PAR SATELLITE (Terre vers espace)	
95 – 101	MOBILE AÉRONAUTIQUE PAR SATELLITE MOBILE MARITIME PAR SATELLITE RADIONAVIGATION AERONAUTIQUE PAR SATELLITE RADIONAVIGATION MARITIME PAR SATELLITE	
101 – 102	RECHERCHE SPATIALE (passive) 412J	
102 – 105	FIXE PAR SATELLITE (espace vers Terre)	
105 – 130	INTER-SATELLITES 412K	
130 – 140	RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 412J	
140 – 142	FIXE PAR SATELLITE (Terre vers espace)	

ADD 412K Dans un certain nombre de pays, on fait, aux termes d'arrangements nationaux, des observations de radioastronomie sur la raie de l'oxyde de carbone (fréquence 115,271 GHz). En assignant des fréquences à des stations d'autres services fonctionnant conformément au présent Tableau, il convient que les administrations ne négligent pas le besoin de protéger des brouillages nuisibles les observations de radioastronomie faites dans la bande 115,16 – 115,38 GHz.

ANN 3 (ART 5)

GHz

Attribution aux services		
Region 1	Région 2	Région 3
142 – 150		
	MOBILE AÉRONAUTIQUE PAR SATELLITE	
	MOBILE MARITIME PAR SATELLITE	
	RADIONAVIGATION AÉRONAUTIQUE PAR SATELLITE	
	RADIONAVIGATION MARITIME PAR SATELLITE	
150 – 152		FIXE PAR SATELLITE (espace vers Terre)
152 – 170	(Pas d'attribution)	
170 – 182	INTER-SATELLITES	
182 – 185	RECHERCHE SPATIALE (passive) 412J	
185 – 190	INTER-SATELLITES	
190 – 200	MOBILE AÉRONAUTIQUE PAR SATELLITE MOBILE MARITIME PAR SATELLITE RADIONAVIGATION AÉRONAUTIQUE PAR SATELLITE RADIONAVIGATION MARITIME PAR SATELLITE	
200 – 220	(Pas d'attribution)	
220 – 230	FIXE PAR SATELLITE	

ANN 3 (ART 5)

GHz

Attribution aux services		
Région 1	Région 2	Région 3
230 - 240	RADIOASTRONOMIE RECHERCHE SPATIALE (passive) 412J	
240 - 250	(Pas d'attribution)	
250 - 265	MOBILE AÉRONAUTIQUE PAR SATELLITE MOBILE MARITIME PAR SATELLITE RADIONAVIGATION AÉRONAUTIQUE PAR SATELLITE RADIONAVIGATION MARITIME PAR SATELLITE	
265 - 275	FIXE PAR SATELLITE	
au-dessus de 275	(Pas d'attribution)	

ANNEXE 4

Révision de l'article 6 du Règlement des radiocommunications

L'article 6 du Règlement des radiocommunications est révisé comme suit:

Le numero 415 est remplacé par le nouveau texte suivant:

MOD 415 § 2. (1) Si une administration se trouve placée dans des circonstances qui rendent indispensable pour elle l'application des méthodes de travail exceptionnelles énumérées ci-après, elle peut y avoir recours, à la condition expresse que les caractéristiques des stations restent conformes à celles qui sont inscrites dans le Fichier de référence international des fréquences:

- a) une station fixe du service de radiocommunications de Terre ou une station terrienne du service fixe par satellite peut, à titre secondaire, faire sur ses fréquences normales des émissions destinées à des stations mobiles;
- b) une station terrestre peut, à titre secondaire, communiquer avec des stations fixes du service de radiocommunications de Terre ou des stations terriennes du service fixe par satellite ou avec d'autres stations terrestres de la même catégorie.

Le numero 417 est remplacé par le nouveau texte suivant:

MOD 417 § 3. Toute administration peut assigner une fréquence choisie dans une bande attribuée au service fixe ou au service fixe par satellite à une station autorisée à émettre unilatéralement d'un point fixe déterminé vers un ou plusieurs points fixes déterminés, pourvu que de telles émissions ne soient pas destinées à être reçues directement par le public en général.

ANN 4 (ART 6)

*Le nouveau texte suivant est ajouté à la suite du
numero 419.*

ADD **419A** § 5A. Les stations terriennes à bord d'aéronefs sont autorisées
Spa2 à utiliser les fréquences des bandes attribuées au service mobile
maritime par satellite pour entrer en communication, par l'inter-
médiaire des stations de ce service, avec les réseaux télégraphique
et téléphonique publics.

ANNEXE 5

Révision de l'article 7 du Règlement des radiocommunications

L'article 7 du Règlement des radiocommunications est révisé comme suit:

Le nouveau sous-titre et le nouveau texte suivants sont ajoutés à la suite de la section I:

ADD Spa2 Section IA. Service de radiodiffusion par satellite

ADD 428A § 2A. Lorsqu'on définit les caractéristiques d'une station spatiale **Spa2** du service de radiodiffusion par satellite, tous les moyens techniques disponibles sont utilisés pour réduire au maximum le rayonnement sur le territoire d'autres pays, sauf accord préalable de ces derniers.

Le titre de la Section VII est remplacé par le nouveau titre suivant:

MOD Spa2 Section VII. Services de radiocommunications de Terre partageant des bandes de fréquences avec les services de radiocommunications spatiales au-dessus de 1 GHz

Choix des emplacements et des fréquences

Le numero 470A est remplacé par le nouveau texte suivant:

(MOD) 470A § 18. Les emplacements et les fréquences des stations de Terre **Spa2** fonctionnant dans les bandes de fréquences partagées, avec égalité des droits, entre les services de radiocommunications de Terre et les services de radiocommunications spatiales doivent être choisis conformément aux Avis pertinents du C.C.I.R. relatifs à la séparation géographique entre stations de Terre et stations terriennes.

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Les nouveaux numeros suivants sont ajoutes a la suite du numero 470A.

- ADD **470AA § 18A.** (1) Dans toute la mesure du possible, les emplacements des stations d'émission¹ du service fixe ou du service mobile dont les puissances isotropes rayonnées équivalentes ont des valeurs maximales supérieures à +35 dBW dans les bandes de fréquences comprises entre 1 et 10 GHz doivent être choisis de telle manière que la direction du rayonnement maximal d'une antenne quelconque s'écarte d'au moins 2° de l'orbite des satellites géostationnaires, compte tenu des effets de la réfraction atmosphérique.²
- ADD **470AB** (2) Dans toute la mesure du possible, les emplacements des stations d'émission³ du service fixe ou du service mobile dont les puissances isotropes rayonnées équivalentes ont des valeurs maximales supérieures à +45 dBW dans les bandes de fréquences comprises entre 10 et 15 GHz doivent être choisis de telle manière que la direction du rayonnement maximal d'une antenne quelconque s'écarte d'au moins 1,5° de l'orbite des satellites géostationnaires, compte tenu des effets de la réfraction atmosphérique.⁴
- ADD **470AC** (3) Dans les bandes de fréquences supérieures à 15 GHz, il n'y a pas de restriction quant à la direction du rayonnement maximal des stations du service fixe ou du service mobile.
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- ADD **470AA.1** ¹ Pour leur propre protection, il convient que les stations de réception du service fixe ou du service mobile qui fonctionnent dans des bandes partagées avec les services de radiocommunications spatiales (dans le sens espace vers Terre) évitent d'orienter leurs antennes dans la direction de l'orbite des satellites géostationnaires, si leur sensibilité est suffisamment élevée pour qu'il puisse en résulter des brouillages importants de la part des émissions des stations spatiales.
- ADD **470AA.2** ² Des renseignements sur ce sujet figurent dans la version la plus récente du Rapport 393 du C.C.I.R.
- ADD **470AB.1** ³ Voir le numéro **470AA.1**.
- ADD **470AB.2** ⁴ Voir le numéro **470AA.2**.

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Limites de puissance

Le numero 470B est remplace par le nouveau texte suivant:

- MOD **470B** § 19. (1) Le niveau maximal de la puissance isotrope rayonnée équivalente d'une station du service fixe ou du service mobile ne doit pas dépasser +55 dBW

Les nouveaux numeros suivants sont ajoutes à la suite du numero 470B:

- ADD **470BA** (1A) Dans le cas où il n'est pas possible de se conformer aux dispositions du numéro **470AA**, le niveau maximal de la puissance isotrope rayonnée équivalente d'une station du service fixe ou du service mobile ne doit pas dépasser:

+47 dBW dans toute direction s'écartant de moins de 0,5° de l'orbite des satellites géostationnaires;
ou +47 dBW à +55 dBW, selon une variation linéaire en décibels (8 dB par degré), dans toute direction comprise entre 0,5° et 1,5° par rapport à l'orbite des satellites géostationnaires, compte tenu des effets de la réfraction atmosphérique¹

Le numero 470C est remplace par le nouveau texte suivant:

- MOD **470C** (2) Le niveau de la puissance fournie à l'antenne par un émetteur du service fixe ou du service mobile, dans les bandes de fréquences comprises entre 1 et 10 GHz, ne doit pas dépasser +13 dBW

Le nouveau numero suivant est ajoute à la suite du numéro 470C:

- ADD **470CA** (2A) Le niveau de la puissance fournie à l'antenne par un émetteur du service fixe ou du service mobile, dans les bandes de fréquences supérieures à 10 GHz, ne doit pas dépasser +10 dBW

ADD **470BA.1** ¹ Voir le numéro **470AA.2**.
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Le numero 470D est remplace par le nouveau texte suivant:

MOD **470D** (3) Les limites specifiees aux numéros **470AA**, **470B**, **470BA** et
Spa2 **470C** s'appliquent dans les bandes de fréquences ci-après qui sont attribuees, pour la réception par les stations spatiales, au service fixe par satellite et au service de météorologie par satellite lorsque ces bandes sont partagees, avec égalité des droits, avec le service fixe ou le service mobile:

2 655 - 2 690 MHz (pour les Régions 2 et 3)
5 800 - 5 850 MHz (pour les pays énumérés au numéro **390**)
5 850 - 5 925 MHz (pour les Régions 1 et 3)
5 925 - 6 425 MHz
7 900 - 7 975 MHz
7 975 - 8 025 MHz (pour les pays enumérés au numéro **392H**)
8 025 - 8 400 MHz

Les nouveaux numeros suivants sont ajoutes a la suite du numero 470D.

ADD **470DA** (4) Les limites specifiees aux numeros **470AB**, **470B** et **470CA** s'appliquent dans les bandes de frequences ci-apres qui sont attribuees, pour la réception par les stations spatiales, au service fixe par satellite lorsque ces bandes sont partageées, avec égalité des droits, avec le service fixe ou le service mobile:

10,95 - 11,20 GHz (Région 1)
12,50 - 12,75 GHz (Régions 1 et 2)
14,175 - 14,300 GHz (pour les pays enumerees au numéro **407**)
14,4 - 14,5 GHz

ADD **470DB** (5) Les limites spécifiées aux numéros **470B** et **470CA** s'appliquent dans les bandes de frequences ci-apres qui sont attribuées, pour la réception par les stations spatiales, au service fixe par satellite

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lorsque ces bandes sont partagees, avec égalité des droits, avec le service fixe ou le service mobile:

27,5 - 29,5 GHz

29,5 - 31,0 GHz (pour le pays mentionné au numéro 409E)

Le titre de la Section VIII est remplacé par le nouveau titre suivant:

MOD Spa2 **Section VIII. Services de radiocommunications spatiales partageant des bandes de fréquences avec les services de radiocommunications de Terre au-dessus de 1 GHz**

Choix des emplacements et des fréquences

Le numero 470E est remplacé par le nouveau texte suivant:

(MOD) 470E § 20. Les emplacements et les fréquences des stations terriennes fonctionnant dans des bandes de fréquences partagées, avec égalité des droits, entre les services de radiocommunications de Terre et les services de radiocommunications spatiales, doivent être choisis conformément aux Avis pertinents du C.C.I.R. relatifs à la séparation géographique entre stations terriennes et stations de Terre.

Limites de puissance

Les numeros 470F et 470G sont remplacés par les nouveaux textes suivants:

MOD 470F § 21. (1) Stations terriennes.
Spa2

MOD 470G (2) Le niveau de la puissance isotrope rayonnée équivalente émise dans une direction quelconque vers l'horizon par une station terrienne fonctionnant dans les bandes de fréquences comprises entre 1 et 15 GHz, ne doit pas dépasser les limites ci-après, sauf dans les cas où les dispositions des numeros 470H ou 470GC sont applicables:

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+ 40 dBW dans une bande quelconque large de 4 kHz,
pour $\theta \leqslant 0^\circ$

+ $40 + 3\theta$ dBW dans une bande quelconque large de 4 kHz,
pour $0^\circ < \theta \leqslant 5^\circ$

θ étant, en degrés, l'angle de site de l'horizon vu du centre de rayonnement de l'antenne de la station terrienne. Cet angle est exprimé par une valeur positive au-dessus du plan horizontal et par une valeur négative au-dessous de ce plan.

Les nouveaux numéros suivants sont ajoutés à la suite du numéro 470G.

ADD **470GA** (2A) Le niveau de la puissance isotrope rayonnée équivalente émise dans une direction quelconque vers l'horizon par une station terrienne fonctionnant dans les bandes de fréquences supérieures à 15 GHz, ne doit pas dépasser les limites ci-après, sauf dans les cas où les dispositions des numéros **470H** ou **470GD** sont applicables:

+ 64 dBW dans une bande quelconque large de 1 MHz,
pour $\theta \leqslant 0^\circ$

+ $64 + 3\theta$ dBW dans une bande quelconque large de 1 MHz,
pour $0^\circ < \theta \leqslant 5^\circ$

θ étant défini comme au numéro **470G**.

ADD **470GB** (2B) Pour des angles de site de l'horizon supérieurs à 5° , il n'y a pas de restriction quant à la valeur de la puissance isotrope rayonnée équivalente émise par une station terrienne en direction de l'horizon.

ADD **470GC** (2C) Par dérogation aux limites spécifiées au numéro **470G**, la puissance isotrope rayonnée équivalente émise vers l'horizon par une station terrienne du service de recherche spatiale (espace lointain) ne doit pas dépasser +55 dBW dans une bande quelconque large de 4 kHz.

ADD **470GD** (2D) Par dérogation aux limites spécifiées au numéro **470GA**, la puissance isotrope rayonnée équivalente émise vers l'horizon par une station terrienne du service de recherche spatiale (espace lointain)

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tain) ne doit pas dépasser +79 dBW dans une bande quelconque large de 1 MHz.

Le numero 470H est remplacé par le nouveau texte suivant:

MOD **470H** (3) Les limites spécifiées aux numéros **470G**, **470GA**, **470GC** et **470GD**, selon le cas, peuvent être dépassées d'une valeur maximale de 10 dB. Cependant, si la zone de coordination qui en résulte empiète sur le territoire d'un autre pays, ce dépassement doit être soumis à l'accord de l'administration de ce pays.

Le numero 470I est biffé.

Le numero 470J est remplacé par le nouveau texte suivant:

MOD **470J** (3A) Les limites spécifiées au numéro **470G** s'appliquent dans les bandes de fréquences ci-après, qui sont attribuées, pour l'émission par les stations terriennes, au service fixe par satellite et au service d'exploration de la Terre par satellite, et en particulier au service de météorologie par satellite, lorsque ces bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

2 655 - 2 690 MHz (Régions 2 et 3)

4 400 - 4 700 MHz

5 800 - 5 850 MHz (pour les pays énumérés au numéro **390**)

5 850 - 5 925 MHz (Régions 1 et 3)

5 925 - 6 425 MHz

7 900 - 7 975 MHz

7 975 - 8 025 MHz (pour les pays énumérés au numéro **392H**)

8 025 - 8 400 MHz

10,95 - 11,20 GHz (Région 1)

12,50 - 12,75 GHz (Régions 2 et 3 et pour les pays énumérés au numéro **405BD**)

14,175 - 14,300 GHz (pour les pays énumérés au numéro **407**)

14,4 - 14,5 GHz

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Le nouveau numero suivant est ajoute a la suite du numero 470J

- ADD **470JA** (3B) Les limites spécifiées au numéro **470GA** s'appliquent dans
Spa2 la bande de fréquences ci-apres qui est attribuée, pour l'émission par les stations terriennes, au service fixe par satellite, lorsque cette bande est partagee, avec égalité des droits, avec le service fixe ou le service mobile:

27,5 - 29,5 GHz

Angle minimal de site

Les numeros 470K et 470L sont remplaces par les nouveaux textes suivants:

- MOD **470K** § 22. (1) Stations terriennes.

Spa2

- MOD **470L** (2) Les antennes des stations terriennes ne doivent pas être employées, a l'émission, sous des angles de site inférieurs a 3°, mesures a partir du plan horizontal dans la direction du rayonnement maximal, sauf accord des administrations intéressées ou de celles dont les services peuvent être défavorablement influencés. Dans le cas de la reception par une station terrière, la valeur ci-dessus doit être utilisée aux fins de la coordination si l'angle de site de fonctionnement est inférieur a cette valeur.

Le nouveau numero suivant est ajoute a la suite du numero 470L.

- ADD **470LA** (2A) Par derogation aux dispositions du numero **470L**, les antennes des stations terriennes du service de recherche spatiale (au voisinage de la Terre) ne doivent pas être employées, a l'émission, sous des angles de site inférieurs a 5°, et les antennes des stations terriennes du service de recherche spatiale (espace lointain) ne doivent pas être employées, a l'émission, sous des angles de site inférieurs a 10°, ces deux angles étant mesures a partir du plan horizontal dans la

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direction du rayonnement maximal. Dans le cas de la réception par une station terrienne, les valeurs ci-dessus doivent être utilisées aux fins de la coordination si l'angle de site de fonctionnement est inférieur à ces valeurs.

Le numero 470M est biffé.

Le sous-titre « Limites du flux de puissance » ainsi que le numero 470N sont remplacés par les nouveaux sous-titre et texte suivants:

MOD **Spa2** *Limites de la densité surfacique de puissance produite par les stations spatiales*

MOD **470N** § 23. (1) Limites de la densité surfacique de puissance entre
Spa2 1 690 MHz et 1 700 MHz.

Les nouveaux numeros suivants sont ajoutés à la suite du numero 470N

ADD **470NA** **Spa2** a) La densité surfacique de puissance produite à la surface de la Terre par les émissions d'une station spatiale ou par réflexion sur un satellite passif, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser -133 dBW/m^2 dans une bande quelconque large de 1,5 MHz. Cette limite s'applique à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NB** **Spa2** b) La limite spécifiée au numéro **470NA** s'applique dans la bande de fréquences indiquée au numéro **470NC**, qui est attribuée, pour l'émission par les stations spatiales, au service d'exploration de la Terre par satellite et en particulier au service de météorologie par satellite, lorsque ladite bande est partagée, avec égalité des droits, avec le service des auxiliaires de la météorologie:

ADD **470NC** **Spa2** 1 690 - 1 700 MHz

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ADD **470ND** (2) Limites de la densité surfacique de puissance entre
Spa2 1 670 MHz et 2 535 MHz.

ADD **470NE** a) La densité surfacique de puissance produite à la surface
Spa2 de la Terre par les émissions d'une station spatiale
ou par réflexion sur un satellite passif, dans toutes les
conditions et pour toutes les méthodes de modulation,
ne doit pas dépasser les limites suivantes:

— 154 dBW/m² dans une bande quelconque large de
4 kHz, pour les angles d'arrivée compris entre 0° et 5°
au-dessus du plan horizontal;

— $-154 + \frac{\delta - 5}{2}$ dBW/m² dans une bande quelconque
large de 4 kHz, pour les angles d'arrivée δ (en degrés)
compris entre 5° et 25° au-dessus du plan horizontal,

— 144 dBW/m² dans une bande quelconque large de
4 kHz, pour les angles d'arrivée compris entre 25° et
90° au-dessus du plan horizontal.

Ces limites s'appliquent à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NF** b) Les limites spécifiées au numéro **470NE** s'appliquent
Spa2 dans les bandes de fréquences énumérées au numéro
470NG, qui sont attribuées, pour l'émission par les sta-
tions spatiales, aux services de radiocommunications
spatiales suivants:

- service d'exploration de la Terre par satellite, et en particulier service de météorologie par satellite (espace vers Terre)

- service de recherche spatiale (espace vers Terre)

- service fixe par satellite (espace vers Terre)

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

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ADD **470NG** 1 670 - 1 690 MHz
Spa2 1 690 - 1 700 MHz (pour les pays énumérés au numéro
 354A).
 1 700 - 1 710 MHz
 1 770 - 1 790 MHz (pour les pays énumérés au numéro
 356AA)
 2 200 - 2 290 MHz
 2 290 - 2 300 MHz
 2 500 - 2 535 MHz

ADD **470NGA** c) Les valeurs de la densité surfacique de puissance spécifiées au numéro **470NE** ont été calculées en prenant comme objectif la protection du service fixe fonctionnant en visibilité directe. Lorsque le service fixe utilisant les techniques de diffusion troposphérique fonctionne dans les bandes énumérées au numero **470NG** et que la séparation de fréquence est insuffisante, il faut prévoir une séparation angulaire suffisante entre la direction de la station spatiale et celle du rayonnement maximal de l'antenne de la station réceptrice du service fixe utilisant les techniques de diffusion troposphérique, afin que la puissance de brouillage à l'entrée du récepteur de la station du service fixe ne dépasse pas —168 dBW dans une bande quelconque large de 4 kHz.

ADD **470NH** (3) Limites de la densité surfacique de puissance entre
Spa2 2 500 MHz et 2 690 MHz.

ADD **470NI** a) La densité surfacique de puissance produite à la surface de la Terre par les émissions d'une station spatiale du service de radiodiffusion par satellite, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:
 —152 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;

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$$-152 + \frac{3(\delta - 5)}{4} \text{ dBW/m}^2 \text{ dans une bande quelconque}$$

large de 4 kHz, pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;

— 137 dBW/m² dans une bande quelconque large de 4 kHz pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NJ**
Spa2

- b) Les limites spécifiées au numéro **470NI** s'appliquent dans la bande de fréquences

2 500 - 2 690 MHz

qui est partagée entre le service de radiodiffusion par satellite et le service fixe ou le service mobile.

ADD **470NK**
Spa2

- c) Les valeurs de la densité surfacique de puissance spécifiées au numéro **470NI** ont été calculées en prenant comme objectif la protection du service fixe fonctionnant en visibilité directe. Lorsque le service fixe utilisant les techniques de diffusion troposphérique fonctionne dans la bande indiquée au numéro **470NJ** et que la séparation de fréquence est insuffisante, il faut prévoir une séparation angulaire suffisante entre la direction de la station spatiale et celle du rayonnement maximal de l'antenne de la station réceptrice du service fixe utilisant les techniques de diffusion troposphérique, afin que la puissance de brouillage à l'entrée du récepteur de la station du service fixe ne dépasse pas —168 dBW dans une bande quelconque large de 4 kHz.

ADD **470NL**
Spa2

(4) Limites de la densité surfacique de puissance entre 3 400 MHz et 7 750 MHz.

ADD **470NM**
Spa2

- a) La densité surfacique de puissance produite à la surface de la Terre par les émissions d'une station spatiale

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ou par réflexion sur un satellite passif, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:

—152 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal,

—152 + $\frac{\delta - 5}{2}$ dBW/m² dans une bande quelconque

large de 4 kHz, pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;

—142 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NN**
 Spa2

b) Les limites spécifiées au numéro **470NM** s'appliquent dans les bandes de fréquences énumérées au numéro **470NO**, qui sont attribuées, pour l'émission par les stations spatiales, aux services de radiocommunications spatiales suivants:

— service fixe par satellite (espace vers Terre)

— service de météorologie par satellite (espace vers Terre)

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

ADD **470NO**
 Spa2

3 400 - 4 200 MHz

7 250 - 7 300 MHz (pour les pays énumérés au numéro
392G)

7 300 - 7 750 MHz

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ADD **470NP** (5) Limites de la densité surfacique de puissance entre 8 025
Spa2 MHz et 11,7 GHz.

ADD **470NQ** **Spa2** a) La densité surfacique de puissance produite à la surface de la Terre par les émissions d'une station spatiale ou par réflexion sur un satellite passif, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les valeurs suivantes:

— 150 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;

— $150 + \frac{\delta - 5}{2}$ dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal,

— 140 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NR** **Spa2** b) Les limites spécifiées au numéro **470NQ** s'appliquent dans les bandes de fréquences énumérées au numéro **470NS**, qui sont attribuées, pour l'émission par les stations spatiales, aux services de radiocommunications spatiales suivants:

- service d'exploration de la Terre par satellite (espace vers Terre)
- service de recherche spatiale (espace vers Terre)
- service fixe par satellite (espace vers Terre)

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

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ADD **470NS** 8 025 - 8 400 MHz
Spa2 8 400 - 8 500 MHz
10,95 - 11,20 GHz
11,45 - 11,70 GHz

ADD **470NT** (6) Limites de la densité surfacique de puissance entre 12,50 GHz et 12,75 GHz.

ADD **470NU** *a)* La densité surfacique de puissance produite à la surface de la Terre par les émissions d'une station spatiale ou par réflexion sur un satellite passif, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 148 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal;

— $148 + \frac{\delta - 5}{2}$ dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;

— 138 dBW/m² dans une bande quelconque large de 4 kHz, pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent à la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NV** *b)* Les limites spécifiées au numéro **470NU** s'appliquent dans la bande de fréquences indiquée au numéro **470NW**, qui est attribuée, pour l'émission par les stations spatiales, au service fixe par satellite, lorsque ladite bande est partagée, avec égalité des droits, avec le service fixe ou le service mobile:

ADD **470NW** 12,50 - 12,75 GHz (Région 3 et pour les pays enumérés
Spa2 au numéro **405BD**)

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ADD **470NX** (7) Limites de la densité surfacique de puissance entre 17,7
Spa2 GHz et 22,0 GHz.

ADD **470NY**
Spa2 a) La densité surfacique de puissance produite a la surface de la Terre par les émissions d'une station spatiale ou par réflexion sur un satellite passif, dans toutes les conditions et pour toutes les méthodes de modulation, ne doit pas dépasser les limites suivantes:

— 115 dBW/m² dans une bande quelconque large de 1 MHz, pour les angles d'arrivée compris entre 0° et 5° au-dessus du plan horizontal,

— $115 + \frac{\delta - 5}{2}$ dBW/m² dans une bande quelconque large de 1 MHz pour les angles d'arrivée δ (en degrés) compris entre 5° et 25° au-dessus du plan horizontal;

— 105 dBW/m² dans une bande quelconque large de 1 MHz, pour les angles d'arrivée compris entre 25° et 90° au-dessus du plan horizontal.

Ces limites s'appliquent a la densité surfacique de puissance que l'on obtiendrait en supposant une propagation en espace libre.

ADD **470NZ**
Spa2 b) Les limites spécifiées au numero **470NY** s'appliquent dans les bandes de fréquences enumérées au numero **470NZA**, qui sont attribuées, pour l'émission par les stations spatiales, aux services de radiocommunications spatiales suivants:

- service fixe par satellite (espace vers Terre)
- service d'exploration de la Terre par satellite (espace vers Terre)

lorsque lesdites bandes sont partagées, avec égalité des droits, avec le service fixe ou le service mobile:

ADD 470NZA Spa2	17,7 - 19,7 GHz 21,2 - 22,0 GHz
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ADD **470NZB** (8) Les limites spécifiées aux numéros **470NA, 470NE, 470NI, Spa2 470NM, 470NQ, 470NU et 470NY** peuvent être dépassées sur le territoire de tout autre pays dont l'administration a donné son accord à ce sujet.

Les numeros 470O a 470U sont biffés.

Le renvoi¹ figurant au bas de la page 140 (Reglement des radiocommunications — édition de 1968) est biffé.

La Section IX est remplacée par le nouveau texte suivant:

MOD **Spa2** **Section IX. Services de radiocommunications spatiales**

Cessation des émissions

MOD **470V** § 24. Les stations spatiales doivent être dotées de dispositifs **Spa2** permettant de faire cesser immédiatement, par télécommande, leurs émissions radioélectriques chaque fois que cette cessation est requise en vertu des dispositions du présent Règlement.

ADD **Spa2** *Mesures contre les brouillages entre systèmes à satellites géostationnaires et systèmes à satellites non synchrones sur orbite inclinée*

ADD **470VA** § 25. Les stations spatiales non géostationnaires du service fixe **Spa2** par satellite doivent cesser leurs émissions ou les réduire à un niveau négligeable, et les stations terrestres qui communiquent avec elles ne doivent plus émettre à leur intention, lorsqu'il n'y a pas une séparation angulaire suffisante entre satellites non géostationnaires et satellites géostationnaires et que des brouillages de niveau inacceptable¹ sont causés à des systèmes spatiaux à satellites géostationnaires fonctionnant conformément aux dispositions du présent Règlement.

ADD **470VA.1** ¹ Le niveau de brouillage inacceptable est fixé par accord entre les administrations intéressées, en se fondant sur les Avis pertinents du C.C.I.R.

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ADD **Spa2** *Maintien en position des stations spatiales*¹

ADD **470VB§ 26.** Les stations spatiales installées à bord de satellites géo-
Spa2 stationnaires:

ADD **470VC** — doivent pouvoir être maintenues en position à moins
Spa2 de $\pm 1^\circ$ de longitude de leur position nominale, mais
on doit s'efforcer d'être en mesure de réduire cette
tolérance à $\pm 0,5^\circ$ ou moins;

ADD **470VD** — doivent être maintenues en position à moins de $\pm 1^\circ$
Spa2 de longitude de leur position nominale, quelle que soit
la cause de la variation de leur position,

ADD **470VE** — ne sont cependant pas tenues d'observer les limites
Spa2 spécifiées au numéro **470VD** tant que le réseau à satellite
auquel elles appartiennent ne cause pas de brouillage
de niveau inacceptable² au détriment de tout autre
réseau à satellite dont la station spatiale observe les
limites fixées au numéro **470VD**.

ADD **Spa2** *Precision de pointage des antennes des satellites geostationnaires*

ADD **470VF§ 27** On doit avoir la possibilité de maintenir la direction de
Spa2 pointage du rayonnement maximal d'un faisceau quelconque, dirigé
vers la Terre, d'une antenne de satellite géostationnaire à moins de:

10% de l'ouverture du faisceau à demi-puissance par rapport à
la direction de pointage nominale,

ou $0,5^\circ$ par rapport à la direction de pointage nominale,

ADD **Spa2** ¹ Dans le cas de stations spatiales installées à bord de satellites géosynchrones
dont l'orbite a une inclinaison supérieure à 5° , les tolérances de position se
rapportent au point nodal.

ADD **470VE.1** ² Le niveau de brouillage inacceptable est fixé par accord entre les admi-
Spa2 nistrations intéressées, en se fondant sur les Avis pertinents du C.C.I.R.

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la plus élevée de ces deux valeurs étant seule retenue. Cette disposition s'applique uniquement lorsque le faisceau est destiné à une couverture inférieure à la couverture mondiale.

Au cas où le faisceau ne présente pas une symétrie de révolution autour de l'axe de rayonnement maximal, la tolérance dans un plan quelconque contenant cet axe doit être rapportée à l'ouverture du faisceau à demi-puissance dans ce plan.

Cette précision doit n'être maintenue que si cela est nécessaire pour éviter de causer des brouillages de niveau inacceptable¹ à d'autres systèmes.

ADD **Spa2** *Densité surfacique de puissance sur l'orbite des satellites géostationnaires*

ADD **470VG** § 28. Dans la bande de fréquences 8 025 à 8 400 MHz, que le service d'exploration de la Terre par satellite utilisant des satellites non géostationnaires partage avec le service fixe par satellite (Terre vers espace) ou avec le service de météorologie par satellite (Terre vers espace), la densité surfacique maximale de puissance produite sur l'orbite des satellites géostationnaires par une station spatiale quelconque du service d'exploration de la Terre par satellite ne doit pas dépasser -174 dBW/m^2 dans une bande quelconque large de 4 kHz.

ADD **470VF.1** ¹ Le niveau de brouillage inacceptable est fixé par accord entre les administrations intéressées, en se fondant sur les Avis pertinents du C.C.I.R.

ANNEXE 6**Révision de l'article 8 du Règlement des radiocommunications**

L'article 8 du Règlement des radiocommunications est révisé comme suit:

Le numero 477 est remplacé par le nouveau texte suivant:

MOD 477
Spa2

e) étudier, à long terme, l'utilisation du spectre radio-électrique, afin de formuler des recommandations tendant à la rendre plus efficace;

ANNEXE 7**Revision de l'article 9 du Règlement des radiocommunications**

L'article 9 du Règlement des radiocommunications est révisé comme suit:

Le titre de l'article ainsi que le texte du renvoi⁰ figurant à la page 143 du Règlement des radiocommunications (édition de 1968) sont remplacés par le nouveau titre et les nouveaux renvois suivants:

MOD Spa2 Notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence¹ aux stations de radiocommunications de Terre²

¹ L'expression *assignation de fréquence*, partout où elle figure dans le présent article, doit être entendue comme se référant soit à une nouvelle assignation de fréquence, soit à une modification à une assignation déjà inscrite dans le Fichier de référence international des fréquences (dénommé ci-après le *Fichier de référence*).

² En ce qui concerne la notification et l'inscription dans le Fichier de référence des assignations de fréquence aux stations de radioastronomie et aux stations de radiocommunications spatiales, voir l'article 9A.

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Section I. Notification des assignations de fréquence et procédure de coordination à appliquer dans certains cas

Le numero 486.1 est biffé.

Les numeros 486, 486.2, 486.3, 486.4 et 487 sont remplacés par les nouveaux textes suivants:

(MOD) **486** § 1. (1) Toute assignation de fréquence ¹ à une station fixe, terrestre, Spa2 de radiodiffusion ², terrestre de radionavigation, terrestre de radio-localisation, de fréquences étalon, ou à une station à terre du service des auxiliaires de la météorologie, doit être notifiée au Comité international d'enregistrement des fréquences:

- a) si l'utilisation de la fréquence en question est susceptible d'entraîner des brouillages nuisibles à un service quelconque d'une autre administration ³;
- b) ou si la fréquence doit être utilisée pour des radio-communications internationales,
- c) ou encore si l'on désire obtenir une reconnaissance internationale de l'utilisation de cette fréquence ³;

(MOD) **487** (2) Une notification analogue doit être faite dans le cas de toute fréquence destinée à être utilisée à la réception des émissions de stations mobiles par une station terrestre déterminée, chaque fois que l'une au moins des circonstances spécifiées au numéro **486** se présente.

(MOD) **486.1** ¹ Dans les cas où de nombreuses stations relevant d'une même administration Spa2 utilisent la même fréquence, voir l'appendice 1 (section E, II, colonne 5a, paragraphes 2c et 2d).

(MOD) **486.2** ² En ce qui concerne les assignations aux stations de radiodiffusion dans les Spa2 bandes attribuées en exclusivité au service de radiodiffusion entre 5 950 kHz et 26 100 kHz, voir l'article 10.

MOD **486.3** ³ L'attention des administrations est particulièrement attirée sur l'application Spa2 des dispositions des alinéas a) et c) du numéro **486** dans les cas où elles font une assignation de fréquence à une station de Terre située à l'intérieur de la zone de coordination d'une station terrienne (voir le numéro **492A**), dans une bande que les services de radiocommunications de Terre partagent, avec égalité des droits, avec les services de radiocommunications spatiales dans la gamme des fréquences supérieures à 1 GHz.

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Les numeros 490, 491, 492, 492A, 492A.1, 492B, 492B.1, 492C, 492D, 492E et 492F sont remplaces par les nouveaux textes suivants:

MOD **490** (2) Lorsque des stations d'un même service, tel le service mobile terrestre, utilisent une bande de fréquences au-dessus de 28 000 kHz dans une ou plusieurs zones déterminées, il convient d'établir pour chaque fréquence assignée à des stations dans cette bande une fiche de notification dans la forme prescrite à l'appendice I dont la section C fixe les caractéristiques fondamentales à fournir, mais les caractéristiques notifiées doivent se rapporter à une seule station type. Cette disposition ne s'applique pas aux stations de radiodiffusion ni aux autres stations de Terre auxquelles les dispositions de la sous-section IIB du présent article s'appliquent, ni aux stations des services fixe ou mobile qui fonctionnent dans les bandes de fréquences énumérées au Tableau II de l'appendice 28 avec une puissance isotrope rayonnée équivalente supérieure à la valeur pertinente indiquée dans ce tableau.

MOD **491** § 3. (1) Chaque fiche de notification doit, autant que faire se peut, parvenir au Comité avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir au plus tôt quatre-vingt-dix jours avant cette date, mais en tout cas au plus tard trente jours après cette date. Cependant, lorsqu'il s'agit d'une assignation de fréquence à une station de Terre dont il est question à la sous-section IIB du présent article ou au numéro 639AQ, la fiche de notification doit parvenir au Comité au plus tôt trois ans et au plus tard quatre-vingt-dix jours avant la date de mise en service de l'assignation de fréquence intéressée.

MOD **492** (2) Toute assignation de fréquence dont la notification parvient au Comité plus de trente jours après la date notifiée de mise en service ou, dans le cas d'une station de Terre dont il est question à la sous-section IIB du présent article, toute assignation de fréquence dont la notification parvient au Comité moins de quatre-vingt-

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dix jours avant la date notifiée de mise en service, porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions du numéro 491.

MOD **492A** § 3A. (1) Avant de notifier au Comité ou de mettre en service une assignation d'une fréquence d'émission à une station de Terre¹ dans une bande attribuée, avec égalité des droits, aux services de radiocommunications de Terre et de radiocommunications spatiales (sens espace-Terre) dans la gamme de fréquences au-dessus de 1 GHz, toute administration commence à coordonner l'assignation en projet avec l'administration responsable de la station terrienne de réception intéressée si l'assignation de fréquence en projet est destinée à être utilisée à l'intérieur de la zone de coordination d'une station terrienne de réception existante ou d'une station terrienne pour laquelle la procédure de coordination dont il est question au numéro 639AN a déjà été engagée. Pour effectuer cette coordination, elle envoie à chacune des administrations dont il s'agit, par le moyen le plus rapide possible, un graphique à échelle convenable indiquant l'emplacement de la station de Terre et elle lui communique tous les autres détails pertinents concernant l'assignation de fréquence en projet, ainsi qu'une indication de la date approximative prévue pour la mise en service de la station.

MOD **492B** (2) Toute administration auprès de laquelle la coordination est recherchée aux termes du numéro 492A accuse immédiatement réception, par télégramme, des données concernant la coordina-

MOD **492A.1** ¹ L'appendice 28 contient des critères concernant uniquement la coordination entre stations terriennes et stations des services fixe ou mobile. Jusqu'à ce que le C.C.I.R. ait établi, conformément à la Recommandation N° Spa2 - 9, les critères relatifs à d'autres services de radiocommunications de Terre, les administrations établissent d'un commun accord les critères à utiliser pour effectuer la coordination entre stations terriennes et stations de Terre autres que celles des services fixe ou mobile.

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tion. Si l'administration qui recherche la coordination ne reçoit pas d'accuse de réception dans le délai de quinze jours qui suit l'envoi des données concernant la coordination, elle peut envoyer un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui l'a reçu doit répondre. Au reçu des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question du point de vue des brouillages¹ qui seraient causés au service assuré par ses stations terriennes fonctionnant conformément aux dispositions de la Convention et du présent Règlement, ou destinées à fonctionner ainsi dans les trois années à venir, sous réserve que, dans cette dernière éventualité, la coordination spécifiée au numéro 639AN ait été effectuée ou que la procédure a suivre en vue d'une telle coordination soit déjà engagée. Puis, dans un délai global de soixante jours à partir de l'envoi des données concernant la coordination, cette administration, ou bien communique à l'administration qui recherche la coordination son accord sur l'assignation en projet, ou bien, en cas d'impossibilité, lui indique les motifs de son désaccord et lui présente les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

MOD 492C (3) Aucune coordination aux termes du numéro 492A n'est
Spa2 requise lorsqu'une administration se propose:

- a) de mettre en service une station de Terre située en dehors de la zone de coordination d'une station terrienne;
- b) de modifier les caractéristiques d'une assignation existante de telle sorte que le niveau des brouillages causés à des stations terriennes d'autres administrations ne s'en trouve pas accru.

ADD 492B.1 ¹ Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les Avis pertinents du C.C.I.R. ou, en l'absence de tels Avis, font l'objet d'un accord entre les administrations intéressées.

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MOD **492D** (4) L'administration qui recherche la coordination peut demander au Comité de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

- a) une administration auprès de laquelle la coordination est recherchée aux termes du numéro **492A** n'envoie pas d'accuse de réception, aux termes du numéro **492B**, dans un délai de trente jours à partir de la date de l'envoi des données concernant la coordination,
- b) une administration qui a envoyé un accusé de réception conformément aux dispositions du numéro **492B** ne communique pas sa décision dans un délai de quatre-vingt-dix jours à partir de l'envoi des données concernant la coordination,
- c) l'administration qui recherche la coordination et une administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le niveau de brouillage acceptable;
- d) ou encore la coordination n'est pas possible pour toute autre raison.

En présentant sa demande au Comité, l'administration intéressée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

MOD **492E** (5) L'administration qui recherche la coordination, ou toute administration auprès de laquelle la coordination est recherchée, ou bien le Comité, peuvent demander les renseignements supplémentaires dont ils estiment avoir besoin pour évaluer le niveau des brouillages causés aux services intéressés.

MOD **492F** (6) Lorsque le Comité reçoit une demande aux termes de l'alinéa a) du numéro **492D**, il envoie sans délai un télégramme à l'administration intéressée en lui demandant d'en accuser réception immédiatement.

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Les nouveaux numeros suivants sont ajoutés a la suite du numero 492F.

- ADD **492FA** (7) Lorsque le Comité reçoit un accusé de réception a la suite
Spa2 de la mesure qu'il a prise aux termes du numero **492F**, ou lorsque
le Comité reçoit une demande aux termes de l'alinéa *b*) du numéro
492D, il envoie sans délai un télégramme a l'administration intéressée
en lui demandant de prendre rapidement une décision sur la question.
- ADD **492FB** (8) Lorsque le Comité reçoit une demande aux termes de l'alinéa
Spa2 *d*) du numero **492D**, il s'efforce d'effectuer la coordination confor-
mément aux dispositions du numéro **492A**. Lorsque le Comite ne
reçoit pas d'accuse de réception a sa demande de coordination dans
le délai spécifié au numéro **492B**, il agit conformément aux disposi-
tions du numéro **492F**
- ADD **492FC** (9) Lorsqu'une administration ne répond pas dans le délai
Spa2 de trente jours qui suit l'envoi du télégramme que le Comite lui a
envoyé aux termes du numéro **492F** en lui demandant un accusé de
réception, ou lorsqu'une administration ne communique pas sa
décision sur la question dans le délai de soixante jours qui suit l'envoi
du télégramme du Comité aux termes du numéro **492FA**, l'adminis-
tration aupres de laquelle la coordination est recherchée est réputée
s'être engagée a ne pas formuler de plainte concernant les brouillages
nuisibles qui pourraient être causés par la station de Terre en voie
de coordination au service assure par sa station terrienne.

*Le numero 492G est remplace par le nouveau texte
suivant:*

- MOD **492G** (10) S'il y a lieu, le Comite évalue, au titre de la procedure
Spa2 spécifiée au numero **492D**, le niveau de brouillage. En tout état de
cause il communique aux administrations intéressées les résultats
obtenus.

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Les nouveaux numéros suivants sont ajoutés à la suite du numéro 492G:

- ADD **492GA** (11) En cas de désaccord persistant entre l'administration qui recherche la coordination et une administration auprès de laquelle la coordination est recherchée, l'administration qui recherche la coordination est en droit, soixante jours après la date à laquelle l'aide du Comité a été demandée, et compte tenu des dispositions du numéro **491**, d'envoyer au Comité sa fiche de notification concernant l'assignation en projet, sous réserve que l'aide du Comité ait été demandée.
- ADD **492GB§ 3B.** Lorsque le Comité reçoit des renseignements d'une administration conformément aux dispositions du numéro **639AQ** en réponse à une demande de coordination concernant une station terrienne, il considère comme notifications aux termes de la présente section uniquement ceux de ces renseignements qui concernent des assignations à des stations de Terre existantes ou qui seront mises en service dans les délais définis au numéro **491**. Le Comité examine ces notifications relativement aux dispositions des numéros **570AB** et **570AD**, selon le cas, et il les traite en conséquence.

Le numéro 493 est remplacé par le nouveau texte suivant:

- (MOD) **493** §3C.(1) Quel que soit le moyen de communication, y compris le télégraphe, par lequel une fiche de notification est transmise au Comité, elle est considérée comme complète lorsqu'elle contient au moins les caractéristiques fondamentales appropriées, telles qu'elles sont spécifiées à l'appendice 1.

Le titre de la sous-section IIA est remplacé par le nouveau titre suivant:

- MOD **Spa2** **Sous-section IIA. Procédure à suivre dans les cas non traités dans la sous-section IIB du présent article**

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Le numéro 501 est remplacé par le nouveau texte suivant:

(MOD) **501**
Spa2

- a) sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radiocommunications (à l'exception de celles qui sont relatives à la probabilité de brouillages nuisibles);

Le titre de la sous-section IIB est remplacé par le nouveau titre suivant:

MOD Spa2 **Sous-section IIB.** Procédure à suivre dans les cas où des stations de Terre fonctionnent dans la même bande de fréquences qu'une station terrienne et sont situées dans la zone de coordination de cette station, qu'il s'agisse d'une station terrienne existante ou d'une station terrienne pour laquelle la coordination a été effectuée ou engagée

Le numéro 570AB est remplacé par le nouveau texte suivant:

(MOD) **570AB**
Spa2

- a) du point de vue de sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fréquences et les autres clauses du Règlement des radiocommunications (à l'exception de celles qui sont relatives à la procédure de coordination et à la probabilité de brouillages nuisibles);

Le numéro 570AD est remplacé par le nouveau texte suivant:

(MOD) **570AD**
Spa2

- c) le cas échéant, du point de vue de la probabilité d'un brouillage nuisible au détriment du service assuré par une station terrienne de réception pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions du numéro **639BM**, si l'assignation de fréquence correspondant à

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la station spatiale d'émission n'a pas, en fait, causé de brouillage nuisible à une assignation quelconque antérieurement inscrite dans le Fichier de référence et conforme aux numéros **501** ou **570AB**, selon le cas.

Le numéro 570AG est remplacé par le nouveau texte suivant:

MOD **570AG** (2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **115**, elle est examinée immédiatement du point de vue des numéros **570AC** et **570AD**.

Les nouveaux numéros suivants sont ajoutés à la suite du numéro 570AG:

ADD **570AGA** (3) Si la conclusion est favorable relativement aux numéros **570AC** ou **570AD**, selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

ADD **570AGB** (4) Si la conclusion est défavorable relativement aux numéros **570AC** ou **570AD**, selon le cas, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité. Si l'administration notificatrice insiste pour un nouvel examen de la fiche de notification, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite que si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins cent vingt jours sans qu'aucune plainte en brouillage nuisible en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage nuisible n'a eu lieu est indiquée dans la colonne Observations.

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ADD **570AGC** (5) La période de cent vingt jours mentionnée aux numéros ~~Spa2~~ **570AGB** et **570AX** est comptée:

- à partir de la date de mise en service de l'assignation à la station de Terre ayant fait l'objet de la conclusion défavorable, si l'assignation à la station terrienne est alors en service;
- à partir de la date de mise en service de l'assignation à la station terrienne dans le cas contraire.

Cependant, si l'assignation à la station terrienne n'a pas été mise en service à la date notifiée, la période de cent vingt jours est comptée à partir de cette dernière date. Le cas échéant, il est tenu compte du délai supplémentaire spécifié au numéro **570BF**.

Les numéros 570AH à 570AK sont remplacés par les nouveaux textes suivants:

(MOD) **570AH** (6) Lorsque la fiche ne comporte aucune référence selon ~~Spa2~~ laquelle la station fonctionnera conformément aux dispositions du numéro **115**, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

(MOD) **570AI** (7) Si l'administration notificatrice présente de nouveau sa fiche ~~Spa2~~ non modifiée, celle-ci est traitée selon les dispositions du numéro **570AH**.

MOD **570AJ** (8) Si l'administration notificatrice présente à nouveau sa fiche ~~Spa2~~ avec une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro **115**, la fiche de notification est traitée selon les dispositions des numéros **570AG** et **570AGA** ou **570AGB**, selon le cas.

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(MOD) **570AK** (9) Si l'administration notificatrice présente à nouveau sa fiche ^{Spa2} avec des modifications telles que, après un nouvel examen, la conclusion du Comité devient favorable relativement au numéro **570AB**, la fiche de notification est traitée selon les dispositions des numéros **570AL à 570AX**. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est inscrite dans la colonne 2d.

[(MOD) **570AM**, (MOD) **570AN**, (MOD) **570AO** et (MOD) **570AP**
ne concernent que le texte espagnol]

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[*(MOD) 570AV ne concerne que le texte espagnol*]

*Le numéro 570AX est remplacé par le nouveau
texte suivant:*

MOD 570AX (4) Dans le cas où l'administration notificatrice présente de Spa2 nouveau sa fiche de notification, soit non modifiée, soit avec des modifications dont l'effet est de diminuer la probabilité de brouillages nuisibles, mais dans des proportions insuffisantes pour permettre l'application des dispositions du numéro 570AW, et où cette administration insiste pour un nouvel examen de la fiche de notification, mais où les conclusions du Comité restent les mêmes, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite que si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins cent vingt jours sans qu'aucune plainte en brouillage nuisible en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage nuisible n'a eu lieu est indiquée dans la colonne Observations. La période de cent vingt jours est comptée à partir de la date indiquée au numéro 570AGC.

Le numéro 570AY est biffé .

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Le numéro 570BA est remplacé par le nouveau texte suivant:

MOD **570BA** (2) Toute notification de modification aux caractéristiques fondamentales d'une assignation déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice 1 (à l'exception toutefois de celles qui figurent dans les colonnes 3 et 4a du Fichier de référence), est examinée par le Comité selon les dispositions des numéros **570AB** et **570AC** et, le cas échéant, **570AD**, et les dispositions des numéros **570AF** à **570AX** sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation originale est modifiée selon la notification.

Le numéro 570BC est remplacé par le nouveau texte suivant:

(MOD) **570BC**§ 23H. Dans l'application des dispositions de la présente sous-section, toute fiche de notification présentée de nouveau au Comité et reçue par lui plus de deux ans après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.

[(MOD) 570BF ne concerne que le texte anglais]

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Les numéros 570BG et 570BH sont remplacés par les nouveaux textes suivants:

MOD **570BG** (4) Dans le cas prévu au numéro **570AX**, et aussi longtemps qu'une fiche de notification ayant fait l'objet d'une conclusion défavorable ne peut être présentée une deuxième fois au Comité du fait des dispositions du numéro **570AGC**, l'administration notificatrice peut demander au Comité d'inscrire provisoirement l'assignation de fréquence en question dans le Fichier de référence. Un symbole spécial indiquant le caractère provisoire de cette inscription est alors inséré dans la colonne Observations. Le Comité biffé ce symbole lorsque l'administration notificatrice l'avise, à l'expiration de la période définie au numéro **570AX**, de l'absence de plainte en brouillage nuisible.

MOD **570BH** (5) Si le Comité ne reçoit pas la confirmation dans les délais prévus au numéro **570BF** ou à l'expiration de la période dont il est question au numéro **570BG**, selon le cas, l'inscription en question est annulée. Le Comité avise l'administration intéressée avant de prendre cette mesure.

Le numéro 611A est remplacé par le nouveau texte suivant:

(MOD) **611A** (6) Si l'utilisation d'une assignation de fréquence non conforme aux dispositions des numéros **501** ou **570AB** cause effectivement un brouillage nuisible à la réception d'une station quelconque fonctionnant conformément aux dispositions du numéro **639BM**, la station utilisant l'assignation de fréquence non conforme aux dispositions des numéros **501** ou **570AB** doit faire cesser immédiatement le brouillage nuisible lorsqu'elle est avisée dudit brouillage.

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Section VIII. Dispositions diverses

Les nouveaux numéros suivants sont ajoutés à la suite du numéro 635:

ADD **635A** § 47A. (1) Si la demande lui en est faite par une administration quelconque et, en particulier, par l'administration d'un pays qui a besoin d'assistance spéciale, et si les circonstances paraissent le justifier, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

- a) vérification du graphique indiquant la zone de coordination dont il est question au numéro **639AN**;
- b) calcul des niveaux de brouillage dont il est question au numéro **492B**;
- c) toute autre assistance de caractère technique afin que les procédures décrites dans le présent article puissent être menées à bien.

ADD **635B** (2) En présentant sa demande au Comité aux termes du numéro **635A**, l'administration lui fournit les renseignements nécessaires.

ANNEXE 8

Révision de l'article 9A du Règlement des radiocommunications

L'article 9A du Règlement des radiocommunications est révisé comme suit:

L'article 9A, dans sa totalité, est remplacé par le nouveau texte suivant:

MOD Spa2

ARTICLE 9A

Coordination, notification et inscription dans le Fichier de référence international des fréquences des assignations de fréquence¹ aux stations de radioastronomie et aux stations de radiocommunications spatiales à l'exception des stations du service de radiodiffusion par satellite

Section I. Procédure pour la publication anticipée de renseignements concernant les systèmes à satellites en projet

639AA§ 1. (1) Toute administration (ou toute administration agissant au nom d'un groupe d'administrations nommément désignées) qui se propose d'établir un système à satellites envoie au Comité international d'enregistrement des fréquences, avant d'engager, le cas échéant, la procédure de coordination décrite au numéro 639AJ, et au plus tôt cinq ans avant la mise en service de chaque réseau à satellite du système en projet, les renseignements énumérés à l'appendice 1B.

¹ L'expression *assignation de fréquence*, partout où elle figure dans le présent article, doit être entendue comme se référant soit à une nouvelle assignation de fréquence, soit à une modification à une assignation déjà inscrite dans le Fichier de référence international des fréquences (dénommé ci-après le *Fichier de référence*).

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639AB (2) Toute modification aux renseignements communiqués conformément aux dispositions du numéro **639AA** au sujet d'un système à satellites en projet est également communiquée au Comité dès le moment où elle est disponible.

639AC (3) Le Comité publie les renseignements dont il est question aux numéros **639AA** et **639AB** dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire.

639AD (4) Si, après avoir étudié les renseignements publiés aux termes du numéro **639AC**, une administration quelle qu'elle soit est d'avis que des brouillages qui peuvent être inacceptables pourront être causés à ses services de radiocommunications spatiales existants ou en projet, elle communique ses observations à l'administration intéressée dans le délai de quatre-vingt-dix jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements énumérés à l'appendice 1B ont été publiés. Elle envoie également au Comité une copie de ces observations. Si l'administration intéressée ne reçoit d'une autre administration aucune observation de cette nature pendant la période susmentionnée, elle peut supposer que cette dernière n'a pas d'objection majeure à formuler à l'encontre du ou des réseaux à satellite en projet du système à l'égard desquels des renseignements ont été publiés.

639AE (5) Une administration qui reçoit des observations formulées aux termes du numéro **639AD** s'efforce de résoudre les difficultés de toute nature qui peuvent se présenter.

639AF (6) Dans le cas où des difficultés se présentent lorsque l'un quelconque des réseaux à satellite en projet d'un système est destiné à faire usage de l'orbite des satellites géostationnaires:

- a) l'administration responsable du système en projet recherche en premier lieu tous les moyens possibles de faire face à ses besoins, en tenant compte des caractéristiques des réseaux à satellite géostationnaire

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faisant partie d'autres systèmes et sans prendre en considération que des remaniements puissent être apportés à des systèmes relevant d'autres administrations. Si elle ne peut pas trouver de tels moyens, l'administration intéressée peut alors s'adresser aux autres administrations concernées afin de résoudre ces difficultés;

- b) une administration qui reçoit une requête aux termes de l'alinéa a) ci-dessus recherche, de concert avec l'administration requérante, tous les moyens possibles de faire face aux besoins de celle-ci, par exemple en changeant l'emplacement d'une ou plusieurs de ses propres stations spatiales géostationnaires en jeu ou en modifiant les émissions, l'utilisation des fréquences (y compris des changements de bande de fréquences), ou d'autres caractéristiques techniques ou d'exploitation;
- c) si, après application de la procédure décrite aux alinéas a) et b) ci-dessus, des difficultés non résolues subsistent, les administrations en cause font de concert tous les efforts possibles pour résoudre ces difficultés au moyen de remaniements acceptables par les deux parties, par exemple en modifiant les emplacements de stations spatiales géostationnaires ainsi que d'autres caractéristiques des systèmes en jeu afin de permettre le fonctionnement normal, à la fois du système en projet et des systèmes existants.

639AG (7) Les administrations peuvent demander l'aide du Comité Spa2 dans leurs tentatives pour résoudre les difficultés mentionnées ci-dessus.

639AH (8) En se conformant aux dispositions des numéros 639AE à Spa2 639AG, une administration responsable d'un système à satellites en projet diffère, si c'est nécessaire, le début de la procédure de coordination ou, si celle-ci n'est pas applicable, l'envoi de ses fiches de notification au Comité, jusqu'à une date postérieure de cent cinquante jours à la date de la circulaire hebdomadaire contenant

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les renseignements énumérés à l'appendice 1B et concernant le réseau à satellite pertinent. Cependant, vis-à-vis des administrations avec lesquelles les difficultés ont été résolues ou qui ont répondu favorablement, la procédure de coordination peut, le cas échéant, être engagée avant l'expiration du délai de cent cinquante jours précité.

639AI (9) Toute administration au nom de laquelle des renseignements sur les réseaux à satellite en projet de son système ont été publiés conformément aux dispositions des numéros 639AA à 639AC fait périodiquement connaître au Comité si elle a reçu ou non des observations et elle lui communique l'état d'avancement du règlement, avec d'autres administrations, des difficultés éventuelles. Le Comité publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire et, lorsque la circulaire hebdomadaire contient des renseignements de cette nature, il en avise les administrations par télégramme-circulaire.

Section II. Procédures de coordination à appliquer dans certains cas

639AJ § 2. (1) Avant de notifier au Comité ou de mettre en service une assignation de fréquence à une station spatiale installée à bord d'un satellite géostationnaire ou à une station terrienne destinée à communiquer avec une telle station spatiale, toute administration commande l'utilisation de cette assignation de fréquence avec toute autre administration au nom de laquelle une assignation de fréquence située dans la même bande et concernant une station spatiale installée à bord d'un satellite géostationnaire ou une station terrienne qui communique avec une telle station spatiale est inscrite dans le Fichier de référence, ou fait ou a fait l'objet de la coordination prévue au présent paragraphe. A cet effet, l'administration qui recherche la coordination envoie à toute autre administration visée ci-dessus les renseignements énumérés à l'appendice 1A.

639AK (2) Aucune coordination aux termes du numéro 639AJ n'est requise:

- a) lorsque, du fait de l'utilisation d'une nouvelle assignation de fréquence, la température de bruit du récepteur de

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toute station spatiale ou terrienne ou la température équivalente de bruit de toute liaison par satellite, selon le cas, relevant d'une autre administration, subit un accroissement qui ne dépasse pas l'accroissement prédéterminé de température de bruit calculé selon la méthode décrite à l'appendice 29;

- b) lorsqu'une administration se propose de modifier les caractéristiques d'une assignation existante de telle sorte que les conditions de l'alinéa a) ci-dessus soient remplies à l'égard de tout service d'une autre administration ou lorsque, cette assignation ayant déjà été coordonnée, l'accroissement de la température de bruit n'excède pas la valeur convenue au cours de la coordination.

639AL (3) En même temps qu'une administration engage la procédure de coordination dont il est question au numéro **639AJ**, elle envoie au Comité une copie de la demande de coordination, accompagnée des renseignements énumérés à l'appendice 1A ainsi que du nom de la ou des administrations auprès desquelles elle recherche la coordination. Le Comité publie ces renseignements dans une section spéciale de sa circulaire hebdomadaire, avec une référence à la circulaire hebdomadaire dans laquelle les renseignements concernant le système à satellites ont été publiés aux termes de la section I du présent article. Lorsque la circulaire hebdomadaire contient des renseignements de cette nature, le Comité en avise les administrations par télégramme-circulaire.

639AM (4) Toute administration qui estime qu'elle aurait dû être incluse dans la procédure de coordination dont il est question au numéro **639AJ** a le droit de demander à être partie à la procédure de coordination.

639AN§ 3. (1) Avant de notifier au Comité ou de mettre en service une assignation d'une fréquence d'émission ou de réception à une station terrienne dans une bande déterminée, attribuée avec égalité

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des droits à des services de radiocommunications spatiales et à des services de radiocommunications de Terre¹ dans la gamme de fréquences située au-delà de 1 GHz, toute administration coordonne l'utilisation de cette assignation avec l'administration de tout autre pays dont le territoire est situé en tout ou en partie à l'intérieur de la zone de coordination² de la station terrienne en projet. A cet effet, elle envoie à chacune des administrations dont il s'agit un graphique à échelle convenable indiquant l'emplacement de la station terrienne et représentant les zones de coordination² de cette station, aussi bien dans le cas où elle émet que dans le cas où elle reçoit; elle lui communique également les paramètres sur lesquels le calcul de ces zones est fondé, ainsi que tous les autres détails pertinents concernant l'assignation de fréquence en projet, tels qu'ils sont énumérés à l'appendice 1A; elle lui indique également la date approximative à laquelle il est prévu que la station commencera à fonctionner.

639AO (2) Toute administration auprès de laquelle la coordination est recherchée aux termes du numéro 639AJ accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'accusé de réception dans le délai de trente jours qui suit la date de la circulaire hebdomadaire dans laquelle les renseignements pertinents ont été publiés conformément aux dispositions du numéro 639AL, elle envoie un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans un nouveau délai de trente jours. Au reçu des renseignements concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question, eu égard à la date prévue de mise en service de l'assignation pour laquelle la coordination est recherchée, du point de vue des brouil-

639AN.1 ¹ L'appendice 28 contient les critères relatifs uniquement à la coordination entre stations des services fixe ou mobile et stations terriennes. Jusqu'à ce que le C.C.I.R. établisse, conformément à la Recommandation N° Spa2 - 9 les critères relatifs à d'autres services de radiocommunications de Terre, les administrations établissent d'un commun accord les critères à utiliser pour effectuer la coordination entre stations terriennes et stations de radiocommunications de Terre autres que celles des services fixe ou mobile.

639AN.2 ² Calculée selon les procédures décrites dans l'appendice 28 en ce qui concerne les stations des services fixe ou mobile.

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lages¹ qui seraient causés au service assuré par celles de ses stations pour lesquelles la coordination est recherchée aux termes du numéro 639AJ; puis elle communique son accord, dans le délai de quatre-vingt-dix jours qui suit la date de la circulaire hebdomadaire pertinente, à l'administration qui recherche la coordination. Si l'administration auprès de laquelle la coordination est recherchée ne communique pas son accord, elle envoie dans le même délai à l'administration qui recherche la coordination des renseignements techniques indiquant les raisons qui motivent son désaccord et elle lui présente les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème. Une copie de ces observations est envoyée également au Comité.

639AP (3) Toute administration auprès de laquelle la coordination est recherchée aux termes du numéro 639AN accuse immédiatement réception, par télégramme, des données concernant la coordination. Si l'administration qui recherche la coordination ne reçoit pas d'accusé de réception dans un délai de quinze jours à partir de l'envoi des données concernant la coordination, elle envoie un télégramme demandant cet accusé de réception, télégramme auquel l'administration qui le reçoit répond dans un nouveau délai de quinze jours. Au reçu des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée étudie rapidement la question, eu égard à la date prévue de mise en service de l'assignation pour laquelle la coordination est recherchée, à la fois du point de vue:

- a) des brouillages² qui seraient causés au service assuré par ses stations de radiocommunications de Terre fonctionnant conformément aux dispositions de la Convention et du présent Règlement, ou destinées à fonctionner ainsi avant la date prévue de mise en service de l'assignation à la station terrienne, ou encore dans les trois années à venir, selon celle de ces dates qui est la plus tardive;

639AO.1 ¹ Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les Avis pertinents du C.C.I.R. ou, en l'absence de tels Avis, font l'objet d'un accord entre les administrations intéressées.

639AP.1 ² Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les Avis pertinents du C.C.I.R. ou, en l'absence de tels Avis, font l'objet d'un accord entre les administrations intéressées.

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- b) des brouillages¹ qui seraient causés à la réception à la station terrienne par le service assuré par ses stations de radiocommunications de Terre fonctionnant conformément aux dispositions de la Convention et du présent Règlement, ou destinées à fonctionner ainsi avant la date prévue de mise en service de l'assignation à la station terrienne, ou encore dans les trois années à venir, selon celle de ces dates qui est la plus tardive.

Puis, dans un délai de soixante jours à partir de l'envoi des données concernant la coordination, l'administration auprès de laquelle la coordination est recherchée communique à l'administration qui recherche la coordination son accord sur l'assignation en projet. Si l'administration auprès de laquelle la coordination est recherchée ne communique pas son accord, elle envoie dans le même délai à l'administration qui recherche la coordination un graphique à échelle convenable indiquant l'emplacement de celles de ses stations de radiocommunications de Terre qui sont ou seront à l'intérieur de la zone de coordination de la station terrienne d'émission ou de réception selon le cas, elle lui communique toutes les autres caractéristiques fondamentales pertinentes et lui présente les suggestions qu'elle peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

639AQ (4) Lorsque l'administration auprès de laquelle la coordination est recherchée envoie à l'administration qui recherche la coordination les renseignements mentionnés au numéro **639AP**, elle envoie une copie de ces renseignements au Comité. Celui-ci considère comme notifications aux termes de la section I de l'article 9 seulement ceux de ces renseignements qui concernent des assignations à des stations de radiocommunications de Terre existantes ou qui seront mises en service dans les trois années à venir.

639AR (5) Aucune coordination aux termes du numéro **639AN** n'est requise lorsqu'une administration se propose:

639AP.1 ¹ Les critères à utiliser pour évaluer les niveaux de brouillage sont fondés sur les Avis pertinents du C.C.I.R. ou, en l'absence de tels Avis, font l'objet d'un accord entre les administrations intéressées.

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- a) de mettre en service une station terrienne dont la zone de coordination est entièrement extérieure au territoire de tout autre pays;
- b) de modifier les caractéristiques d'une assignation existante de telle sorte que le niveau des brouillages causés à ou par des stations de radiocommunications de Terre d'autres administrations ne s'en trouve pas accru;
- c) de faire fonctionner une station terrienne mobile. Cependant si la zone de coordination liée au fonctionnement d'une telle station terrienne mobile dans l'une des bandes de fréquences auxquelles référence est faite au numéro 639AN, recouvre tout ou partie du territoire d'un autre pays, le fonctionnement de cette station fait l'objet d'un accord préalable entre les administrations intéressées, afin d'éviter que des brouillages nuisibles ne soient causés aux stations existantes de radiocommunications de Terre de cet autre pays. Cet accord porte sur les caractéristiques de la ou des stations terriennes mobiles ou sur les caractéristiques d'une station terrienne mobile type, et est conclu pour une zone de service donnée; sauf dispositions contraires de l'accord, celui-ci s'applique à toute station terrienne mobile se déplaçant dans la zone de service considérée, sous réserve que la probabilité de brouillages nuisibles causés par elle ne soit pas plus élevée que dans le cas de la station terrienne type.

639AS§ 4. (1) L'administration qui recherche la coordination peut demander au Comité de s'efforcer d'effectuer cette coordination dans les circonstances suivantes:

- a) une administration auprès de laquelle la coordination est recherchée aux termes du numéro 639AJ n'envoie pas d'accusé de réception, aux termes du numéro

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639AO, dans un délai de soixante jours à partir de la date de la circulaire hebdomadaire dans laquelle les renseignements relatifs à la demande de coordination ont été publiés;

- b) une administration auprès de laquelle la coordination est recherchée aux termes du numéro **639AN** n'envoie pas d'accusé de réception, aux termes du numéro **639AP**, dans un délai de trente jours à partir de l'envoi des données concernant la coordination;
- c) une administration a envoyé un accusé de réception aux termes du numéro **639AO**, mais ne communique pas sa décision dans un délai de quatre-vingt-dix jours à partir de la date de la circulaire hebdomadaire pertinente;
- d) une administration a envoyé un accusé de réception aux termes du numéro **639AP**, mais ne communique pas sa décision dans un délai de soixante jours à partir de l'envoi des données concernant la coordination;
- e) l'administration qui recherche la coordination et l'administration auprès de laquelle la coordination est recherchée sont en désaccord en ce qui concerne le niveau de brouillage acceptable;
- f) ou encore la coordination n'est pas possible pour toute autre raison.

En présentant sa demande au Comité, l'administration intéressée lui communique les renseignements nécessaires pour lui permettre de s'efforcer d'effectuer la coordination.

639AT (2) L'administration qui recherche la coordination, ou toute
Spa2 administration auprès de laquelle la coordination est recherchée, ou bien le Comité, peuvent demander les renseignements supplémentaires dont ils estiment avoir besoin pour évaluer le niveau des brouillages causés aux services intéressés.

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639AU (3) Lorsque le Comité reçoit une demande aux termes des alinéas *a)* ou *b)* du numéro **639AS**, il envoie sans délai un télégramme à l'administration intéressée en lui demandant d'en accuser réception immédiatement.

639AV (4) Lorsque le Comité reçoit un accusé de réception à la suite de la mesure qu'il a prise aux termes du numéro **639AU** ou lorsque le Comité reçoit une demande aux termes des alinéas *c)* ou *d)* du numéro **639AS**, il envoie sans délai un télégramme à l'administration intéressée en lui demandant de prendre rapidement une décision sur la question.

639AW (5) Lorsque le Comité reçoit une demande aux termes de l'alinéa *f)* du numéro **639AS**, il s'efforce d'effectuer la coordination conformément aux dispositions des numéros **639AJ** et **639AN**, selon le cas. Le Comité prend également, le cas échéant, les mesures prévues au numéro **639AL**. Lorsque le Comité ne reçoit pas d'accusé de réception à sa demande de coordination dans le délai spécifié aux numéros **639AO** ou **639AP**, selon le cas, il agit conformément aux dispositions du numéro **639AU**.

639AX (6) Lorsqu'une administration ne répond pas dans un délai de trente jours qui suit l'envoi du télégramme que le Comité lui a envoyé aux termes du numéro **639AU** en lui demandant un accusé de réception, ou lorsqu'elle ne communique pas sa décision sur la question dans le délai de trente jours qui suit l'envoi du télégramme du Comité aux termes du numéro **639AV**, l'administration auprès de laquelle la coordination a été recherchée est réputée s'être engagée:

- a)* à ne pas formuler de plainte concernant les brouillages nuisibles qui pourraient être causés au service assuré par ses stations de radiocommunications spatiales ou ses stations de radiocommunications de Terre par l'utilisation de l'assигnation de fréquence pour laquelle la coordination a été recherchée;
- b)* à faire en sorte que ses stations de radiocommunications spatiales ou ses stations de radiocommuni-

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cations de Terre ne causeront pas de brouillages nuisibles à l'utilisation de l'assignation de fréquence pour laquelle la coordination a été recherchée.

639AY (7) S'il y a lieu, le Comité évalue, au titre de la procédure spécifiée au numéro **639AS**, le niveau de brouillage. En tout état de cause, il communique aux administrations intéressées les résultats obtenus.

639AZ § 5. En cas de désaccord persistant entre l'administration qui recherche la coordination et l'administration auprès de laquelle la coordination a été recherchée, l'administration qui recherche la coordination est en droit, cent cinquante jours après la date à laquelle elle a demandé la coordination, et compte tenu des dispositions du numéro **639BF**, d'envoyer au Comité sa fiche de notification concernant l'assignation en projet, sous réserve que l'aide du Comité ait été demandée.

Section III. Notification des assignations de fréquence

639BA § 6. (1) Toute assignation de fréquence à une station terrienne ou spatiale doit être notifiée au Comité:

- a) si l'utilisation de la fréquence en question est susceptible d'entraîner des brouillages nuisibles à un service quelconque d'une autre administration;
- b) ou si la fréquence doit être utilisée pour des radio-communications internationales;
- c) ou encore si l'on désire obtenir une reconnaissance internationale officielle de l'utilisation de cette fréquence.

639BB (2) Une notification analogue doit être faite dans le cas de toute fréquence destinée à être utilisée à la réception des émissions des stations terriennes ou spatiales par une station spatiale ou terrienne déterminée, chaque fois que l'une au moins des circonstances spécifiées au numéro **639BA** se présente.

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639BC (3) Une notification analogue peut être faite dans le cas de toute fréquence ou bande de fréquences destinée à être utilisée à la réception par une station de radioastronomie déterminée, si l'on désire que ce renseignement soit inscrit dans le Fichier de référence.

639BD (4) Une notification faite aux termes des numéros **639BA** ou **639BB** et concernant une assignation de fréquence à des stations terriennes mobiles d'un système à satellites comporte les caractéristiques techniques soit de chaque station terrienne mobile, soit d'une station terrienne mobile type, ainsi que l'indication de la zone de service dans laquelle ces stations sont destinées à fonctionner.

639BE § 7. Toute assignation de fréquence notifiée en exécution des numéros **639BA**, **639BB**, **639BC** ou **639BD** doit faire l'objet d'une fiche individuelle de notification établie dans la forme prescrite à l'appendice 1A, dont les diverses sections spécifient les caractéristiques fondamentales à fournir selon le cas. Il est recommandé que l'administration notificatrice communique également au Comité les autres renseignements indiqués à la section A dudit appendice, ainsi que tout autre renseignement qu'elle peut juger utile.

639BF § 8. (1) Lorsqu'il s'agit d'une assignation de fréquence à une station terrienne ou spatiale, la fiche de notification doit parvenir au Comité au plus tôt trois ans avant la date de mise en service de l'assignation de fréquence intéressée. Elle doit lui parvenir en tout cas au plus tard quatre-vingt-dix jours¹ avant cette date, sauf en ce qui concerne une assignation de fréquence à une station du service de recherche spatiale dans une bande attribuée en exclusivité à ce service ou une bande partagée dans laquelle il est le seul service primaire. Dans le cas d'une telle assignation à une station du service de recherche spatiale, la fiche de notification doit, autant que faire se peut, parvenir au Comité avant la date de mise en service de l'assignation de fréquence intéressée, mais elle doit, en tout cas, lui parvenir au plus tard trente jours après la date à laquelle l'assignation de fréquence est effectivement mise en service.

639BF.1 ¹ L'administration notificatrice engage, le cas échéant, la ou les procédures de coordination en temps voulu pour que cette date limite soit respectée.

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639BG (2) Toute assignation de fréquence à une station terrienne ou spatiale dont la notification parvient au Comité après l'expiration des délais voulus spécifiés au numéro **639BF** porte, lorsqu'il y a lieu de l'inscrire dans le Fichier de référence, une observation indiquant que la fiche de notification n'est pas conforme aux dispositions du numéro **639BF**.

Section IV. Procédure pour l'examen des fiches de notification et l'inscription des assignations de fréquence dans le Fichier de référence

639BH § 9. Lorsque le Comité reçoit une fiche de notification qui ne contient pas au moins les caractéristiques fondamentales spécifiées à l'appendice 1A, il la retourne immédiatement par poste aérienne à l'administration dont elle émane, accompagnée des motifs de ce renvoi.

639BI § 10. Lorsque le Comité reçoit une fiche de notification complète, il inclut les renseignements qu'elle contient, avec sa date de réception, dans la circulaire hebdomadaire dont il est question au numéro **497**; cette circulaire contient les renseignements figurant dans toutes les fiches de notification complètes reçues par le Comité depuis la publication de la circulaire précédente.

639BJ § 11. La circulaire tient lieu d'accusé de réception par le Comité, à l'administration notificatrice, d'une fiche de notification complète.

639BK § 12. Le Comité examine les fiches de notification complètes dans l'ordre où il les reçoit. Il ne peut pas ajourner la conclusion, à moins qu'il ne manque de renseignements suffisants pour prendre une décision à cet égard; de plus, le Comité ne statue pas sur une fiche de notification ayant des relations techniques avec une fiche reçue antérieurement, et encore en cours d'examen, avant d'avoir pris une décision en ce qui concerne cette dernière.

639BL § 13. Le Comité examine chaque fiche de notification:

639BM a) du point de vue de sa conformité avec les clauses de la Convention, le Tableau d'attribution des bandes de fré-

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quences et les autres clauses du Règlement des radio-communications (à l'exception de celles qui sont relatives aux procédures de coordination et à la probabilité de brouillages nuisibles);

- 639BN**
Spa2 b) le cas échéant, du point de vue de sa conformité avec les dispositions du numéro **639AJ**, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées, vis-à-vis des stations de radiocommunications spatiales;
- 639BO**
Spa2 c) le cas échéant, du point de vue de sa conformité avec les dispositions du numéro **639AN**, lesquelles concernent la coordination de l'utilisation de l'assignation de fréquence avec les autres administrations intéressées, vis-à-vis des stations de radiocommunications de Terre;
- 639BP**
Spa2 d) le cas échéant, du point de vue de la probabilité d'un brouillage nuisible au détriment du service assuré par une station de radiocommunications spatiales pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions du numéro **639BM**, si cette assignation de fréquence n'a pas, en fait, causé de brouillage nuisible à une assignation quelconque antérieurement inscrite dans le Fichier de référence et conforme au numéro **639BM**;
- 639BQ**
Spa2 e) le cas échéant, du point de vue de la probabilité d'un brouillage nuisible au détriment du service assuré par une station de radiocommunications de Terre pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions des numéros **501** ou **570AB**, selon le cas, si cette assignation de fréquence n'a pas, en fait, causé de brouillage nuisible à une assignation quelconque antérieurement inscrite dans le Fichier de référence et conforme au numéro **639BM**;

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639BR *f)* le cas échéant, du point de vue de la probabilité d'un brouillage nuisible causé à une station terrienne de réception par une station de radiocommunications de Terre pour laquelle a déjà été inscrite dans le Fichier de référence une assignation de fréquence conforme aux dispositions des numéros **501** ou **570AB**, selon le cas.

639BS § 14. Lorsque, à la suite de l'examen d'une fiche de notification relativement au numéro **639BP**, le Comité formule une conclusion défavorable en se fondant sur la probabilité de brouillages nuisibles au détriment d'une assignation de fréquence inscrite au Fichier de référence et concernant une station spatiale dont le Comité a des raisons de croire qu'elle peut n'être pas régulièrement en service, le Comité consulte sans délai l'administration responsable de cette assignation. Si, après cette consultation, il est établi, d'après les renseignements disponibles, que cette assignation inscrite au Fichier de référence n'a pas été utilisée depuis deux ans, il n'en est plus tenu compte lors de l'examen en cours ni lors de l'examen de toute autre fiche de notification auquel il sera procédé ultérieurement, aux termes du numéro **639BP**, avant la date à laquelle l'assignation de fréquence sera remise en service. Avant sa remise en service, l'assignation de fréquence est l'objet, selon le cas, d'une nouvelle coordination conformément aux dispositions du numéro **639AJ** ou d'un nouvel examen par le Comité relativement au numéro **639BP**. La date de remise en service est alors inscrite dans le Fichier de référence.

639BT § 15. Selon les conclusions auxquelles le Comité parvient à la suite de l'examen prévu aux numéros **639BM**, **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, selon le cas, la procédure se poursuit comme suit:

639BU § 16. (1) *Conclusion favorable relativement au numéro **639BM** dans les cas où les dispositions des numéros **639BN** et **639BO** ne sont pas applicables.*

639BV (2) L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

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639BW § 17. (1) *Conclusion défavorable relativement au numéro 639BM.*
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639BX (2) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro 115 et que la conclusion est favorable relativement aux numéros 639BN, 639BO, 639BP, 639BQ et 639BR, selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

639BY (3) Lorsque la fiche comporte une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro 115 et que la conclusion est défavorable relativement aux numéros 639BN, 639BO, 639BP, 639BQ ou 639BR, selon le cas, la fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité. Si l'administration notificatrice insiste pour un nouvel examen de la fiche de notification, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite que si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins cent vingt jours sans qu'aucune plainte en brouillage nuisible en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage nuisible n'a eu lieu est indiquée dans la colonne Observations.

639BZ (4) La période de cent vingt jours mentionnée aux numéros 639BY et 639CP est comptée:

- à partir de la date de mise en service de l'assignation de fréquence à la station de radiocommunications spatiales qui a fait l'objet d'une conclusion défavorable, si l'assignation de fréquence à la station qui a motivé cette conclusion est alors en service;
- à partir de la date de mise en service de l'assignation de fréquence à la station qui a motivé la conclusion défavorable, dans le cas contraire.

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Cependant, si l'assignation de fréquence à la station qui a motivé la conclusion défavorable n'a pas été mise en service à la date notifiée, la période de cent vingt jours est comptée à partir de cette dernière date. Si c'est nécessaire, il est tenu compte du délai supplémentaire spécifié au numéro 639CY.

639CA (5) Lorsque la fiche ne comporte aucune référence selon laquelle la station fonctionnera conformément aux dispositions du numéro 115, cette fiche est retournée immédiatement par poste aérienne à l'administration notificatrice, avec un exposé des raisons qui motivent la conclusion du Comité, et avec les suggestions qu'il peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

639CB (6) Si l'administration notificatrice présente de nouveau sa fiche non modifiée, celle-ci est traitée selon les dispositions du numéro 639CA. Si l'administration notificatrice présente à nouveau sa fiche avec une référence selon laquelle la station fonctionnera conformément aux dispositions du numéro 115, la fiche de notification est traitée conformément aux dispositions des numéros 639BX ou 639BY, selon le cas. Si la fiche est présentée à nouveau avec des modifications telles que, après un nouvel examen, la conclusion du Comité devient favorable relativement au numéro 639BM, la fiche est traitée comme une nouvelle fiche de notification.

639CC § 18. (1) *Conclusion favorable relativement au numéro 639BM dans les cas où les dispositions des numéros 639BN ou 639BO sont applicables.*

639CD (2) Lorsque le Comité conclut que les procédures de coordination dont il est question aux numéros 639BN ou 639BO ont été appliquées avec succès en ce qui concerne toutes les administrations dont les stations de radiocommunications spatiales ou de Terre peuvent être défavorablement influencées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

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639CE (3) Lorsque le Comité conclut que l'une ou l'autre des procédures de coordination dont il est question aux numéros **639BN** et **639BO** n'ont pas été appliquées, et si l'administration notificatrice lui demande d'effectuer la coordination requise, le Comité prend les mesures nécessaires à cet effet et communique aux administrations intéressées les résultats obtenus. Si les tentatives du Comité en vue de mener à bien la coordination sont couronnées de succès, la fiche de notification est traitée conformément aux dispositions du numéro **639CD**. Si les tentatives du Comité ne sont pas couronnées de succès, il examine la fiche de notification du point de vue des dispositions des numéros **639BP**, **639BQ** et **639BR**, selon le cas.

639CF (4) Lorsque le Comité conclut que l'une ou l'autre des procédures de coordination dont il est question aux numéros **639BN** et **639BO** n'ont pas été appliquées, et si l'administration notificatrice ne lui demande pas d'effectuer la coordination requise, la fiche de notification est renvoyée immédiatement par poste aérienne à l'administration notificatrice avec un exposé des raisons qui motivent ce renvoi et avec les suggestions que le Comité peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

639CG (5) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification, et si le Comité conclut que les procédures de coordination dont il est question aux numéros **639BN** et **639BO** ont été appliquées avec succès en ce qui concerne toutes les administrations dont les stations de radiocommunications spatiales ou de Terre peuvent être défavorablement influencées, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

639CH (6) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en demandant au Comité d'effectuer la coordination requise aux termes des numéros **639AJ** ou **639AN**, la fiche de notification est traitée conformément aux dispositions du numéro **639CE**. S'il y a lieu ultérieurement d'inscrire l'assignation dans le

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Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

639CI (7) Lorsque l'administration notificatrice présente à nouveau sa fiche de notification en déclarant qu'elle n'a pas eu de succès en tentant d'effectuer la coordination, le Comité en informe les administrations intéressées. Le Comité examine la fiche de notification du point de vue des dispositions des numéros **639BP**, **639BQ** et **639BR**, selon le cas. S'il y a lieu ultérieurement d'inscrire l'assignation dans le Fichier de référence, la date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

639CJ § 19. (1) *Conclusion favorable relativement aux numéros **639BM**, **639BP**, **639BQ** et **639BR**, selon le cas.*

639CK (2) L'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification est inscrite dans la colonne 2d.

639CL (3) Cependant, s'il résulte de l'examen que le niveau du bruit de brouillage et le pourcentage de temps pendant lequel celui-ci est susceptible de se produire ont des valeurs légèrement plus élevées que celles qui sont utilisées pour évaluer la probabilité de brouillages nuisibles (conditions particulières de propagation, humidité anormale de l'atmosphère, etc.), une observation est insérée dans le Fichier de référence afin d'indiquer qu'un faible risque de brouillages nuisibles peut exister et qu'en conséquence des précautions supplémentaires doivent être prises dans l'utilisation de l'assignation pour éviter les brouillages nuisibles aux assignations déjà inscrites dans le Fichier de référence.

639CM § 20. (1) *Conclusion favorable relativement au numéro **639BM**, mais défavorable relativement aux numéros **639BP**, **639BQ** ou **639BR**, selon le cas.*

639CN (2) La fiche de notification est retournée immédiatement par poste aérienne à l'administration dont elle émane, avec un exposé

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des raisons qui motivent la conclusion du Comité et avec les suggestions qu'il peut faire, le cas échéant, en vue d'arriver à une solution satisfaisante du problème.

639CO (3) Si l'administration notificatrice présente à nouveau sa fiche avec des modifications qui, après nouvel examen, entraînent de la part du Comité une conclusion favorable relativement aux numéros **639BP**, **639BQ** et **639BR**, selon le cas, l'assignation est inscrite dans le Fichier de référence. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date de réception par le Comité de la fiche de notification présentée à nouveau est indiquée dans la colonne Observations.

639CP (4) Dans le cas où l'administration notificatrice présente à nouveau sa fiche de notification, soit non modifiée, soit avec des modifications dont l'effet est de diminuer la probabilité de brouillages nuisibles, mais dans des proportions insuffisantes pour permettre l'application des dispositions du numéro **639CO**, et où cette administration insiste pour un nouvel examen de la fiche de notification, mais où les conclusions du Comité restent les mêmes, l'assignation est inscrite dans le Fichier de référence. Mais cette inscription n'est faite que si l'administration notificatrice avise le Comité que l'assignation a été en service pendant au moins cent vingt jours sans qu'aucune plainte en brouillage nuisible en soit résultée. La date de réception par le Comité de la fiche de notification originale est inscrite dans la colonne 2d. La date à laquelle le Comité reçoit l'avis selon lequel aucune plainte en brouillage nuisible n'a eu lieu est indiquée dans la colonne Observations. La période de cent vingt jours est comptée à partir de la date indiquée au numéro **639BZ**.

639CQ § 21. (1) *Fiches de notification concernant les stations de radio-astronomie.*

639CR (2) Une fiche de notification concernant une station de radio-astronomie n'est pas examinée par le Comité du point de vue des dispositions des numéros **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**. Quelle que soit la conclusion, l'assignation est inscrite dans le Fichier

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de référence avec une date dans la colonne 2c. La date de réception par le Comité de la fiche de notification est indiquée dans la colonne Observations.

639CS § 22. (1) *Modifications aux caractéristiques fondamentales des assignations déjà inscrites dans le Fichier de référence.*

639CT (2) Toute notification de modification aux caractéristiques fondamentales d'une assignation déjà inscrite dans le Fichier de référence, telles qu'elles sont définies à l'appendice 1A (à l'exception toutefois du nom de la station ou du nom de la localité dans laquelle elle est située), est examinée par le Comité selon les dispositions des numéros **639BM**, et, le cas échéant, **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, et les dispositions des numéros **639BU** à **639CR** inclus sont appliquées. Lorsqu'il y a lieu d'inscrire la modification dans le Fichier de référence, l'assignation originale est modifiée selon la notification.

639CU (3) Cependant, dans le cas d'une modification aux caractéristiques d'une assignation conforme aux dispositions du numéro **639BM** et où le Comité formule une conclusion favorable relativement aux numéros **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, le cas échéant, ou conclut que cette modification n'accroît pas la probabilité de brouillages nuisibles au détriment d'assignations de fréquence déjà inscrites dans le Fichier de référence, l'assignation de fréquence modifiée conserve la date primitivement inscrite dans la colonne 2d. De plus, la date de réception par le Comité de la fiche de notification concernant la modification est indiquée dans la colonne Observations.

639CV § 23. Dans l'application des dispositions de la présente section, toute fiche de notification présentée de nouveau au Comité et reçue par lui plus de deux ans après la date à laquelle il a renvoyé la fiche à l'administration notificatrice est considérée comme une nouvelle fiche de notification.

639CW § 24. (1) *Inscription des assignations de fréquence notifiées avant leur mise en service.*

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639CX (2) Si une assignation de fréquence notifiée avant sa mise en service est l'objet de conclusions favorables formulées par le Comité relativement aux numéros **639BM** et, le cas échéant, **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, elle est inscrite provisoirement dans le Fichier de référence avec, dans la colonne Observations, un symbole spécial indiquant le caractère provisoire de cette inscription.

639CY (3) Si, dans un délai de trente jours après la date prévue pour la mise en service, le Comité reçoit de l'administration notificatrice la confirmation de la date de mise en service, il biffé le symbole spécial inséré dans la colonne Observations. Au cas où, à la suite d'une demande reçue de l'administration notificatrice avant l'expiration de ce délai de trente jours, le Comité conclut que des circonstances exceptionnelles motivent un délai supplémentaire, ce dernier ne doit en aucun cas dépasser cent cinquante jours.

639CZ (4) Dans le cas prévu aux numéros **639BY** et **639CP**, et aussi longtemps qu'une fiche de notification ayant fait l'objet d'une conclusion défavorable ne peut être présentée de nouveau au Comité du fait des dispositions du numéro **639BZ**, l'administration notificatrice peut demander au Comité d'inscrire provisoirement l'assignation de fréquence en question dans le Fichier de référence. Un symbole spécial indiquant le caractère provisoire de cette inscription est alors inséré dans la colonne Observations. Le Comité biffé ce symbole lorsque l'administration notificatrice l'avise, à l'expiration de la période définie aux numéros **639BY** ou **639CP**, selon le cas, de l'absence de plainte en brouillage nuisible.

639DA (5) Si le Comité ne reçoit pas la confirmation dans les délais prévus au numéro **639CY** ou à l'expiration de la période dont il est question aux numéros **639BY** ou **639CP**, selon le cas, l'inscription en question est annulée. Le Comité avise l'administration intéressée avant de prendre cette mesure.

Section V. Inscription des conclusions dans le Fichier de référence

639DB § 25. Chaque fois que le Comité inscrit une assignation de fréquence dans le Fichier de référence, il indique sa conclusion par un

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symbole placé dans la colonne 13a. De plus, il insère dans la colonne Observations une observation indiquant les motifs de toute conclusion défavorable.

Section VI. Catégories d'assignations de fréquence

639DC § 26. (1) La date à inscrire dans la colonne 2c est la date de mise Spa2 en service notifiée par l'administration intéressée. Elle est donnée à titre d'information seulement.

639DD (2) Si l'utilisation d'une assignation de fréquence à une station Spa2 de radiocommunications spatiales qui a été inscrite au Fichier de référence conformément aux dispositions du numéro **639CP** cause effectivement un brouillage nuisible à la réception d'une station de radiocommunications spatiales pour laquelle une assignation de fréquence a été antérieurement inscrite dans le Fichier de référence à la suite d'une conclusion favorable relativement aux numéros **639BM**, **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, selon le cas, la station utilisant l'assignation de fréquence inscrite conformément aux dispositions du numéro **639CP** doit faire cesser immédiatement le brouillage nuisible lorsqu'elle est avisée dudit brouillage.

639DE (3) Si l'utilisation d'une assignation de fréquence non conforme Spa2 aux dispositions du numéro **639BM** cause effectivement un brouillage nuisible à la réception d'une station quelconque fonctionnant conformément aux dispositions des numéros **501**, **570AB** ou **639BM**, selon le cas, la station utilisant l'assignation de fréquence non conforme aux dispositions du numéro **639BM** doit faire cesser immédiatement le brouillage nuisible lorsqu'elle est avisée dudit brouillage.

Section VII. Réexamen des conclusions

639DF § 27. (1) Une conclusion peut être réexamинée par le Comité:
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— à la demande de l'administration notificatrice;

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- à la demande de toute autre administration intéressée à la question, mais uniquement en raison d'un brouillage nuisible constaté;
- sur la propre initiative du Comité lui-même lorsqu'il estime cette mesure justifiée.

639DG (2) Le Comité, se fondant sur tous les renseignements dont Spa2 il dispose, réexamine la question en tenant compte des dispositions du numéro **639BM** et, le cas échéant, des dispositions des numéros **639BN**, **639BO**, **639BP**, **639BQ** et **639BR**, et il formule une conclusion appropriée, puis informe de cette conclusion l'administration notificatrice, soit avant de publier la conclusion, soit avant de la reporter dans le Fichier de référence.

639DH § 28. (1) Après utilisation réelle pendant une période raisonnable Spa2 d'une assignation de fréquence inscrite dans le Fichier de référence sur l'insistance de l'administration notificatrice, à la suite d'une conclusion défavorable relativement aux numéros **639BP**, **639BQ** ou **639BR**, cette administration peut demander au Comité de réexaminer la conclusion. Le Comité réexamine alors la question après avoir consulté les administrations intéressées.

639DI (2) Si la conclusion du Comité est alors favorable, il apporte Spa2 au Fichier de référence les modifications requises pour que l'inscription y figure désormais comme si la conclusion initiale avait été favorable.

639DJ (3) Si la conclusion relative à la probabilité d'un brouillage Spa2 nuisible reste défavorable, l'inscription initiale n'est pas modifiée.

Section VIII. Modification, annulation et révision des inscriptions du Fichier de référence

639DK § 29. (1) Lorsque l'utilisation d'une assignation de fréquence à une Spa2 station spatiale inscrite au Fichier de référence est suspendue pendant une période de dix-huit mois, l'administration notificatrice informe le Comité, au cours de cette période de dix-huit mois, de

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la date à laquelle cette utilisation a été suspendue et de la date à laquelle l'utilisation régulière de cette assignation reprendra.

639DL (2) Chaque fois qu'il apparaît au Comité, qu'il s'agisse ou non Spa2 du résultat des mesures prises aux termes du numéro **639DK**, qu'une assignation de fréquence à une station spatiale inscrite au Fichier de référence n'a pas été utilisée régulièrement pendant plus de dix-huit mois, le Comité s'enquiert auprès de l'administration notificatrice de la date à laquelle l'utilisation régulière de cette assignation reprendra.

639DM (3) Si, dans un délai de six mois, le Comité ne reçoit aucune Spa2 réponse à sa demande de renseignements aux termes du numéro **639DL**, ou si la réponse qu'il reçoit ne confirme pas que l'utilisation régulière de cette assignation à une station spatiale reprendra dans un délai de six mois, un symbole est inséré dans le Fichier de référence en regard de l'inscription. Dorénavant, l'assignation est traitée conformément aux dispositions du numéro **639BS** comme une assignation à l'égard de laquelle il a été établi qu'elle n'a pas été effectivement utilisée depuis deux ans.

639DN § 30. Si l'utilisation d'une assignation de fréquence inscrite au Spa2 Fichier de référence vient à être abandonnée définitivement, l'administration notificatrice doit en informer le Comité dans un délai de quatre-vingt-dix jours, à la suite de quoi l'inscription au Fichier de référence est annulée.

639DO § 31. Chaque fois qu'il apparaît au Comité, d'après les renseignements dont il dispose, qu'une assignation inscrite dans le Fichier de référence n'a pas été mise en service régulier conformément aux caractéristiques fondamentales notifiées, ou n'est pas utilisée conformément à ses caractéristiques fondamentales, le Comité consulte l'administration notificatrice et, sous réserve de son accord, il annule l'inscription ou lui apporte les modifications qui conviennent.

639DP § 32. Si, à la suite d'une enquête faite par le Comité aux termes Spa2 du numéro **639DO**, l'administration notificatrice n'a pas fourni au

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Comité dans les quarante-cinq jours les renseignements nécessaires ou pertinents, le Comité insère dans la colonne Observations du Fichier de référence, des observations indiquant la situation.

Section IX. Etudes et recommandations

639DQ § 33. (1) Si la demande lui en est faite par une administration quelconque et si les circonstances paraissent le justifier, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, procède à une étude des cas de présomption de contravention au présent Règlement ou de non observation de ce Règlement, ou des cas de brouillage nuisible.

639DR (2) Le Comité établit ensuite un rapport qu'il communique aux administrations intéressées et dans lequel il consigne ses conclusions et ses recommandations pour la solution du problème.

639DS § 34. Dans le cas où, à la suite d'une étude, le Comité présente à une ou plusieurs administrations des propositions ou recommandations tendant à la solution d'une question, et où, dans un délai de quatre-vingt-dix jours, il n'a pas reçu de réponse d'une ou de plusieurs de ces administrations, il considère que ses propositions ou recommandations ne sont pas acceptables par la ou les administrations qui n'ont pas répondu. Si l'administration requérante elle-même n'a pas répondu dans ce délai, le Comité ne poursuit pas l'étude.

Section X. Dispositions diverses

639DT § 35. (1) Si la demande lui en est faite par une administration quelconque et, en particulier, par l'administration d'un pays qui a besoin d'assistance spéciale, et si les circonstances paraissent le justifier, le Comité, utilisant à cet effet les moyens dont il dispose et qui conviennent aux circonstances, fournit l'assistance suivante:

- a) calcul des accroissements de température de bruit, selon le numéro **639AK**;

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- b) établissement de graphiques représentant les zones de coordination, selon le numéro 639AN;
- c) toute autre assistance de caractère technique afin que les procédures décrites dans le présent article puissent être menées à bien.

639DU (2) En présentant sa demande au Comité aux termes du numéro 639DT, l'administration lui fournit les renseignements nécessaires.

639DV § 36. Les normes techniques du Comité sont fondées sur les dispositions pertinentes du présent Règlement et de ses appendices, sur les décisions, le cas échéant, des Conférences administratives de l'Union, sur les Avis du C.C.I.R., sur l'état d'avancement de la technique radioélectrique et sur les perfectionnements de nouvelles techniques de transmission.

639DW § 37. Le Comité porte à la connaissance des administrations ses conclusions et l'exposé de leurs motifs, ainsi que toutes les modifications apportées au Fichier de référence, au moyen de la circulaire hebdomadaire dont il est question au numéro 497.

639DX § 38. Si un Membre ou Membre associé de l'Union a recours aux dispositions de l'article 28 de la Convention, le Comité, si la demande lui en est faite, met ses documents à la disposition des parties intéressées pour l'application de toute procédure prescrite dans la Convention en vue d'apporter une solution aux différends internationaux.

ANNEXE 9

Révision de l'article 14 du Règlement des radiocommunications

L'article 14 du Règlement des radiocommunications est révisé comme suit:

Le numéro 695 est remplacé par le nouveau texte suivant:

MOD **695** § 3. Afin d'éviter les brouillages:
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- les emplacements des stations d'émission et, lorsque la nature du service le permet, ceux des stations de réception sont choisis avec un soin particulier;
 - le rayonnement dans des directions inutiles, de même que la réception de rayonnements provenant de directions inutiles sont, lorsque la nature du service le permet, réduits le plus possible en tirant le meilleur parti des propriétés des antennes à effet directif;
 - le choix et l'utilisation des émetteurs et des récepteurs satisfont aux dispositions de l'article 12;
 - les conditions spécifiées au numéro 470V doivent être remplies.
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ANNEXE 10

Révision de l'article 15 du Règlement des radiocommunications

L'article 15 du Règlement des radiocommunications est révisé comme suit:

Le numéro 717 est remplacé par le nouveau texte suivant:

- MOD **717** (2) En pareil cas, l'administration intéressée peut aussi demander l'intervention du Comité, conformément aux dispositions des sections VII et VIII de l'article 9 et des sections IX et X de l'article 9A, mais elle doit alors porter à la connaissance du Comité tous les faits, y compris tous les détails techniques, les renseignements d'exploitation et des copies de la correspondance.
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ANNEXE 11

Révision de l'article 27 du Règlement des radiocommunications

L'article 27 du Règlement des radiocommunications est révisé comme suit:

Les numéros 951 et 952 sont remplacés par les nouveaux textes suivants:

- MOD 951** § 3. (1) Les stations à bord d'aéronefs peuvent communiquer avec les stations du service mobile maritime ou du service mobile maritime par satellite. Elles doivent alors se conformer aux dispositions du présent Règlement relatives à ces services.
- MOD 952** (2) Il convient qu'à cette occasion les stations à bord d'aéronefs utilisent les fréquences attribuées au service mobile maritime ou au service mobile maritime par satellite. Cependant, en raison des brouillages que peuvent causer les stations d'aéronef à des altitudes élevées, les fréquences du service mobile maritime comprises dans les bandes supérieures à 30 MHz ne doivent pas être utilisées par les stations d'aéronef, dans une zone donnée, sans l'accord préalable de toutes les administrations de la zone où ces brouillages risquent de se produire. En particulier, les stations d'aéronef fonctionnant dans la Région 1 ne doivent pas utiliser de fréquences comprises dans les bandes supérieures à 30 MHz attribuées au service mobile maritime en vertu d'un accord entre des administrations de cette Région.

ANNEXE 12

Révision de l'article 41 du Règlement des radiocommunications

L'article 41 du Règlement des radiocommunications est révisé comme suit:

Le nouveau numéro suivant est ajouté à la suite du numéro 1567:

ADD **1567A § 6.** Les stations spatiales du service d'amateur par satellite qui fonctionnent dans des bandes partagées avec d'autres services sont équipées de dispositifs appropriés à la commande de leurs émissions, pour le cas où des brouillages nuisibles seraient signalés conformément à la procédure spécifiée à l'article 15. Les administrations qui autorisent de telles stations spatiales en informeront l'I.F.R.B. et font en sorte que des stations terriennes de commande suffisantes soient installées avant le lancement, afin de garantir que tout brouillage nuisible qui serait signalé puisse être éliminé par lesdites administrations (voir le numéro **470V**).

ANNEXE 13

Révision de l'appendice 1 au Règlement des radiocommunications

L'appendice 1 au Règlement des radiocommunications est révisé comme suit:

Section A. Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes du numéro 486 du Règlement

Remplacer le paragraphe « Renseignements supplémentaires » par le nouveau texte suivant:

MOD Spa2 Renseignements supplémentaires:

- a) fréquence de référence, le cas échéant, et toute coordination requise aux termes du numéro 492A;
- b) nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.

Section B. Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes du numéro 487 du Règlement

Remplacer le paragraphe « Renseignements supplémentaires » par le nouveau texte suivant:

MOD Spa2 Renseignements supplémentaires:

- a) toute coordination requise aux termes du numéro 492A;
- b) nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.

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Section C. Caractéristiques fondamentales à fournir dans le cas d'une notification aux termes du numéro 490 du Règlement

Remplacer le paragraphe « Renseignements supplémentaires » par le nouveau texte suivant:

MOD Spa2 Renseignements supplémentaires:

- a) toute coordination requise aux termes du numéro **492A**;
 - b) nom de toute administration avec laquelle un accord a été conclu en vue de dépasser les limites prescrites dans le présent Règlement, et contenu de cet accord.
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ANNEXE 14

Révision de l'appendice 1A au Règlement des radiocommunications

L'appendice 1A au Règlement des radiocommunications est révisé comme suit:

L'appendice 1A, dans sa totalité, est remplacé par le nouveau texte suivant:

MOD Spa2

APPENDICE 1A

Fiches de notification relatives aux stations de radiocommunications spatiales et de radioastronomie

(voir l'article 9A)

Section A. Instructions générales

1. Une fiche de notification distincte doit être envoyée au Comité international d'enregistrement des fréquences pour notifier:
 - chaque nouvelle assignation de fréquence;
 - toute modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de référence international des fréquences, dénommé ci-après *Fichier de référence*;
 - toute annulation totale d'une assignation de fréquence inscrite dans le Fichier de référence.
2. En ce qui concerne les assignations de fréquence aux stations terriennes et spatiales notifiées aux termes du numéro 639BA ou du numéro 639BB, selon qu'il s'agit de fréquences d'émission ou de réception, une fiche de notification distincte doit être présentée au Comité pour chaque assignation à une station terrière ou spatiale. Dans le cas d'un système à satellites passifs, seules les assignations des fréquences d'émission et de réception aux stations terriennes doivent faire l'objet d'une notification.
3. Dans le cas d'un système à satellites comportant plusieurs stations spatiales de mêmes caractéristiques générales, une fiche distincte doit être présentée au Comité pour chaque station spatiale:

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- si elle est placée à bord d'un satellite géostationnaire;
- si elle est placée à bord d'un satellite non géostationnaire, sauf si plusieurs satellites ont les mêmes caractéristiques aux fréquences radioélectriques et les mêmes caractéristiques d'orbite (à l'exclusion de la position du nœud ascendant); en pareil cas, une fiche unique valable pour toutes ces stations spatiales peut être présentée au Comité.

4. Chaque fiche de notification doit contenir les renseignements de base suivants:

- a) le numéro de série de la fiche et la date de son envoi au Comité;
- b) le nom de l'administration dont elle émane;
- c) des renseignements suffisants pour permettre d'identifier le réseau à satellite particulier dans lequel fonctionnera la station terrière ou spatiale;
- d) l'indication que la fiche a trait:
 - 1) à la première utilisation d'une fréquence par une station;
 - 2) à une modification aux caractéristiques d'une assignation de fréquence inscrite dans le Fichier de référence (indiquer si cette modification consiste en un remplacement, une adjonction ou une annulation des caractéristiques existantes);
 - 3) à l'annulation de la totalité des caractéristiques notifiées d'une assignation;
- e) un renvoi à la circulaire hebdomadaire de l'I.F.R.B. contenant la publication anticipée requise aux termes du numéro **639AA**;
- f) les caractéristiques fondamentales définies dans les sections B, C, D, E ou F selon le cas;
- g) enfin, tout autre renseignement que l'administration juge pertinent, par exemple tout facteur pris en considération lors de l'application des dispositions de l'appendice 28 pour déterminer la zone de coordination, ainsi que l'indication éventuelle que l'assignation sera utilisée conformément au numéro **115**,

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des renseignements concernant l'utilisation de la fréquence notifiée dans le cas où cette utilisation est restreinte ou, lorsqu'il s'agit d'une fiche de notification relative à une station spatiale, si les émissions de celle-ci seront définitivement interrompues au terme d'une période déterminée.

Section B. Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence d'émission d'une station terrienne***Point 1* Fréquence assignée**

Indiquer la fréquence assignée, telle qu'elle est définie à l'article 1, en kHz jusqu'à 30 000 kHz inclus, en MHz au-dessus de 30 000 kHz (voir le numéro 85).

***Point 2* Bande de fréquences assignée**

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro 89).

***Point 3* Date de mise en service**

a) Dans le cas d'une nouvelle assignation, indiquer la date de mise en service effective ou prévue, selon le cas, de l'assignation de fréquence.

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au point 4 *a*), la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

***Point 4* Identité et emplacement de la station terrienne d'émission**

a) Indiquer le nom sous lequel la station est désignée ou le nom de la localité dans laquelle elle est située.

b) Indiquer le pays où la station est située. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

c) Indiquer les coordonnées géographiques (en degrés et minutes) de l'emplacement de l'émetteur.

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Point 5 Station(s) avec laquelle (lesquelles) la communication doit être établie

Indiquer l'identité de la (ou des) station(s) spatiale(s) de réception associée(s) à la station terrienne en se référant aux notifications y relatives ou de toute autre façon, ou bien, dans le cas d'un satellite passif, l'identité du satellite et l'emplacement de la (ou des) station(s) terrienne(s) de réception qui lui sont associée(s).

Point 6 Classe de la station et nature du service

Au moyen des symboles figurant à l'appendice 10, indiquer la classe de la station et la nature du service effectué.

Point 7 Classe d'émission, largeur de bande nécessaire et nature de la transmission

Conformément à l'article 2 et à l'appendice 5:

- a) indiquer la classe d'émission;
- b)¹ indiquer la (ou les) fréquence(s) porteuse(s) de l'émission;
- c)¹ indiquer, pour chaque porteuse, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission.

Point 8 Caractéristiques de puissance de l'émission

a)¹ Indiquer, pour chaque porteuse, la puissance de crête fournie à l'entrée de l'antenne.

b) Indiquer la puissance totale de crête et la densité maximale de puissance par Hz fournie à l'entrée de l'antenne (valeur moyenne calculée dans la bande de 4 kHz la plus défavorisée pour les porteuses inférieures à 15 GHz et dans la bande de 1 MHz la plus défavorisée pour les porteuses supérieures à 15 GHz).

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point 9 Caractéristiques de l'antenne d'émission

- a) Indiquer le gain isotrope (dB) de l'antenne dans la direction du rayonnement maximal (voir le numéro 100).
- b) Indiquer, en degrés, l'angle formé par les directions dans lesquelles la puissance est réduite de moitié (donner une description détaillée si le diagramme de rayonnement n'est pas symétrique).
- c) Joindre à la fiche le diagramme de rayonnement de l'antenne mesuré en prenant la direction du rayonnement maximal comme référence, ou indiquer le diagramme de rayonnement de référence à utiliser pour la coordination.
- d) Joindre à la fiche un schéma indiquant l'angle de site de l'horizon dans chaque azimut autour de la station terrienne.
- e) Indiquer, en degrés, par rapport au plan horizontal, l'angle de site minimal, prévu en exploitation, de la direction du rayonnement maximal de l'antenne.
- f) Indiquer, en degrés, à partir du nord vrai dans le sens des aiguilles d'une montre, les limites entre lesquelles l'azimut de la direction du rayonnement maximal de l'antenne peut varier pendant l'exploitation.
- g)¹ Indiquer le type de polarisation de l'onde émise dans la direction du rayonnement maximal; indiquer aussi le sens de la polarisation dans le cas où elle est circulaire et le plan de la polarisation dans le cas où elle est linéaire.
- h) Indiquer l'altitude en mètres de l'antenne au-dessus du niveau moyen de la mer.

Point 10¹ Caractéristiques de modulation

Pour chaque porteuse, selon la nature du signal modulant la porteuse et selon le type de modulation, indiquer les caractéristiques suivantes:

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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- a) porteuse modulée en fréquence par une bande de base téléphonique multivoie à répartition en fréquence (MRF-MF) ou par un signal pouvant être représenté par une bande de base téléphonique multivoie à répartition en fréquence: indiquer les fréquences inférieure et supérieure de la bande de base et l'excursion de fréquence efficace de la tonalité d'essai en fonction de la fréquence de la bande de base;
- b) porteuse modulée en fréquence par un signal de télévision: indiquer la norme du signal de télévision (y compris, s'il y a lieu, la norme utilisée pour la couleur), l'excursion de fréquence pour la fréquence pivot de la caractéristique de préaccentuation et cette caractéristique de préaccentuation; indiquer également, s'il y a lieu, les caractéristiques de multiplexage du signal image avec le(s) son(s) ou d'autres signaux;
- c) porteuse modulée par déplacement de phase par un signal à modulation par impulsions et codage (MIC/MDP): indiquer le débit binaire et le nombre de phases;
- d) porteuse modulée en amplitude (y compris à bande latérale unique): indiquer de façon aussi précise que possible la nature du signal modulant et le type de modulation d'amplitude utilisé;
- e) pour tous les autres types de modulation: indiquer les renseignements qui peuvent être utiles pour une étude de brouillage;
- f) quel que soit le type de modulation utilisé, indiquer, s'il y a lieu, les caractéristiques de dispersion de l'énergie.

Point 11 Horaire maximal de fonctionnement

Indiquer l'horaire maximal de fonctionnement (T.M.G.) sur la fréquence de chaque porteuse.

Point 12 Coordination

Indiquer le nom de toute administration avec laquelle l'utilisation de la fréquence a été coordonnée avec succès, conformément à l'annexe 1.

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ment aux numéros **639AJ** et **639AN** et, le cas échéant, le nom de toute administration auprès de laquelle la coordination de l'utilisation de la fréquence a été recherchée, mais non effectuée.

Point 13 Accords

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 14 Administration ou compagnie exploitante

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à l'exploitation technique des stations (voir l'article 15).

Section C. Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception d'une station terrienne*Point 1* Fréquence assignée

Indiquer la fréquence assignée de l'émission à recevoir, telle qu'elle est définie à l'article 1, en kHz jusqu'à 30 000 kHz inclus, en MHz au-dessus de 30 000 kHz (voir le numéro **85**).

Point 2 Bande de fréquences assignée

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro **89**).

Point 3 Date de mise en service

a) Dans le cas d'une nouvelle assignation, indiquer la date effective ou prévue, selon le cas, à laquelle commence la réception sur la fréquence assignée.

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b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au point 4 a), la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité et emplacement de la station terrienne de réception

a) Indiquer le nom sous lequel la station terrienne de réception est désignée ou le nom de la localité dans laquelle elle est située.

b) Indiquer le pays où la station terrienne de réception est située. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

c) Indiquer les coordonnées géographiques (en degrés et minutes) de l'emplacement du récepteur.

Point 5 Station(s) avec laquelle (lesquelles) la communication doit être établie

Indiquer l'identité de la (ou des) station(s) spatiale(s) d'émission associée(s) à la station terrienne, en se référant aux notifications y relatives ou de toute autre façon appropriée, ou bien, dans le cas d'un satellite passif, l'identité du satellite et de la (ou des) station(s) terrienne(s) d'émission qui lui sont associée(s).

Point 6 Classe de la station et nature du service

Au moyen des symboles figurant à l'appendice 10, indiquer la classe de la station et la nature du service effectué.

Point 7 Classe d'émission, largeur de bande nécessaire et nature de la transmission à recevoir

Conformément à l'article 2 et à l'appendice 5:

a) indiquer la classe d'émission de la transmission à recevoir;

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b)¹ indiquer la (ou les) fréquence(s) porteuse(s) de la transmission à recevoir;

c)¹ indiquer, pour chaque fréquence porteuse à recevoir, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission.

Point 8 Caractéristiques de l'antenne de réception de la station terrienne

a) Indiquer le gain isotrope de l'antenne (dB) dans la direction du rayonnement maximal (voir le numéro 100).

b) Indiquer, en degrés, l'angle formé par les directions dans lesquelles la puissance est réduite de moitié (donner une description détaillée si le diagramme de rayonnement n'est pas symétrique).

c) Joindre à la fiche le diagramme de rayonnement de l'antenne mesuré en prenant la direction du rayonnement maximal comme référence, ou indiquer le diagramme de rayonnement de référence à utiliser pour la coordination.

d) Joindre à la fiche un schéma indiquant l'angle de site de l'horizon dans chaque azimut autour de la station terrienne.

e) Indiquer, en degrés, par rapport au plan horizontal, l'angle de site minimal, prévu en exploitation, de la direction du rayonnement maximal de l'antenne.

f) Indiquer, en degrés, à partir du Nord vrai dans le sens des aiguilles d'une montre, les limites entre lesquelles l'azimut de la direction du rayonnement maximal de l'antenne peut varier pendant l'exploitation.

g) Indiquer l'altitude en mètres de l'antenne au-dessus du niveau moyen de la mer.

Point 9 Température de bruit

Indiquer, en kelvins, la plus faible température équivalente de bruit de la liaison par satellite (voir le numéro 103A) en fonc-

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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tionnement dans les conditions de « ciel calme ». Cette valeur est à indiquer pour la valeur nominale de l'angle de site dans le cas où la station d'émission associée est placée à bord d'un satellite géostationnaire et, dans les autres cas, pour la valeur minimale de l'angle de site.

Point 10 Horaire maximal de réception

Indiquer l'horaire maximal de réception (T.M.G.) sur la fréquence de chaque porteuse.

Point 11 Coordination

Indiquer le nom de toute administration avec laquelle l'utilisation de la fréquence a été coordonnée avec succès, conformément aux numéros 639AJ et 639AN et, le cas échéant, le nom de toute administration auprès de laquelle la coordination de l'utilisation de la fréquence a été recherchée, mais non effectuée.

Point 12 Accords

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 13 Administration ou compagnie exploitante

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 15).

Section D. Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence d'émission de stations spatiales

Point 1 Fréquence assignée

Indiquer la fréquence assignée, telle qu'elle est définie à l'article 1, en kHz jusqu'à 30 000 kHz inclus, en MHz au-dessus

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de 30 000 kHz (voir le numéro 85). Il convient que chaque faisceau de rayonnement d'antenne fasse l'objet d'au moins une fiche de notification distincte.

Point 2 Bande de fréquences assignée

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro 89).

Point 3 Date de mise en service

a) Dans le cas d'une nouvelle assignation, indiquer la date de mise en service effective ou prévue, selon le cas, de l'assignation de fréquence.

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au point 4, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité de la ou des stations spatiales

Indiquer l'identité de la ou des stations spatiales.

Point 5 Renseignements relatifs à l'orbite

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale prévue sur l'orbite des satellites géostationnaires et les tolérances prévues de longitude et d'inclinaison. Indiquer également:

- 1) l'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site d'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
- 2) l'arc de l'orbite des satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;

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- 3) si l'arc dont il est question à l'alinéa 2) ci-dessus est plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

Note: Les arcs dont il est question aux alinéas 1) et 2) sont à définir par la longitude géographique de leurs extrémités sur l'orbite des satellites géostationnaires.

- b) Dans le cas d'une ou de plusieurs stations spatiales placées à bord d'un ou de plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en kilomètres) de l'apogée et du périgée de la (ou des) station(s) spatiale(s) ainsi que le nombre des satellites utilisés.

Point 6 Zone de service

Indiquer la zone de service (ou les zones de service) prévue(s) sur la Terre ou le nom de la localité et du pays où est (ou sont) située(s) la (ou les) station(s) de réception associée(s) à la (ou aux) station(s) spatiale(s).

Point 7 Classe de station et nature du service

Au moyen des symboles figurant à l'appendice 10, indiquer la classe de la (ou des) station(s) et la nature du service effectué.

Point 8 Classe d'émission, largeur de bande nécessaire et nature de la transmission

Conformément à l'article 2 et à l'appendice 5:

- a) indiquer la classe d'émission de la transmission;
- b)¹ indiquer la (ou les) fréquence(s) porteuse(s) de la transmission;
- c)¹ indiquer, pour chaque porteuse, la classe d'émission, la largeur de bande nécessaire et la nature de la transmission.

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point 9 Caractéristiques de puissance de l'émission

a)¹ Indiquer pour chaque porteuse la puissance de crête fournie à l'entrée de l'antenne.

b) Indiquer la puissance totale de crête et la densité maximale de puissance par Hz fournie à l'entrée de l'antenne (valeur moyenne calculée dans la bande de 4 kHz la plus défavorisée pour les porteuses inférieures à 15 GHz, ou dans la bande de 1 MHz la plus défavorisée pour les porteuses supérieures à 15 GHz).

Point 10 Caractéristiques de l'antenne d'émission de la station spatiale

Pour chaque zone de service:

a) dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain de l'antenne d'émission de la station spatiale au moyen de contours de gain tracés sur une carte de la surface terrestre. Indiquer le gain isotrope sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale, et ainsi de suite de 10 dB en 10 dB si nécessaire;

b) dans le cas d'une station spatiale placée à bord d'un satellite non géostationnaire, indiquer le gain isotrope de l'antenne d'émission de la station spatiale dans la direction principale de rayonnement et le diagramme de rayonnement de cette antenne dans les directions qui peuvent rencontrer la surface terrestre, en prenant pour référence le gain dans la direction principale de rayonnement;

c)¹ indiquer le type de polarisation de l'antenne, le sens de la polarisation dans le cas où elle est circulaire et le plan de la polarisation dans le cas où elle est linéaire; indiquer aussi le taux d'ellipticité le plus défavorable dans le faisceau à demi-puissance;

d) dans le cas d'un satellite géostationnaire, indiquer la précision du pointage de l'antenne.

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point II¹ Caractéristiques de modulation

Pour chaque fréquence porteuse, selon la nature du signal modulant la porteuse et selon le type de modulation, indiquer les caractéristiques suivantes:

- a) porteuse modulée en fréquence par une bande de base téléphonique multivoie à répartition en fréquence (MRF-MF) ou par un signal pouvant être représenté par une bande de base téléphonique multivoie à répartition en fréquence: indiquer les fréquences inférieure et supérieure de la bande de base et l'excursion de fréquence efficace de la tonalité d'essai en fonction de la fréquence de la bande de base;
- b) porteuse modulée en fréquence par un signal de télévision: indiquer la norme du signal de télévision (y compris, s'il y a lieu, la norme utilisée pour la couleur), l'excursion de fréquence pour la fréquence pivot de la caractéristique de préaccentuation et cette caractéristique de préaccentuation; indiquer également, s'il y a lieu, les caractéristiques de multiplexage du signal image avec le(s) son(s) ou d'autres signaux;
- c) porteuse modulée par déplacement de phase par un signal à modulation par impulsions et codage (MIC/MDP): indiquer le débit binaire et le nombre de phases;
- d) porteuse modulée en amplitude (y compris à bande latérale unique): indiquer de façon aussi précise que possible la nature du signal modulant et le genre de modulation d'amplitude utilisé;
- e) pour tous les autres types de modulation: indiquer les renseignements qui peuvent être utiles pour une étude de brouillage;
- f) quel que soit le type de modulation utilisé: indiquer, s'il y a lieu, les caractéristiques de dispersion de l'énergie.

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point 12 Horaire maximal de fonctionnement

Indiquer l'heure maximal de fonctionnement (T.M.G.) sur la fréquence de chaque porteuse.

Point 13 Coordination

Indiquer le nom de toute administration ou groupe d'administrations avec lequel l'utilisation du réseau à satellite auquel appartient la station spatiale a été coordonnée avec succès, conformément au numéro **639AJ**.

Point 14 Accords

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 15 Administration ou compagnie exploitante

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages, la qualité des émissions et les questions relatives à l'exploitation technique des stations (voir l'article 15).

Section E. Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception de stations spatiales*Point 1 Fréquence assignée*

Indiquer la fréquence assignée de l'émission à recevoir, telle qu'elle est définie à l'article 1, en kHz jusqu'à 30 000 kHz inclus, et en MHz au-dessus de 30 000 kHz (voir le numéro **85**). Il convient que chaque faisceau de rayonnement d'antenne fasse l'objet d'au moins une fiche de notification distincte.

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Point 2 Bande de fréquences assignée

Indiquer la largeur de la bande de fréquences assignée, en kHz (voir le numéro 89).

Point 3 Date de mise en service

a) Dans le cas d'une nouvelle assignation, indiquer la date effective ou prévue, selon le cas, à laquelle commence la réception sur la fréquence assignée.

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales d'une assignation, telles qu'elles sont spécifiées dans la présente section, à l'exception de celle qui figure au point 4, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

Point 4 Identité de la ou des stations spatiales de réception

Indiquer l'identité de la (ou des) station(s) spatiale(s) de réception.

Point 5 Renseignements relatifs à l'orbite

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale prévue sur l'orbite des satellites géostationnaires et les tolérances prévues de longitude et d'inclinaison. Indiquer également:

- 1) l'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site d'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
- 2) l'arc de l'orbite des satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;
- 3) si l'arc dont il est question à l'alinéa 2) ci-dessus est plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

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Note: Les arcs dont il est question aux alinéas 1) et 2) sont à définir par la longitude géographique de leurs extrémités sur l'orbite des satellites géostationnaires.

b) Dans le cas d'une ou de plusieurs stations spatiales placées à bord d'un ou de plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en kilomètres) de l'apogée et du périgée de la (ou des) station(s) spatiale(s) ainsi que le nombre des satellites utilisés.

Point 6 Station(s) terrienne(s) d'émission associée(s) à la (ou aux) station(s) spatiale(s)

Indiquer l'identité de la (ou des) station(s) terrienne(s) d'émission associée(s) à la (ou aux) station(s) spatiale(s), en se référant aux notifications y relatives ou de toute autre façon.

Point 7 Classe de station et nature du service

Au moyen des symboles figurant à l'appendice 10, indiquer la classe de la (ou des) station(s) et la nature du service effectué.

Point 8 Classe d'émission, largeur de bande nécessaire et nature de la (ou des) transmission(s) à recevoir

Conformément à l'article 2 et à l'appendice 5:

a) indiquer la classe d'émission de (ou des) transmission(s) à recevoir;

b)¹ indiquer la (ou les) fréquence(s) porteuse(s) de la (ou des) transmission(s) à recevoir;

c)¹ indiquer, pour chaque fréquence porteuse à recevoir, la classe d'émission, la largeur de bande nécessaire et la nature de la (ou des) transmission(s) à recevoir.

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point 9 Caractéristiques de l'antenne de réception de la station spatiale

Pour chaque faisceau d'antenne de réception:

- a) dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain de l'antenne de réception de la station spatiale au moyen de contours de gain tracés sur une carte de la surface terrestre. Indiquer le gain isotrope sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale, et ainsi de suite de 10 dB en 10 dB si nécessaire;
- b) dans le cas d'une station spatiale placée à bord d'un satellite non géostationnaire, indiquer le gain isotrope de l'antenne de réception de la station spatiale dans la direction principale de rayonnement et le diagramme de rayonnement de cette antenne dans les directions qui peuvent rencontrer la surface terrestre, en prenant pour référence le gain dans la direction principale de rayonnement;
- c)¹ indiquer le type de polarisation de l'antenne, le sens de la polarisation dans le cas où elle est circulaire et le plan de la polarisation dans le cas où elle est linéaire; indiquer aussi le taux d'ellipticité le plus défavorable dans le faisceau à demi-puissance;
- d) dans le cas d'un satellite géostationnaire, indiquer la précision du pointage de l'antenne.

Point 10 Température de bruit

Indiquer, en kelvins, la température de bruit de l'ensemble du système de réception à l'entrée du récepteur de la station spatiale.

Point 11 Horaire maximal de réception

Indiquer l'horaire maximal de réception (T.M.G.) sur la fréquence de chaque porteuse.

¹ Cette information n'est nécessaire que si elle a servi comme base pour effectuer la coordination avec une autre administration.

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Point 12 Coordination

Indiquer le nom de toute administration ou groupe d'administrations avec lequel l'utilisation du réseau à satellite auquel appartient la station spatiale a été coordonnée avec succès, conformément au numéro **639AJ**.

Point 13 Accords

Indiquer, s'il y a lieu, le nom de toute administration avec laquelle un accord a été conclu pour dépasser les limites prescrites dans le présent Règlement, ainsi que le contenu de cet accord.

Point 14 Administration ou compagnie exploitante

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 15).

Section F. Caractéristiques fondamentales à fournir dans le cas de la notification d'une fréquence de réception de stations de radioastronomie*Point 1 Fréquence observée*

Indiquer le centre de la bande de fréquences observée, en kHz jusqu'à 30 000 kHz inclus, en MHz au-dessus de 30 000 kHz.

Point 2 Date de mise en service

a) Indiquer la date effective ou prévue, selon le cas, à laquelle commence la réception dans la bande de fréquences.

b) Lors d'une modification de l'une quelconque des caractéristiques fondamentales spécifiées dans la présente section, à l'exception de celle qui figure au point *3 b)*, la date à indiquer doit être celle de la dernière modification effective ou prévue, selon le cas.

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Point 3 Nom et emplacement de la station

a) Incrire les lettres « RA ».

b) Indiquer le nom sous lequel la station est désignée ou le nom de la localité dans laquelle elle est située, ou bien ces deux noms.

c) Indiquer le pays où la station est située. Il convient d'utiliser à cet effet les symboles figurant dans la Préface à la Liste internationale des fréquences.

d) Indiquer les coordonnées géographiques (en degrés et minutes) de l'emplacement de la station.

Point 4 Largeur de bande

Indiquer la largeur de la bande de fréquences (en kHz) sur laquelle portent les observations.

Point 5 Caractéristiques de l'antenne

Indiquer le type et les dimensions de l'antenne, sa surface effective et les limites entre lesquelles peuvent varier son azimut et son angle de site.

Point 6 Horaire maximal de réception

Indiquer l'heure maximal de réception (T.M.G.) dans la bande de fréquences indiquée au point 4.

Point 7 Température de bruit

Indiquer, en kelvins, la température de bruit de l'ensemble du système de réception.

Point 8 Classe des observations

Indiquer la classe des observations effectuées dans la bande de fréquences indiquée au point 4. Les observations de la classe A sont celles dans lesquelles la sensibilité des appareils n'est pas

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un facteur essentiel. Les observations de la classe B sont celles que l'on ne peut effectuer qu'avec des récepteurs à faible bruit très perfectionnés.

Point 9 Administration ou compagnie exploitante

Indiquer le nom de l'administration ou de la compagnie exploitante et les adresses postale et télégraphique de l'administration à laquelle il convient d'envoyer toute communication urgente concernant les brouillages et les questions relatives à l'exploitation technique des stations (voir l'article 15).

ANNEXE 15

Adjonction d'un nouvel appendice (appendice 1B) au Règlement des radiocommunications

Le nouvel appendice suivant est ajouté au Règlement des radiocommunications à la suite de l'appendice 1A:

ADD Spa2

APPENDICE 1B

Renseignements à fournir pour la publication anticipée relative à un réseau à satellite

(voir l'article 9A)

Section A. Instructions générales

- Point 1* Les renseignements sont fournis séparément pour chaque réseau à satellite.
- Point 2* Les renseignements à fournir pour chaque réseau à satellite comprennent les caractéristiques générales (section B) et, selon le cas, les caractéristiques pour le sens Terre vers espace (section C), les caractéristiques pour le sens espace vers Terre (section D), et les caractéristiques pour les liaisons espace-espace (section E).

Section B. Caractéristiques générales à fournir pour un réseau à satellite

- Point 1* Identité du réseau à satellite

Indiquer l'identité du réseau à satellite au moyen de renseignements suffisants pour éviter toute ambiguïté et, le cas échéant, l'identité du système à satellites dont il constituera un élément.

- Point 2* Date de mise en service

Indiquer la date prévue pour la première mise en service du réseau à satellite.

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Point 3 Administration ou groupe d'administrations fournissant les renseignements pour la publication anticipée

Indiquer le nom de l'administration ou les noms des administrations du groupe fournissant les renseignements relatifs au réseau à satellite aux fins de leur publication anticipée, ainsi que les adresses postale et télégraphique de la ou des administration(s) à laquelle (auxquelles) il convient d'envoyer toute communication.

Point 4 Renseignements relatifs à l'orbite de la (ou des) station(s) spatiale(s)

a) Dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer la longitude géographique nominale prévue sur l'orbite des satellites géostationnaires et les tolérances prévues de longitude et d'inclinaison. Indiquer également:

- 1) l'arc de l'orbite des satellites géostationnaires sur lequel la station spatiale est visible sous un angle de site d'au moins 10° à partir des stations terriennes ou zones de service qui lui sont associées;
- 2) l'arc de l'orbite des satellites géostationnaires le long duquel la station spatiale pourrait assurer le service requis avec les stations terriennes ou zones de service qui lui sont associées;
- 3) si l'arc dont il est question à l'alinéa 2) ci-dessus est plus petit que celui dont il est question à l'alinéa 1) précédent, donner les raisons de cette différence.

Note: Les arcs dont il est question aux alinéas 1) et 2) sont à définir par la longitude géographique de leurs extrémités sur l'orbite des satellites géostationnaires.

b) Dans le cas d'une ou de plusieurs stations spatiales placées à bord d'un ou de plusieurs satellites non géostationnaires, indiquer l'inclinaison de l'orbite, la période et les altitudes (en

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kilomètres) de l'apogée et du périgée de la (ou des) station(s) spatiale(s) ainsi que le nombre des satellites de mêmes caractéristiques utilisés.

Section C. Caractéristiques du réseau à satellite pour le sens « Terre vers espace »***Point 1 Zone(s) de service « Terre vers espace »***

Pour chaque antenne de réception de la station spatiale, indiquer la (ou les) zone(s) de service associée(s) sur la surface de la Terre.

Point 2 Classe des stations et nature du service

Pour chaque zone de service « Terre vers espace », indiquer, au moyen des symboles figurant à l'appendice 10, la classe des stations du réseau à satellite et la nature du service à effectuer.

Point 3 Gamme de fréquences

Pour chaque zone de service « Terre vers espace », indiquer la gamme de fréquences dans laquelle les porteuses seront situées.

Point 4 Caractéristiques de puissance de l'onde émise

a) Pour chaque zone de service « Terre vers espace », indiquer la densité spectrale maximale de puissance (W/Hz) fournie à l'antenne des stations terriennes d'émission (la bande dans laquelle la moyenne est calculée dépend de la nature du service dont il s'agit).

b) Si ce renseignement est disponible, indiquer pour chaque zone de service « Terre vers espace », en prenant pour référence le niveau isotrope, le diagramme de rayonnement réel de l'antenne de la station terrière d'émission pour lequel la densité spectrale de puissance isotrope rayonnée équivalente en dehors du faisceau principal est la plus élevée.

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Point 5 Caractéristiques des antennes de réception de la station spatiale

Pour chaque zone de service « Terre vers espace »:

- a) dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain estimé de l'antenne de réception de la station spatiale au moyen de contours de gain tracés sur une carte de la surface terrestre; indiquer le gain isotrope sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale et ainsi de suite de 10 dB en 10 dB, si nécessaire;
- b) dans le cas d'une station spatiale placée à bord d'un satellite non géostationnaire, indiquer le gain isotrope estimé de l'antenne de réception de la station spatiale dans la direction principale de rayonnement et le diagramme de rayonnement de cette antenne dans les directions qui peuvent rencontrer la surface terrestre, en prenant pour référence le gain dans la direction principale de rayonnement.

Point 6 Température de bruit de la station spatiale de réception

Pour chaque zone de service « Terre vers espace », indiquer, lorsqu'il n'est pas fait usage d'un simple répéteur-changeur de fréquence à bord de la station spatiale, la température de bruit la plus basse de l'ensemble du système de réception.

Section D. Caractéristiques du réseau à satellite dans le sens espace vers Terre**Point 1 Zone(s) de service « espace vers Terre »**

Pour chaque antenne d'émission de la station spatiale, indiquer la (ou les) zone(s) de service associée(s) sur la surface de la Terre.

Point 2 Classe des stations et nature du service

Pour chaque zone de service « espace vers Terre », indiquer, au moyen des symboles figurant à l'appendice 10, la classe des stations du réseau à satellite et la nature du service à effectuer.

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Point 3 Gamme de fréquences

Pour chaque zone de service « espace vers Terre », indiquer la gamme de fréquences dans laquelle les porteuses seront situées.

Point 4 Caractéristiques de puissance de l'émission

Pour chaque zone de service « espace vers Terre », indiquer la densité spectrale maximale de puissance (W/Hz) fournie à l'antenne d'émission de la station spatiale (la bande dans laquelle la moyenne est calculée dépend de la nature du service dont il s'agit).

Point 5 Caractéristiques des antennes d'émission de la station spatiale

Pour chaque zone de service « espace vers Terre »:

- a) dans le cas d'une station spatiale placée à bord d'un satellite géostationnaire, indiquer le gain estimé de l'antenne d'émission de la station spatiale au moyen de contours de gain tracés sur une carte de la surface terrestre; indiquer le gain isotrope sur chaque contour correspondant à un gain inférieur de 2, 4, 6, 10, 20 dB à la valeur maximale, et ainsi de suite de 10 dB en 10 dB, si nécessaire;
- b) dans le cas d'une station spatiale placée à bord d'un satellite non géostationnaire, indiquer le gain isotrope estimé de l'antenne d'émission de la station spatiale dans la direction principale d'émission et le diagramme de rayonnement de cette antenne dans les directions qui peuvent rencontrer la surface terrestre, en prenant pour référence le gain dans la direction principale d'émission.

Point 6 Caractéristiques de réception des stations terriennes

- a) Pour chaque zone de service « espace vers Terre », indiquer, lorsqu'il n'est pas fait usage d'un simple répéteur-changeur de fréquence à bord de la station spatiale, la température de bruit la plus basse de l'ensemble du système de réception des stations terriennes.

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Pour chaque zone de service « espace vers Terre » et pour chaque utilisation¹ projetée, indiquer, lorsqu'il est fait usage de simples répéteurs-changeurs de fréquence à bord de la station spatiale, la plus faible température de bruit équivalente de liaison par satellite et la valeur associée du gain de transmission évalué depuis la sortie de l'antenne de réception de la station spatiale jusqu'à la sortie de l'antenne de réception de la station terrienne. Pour chaque utilisation projetée, indiquer également à quelle(s) antenne(s) de réception de la station spatiale chaque simple répéteur-changeur de fréquence sera connecté.

b) Si ce renseignement est disponible, indiquer pour chaque zone de service « espace vers Terre », en prenant pour référence le niveau isotrope, le diagramme de rayonnement réel de l'antenne de la station terrienne de réception dont le niveau en dehors du faisceau principal est le plus élevé. Lorsqu'il est fait usage de simples répéteurs-changeurs de fréquence à bord de la station spatiale, indiquer également, si possible, le diagramme qui est associé à chacune des températures de bruit équivalentes de liaison par satellite indiquées ci-dessus.

Section E. Caractéristiques à fournir pour les liaisons espace-espace

Si le réseau à satellite est relié à un ou plusieurs autres réseaux à satellite au moyen de liaisons espace-espace, indiquer :

- a)* l'identité du (ou des) réseau(x) à satellite auxquels le réseau à satellite considéré est relié;
- b)* les bandes de fréquences d'émission et de réception;
- c)* les classes d'émission;
- d)* les puissances isotropes rayonnées équivalentes nominales dans l'axe des faisceaux d'antenne.

¹ On considérera qu'il s'agit d'utilisations différentes lorsqu'il est fait usage de types différents de porteuse (par leur densité spectrale maximale de puissance) ou de types différents de stations terriennes de réception (par leur gain d'antenne de réception).

ANNEXE 16**Révision de l'appendice 9 au Règlement des radiocommunications**

L'appendice 9 au Règlement des radiocommunications est révisé comme suit:

Le titre de l'appendice 9 est remplacé par le nouveau titre suivant:

APPENDICE 9**MOD Spa2****Documents de service**

(voir les articles 8, 9, 9A, 10 et 20)

Liste I. Liste internationale des fréquences

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Les renvois 1 à 8 sont remplacés par les nouveaux renvois suivants (les renvois 3 et 5 demeurent inchangés):

MOD Spa² ¹ En ce qui concerne les stations de télévision de la Région I, la fréquence indiquée dans cette colonne est celle de l'onde porteuse du son ou de l'image (voir l'appendice I au Règlement des radiocommunications). ² Voir les numéros 607 et 608 du Règlement des radiocommunications. ³ Lorsqu'un symbole figure dans cette colonne au lieu d'une date, il s'agit d'une assignation notifiée en exécution des dispositions du numéro 2/2 de l'Accord de la Conférence administrative extraordinaire des radiocommunications, Genève, 1951, ou, dans les bandes de fréquences au-dessus de 27 500 kHz, d'une assignation dont la notification a été reçue par l'I.F.R.B. avant le 1^{er} avril 1952. ⁴ Voir l'appendice I au Règlement des radiocommunications. ⁵ Les Colonnes 12a et 12b contiennent uniquement des nombres ou des lettres dont la signification est donnée dans la Préface à la Liste internationale des fréquences. ⁶ Voir la section II de l'article 9 et la section IV de l'article 9A du Règlement des radiocommunications. ⁷ Voir les numéros 516, 517, 621, 622, 639BS, 639DM, 639DO et 639DP du Règlement des radiocommunications. ⁸ Y compris les dates dont il est question dans la section II de l'article 9 et la section IV de l'article 9A du Règlement des radiocommunications.

Le titre de la Liste VIIIA est remplacé par le nouveau titre suivant:

Liste VIIIA — Nomenclature des stations de radiocommunications spatiales et des stations de radioastronomie¹

MOD Spa

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Le titre de la section I est remplacé par le nouveau titre suivant:

I = Stations terrestres du service fixe par satellite

Les en-têtes de la section / sont remplacés par les nouveaux en-têtes suivants:

Pour les cas où les données doivent être fournies voir les numéros 639BA, 639BB et 639BC.

Le titre de la section 2 est remplacé par le nouveau titre suivant:

2 - Stations spatiales du service fixe par satellite

Les on-étapes de la section 3 sont remplacés par les nouveaux en-étapes suivants:

ANN 16 (APP 9)

Le titre de la section 3 est remplacé par le nouveau titre suivant:

3.—Stations terriennes du service d'exploration de la Terre par satellite

Les en-têtes de la section 3 sont remplacés par les nouveaux en-têtes suivants:

Observations		Méthodes spéciales de modulation.	
Réception	Emission	Fréquence (en MHz ou GHz)	Nombre sous lequel la station est désignée ou nom de la localité dans l'agence elle-même
		Pulsation (en KHz)	Station
		Fréquence (en MHz ou GHz)	Code de modulations photographiques (en degrés par minutes) de l'emplacement de la
		Télécommunication	est située
		Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et le cas échéant
		Pulsation	Pulsation (en KHz)
		Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission
		Télémesure	Fréquence (en MHz ou GHz)
		Fréquence (en MHz ou GHz)	Classe d'émission, largeur de bande nécessaire et nature de la transmission
		Pour toute	Classe d'émission, largeur de bande nécessaire et nature de la transmission
		Fréquence (en MHz ou GHz)	Fréquence (en MHz ou GHz)
		Réception des renseignements nécessaires et la Tercce d'émission, largeur de bande nécessaire et la Tercce d'exposition	Fréquence (en MHz ou GHz)
		Admission d'information ou compacte exploitante	la communication doit être stable
		Identité de la (ou des) station(s) spatielle(s) associée(s) avec l'agence (les agences)	la communication doit être stable

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Le titre de la section 4 est remplacé par le nouveau titre suivant:

4 — Stations spatiales du service d'exploration de la Terre par satellite

Il est à noter que les nouveaux éléments de la section 4 sont remplacés par les nouveaux éléments suivants:

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Le titre de la section 5 est remplacé par le nouveau titre suivant:

5 — Stations terriennes du service de radiorepérage par satellite

Les en-têtes de la section 5 sont remplacés par les nouveaux en-têtes suivants:

		Observations	
		Méthodes spéciales de modulation.	
Réception	Emission	Administration ou compactage exploitante	
		la communication doit être établie entre l'antenne(s) spatiale(s) associée(s) avec l'antenne(s) locale(s)	
		Fréquence (en MHz ou GHz)	Fréquence (en MHz ou GHz)
		Pour toute	Pour toute
		Fréquence de la transmission, largeur de bande nécessaire et nature de la transmission	Fréquence de la transmission, largeur de bande nécessaire et nature de la transmission
		Fréquence (en MHz ou GHz)	Fréquence (en MHz ou GHz)
		Télémesure	Télémesure
		Fréquence de la transmission	Fréquence de la transmission
		Claasse d'émission, largeur de bande nécessaire et nature de la transmission	Claasse d'émission, largeur de bande nécessaire et nature de la transmission
		Puissance (en KWh)	Puissance (en KWh)
		Le cas échéant	Le cas échéant
		nature de la transmission	nature de la transmission
		Claasse d'émission, largeur de bande nécessaire et nature de la transmission	Claasse d'émission, largeur de bande nécessaire et nature de la transmission
		Frequence (en MHz ou GHz)	Frequence (en MHz ou GHz)
		Emissions	Emissions
		Coordonnées géographiques (en degrés ci minutes) de l'emplacement de la station	Coordonnées géographiques (en degrés ci minutes) de la localité dans laquelle elle
		est située	est située
1	1	Nom sous lequel la station est désignée ou nom de la localité dans laquelle elle	Nom sous lequel la station est désignée ou nom de la localité dans laquelle elle

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Le titre de la section 6 est remplacé par le nouveau titre suivant:

6—Stations spatiales du service de radiorepérage par satellite

Les en-têtes de la section 6 sont remplacés par les nouveaux en-têtes suivants:

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*Le tire de la section 7 est remplacé par le nouveau tire suivant:***MOD Spac2****7 — Stations terriennes du service de recherche spatiale***Les en-têtes de la section 7 sont remplacés par les nouveaux en-têtes suivants:***MOD Spac2***Les en-têtes de la section 7 sont remplacés par les nouveaux en-têtes suivants:*

1	2	3a	3b	3c	4a	4b	5a	5b	6a	6b	7	8	9
<i>Nom sous lequel la station est désignée ou nom de la localité dans laquelle elle est située</i>													
<i>Coordonnées géographiques (en degrés et minutes) de l'emplacement de la station</i>													
<i>Fréquence (en MHz ou GHz) de transmission, largeur de bande nécessaire et le cas échéant, nature de la transmission</i>													
<i>Fréquence (en MHz ou GHz) de réception, largeur de bande nécessaire et le cas échéant, nature de la transmission</i>													
<i>Puissance (en KW) de transmission, largeur de bande nécessaire et le cas échéant, nature de la transmission</i>													
<i>Télécommande, nature de la transmission, largeur de bande nécessaire et le cas échéant, nature de la transmission</i>													
<i>Fréquence (en MHz ou GHz) d'émission, largeur de bande nécessaire et le cas échéant, nature de la transmission</i>													
<i>Fréquence (en MHz ou GHz) d'écoute</i>													
<i>Observations</i>													
<i>Toute particularité éventuelle de la station et objet des recherches.</i>													
<i>Administrations ou compagnie exploitante</i>													
<i>La communication doit être établie avec l'autre(s) associé(s) avec laquelle(s) (lesquelles)</i>													

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Le titre de la section 8 est remplacé par le nouveau titre suivant:

8 — Stations spatiales du service de recherche spatiale

Les en-têtes de la section 8 sont remplacés par les nouveaux en-têtes suivants:

MOD Spatiale		MOD Spatiale										
Emission		Réception										
Identité de la station	Fréquence (en MHz ou GHz)	Pour toute	Puissance (en watts)	Fréquence (en MHz ou GHz)	Fréquence de la transmission, largeur de bande nécessaire et	Emisiteur	Puissance (en watts)	Fréquence (en MHz ou GHz)	Fréquence de la transmission, largeur de bande nécessaire et	Emisiteur	Réception	Observations
1 2a 2b 2c 3a 3b 3c 4a 4b 4c 5a 5b 6 7 8	Zonage(s) de service sur la Terre ou nom de la localité et du pays où est (ou son) siège(s) de service(s) (la ou les) station(s) terrestre(s) associée(s)	Administratrice ou compagnie exploitante	1) Dans le cas d'un satellite de la Terre, renseignements relatifs à l'orbite: a) angle d'inclinaison de l'orbite; b) période de l'objet spatial; c) altitude de l'apogée en km; d) altitude du périhélie en km; e) nombre de satellites utilisés, le cas échéant; f) dans le cas d'un satellite géostationnaire: — longitude géographique nominale sur l'orbite des satellites géostationnaires; — arc de l'orbite des satellites géostationnaires le long duquel la station spatiale pourra assurer le service requis avec les stations terrestres ou les zones de service qui lui sont associées. 2) Dans le cas d'une sonde spatiale, indications générales sur sa trajectoire. 3) Méthodes spéciales de modulation.									

Le titre de la section 9 est remplacé par le nouveau titre suivant:

9 — Stations de service de radioastronomie

ANNEXE 17**Révision de l'appendice 10 au Règlement des radiocommunications**

L'appendice 10 au Règlement des radiocommunications est révisé comme suit:

La notation FE est biffée.

Les notations EC, TC, TH, TM et TN sont remplacées par les nouvelles notations suivantes:

MOD	EC	station spatiale du service fixe par satellite
MOD	TC	station terrienne du service fixe par satellite
MOD	TH	station terrienne du service de recherche spatiale
MOD	TM	station terrienne du service de météorologie par satellite
MOD	TN	station terrienne du service de radionavigation par satellite

Les nouvelles notations suivantes sont insérées à leur ordre alphabétique:

ADD	EA	station spatiale du service d'amateur par satellite
ADD	EB	station spatiale du service de radiodiffusion par satellite (radiodiffusion sonore)
ADD	EV	station spatiale du service de radiodiffusion par satellite (télévision)
ADD	TA	station terrienne d'exploitation spatiale du service d'amateur par satellite
ADD	TE	station terrienne d'émission
ADD	TF	station terrienne fixe du service de radiopéage par satellite
ADD	TL	station terrienne mobile du service de radiopéage par satellite
ADD	TP	station terrienne de réception
ADD	TT	station terrienne du service d'exploitation spatiale

ANNEXE 18

**Adjonction d'un nouvel appendice
(appendice 28) au Règlement des radiocommunications**

Le nouvel appendice suivant est ajouté au Règlement des radiocommunications à la suite de l'appendice 27:

APPENDICE 28

Méthode de détermination de la zone de coordination d'une station terrienne dans les bandes de fréquences comprises entre 1 et 40 GHz partagées entre services de radiocommunications spatiales et de radiocommunications de Terre**1. Objectifs**

On détermine la zone de coordination (voir le numéro **103D**) en calculant, dans tous les azimuts à partir de la station terrienne, les distances de coordination (voir le numéro **103B**) et en traçant à l'échelle sur une carte appropriée le contour de coordination (voir le numéro **103C**).

Il faut souligner que l'existence ou l'installation d'une station de Terre à l'intérieur de la zone de coordination d'une station terrienne n'empêche pas forcément le bon fonctionnement de la station terrienne ou de cette station de Terre, car la méthode est fondée sur les hypothèses les plus défavorables pour ce qui concerne les brouillages.

Pour déterminer la zone de coordination, on peut envisager deux cas:

- 1) celui de la station terrienne à la réception (susceptible d'être brouillée par des stations de Terre);
- 2) celui de la station terrienne à l'émission (susceptible de brouiller des stations de Terre).

Quand une station terrienne est destinée à fonctionner avec diverses classes d'émissions, les paramètres de station terrienne à utiliser pour la détermination du contour de coordination doivent être ceux qui conduisent aux distances de coordination les plus grandes, pour chaque faisceau d'antenne de station terrienne et dans chaque bande de fréquences attribuée que la station terrienne se propose d'utiliser en partage avec les services de Terre.

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La méthode indiquée dans le présent appendice pour la détermination de la zone de coordination est relativement complexe. C'est pourquoi on a estimé qu'il serait bon de présenter à l'annexe A une version simplifiée de cette méthode, qui facilitera la tâche de ceux qui doivent suivre les diverses étapes nécessaires pour tracer les contours de coordination. Cette présentation simplifiée est donnée pour certaines bandes de fréquences attribuées.

Il est suggéré de tracer, en plus du contour de coordination, des contours auxiliaires fondés sur des hypothèses moins défavorables que celles utilisées pour la détermination du contour de coordination. Ces contours auxiliaires peuvent être utilisés au cours de négociations ultérieures entre les administrations intéressées en vue d'éliminer de ces négociations, sans qu'il soit nécessaire d'avoir recours à des calculs plus précis, le cas de certaines stations existantes ou en projet situées à l'intérieur de la zone de coordination. La méthode à appliquer pour obtenir et utiliser ces contours auxiliaires est expliquée dans l'annexe B au présent appendice.

2. Valeurs admissibles du brouillage

La puissance de brouillage admissible (en dBW) dans la largeur de bande de référence, qui ne doit pas être dépassée pendant plus de p pour cent du temps à l'entrée du récepteur d'une station brouillée, sous l'effet de chaque source de brouillage, est donnée par la relation générale ci-dessous:

$$P_r(p) = 10 \log_{10} (kT_rB) + J + M(p) - W \quad (1)$$

où

$$M(p) = M(p_0/n) = M_0(p_0) \quad (1a)$$

avec k = constante de Boltzmann ($1,38 \times 10^{-23}$ J/K);

T_r = température de bruit thermique du système de réception (K);

B = largeur de bande de référence (Hz) (largeur de bande, intéressant le système brouillé, dans laquelle on peut déterminer la valeur moyenne de la puissance de brouillage);

J = valeur à long terme (20 % du temps) du rapport (dB) de la puissance de brouillage admissible à la puissance de bruit thermique dans le système de réception (¹);

(¹) voir la Note (¹) à la page suivante.

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p_0 = pourcentage du temps pendant lequel le brouillage provenant de toutes les sources peut dépasser la valeur admissible;

n = nombre des cas de brouillage, supposés non corrélés, auxquels on s'attend;

p = pourcentage du temps pendant lequel le brouillage provenant d'une source peut dépasser la valeur admissible; du fait de la non-simultanéité probable des cas de brouillage
 $p = p_0/n$;

$M_0(p_0)$ = rapport (dB) entre les puissances admissibles de brouillage pour tous les cas de brouillage, d'une part pendant $p_0\%$, d'autre part pendant 20% du temps (¹);

$M(p)$ = rapport (dB) entre les puissances admissibles de brouillage, d'une part pendant $p\%$ du temps et pour un cas de brouillage, d'autre part pendant 20% du temps et pour tous les cas de brouillage;

Notes

(¹) Le facteur J (dB) est défini comme le rapport de la puissance de brouillage totale admissible à long terme (pendant 20% du temps) dans le système, à la puissance de bruit thermique à long terme dans un récepteur unique. Par exemple, dans un circuit fictif de référence pour faisceaux hertziens à visibilité directe à 50 bonds, la puissance totale admissible de brouillage cumulé est de 1 000 pW0p (Avis 357-1 du C.C.I.R.) et la puissance moyenne de bruit thermique par bond peut être supposée de 25 pW0p. En conséquence, puisque, dans un système MRF-MF, le rapport entre la puissance de brouillage et le bruit thermique dans une bande quelconque large de 4 kHz est le même avant et après démodulation, $J = 16$ dB. Dans une liaison par satellite dans le service fixe par satellite, la puissance totale de brouillage admissible est aussi de 1 000 pW0p (Avis 356-2 du C.C.I.R.), alors que la contribution de bruit thermique du trajet descendant ne doit pas dépasser 7 000 pW0p, ce qui entraîne $J \geq -8,5$ dB. Dans les systèmes numériques, il peut être nécessaire de protéger séparément chaque trajet de télécommunication et, dans ce cas, la puissance de brouillage à long terme peut être du même ordre de grandeur que le bruit thermique à long terme; de ce fait, $J = 0$ dB.

(²) $M_0(p_0)$ est la « marge de brouillage » (dB) entre les puissances de brouillage admissibles à long terme (20%) et à court terme ($p_0\%$). Dans le cas des systèmes analogiques de faisceaux hertziens et de ceux du service fixe par satellite entre 1 et 15 GHz, c'est le rapport (en dB) entre 50 000 et 1 000 pW0p, soit 17 dB. Dans le cas des systèmes numériques, $M_0(p_0)$ peut provisoirement être tenu pour égal à la marge d'évanouissement, laquelle dépend entre autres de la zone hydrométéorologique.

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W = facteur d'équivalence (dB) permettant d'établir une relation entre l'effet du brouillage et celui d'un bruit thermique de même puissance dans la largeur de bande de référence⁽¹⁾.

Les Tableaux I et II donnent les valeurs des paramètres ci-dessus.

3. Détermination de la distance de coordination dans le cas où la propagation se fait au voisinage de l'arc de grand cercle

Lorsqu'on détermine la distance de coordination pour une station terrienne, il faut tenir compte d'un certain nombre de mécanismes qui interviennent dans la propagation des ondes radioélectriques. La présente section traite de la détermination de la distance de coordination en présence de phénomènes tels que la superréfraction, la propagation guidée (conduits), la diffusion et la réflexion dues à des irrégularités de l'indice de réfraction de la basse atmosphère, en l'absence de précipitations. La section 4 traite de la détermination de la distance de coordination dans le cas où la propagation se fait par diffusion par les hydrométéores.

⁽¹⁾ Le facteur W (dB) est le rapport de la puissance de bruit thermique à la puissance de brouillage, dans la largeur de bande de référence, qui produit le même effet de brouillage après démodulation (par exemple dans un système MRF-MF, on l'exprimerait en admettant que les puissances de bruit sont identiques dans une voie téléphonique et, dans un système numérique, en admettant que les probabilités d'erreur sur les bits sont identiques). Pour les signaux à modulation de fréquence, ce facteur est défini comme suit:

$$W = 10 \log_{10} \left(\frac{\text{Puissance de brouillage dans le système de réception après démodulation}}{\text{Puissance de bruit thermique dans le système de réception après démodulation}} \times \frac{\text{Puissance de bruit thermique à l'entrée du récepteur dans la largeur de bande de référence}}{\text{Puissance de brouillage aux fréquences radioélectriques dans la largeur de bande de référence}} \right)$$

De plus, si le signal utile est à modulation de fréquence, et pour des taux de modulation efficaces supérieurs à l'unité, W est d'environ 4 dB, indépendamment des caractéristiques du signal brouilleur. Pour des systèmes MRF-MF à faible indice, on a utilisé une largeur de bande de référence très étroite (4 kHz), afin de ne pas avoir à considérer un grand nombre de caractéristiques possibles des signaux utiles et brouilleurs dont W dépendrait si la bande de référence était plus large.

Si le signal utile est numérique, W est habituellement inférieur ou égal à 0 dB, quelles que soient les caractéristiques du signal brouilleur.

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3.1 *Affaiblissement de transmission de référence normalisé $L_o(0,01)$*

Pour faciliter la détermination graphique de la distance de coordination, il est commode de normaliser le pourcentage de temps à 0,01 % et la fréquence à 4 GHz.

Pour déterminer la distance de coordination, il faut tout d'abord calculer l'affaiblissement de transmission de référence normalisé $L_o(0,01)$ à l'aide de l'équation suivante:

$$L_o(0,01) = P_{r'} + G_{r'} + G_r - P_r(p) - F(p) - 20 \log_{10} (f/4) \quad (2)$$

Dans cette formule:

$P_{r'}$ = puissance d'émission maximale (dBW) dans la largeur de bande de référence B , disponible à l'entrée de l'antenne d'une station brouilleuse*;

$G_{r'}$ = gain isotrope (dB) de l'antenne d'émission de la station brouilleuse. Si la station brouilleuse est une station terrienne, il s'agit ici du gain isotrope de l'antenne dans la direction pertinente; dans le cas d'une station de Terre, on combine $P_{r'}$ et $G_{r'}$ pour obtenir la puissance isotrope rayonnée équivalente E dans la direction principale de rayonnement; on utilise les valeurs données dans le Tableau II. Lorsque $G_{r'}$ représente le gain dans la direction principale de rayonnement, on l'écrit $G_{r',max.}$;

G_r = gain isotrope (dB) de l'antenne de réception de la station brouillée. Si la station brouillée est une station terrienne, il s'agit ici du gain isotrope dans la direction pertinente; dans le cas d'une station de Terre, on utilise le gain maximal de l'antenne de cette station. Lorsque G_r représente le gain maximal, on l'écrit $G_{r,max.}$ (Pour les stations de Terre, voir le Tableau I);

$F(p)$ = facteur de correction (dB) à appliquer pour passer du pourcentage de 0,01 % au pourcentage de temps effectif p (voir la figure 1);

f = fréquence de fonctionnement (GHz).

La « direction pertinente » mentionnée dans les définitions de $G_{r'}$ et de G_r est généralement la direction de l'horizon réel dans l'azimut

* Les symboles munis d'un accent se rapportent aux caractéristiques de la station brouilleuse.

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considéré (voir le paragraphe 3.2), sauf dans le cas où le faisceau principal d'une station terrienne est pointé sous un angle de site inférieur à 12°. Dans ce dernier cas, le trajet pour lequel l'affaiblissement de transmission est minimal peut ne pas être le trajet vers l'horizon mais plutôt le trajet du faisceau principal (voir le paragraphe 3.6).

Lorsqu'il s'agit de satellites non géostationnaires, celui des deux gains G_r' et G_r , qui se rapporte à l'antenne de la station terrienne varie avec le temps. Dans ce cas, il est suggéré d'employer un gain équivalent * d'antenne de station terrienne invariable dans le temps, et qui soit égal à la plus grande des deux quantités: *a)* le gain maximal de l'antenne en direction de l'horizon, diminué de 10 dB, *b)* le gain de cette antenne en direction de l'horizon qui n'est pas dépassé pendant plus de 10% du temps.

3.2 Gain d'antenne à l'horizon de la station terrienne pour les satellites géostationnaires

La composante du gain de l'antenne d'une station terrienne dans la direction de l'horizon réel autour de la station terrienne est fonction de l'angle φ entre l'axe du faisceau principal et la direction de l'horizon considérée. Il s'ensuit qu'il est nécessaire de connaître l'angle φ pour chaque azimut.

Il existe une relation univoque entre l'angle de site ϵ et l'azimut α des satellites géostationnaires vus d'une station terrienne qui se trouve à la latitude λ . La figure 2 présente, dans un diagramme rectangulaire *angle de site/azimut*, les portions d'arc « permises » de l'orbite des satellites géostationnaires; chaque arc correspond à une latitude de station terrienne.

Il est possible que l'on ne connaisse pas à l'avance les longitudes relatives exactes des satellites. Mais, même si ces longitudes sont connues, la possibilité d'ajouter un nouveau satellite ou la possibilité de déplacer un satellite existant suggère que tout ou partie de l'arc correspondant doive être considéré comme contenant des satellites.

* Ce gain équivalent ne doit pas être employé quand l'antenne de la station terrienne reste pointée dans la même direction pendant des durées appréciables (par exemple, quand elle travaille avec des sondes spatiales pour l'espace lointain ou des satellites presque géostationnaires).

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Après avoir choisi et marqué l'arc approprié ou la portion d'arc appropriée, on superpose au graphique de la figure 3 le tracé de l'horizon $\theta(\alpha)$. Cette figure donne un exemple pour une station terrienne située à 45° de latitude nord et pour un satellite que l'on envisage de placer entre les longitudes relatives 10° E et 45° W; elle montre également le tracé de l'horizon.

Pour chaque point situé sur l'horizon local $\theta(\alpha)$, on détermine et on mesure, sur l'échelle des angles de site, la plus courte distance par rapport à l'arc. L'exemple de la figure 3 montre comment on détermine l'angle φ pour un azimut $\alpha_0 = 210^\circ$, avec un angle de site de l'horizon $\theta = 4^\circ$.

Si l'on opère ainsi pour tous les azimuts (par exemple, de 5° en 5°), on obtient une relation $\varphi(\alpha)$. On peut utiliser la relation $\varphi(\alpha)$ pour obtenir le gain de l'antenne vers l'horizon $G(\alpha)$ à l'aide du diagramme de rayonnement effectif de l'antenne de la station terrienne ou par application d'une formule donnant une bonne approximation; par exemple, dans les cas où le rapport entre le diamètre de l'antenne et la longueur d'onde est supérieur à 100, il convient d'utiliser la formule:

$$\begin{aligned} G(\varphi) &= 32 - 25 \log_{10} \varphi \text{ (dB)} & (1^\circ \leq \varphi < 48^\circ) \\ &= -10 \text{ dB} & (48^\circ \leq \varphi \leq 180^\circ) \end{aligned}$$

Si l'on applique cette formule du gain à la courbe $\varphi(\alpha)$, on obtient le gain d'antenne à l'horizon en fonction de l'azimut.

Les paramètres utilisés ci-dessus ont la signification suivante:

- α = azimut considéré, à l'Est du Nord vrai;
- φ = angle minimal en degrés entre l'axe du faisceau principal de l'antenne de la station terrienne et la droite joignant cette station à l'horizon réel, dans l'azimut α ;
- ε = angle de site du faisceau principal de l'antenne de la station terrienne au-dessus du plan horizontal;
- λ = latitude de la station terrienne;
- θ = angle de site de l'horizon réel au-dessus du plan horizontal, dans l'azimut α .

3.3 Zones radioclimatiques

On a divisé le globe en trois zones radioclimatiques de base, appelées respectivement Zones A, B et C.

Ces zones sont définies comme suit:

- Zone A: terre. Sont exclues de la Zone A les parties émergées d'altitude inférieure à 1000 mètres situées à moins de 100 km des côtes;
- Zone B: mer, aux latitudes supérieures à 23,5° N et 23,5° S, à l'exception de la Mer Méditerranée et de la Mer Noire. Sont incluses dans la Zone B les parties émergées d'altitude inférieure à 1000 mètres situées à moins de 100 km des côtes considérées;
- Zone C: mer, aux latitudes comprises entre 23,5° N et 23,5° S en y incluant la Mer Méditerranée et la Mer Noire. Sont incluses dans la Zone C les parties émergées d'altitude inférieure à 1000 mètres situées à moins de 100 km des côtes considérées.

3.4 Méthode à appliquer pour déterminer la distance de coordination — Mode de propagation (a)

Pour obtenir la distance de coordination dans la Zone A, il faut retrancher de $L_0(0,01)$ une correction ΔL , qui représente l'écart entre les affaiblissements de transmission de référence sur des trajets pour lesquels les angles de site de l'horizon vu de la station terrienne ne sont pas les mêmes. ΔL se calcule en deux étapes. On établit tout d'abord, d'après la figure 4, une correction ΔL_0 par unité d'angle de site (c'est-à-dire pour l'angle de site 1°), en fonction de l'affaiblissement de transmission de référence normalisé et de la fréquence. On applique une interpolation linéaire entre les courbes de la figure 4, pour les fréquences non indiquées sur les courbes.

Pour toute autre valeur de l'angle de site θ de l'horizon, on détermine ΔL (dB) d'après la figure 5 en utilisant la valeur de ΔL_0 obtenue précédemment d'après la figure 4. Si l'on a besoin de valeurs pour des angles de site autres que ceux qui sont indiqués, on procède ici encore

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par interpolation linéaire. Dans les cas où l'angle de site est inférieur à 0,2°, ΔL est pris égal à 0 dB.

On doit alors retrancher ΔL de $L_o(0,01)$ afin d'obtenir l'« affaiblissement de coordination » L_c :

$$L_c = L_o(0,01) - \Delta L \quad (3)$$

qui, associé à la fréquence correspondante de la figure 6, donne la distance de coordination.

On procède de la même manière pour obtenir la distance de coordination dans la Zone B et la Zone C, en utilisant les figures 7, 8 et 9 pour la Zone B et les figures 10, 11 et 12 pour la Zone C.

A titre de référence, les distances ainsi obtenues seront appelées d_{aA} , d_{aB} et d_{aC} , pour les Zones A, B et C respectivement.

3.5 Distance de coordination pour des trajets mixtes

3.5.1 Deux zones

La méthode à utiliser dans le cas d'un trajet mixte mettant en jeu deux zones est illustrée par l'exemple de la figure 13b. La station terrienne est située dans la Zone A, à la distance de 75 km de la Zone B. La méthode graphique décrite ci-dessous est particulièrement utile lorsque, comme dans cet exemple, plusieurs frontières entre zones sont en jeu.

On suppose que pour une fréquence de 4 GHz, l'affaiblissement de transmission de référence normalisé $L_o(0,01)$ a une valeur de 200 dB, et que l'angle de site de l'horizon est zéro degré. Cela entraîne pour L_c une valeur de 200 dB, indépendante de la zone considérée (ce qui ne serait, bien entendu, pas le cas si l'angle de site de l'horizon était supérieur à 0,2 degré). La méthode est la suivante:

- i) déterminer la distance qui, dans la Zone A, donnerait la valeur de L_c ; reporter cette distance (ici 350 km), à partir de l'origine, sur l'axe des abscisses d'une feuille de papier millimtré, ce qui donne le point A (figure 13a);

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- ii) déterminer la distance qui, dans la Zone B, donnerait la même valeur de L_c ; reporter cette distance (ici 530 km), à partir de l'origine, sur l'axe des ordonnées de la même feuille, ce qui donne le point B;
- iii) joindre les points A et B par un segment de droite;
- iv) porter sur l'axe des abscisses, à partir de l'origine, la distance de 75 km entre la station terrienne et la Zone B, ce qui donne le point A_1 ;
- v) partant du point A_1 , porter parallèlement à l'axe des ordonnées la distance de 375 km entièrement comprise dans la Zone B, ce qui donne le point B_1 ;
- vi) la distance qui reste à parcourir dans la deuxième partie de la Zone A se détermine en menant de B_1 une parallèle à l'axe des abscisses jusqu'au point X où elle rencontre la courbe à utiliser dans le cas d'un trajet mixte. Sur la figure 13a, on lit: $B_1X = 30$ km;
- vii) la distance de coordination est la somme des longueurs OA_1 , A_1B_1 et B_1X . Elle vaut:

$$75 + 375 + 30 = 480 \text{ km}$$

La distance B_1X peut aussi se calculer numériquement d'une façon plus précise à partir de la distance totale dans les deux parties de la Zone A, $OA_1 + B_1X$, que l'on obtient comme suit:

$$OA_1 + B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right)$$

D'après cette expression:

$$B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right) - OA_1$$

d'où:

$$B_1X = 350 \left(1 - \frac{375}{530} \right) - 75 = 27 \text{ km}$$

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3.5.2 *Trois zones*

Dans certains cas particuliers, le trajet mixte traverse les trois zones radioclimatiques A, B et C. On peut résoudre le problème en ajoutant une troisième dimension à la méthode suivie dans le cas où le trajet mixte ne traverse que deux zones. Théoriquement, cela revient à dire que l'on doit chercher la troisième coordonnée d'un point dont les deux premières coordonnées correspondent aux distances connues dans les deux premières zones et qui se trouve dans le plan passant par les trois points des axes Ox, Oy et Oz correspondant aux distances qui, dans les Zones A, B et C respectivement, donneraient la valeur requise de l'affaiblissement de transmission de référence.

Dans la pratique, on peut ramener cette détermination à la méthode graphique simple représentée sur la figure 14 pour laquelle on suppose par exemple que l'affaiblissement de coordination (L_c) est égal à 200 dB pour une fréquence de 4 GHz. Le problème consiste à trouver la distance de coordination à partir de la station terrienne dans la direction indiquée sur la figure 14a. Dans cette direction, la longueur du trajet dans la Zone A est de 75 km (OA_1); elle est suivie d'une longueur de 375 km dans la Zone B (A_1B_1), puis d'une longueur inconnue qu'il s'agit précisément de déterminer dans la Zone C (figure 14a).

La méthode à appliquer est alors la suivante (figure 14b):

- i) commencer par appliquer la même méthode que dans le cas où deux zones seulement sont en jeu, en appliquant seulement les étapes i) à v) et continuer comme suit:
- ii) du point B_1 , tracer une parallèle à la droite AB; elle coupe l'axe des abscisses en D;
- iii) déterminer la distance qui, située tout entière dans la Zone C, donnerait la même valeur de l'affaiblissement de coordination. Porter cette distance (ici: 930 km) sur l'axe des ordonnées en OC. Joindre les points C et A par un segment de droite;
- iv) du point D, tracer la parallèle à l'axe des ordonnées; elle coupe CA en X;
- v) la distance DX est la longueur cherchée du trajet dans la Zone C; on trouve qu'elle est égale à 75 km;

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vi) la distance de coordination est la somme des longueurs OA_1 , A_1B_1 et DX . Elle vaut:

$$75 + 375 + 75 = 525 \text{ km}$$

La distance DX peut aussi se calculer numériquement de façon plus précise d'après la formule:

$$DX = OC \left(1 - \frac{OA_1}{OA} - \frac{A_1B_1}{OB} \right)$$

d'où

$$DX = 930 \left(1 - \frac{75}{350} - \frac{375}{530} \right) = 73 \text{ km}$$

On désigne par d_a la distance ainsi obtenue, qu'il s'agisse du cas d'une seule zone (paragraphe 3.4) ou du cas de plusieurs zones (paragraphe 3.5).

3.6 Détermination de la distance de coordination — Mode de propagation (b)

Si l'angle de site du faisceau principal de l'antenne de la station terrienne est inférieur à 12° pendant de longues périodes, comme cela peut être le cas quand il s'agit de satellites géostationnaires, on détermine la distance de coordination dans l'azimut du faisceau principal de la même manière que ci-dessus, mais en remplaçant l'angle à l'horizon θ par l'angle de site de l'antenne ϵ et le gain dans la direction de l'horizon par le gain dans le faisceau principal de l'antenne. *Dans tous les cas de ce genre, il convient d'utiliser les courbes relatives à la Zone A, quelle que soit la zone pour laquelle on fait le calcul.*

Cette méthode donne une distance pour le mode de propagation (b), que l'on désigne par d_b .

Dans le cas des satellites non géostationnaires, il convient de ne prendre en considération que les brouillages par le trajet du faisceau principal lorsque l'antenne de la station terrienne est pointée dans la même direction pendant des durées appréciables (par exemple en cas de fonctionnement en liaison avec des sondes spatiales pour l'espace lointain ou avec des satellites quasi géostationnaires).

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3.7 *Evaluation des résultats obtenus pour les modes de propagation (a) et (b)*

S'il s'agit du mode de propagation (b), on compare la distance de coordination ainsi obtenue à celle qui correspond au mode de propagation (a); si la distance de coordination calculée pour le trajet du faisceau principal est supérieure à celle qui a été calculée pour le trajet à l'horizon, on procède comme suit (voir la figure 15) pour obtenir le contour de coordination correspondant aux mécanismes de propagation sur l'arc de grand cercle:

- i) tracer deux lignes droites partant de la station terrienne et formant des angles de $\pm 5^\circ$ avec l'azimut du faisceau principal, et prolonger ces deux droites jusqu'à leurs intersections avec le contour de coordination obtenu pour le mode de propagation (a);
- ii) à partir du point correspondant à la distance de coordination déterminée pour le mode de propagation (b) dans l'azimut du faisceau principal, tracer deux lignes droites jusqu'à ces deux intersections;
- iii) les deux segments de droite ainsi obtenus constituent la partie du contour de coordination à utiliser dans le secteur de $\pm 5^\circ$ par rapport à l'azimut du faisceau principal;
- iv) en dehors de ce secteur de $\pm 5^\circ$, le contour de coordination pour les mécanismes de propagation sur l'arc de grand cercle est celui qui est obtenu pour le mode de propagation (a).

Les distances obtenues après application des méthodes décrites dans les paragraphes 3.4 à 3.7 sont appelées d_{ab} .

4. *Détermination de la distance de coordination — Mode de propagation (c) (diffusion par les hydrométéores)*

Dans le cas du mécanisme de propagation par diffusion par les hydrométéores, la distance de coordination est déterminée au moyen d'un trajet dont la configuration est sensiblement différente de celle qui intervient dans les mécanismes de la propagation sur l'arc de grand cercle.

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4.1 *Affaiblissement de transmission normalisé $L_1(0,01)$*

Pour déterminer la distance de coordination correspondant à la diffusion par les hydrométéores, il faut calculer « l'affaiblissement de transmission normalisé » en appliquant la formule suivante:

$$L_1(0,01) = P_r + \Delta G - P_r(p) - F_1(p, f) \quad (4)$$

Dans cette formule:

ΔG = différence (dB) entre la valeur du gain maximal des antennes des stations de Terre fonctionnant dans la bande de fréquences considérée et la valeur de 42 dB. Lorsque la station terrienne est une station d'émission, ΔG est donné par le Tableau I; lorsque la station terrienne est une station de réception, ΔG est donné par le Tableau II;

$F_1(p, f)$ = facteur de correction (dB) à appliquer pour passer du pourcentage de 0,01 % au pourcentage de temps effectif p dans la bande de fréquences considérée (voir la figure 16).

Les autres paramètres sont définis à la section 2. Pour les stations de Terre, les valeurs de P_r sont indiquées dans le Tableau II.

4.2 *Zones hydrométéorologiques*

La surface terrestre a été divisée en cinq zones hydrométéorologiques principales (Zones 1 à 5). Ces zones sont représentées sur la figure 17.

4.3 *Méthode de détermination de la distance de coordination dans le cas de la diffusion par les hydrométéores*

Pour calculer la distance de coordination dans le cas de la diffusion par les hydrométéores et pour la Zone hydrométéorologique 1, on utilise l'affaiblissement de transmission normalisé obtenu par application de la formule (4) pour la fréquence appropriée (voir la figure 18). On désigne par d_{cr} la distance de diffusion par les hydrométéores.

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Les figures 19 à 21 contiennent des courbes correspondant aux Zones 2 à 5. Dans tous les cas, on choisit la zone hydrométéorologique correspondant à l'emplacement de la station terrienne. En raison de la géométrie de propagation particulière à la diffusion par les hydrométéores, le centre du contour de coordination tracé dans le cas de cette diffusion ne coïncide pas avec l'emplacement de la station terrienne; la distance qui les sépare est désignée par Δd .

Dans la figure 22, on a déterminé la distance Δd en fonction de la distance de diffusion par les hydrométéores (d_{cr}) et de l'angle de site ϵ du faisceau principal de l'antenne de la station terrienne. Cette distance Δd est mesurée à partir de la station terrienne, dans l'azimut correspondant au faisceau principal de son antenne; on trace un cercle de rayon d_{cr} ayant pour centre le point ainsi obtenu. Ce cercle est le contour de coordination dans le cas de la diffusion par les hydrométéores.

La distance de coordination, qu'on appelle d_c , est la distance comprise entre l'emplacement de la station terrienne et le contour de coordination dans l'azimut considéré.

5. Valeur minimale de la distance de coordination

Si, au cours de la détermination des distances de coordination pour les modes de propagation (a) ou (b), on obtient des valeurs qui requerraient une extrapolation des courbes de distance de coordination à des distances inférieures à 100 km, la distance de coordination (d_a ou d_b) pour le mode considéré sera prise à égale à 100 km.

Si, au cours de la détermination de la distance de coordination pour le mode de propagation (c), on obtient des valeurs qui requerraient une extrapolation des courbes de distance de diffusion par les hydrométéores à des distances inférieures à 100 km, la distance de diffusion par les hydrométéores (d_{cr}) sera prise égale à 100 km et sera utilisée avec la valeur appropriée de Δd .

6. La distance de coordination

Dans un azimut quelconque, la plus grande des distances de coordination d_a , d_b ou d_c déterminées pour les trois modes de propagation

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représente la distance de coordination et est à utiliser pour la procédure de coordination.

La figure 23 donne un exemple de contour de coordination.

7. Paramètres à utiliser dans les calculs

Les valeurs des paramètres nécessaires pour la détermination du contour de coordination sont indiquées dans le Tableau I pour une station terrienne d'émission, et dans le Tableau II pour une station terrienne de réception.

Dans certains cas, une administration peut avoir des raisons de croire que, pour sa station terrienne, il peut être justifié d'adopter des valeurs qui diffèrent de celles qui sont indiquées dans le Tableau II. Il convient d'attirer l'attention sur le fait que, pour certains systèmes déterminés, il peut être nécessaire de modifier les largeurs de bande B ou, par exemple dans le cas des systèmes à assignation en fonction de la demande, les pourcentages de temps p et p_0 par rapport aux valeurs indiquées dans le Tableau II.

Pour faciliter les négociations ultérieures entre les administrations (voir l'annexe B), il a été jugé utile d'isoler de l'équation (2) deux paramètres composites concernant uniquement les stations de Terre: un facteur de sensibilité au brouillage $S = G_r - P_r(p)$ dans le cas des stations terriennes d'émission et la p.i.r.e. $E = P_r + G_r$ dans le cas des stations terriennes de réception. Les Tableaux I et II contiennent respectivement les valeurs de S et de E à utiliser.

S'il se révèle nécessaire de calculer la distance de coordination dans une bande de fréquences qui ne figure pas dans les Tableaux I ou II, il convient d'utiliser les valeurs correspondant à la bande de fréquences la plus proche attribuée au même service.

TABLEAU I
Caractéristiques requises pour la détermination de la distance de coordination
dans le cas d'une station terrière d'émission

Désignation du service de radiocommunications spatiales	Exploitation spatiale (télécommande)	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite	Fixe par satellite
Bande de fréquences (GHz)	1,427- 1,429	2,655- 2,690	4,400- 4,700	5,850- 6,425	7,900- 7,975	10,95- 11,20	12,30- 12,75	14,4- 14,5	27,5- 29,5	
Type de signal modulant à la station de Terre ⁽¹⁾	A	A	A	A	A	A	A	A	N	
Caractéristiques et critères de brouillage	p_0 (%)	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,003	
	n	2	1	1	2	2	2	2	1	
	P (%)	0,005	0,01	0,01	0,005	0,005	0,005	0,005	0,005	0,003
	J (dB)	16	9	9	16	16	16	16	0	
	$M_a(p_0)$ (dB)	17	17	17	17	17	17	17	30	
	W (dB)	0	0	0	0	0	0	0	0	
Caractéristiques de la station de Terre	B (Hz)	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4	1×10^4
	G_T (dB) ⁽²⁾	35	52 ⁽³⁾	52 ⁽⁴⁾	45	47	50	50	50	50
	ΔG (dB)	-7	10 ⁽⁴⁾	10 ⁽⁴⁾	3	5	8	8	8	8
	T_r (K)	750	500 ⁽³⁾	500 ⁽³⁾	750	750	1500	1500	1500	3200
Caractéristiques auxiliaires	S (dBW)	166	192	192	176	178	178	178	178	154
	$P_T(p)$ (dBW) dans B	-131	-140	-140	-131	-131	-128	-128	-128	-104

(1) A = modulation analogique; N = modulation numérique.

(2) Non compris les pertes dans les lignes d'alimentation.

(3) Dans ces bandes, on a indiqué les caractéristiques des stations de Terre correspondant aux systèmes transhorizon.

TABLEAU II
Caractéristiques requises pour la détermination de la distance de coordination dans le cas d'une station terrienne de réception

¹¹⁾ Les caractéristiques correspondant à ces services peuvent varier dans des limites assez étendues. Un complément d'étude est nécessaire pour fournir des valeurs significatives.

A = modulation analogique; **N** = modulation numérique.

⁽¹⁾ Voir la note⁽¹⁾ du paragraphe 2. $M_0(p_0)$ peut prendre des valeurs comprises entre 5 et 40 dB, selon la fréquence utilisée, la zone hydrométéorologique et la conception du système.

Valence estime que la largeur de bande des fréquences radioélectriques est d'au moins 100 MHz, et inférieure de 20 dB à la puissance totale supposée pour chaque émission.

(4) Dans ces bandes, on a indiqué des caractéristiques des stations de Terre correspondant aux systèmes transhorizon.

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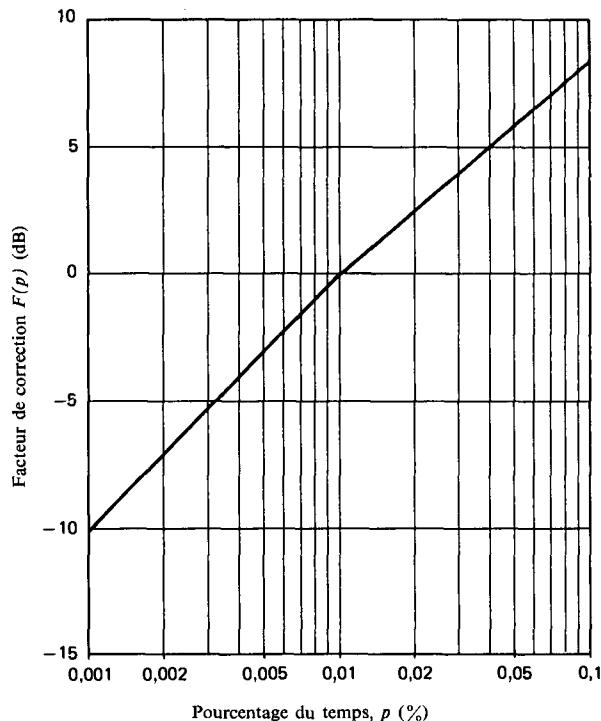


FIGURE 1

Facteur de correction $F(p)$ pour des pourcentages p du temps différents de 0,01%

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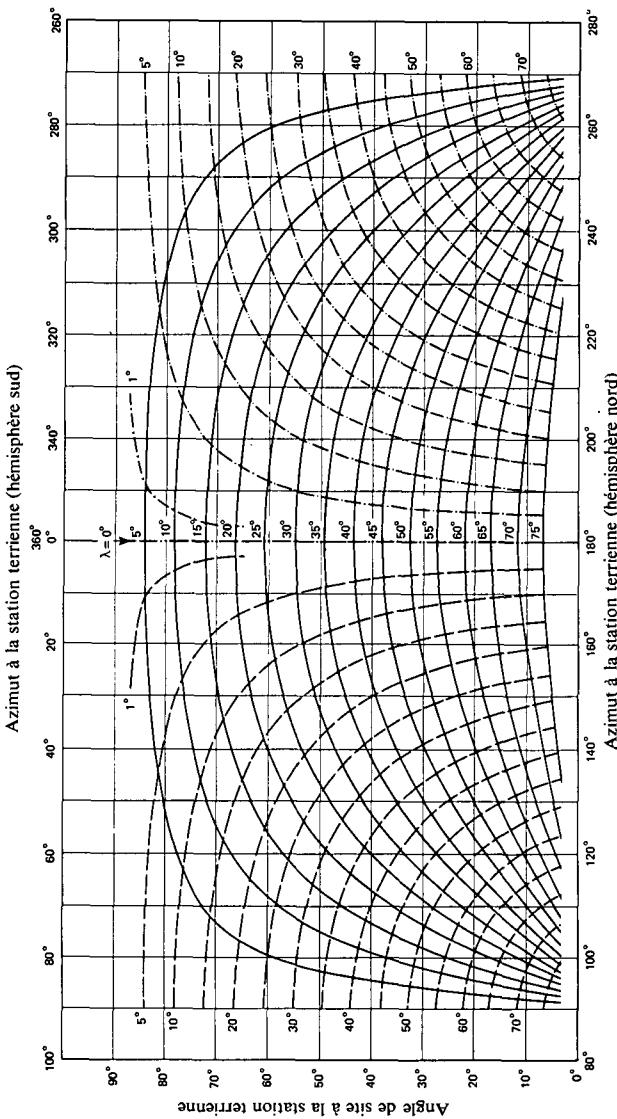
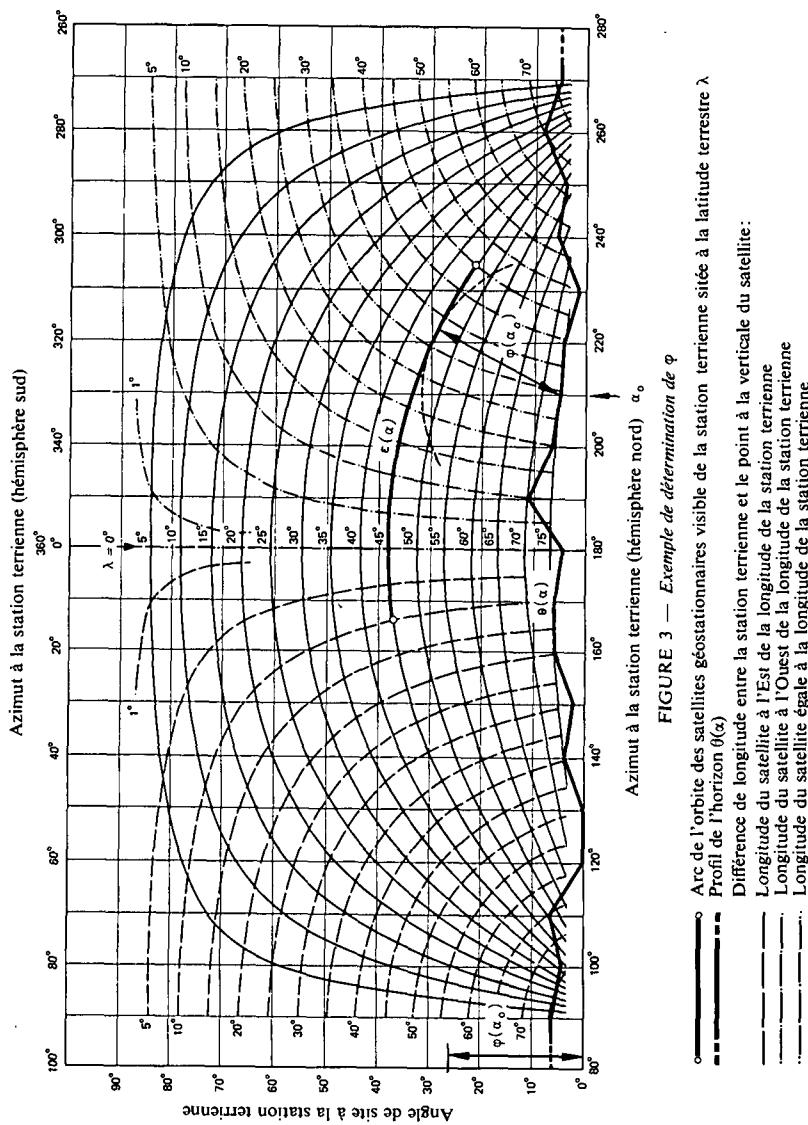


FIGURE 2

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FIGURE 3 — Exemple de détermination de φ

- Arc de l'orbite des satellites géostationnaires visibles de la station terrienne située à la latitude terrestre λ
 - - - Profil de l'horizon $\theta(\alpha)$
 : - - Déférence de longitude entre la station terrienne et le point à la verticale du satellite :
 - - - Longitude du satellite à l'Est de la longitude de la station terrienne
 - - - Longitude du satellite à l'Ouest de la longitude de la station terrienne
 - - - Longitude du satellite égale à la longitude de la station terrienne

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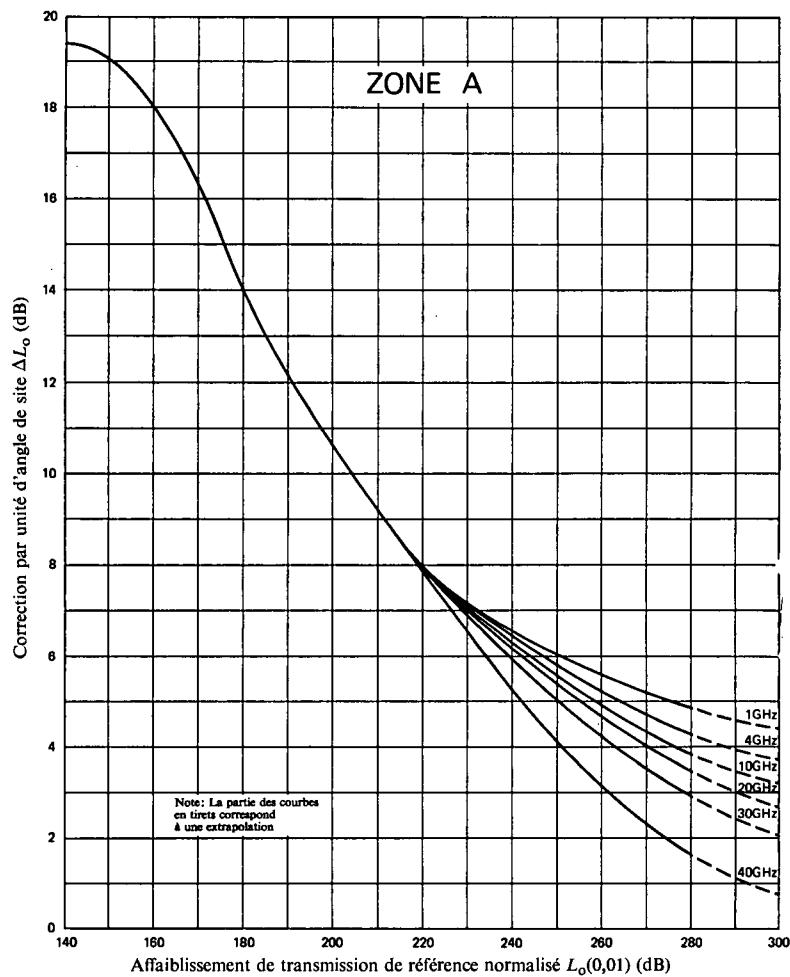


FIGURE 4
Correction par unité d'angle de site en fonction de l'affaiblissement de transmission de référence normalisé et de la fréquence — Zone A

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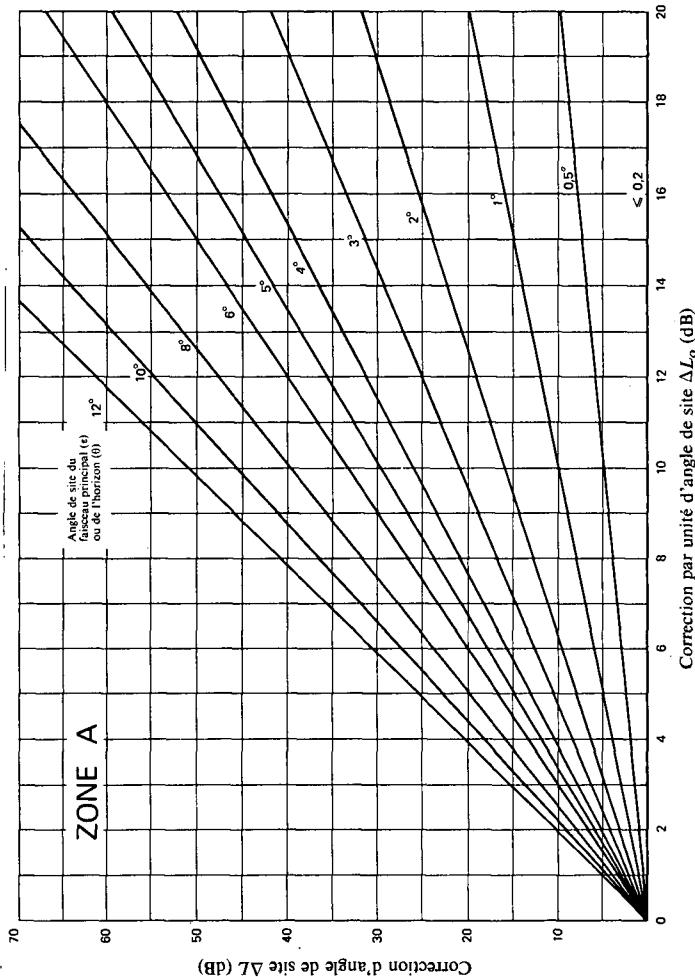


FIGURE 5
Correction d'angle de site — Zone A

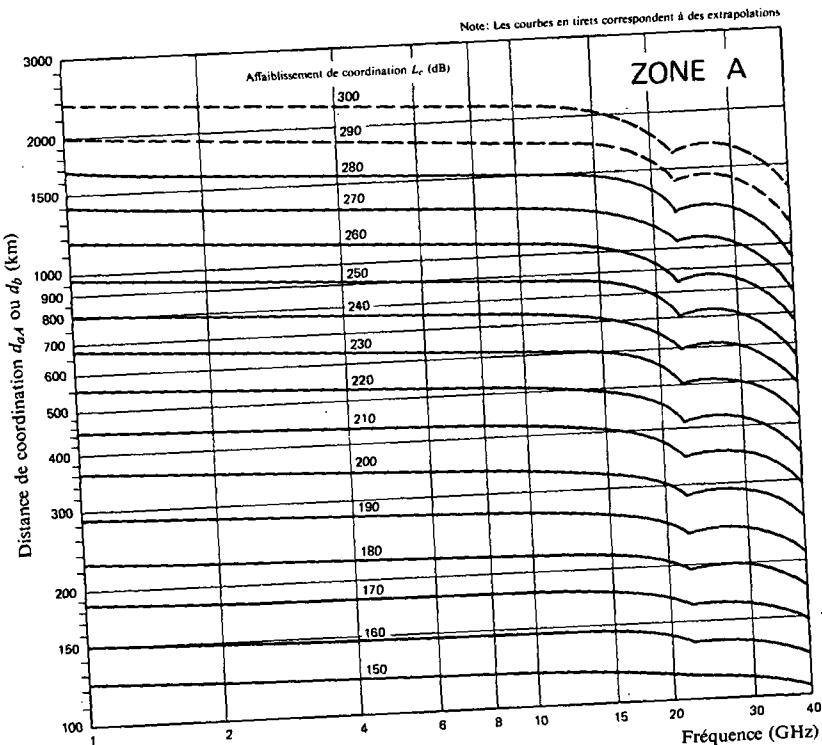


FIGURE 6

*Distance de coordination d_{aA} ou d_b en fonction de la fréquence
et de l'affaiblissement de coordination — Zone A*

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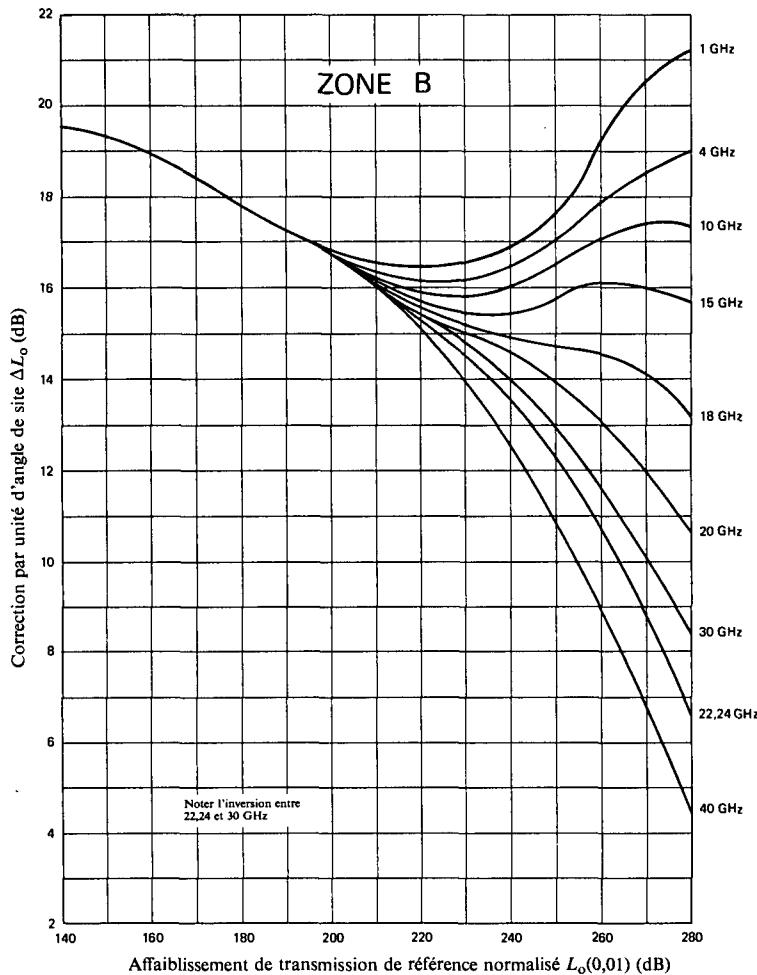


FIGURE 7

Correction par unité d'angle de site en fonction de l'affaiblissement de transmission de référence normalisé et de la fréquence — Zone B

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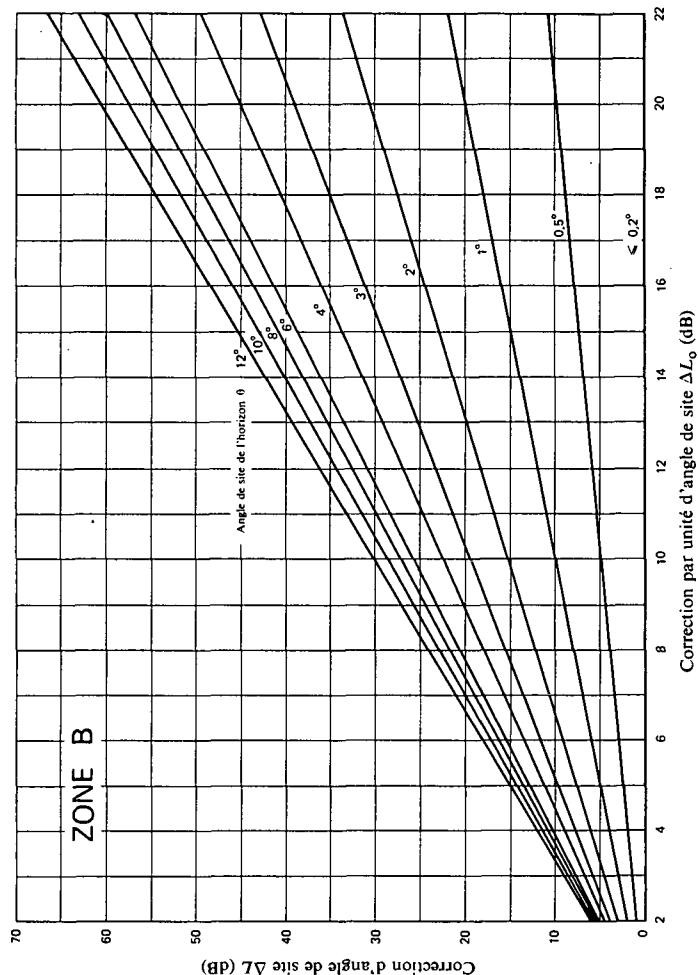


FIGURE 8
Correction d'angle de site — Zone B

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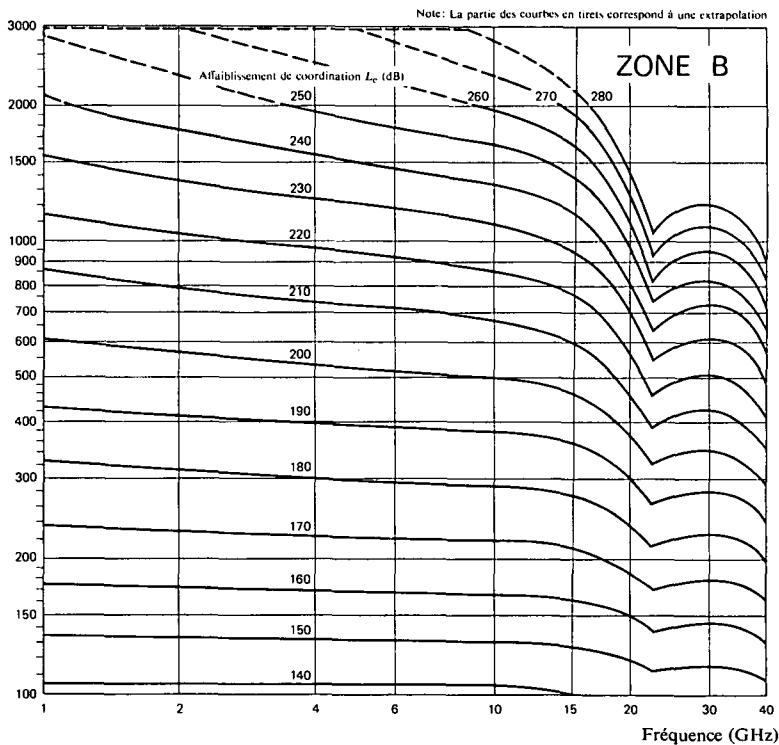


FIGURE 9

*Distance de coordination d_{ab} en fonction de la fréquence
et de l'affaiblissement de coordination — Zone B*

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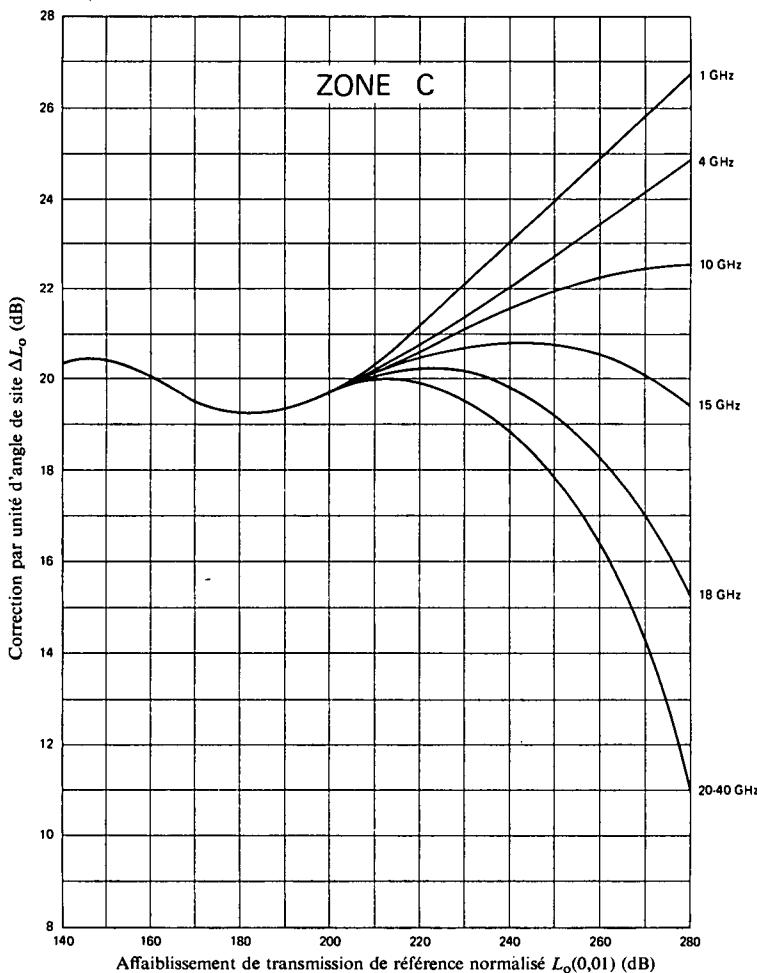


FIGURE 10

Correction par unité d'angle de site en fonction de l'affaiblissement de transmission de référence normalisé et de la fréquence — Zone C

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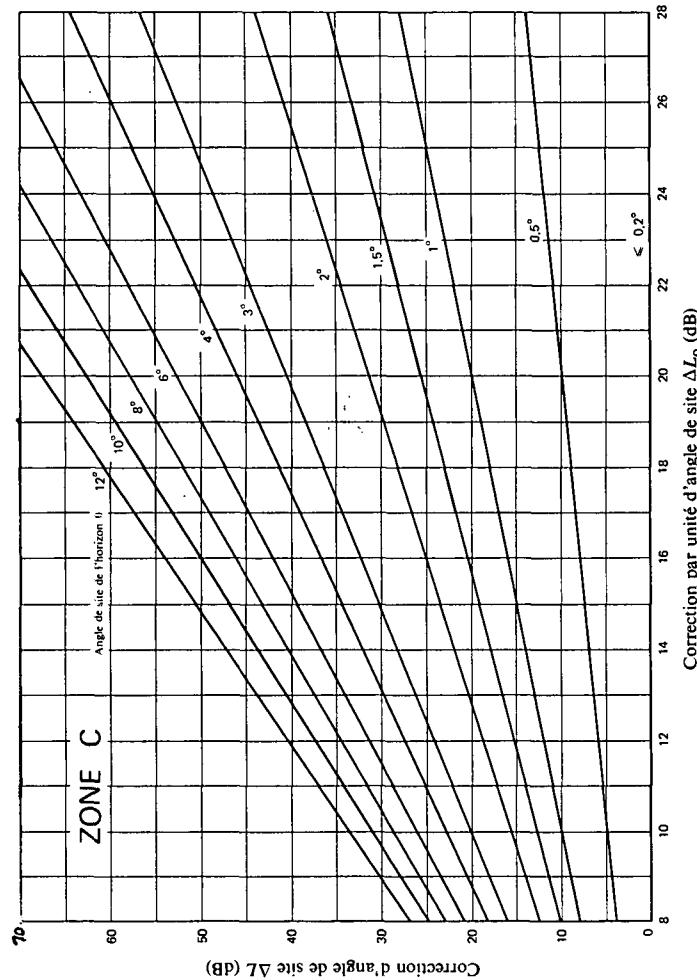


FIGURE 11
Correction d'angle de site — Zone C

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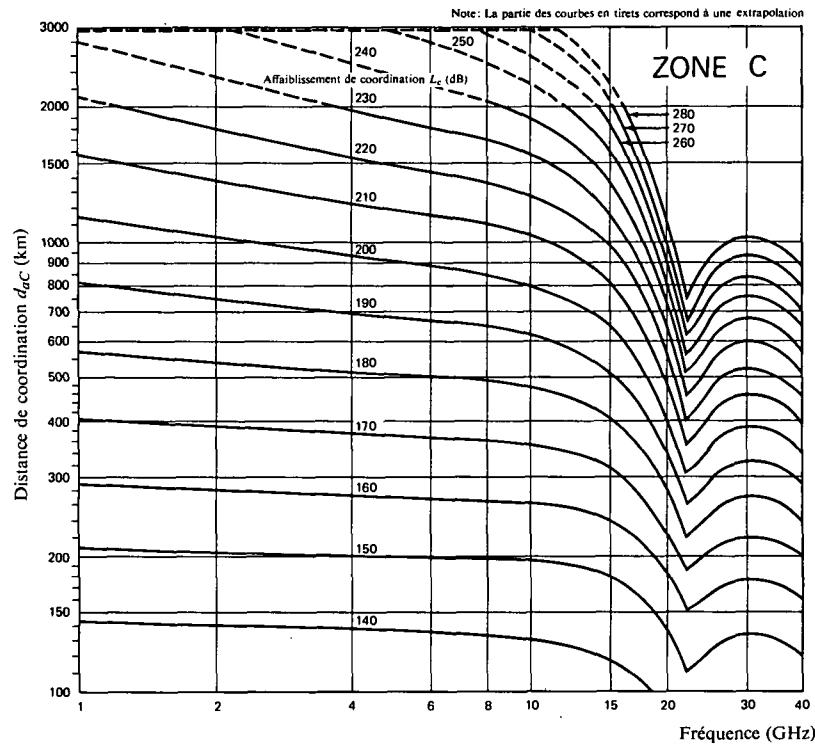


FIGURE 12

*Distance de coordination d_{AC} en fonction de la fréquence
et de l'affaiblissement de coordination — Zone C*

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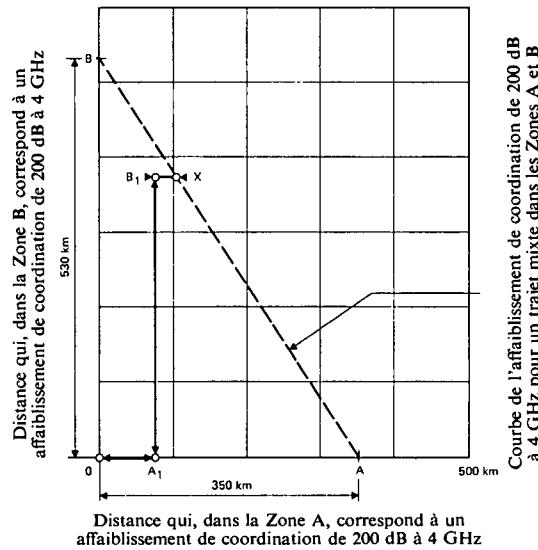


FIGURE 13a

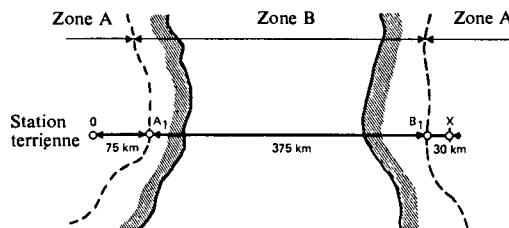


FIGURE 13b

FIGURE 13

Exemple de détermination de la distance de coordination dans le cas d'un trajet mixte mettant en jeu deux zones

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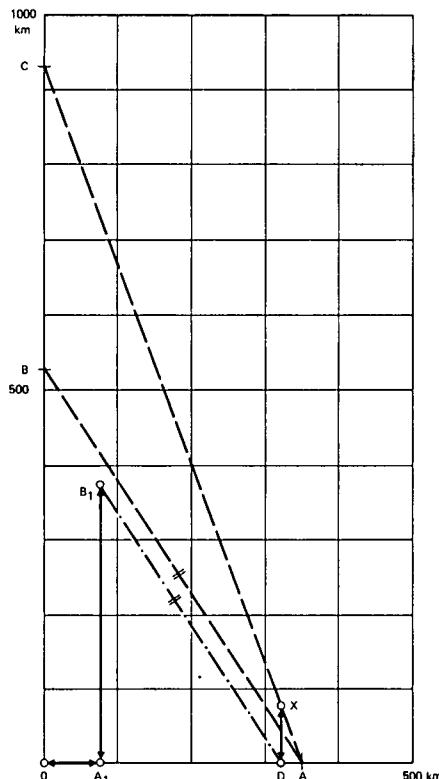


FIGURE 14b

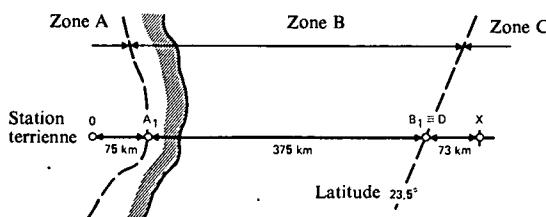


FIGURE 14a

FIGURE 14

Exemple de détermination de la distance de coordination dans le cas d'un trajet mixte mettant en jeu les trois zones

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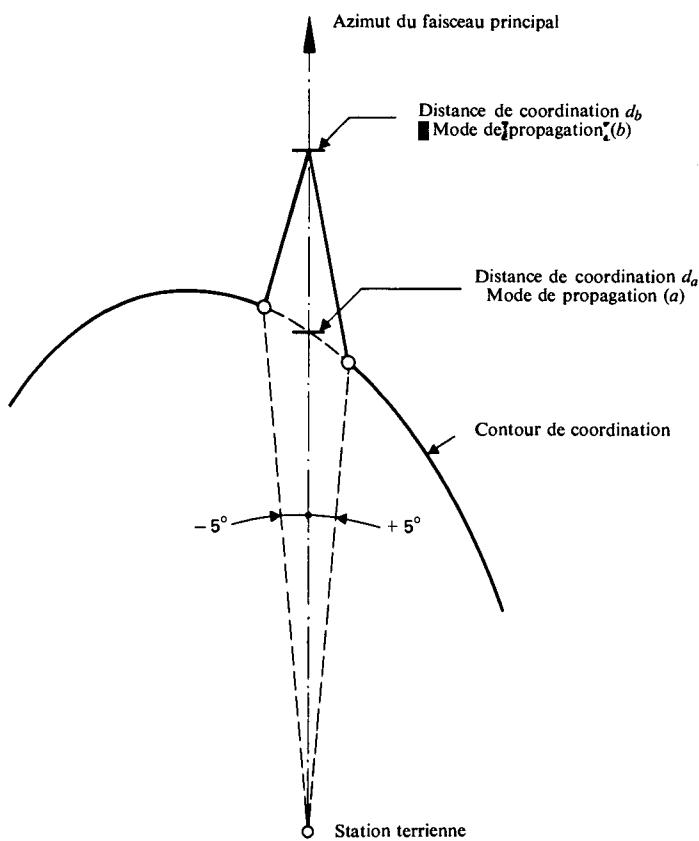
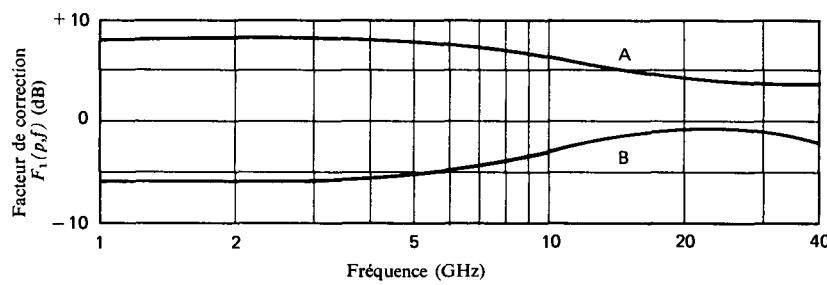


FIGURE 15

Exemple de détermination de la distance de coordination dans le cas où l'angle de site du faisceau principal de la station terrienne est inférieur à 12°

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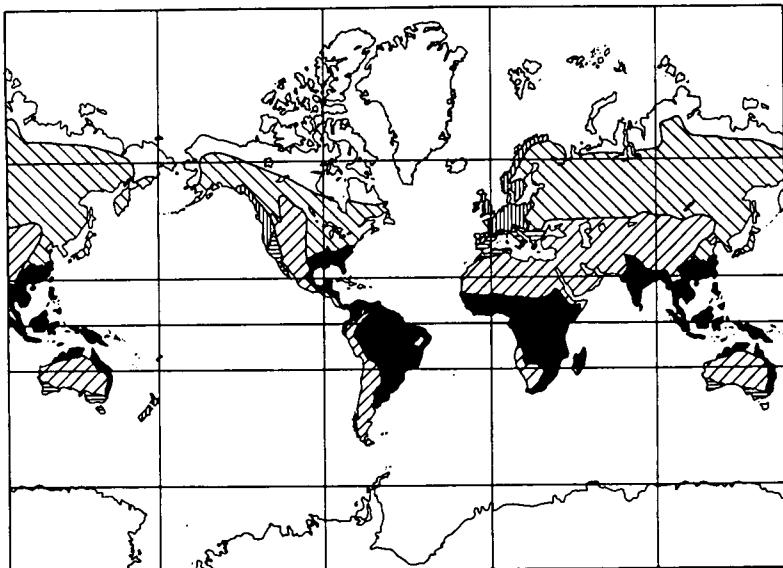


A: Correction pour 0,1 % du temps
B: Correction pour 0,001 % du temps } pour toutes les zones hydrométéorologiques

FIGURE 16

Facteur de correction $F_1(p,f)$ des pourcentages p du temps différents
de 0,01 %, en fonction de la fréquence — Mode de propagation (c)

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- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5

FIGURE 17

Zones hydro-météorologiques dans le monde

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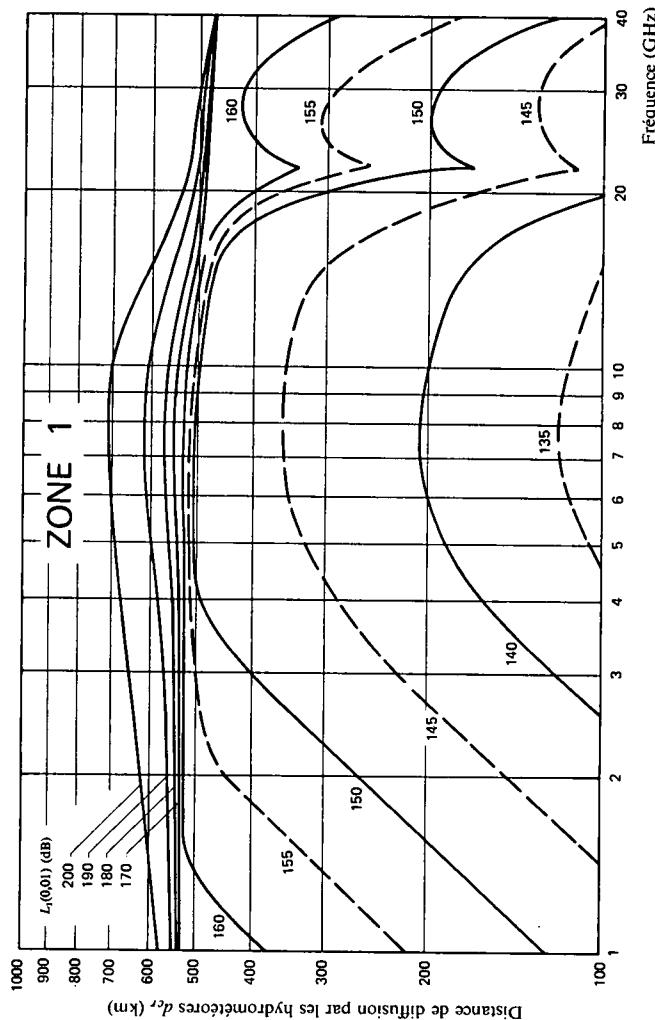


FIGURE 18
Distance de diffusion par les hydromètres en fonction de la fréquence et de l'affaiblissement de transmission normalisé — Zone hydrométéorologique 1 (voir la figure 17)

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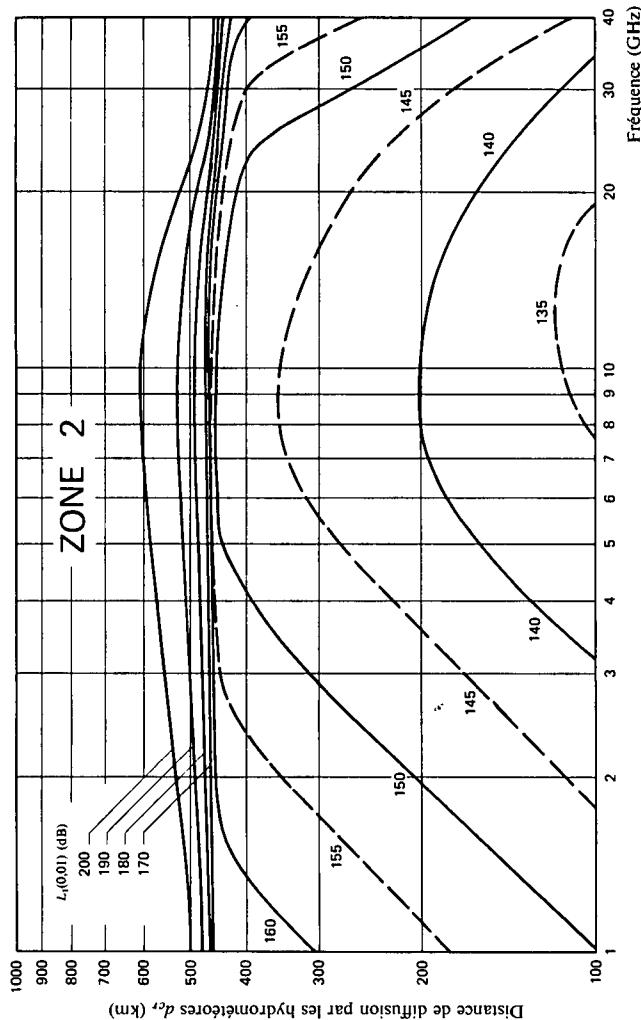


FIGURE 19

Distance de diffusion par les hydromètres en fonction de la fréquence et de l'affaiblissement de transmission normalisé — Zone hydrométéorologique 2 (voir la figure 17)

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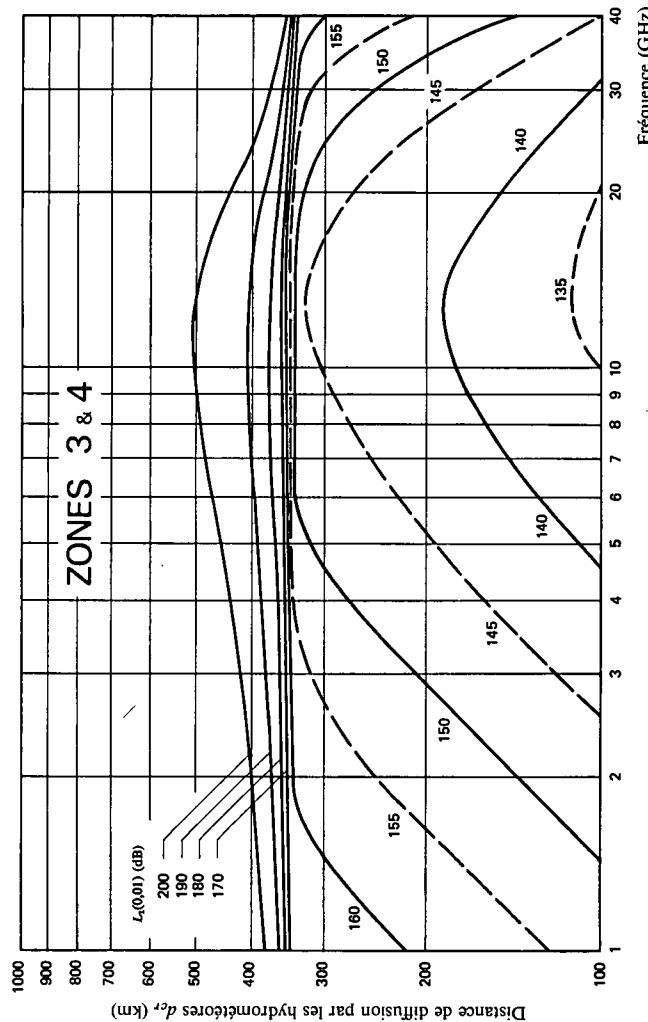


FIGURE 20

Distance de diffusion par les hydromètres en fonction de la fréquence et de l'affaiblissement normalisé — Zones hydrométéorologiques 3 et 4 (voir la figure 17)

ANN 18 (APP 28)

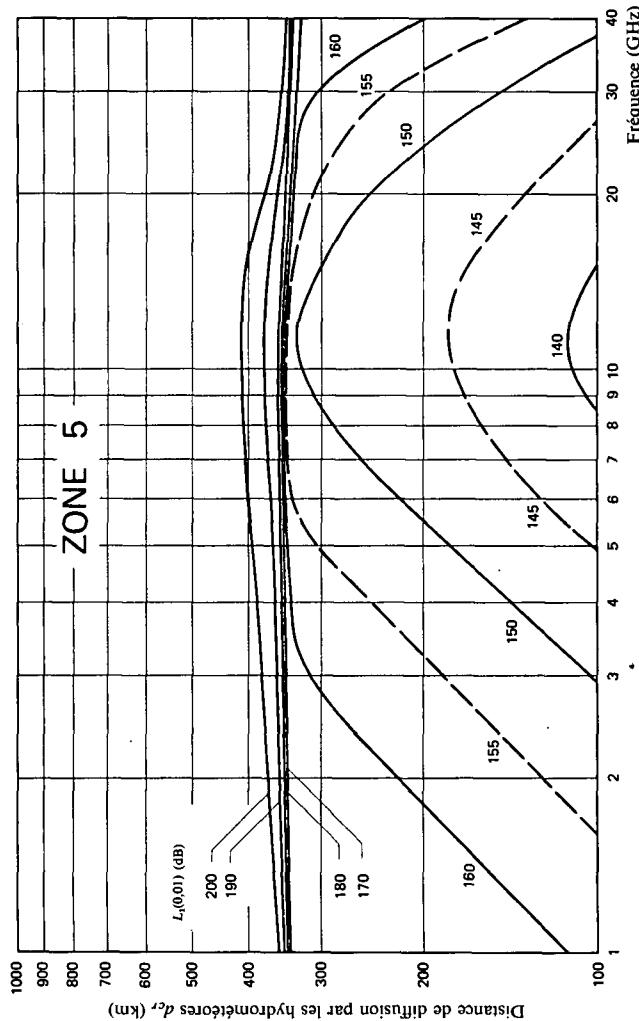


FIGURE 21

Distance de diffusion par les hydrométéores en fonction de la fréquence et de l'affaiblissement de transmission normalisé — Zone hydrométéorologique 5 (voir la figure 17)

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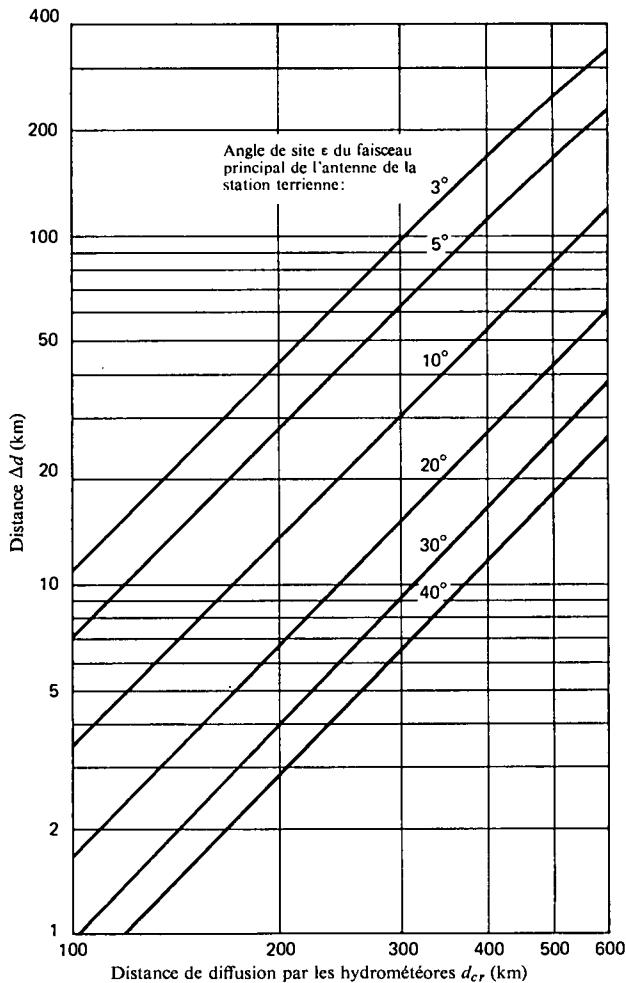
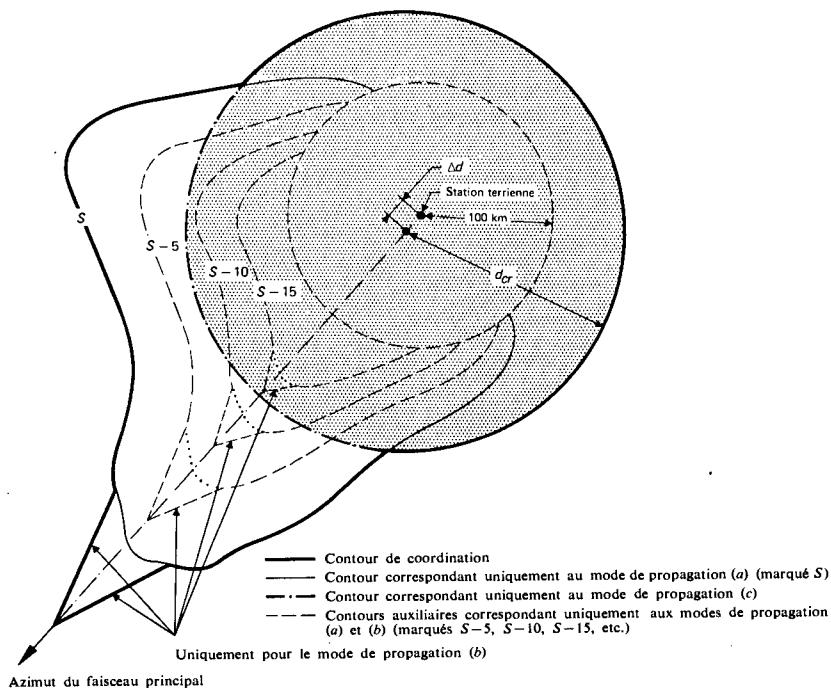


FIGURE 22

Distance Δd en fonction de la distance de diffusion par les hydrométéores d_{cr} et de l'angle de site ϵ du faisceau principal de l'antenne de la station terrienne

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Si les contours auxiliaires montrent que, du point de vue du mécanisme de la propagation sur un arc de grand cercle, on peut éliminer une station de Terre:

- on ne tiendra plus compte de celle-ci dans la suite de l'étude si elle se trouve en dehors de la zone ombrée (diffusion par les hydrométéores),
- on continuera à tenir compte de celle-ci, mais uniquement pour le mode de propagation par diffusion par les hydrométéores, si elle se trouve à l'intérieur de la zone ombrée (diffusion par les hydrométéores).

FIGURE 23

Exemple de contours pour une station terrienne d'émission

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ANNEXE A
A L'APPENDICE 28

**Détermination de la distance de coordination pour les bandes
de fréquences attribuées**

1. En vertu de l'article 9A du Règlement des radiocommunications, les distances de coordination ne doivent être déterminées que pour les bandes de fréquences indiquées à l'article 5 dudit Règlement et énumérées dans les Tableaux III et IV ci-après. Pour chacune de ces bandes de fréquences, il est commode de combiner les caractéristiques qui dépendent uniquement de la fréquence et des types de systèmes utilisant la bande. La valeur qui résulte de la combinaison de ces paramètres devient alors une constante donnée pour une bande de fréquences attribuée déterminée et pour un type donné de station terrienne.

Emission par les stations terriennes

2. Dans les bandes attribuées pour l'émission par les stations terriennes (Tableau III), on utilise les constantes C_1 et C_2 qui sont obtenues de la manière suivante:

Pour les modes de propagation (a) et (b):

$$\begin{aligned} C_1 &= G_r - P_r(p) - 20 \log_{10}(f/4) - F(p) \\ &= S - 20 \log_{10}(f/4) - F(p) \end{aligned}$$

Pour le mode de propagation (c):

$$C_2 = -P_r(p) - F_1(p, f) + \Delta G$$

L'affaiblissement de transmission de référence normalisé $L_o(0,01)$ et l'affaiblissement de transmission normalisé $L_1(0,01)$ sont donnés par les relations:

$$\begin{aligned} L_o(0,01) &= P_{r'} + G_{r'} + C_1 \\ L_1(0,01) &= P_{r'} + C_2 \end{aligned}$$

Les valeurs de C_1 et C_2 pour les bandes attribuées aux émissions par les stations terriennes sont indiquées dans le Tableau III en regard de la largeur de bande de référence (B) que l'on utilise pour calculer $P_{r'}$.

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Réception par les stations terriennes

3. Dans les bandes attribuées pour la réception par les stations terriennes (Tableau IV), on utilise les constantes C_3 et C_4 qui sont obtenues de la manière suivante:

Pour les modes de propagation (a) et (b):

$$C_3 = E - (10 \log_{10} kB + J - W) - F(p) - 20 \log_{10}(f/4)$$

Pour le mode de propagation (c):

$$C_4 = P_r - (10 \log_{10} kB + J - W) - F_1(p,f) + \Delta G$$

L'affaiblissement de transmission de référence normalisé $L_o(0,01)$ et l'affaiblissement de transmission normalisé $L_1(0,01)$ sont donnés par les relations:

$$L_o(0,01) = G_r + C_3 - 10 \log_{10} T_r - M(p)$$

$$L_1(0,01) = C_4 - 10 \log_{10} T_r - M(p)$$

Les valeurs de C_3 et C_4 pour les bandes attribuées pour la réception par les stations terriennes sont indiquées dans le Tableau IV.

Organigrammes

4. La méthode à employer pour déterminer la distance de coordination est illustrée par les organigrammes 1 et 2 de la présente annexe. Les différentes opérations requises pour déterminer les distances de coordination sont indiquées sur l'organigramme 1 pour le cas d'une station terrière d'émission et sur l'organigramme 2 pour le cas d'une station terrière de réception. Les symboles utilisés dans ces organigrammes sont définis dans le corps du texte de l'appendice 28.

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TABLEAU III

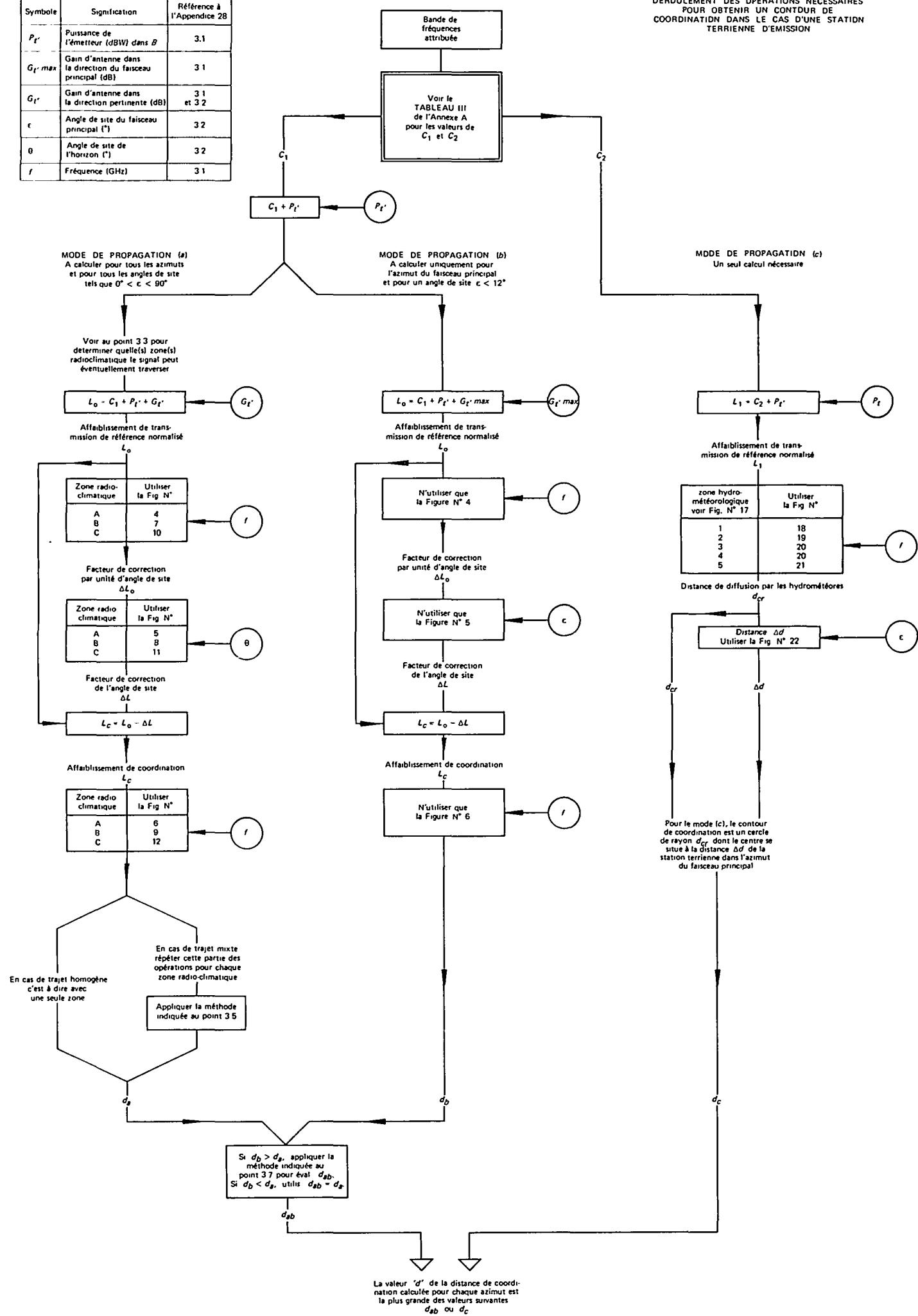
Emission par les stations terriennes — Voir l'organigramme 1

Bandes de fréquences attribuées (GHz)	C_1 (dBW)	C_2 (dBW)	Largeur de bande de référence B (Hz)
1,427 - 1,429	178	127	4×10^8
2,655 - 2,690	196	150	4×10^8
4,400 - 4,700	191	150	4×10^8
5,850 - 6,425	175	136	4×10^8
7,900 - 7,975 8,025 - 8,400 }	175	138	4×10^8
10,95 - 11,20	172	137	4×10^8
12,50 - 12,75	171	137	4×10^8
14,40 - 14,50	170	137	4×10^8
27,5 - 29,5	142	112	1×10^6

DEFINITIONS DES SYMBOLES

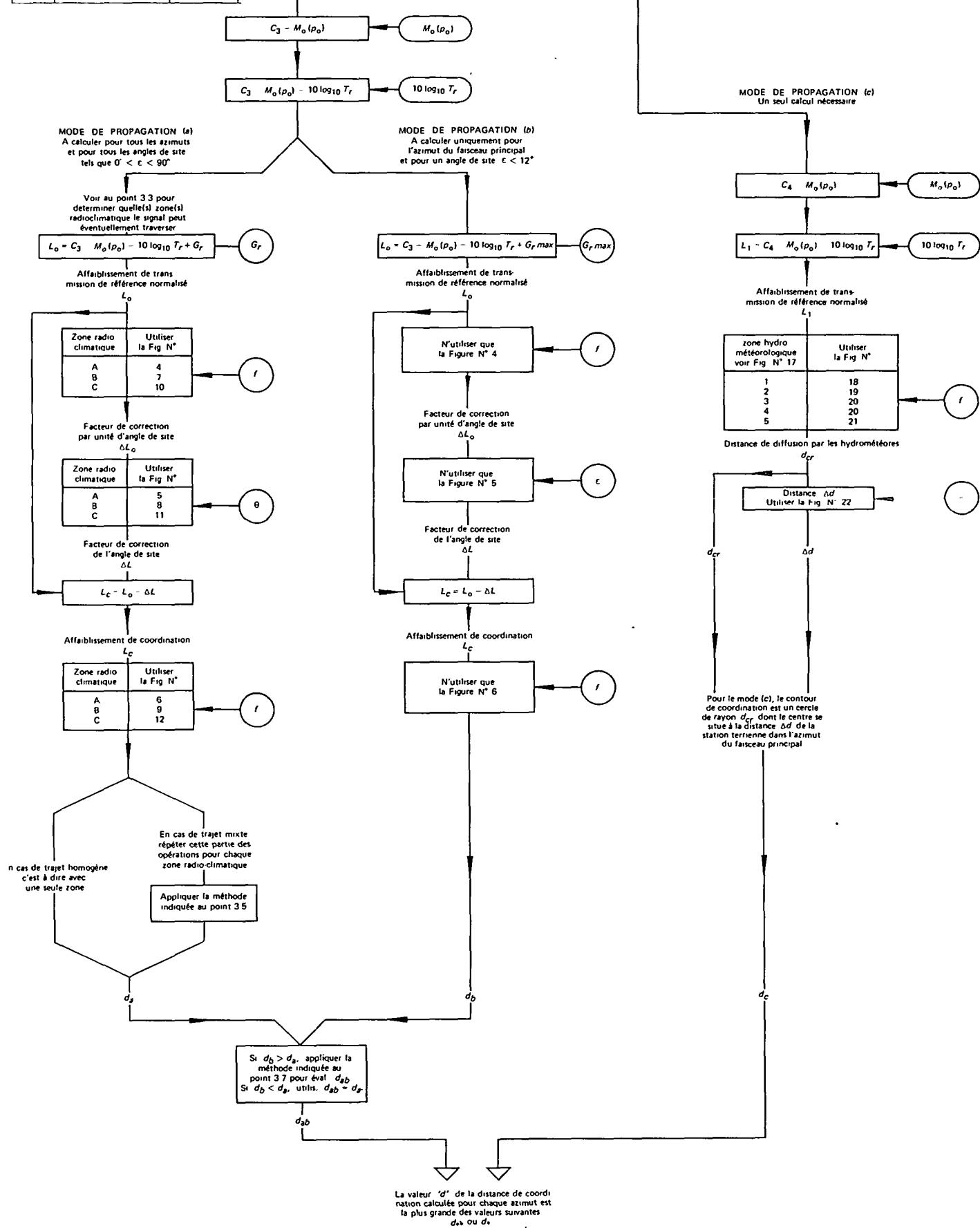
Symbol	Signification	Référence à l'Appendice 28
$P_{t'}$	Puissance de l'émetteur (dBW) dans B	3.1
$G_{t'} \text{ max}$	Gain d'antenne dans la direction du faisceau principal (dB)	3.1
$G_{t'}$	Gain d'antenne dans la direction pertinente (dB) et 3.2	3.1 et 3.2
ϵ	Angle de site du faisceau principal ($^{\circ}$)	3.2
θ	Angle de site de l'horizon ($^{\circ}$)	3.2
f	Fréquence (GHz)	3.1

ORGANIGRAMME 1
DEVELOPPEMENT DES OPERATIONS NECESSAIRES POUR OBTENIR UN CONTOUR DE COORDINATION DANS LE CAS D'UNE STATION TERRIENNE D'EMISSION



ORGANIGRAMME 2
DÉROULEMENT DES OPERATIONS NÉCESSAIRES
POUR OBTENIR UN CONTOUR DE
COORDINATION DANS LE CAS D'UNE STATION
TERRIENNE DE RECEPTION

Symbole	Signification	Référence à l'Appendice 28
$M_o(p_o)$	Marge de brouillage, long terme/court terme	2, note 2
T_r	Température de bruit du système de réception (K)	2
G_r	Gain d'antenne dans la direction pertinente (dB) et 3.2	3.1
$G_{r\max}$	Gain d'antenne dans la direction du faisceau principal (dB)	3.1
ϵ	Angle de site du lobe principal ($^{\circ}$)	3.2
θ	Angle de site de l'horizon ($^{\circ}$)	3.2
f	Fréquence (GHz)	3.1



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TABLEAU IV
Réception par les stations terriennes — Voir l'organigramme 2

Bandes de fréquences attribuées (GHz)	Désignation du service de radiocommunications spatiales		Type de signal modulant ⁽¹⁾	<i>C₃</i> (dBW)	<i>C₄</i> (dBW)
1,525 - 1,535	Exploitation spatiale (télémesure)				
1,670 - 1,690	Météorologie par satellite				
1,700 - 1,710 } 2,290 - 2,300 }	Recherche spatiale	Au voisinage de la Terre			
		Espace lointain; engins habités			
2,500 - 2,535	Fixe par satellite		A	277	231
3,400 - 4,200	Fixe par satellite		A	236	194
			N	234	188
7,300 - 7,750	Fixe par satellite		A	230	194
			N	228	186
8,025 - 8,400	Exploration de la Terre par satellite				
8,400 - 8,500	Recherche spatiale	Au voisinage de la Terre			
		Espace lointain			
10,95 - 11,20 } 11,45 - 11,70 }	Fixe par satellite		A	225	184
			N	220	176
11,70 - 12,20 } 12,50 - 12,75 }	Fixe par satellite		A	224	184
			N	219	176
17,7 - 19,7	Fixe par satellite		N	196	154
21,2 - 22,0	Exploration de la Terre par satellite				

⁽¹⁾ A = modulation analogique; N = modulation numérique.

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ANNEXE B A L'APPENDICE 28

Détermination et utilisation des contours auxiliaires

1. *Introduction*

Pour les mécanismes de propagation le long de l'arc de grand cercle (modes (a) et (b)), les contours auxiliaires sont d'un grand intérêt pour éliminer des études certaines des stations de Terre, existantes ou en projet, qui se trouvent à l'intérieur de la zone de coordination, cela sans avoir à faire des calculs précis et ardu. Aussi, les travaux de l'administration responsable de la station terrienne et ceux des administrations concernées se trouvent facilités, au cours des négociations ultérieures, si ces contours auxiliaires leur sont fournis.

2. *Détermination des contours auxiliaires*

On peut déterminer deux types de contour, selon que la station terrienne est une station d'émission ou de réception.

2.1 *Station terrienne d'émission*

La détermination des contours se fait de la même manière que pour le contour de coordination correspondant aux modes de propagation (a) et (b), mais on utilise pour le facteur de sensibilité au brouillage, S (en dBW), de la station de Terre des valeurs inférieures de 5, 10, 15, 20 dB, etc., à la valeur (donnée dans le Tableau I de l'appendice 28) qui correspond au contour de coordination.

2.2 *Station terrienne de réception*

La détermination des contours se fait de la même manière que pour le contour de coordination correspondant aux modes de propagation (a) et (b), mais on utilise, pour la p.i.r.e. E (en dBW), de la station de Terre, des valeurs inférieures de 5, 10, 15, 20 dB, etc., à la valeur (donnée dans le Tableau II de l'appendice 28) qui correspond au contour de coordination.

3. *Utilisation des contours auxiliaires*

Pour une bande partagée donnée, on trace sur le même graphique les contours auxiliaires, le contour de coordination pour la propagation

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le long de l'arc de grand cercle (modes (a) et (b)) et le contour de coordination pour la diffusion par les hydrométéores (mode (c)). A titre d'illustration, un exemple est donné à la figure 23 de l'appendice 28 dans le cas d'une station terrienne d'émission.

Pour chaque station de Terre située à l'intérieur de la zone de coordination, on peut appliquer une méthode en deux temps, d'une part pour la propagation le long de l'arc de grand cercle, d'autre part pour la diffusion par les hydrométéores.

3.1 Mécanisme de propagation le long de l'arc de grand cercle (modes (a) et (b))

Si une station de Terre d'émission se trouve à l'extérieur de la zone de coordination correspondant aux modes (a) et (b), il est inutile d'en tenir compte plus avant en ce qui concerne ces modes.

Pour chaque station de Terre d'émission située à l'intérieur de la zone de coordination correspondant aux modes (a) et (b), on détermine la p.i.r.e. dans la direction de la station terrienne. Si cette valeur est inférieure à celle qui correspond au contour le plus proche définissant une zone à l'extérieur de laquelle se trouve la station, on peut considérer que celle-ci ne cause pas de brouillages dépassant un niveau admissible, et que par conséquent on n'a pas à en tenir compte plus avant en ce qui concerne les modes (a) et (b).

La même méthode peut être appliquée pour chaque station de Terre de réception, en utilisant le facteur de sensibilité au brouillage en lieu et place de la p.i.r.e.

3.2 Elimination d'une station de Terre et mécanisme de diffusion par les hydrométéores (mode (c))

Les stations de Terre qui se trouvent éliminées par la méthode ci-dessus et dont il n'y a plus lieu de tenir compte pour les modes (a) et (b) doivent néanmoins être prises en considération dans l'étude pour le mode de propagation (c), si ces stations se trouvent à l'intérieur de la zone de coordination pour la diffusion par les hydrométéores.

ANNEXE 19**Adjonction d'un nouvel appendice
(appendice 29) au Règlement des radiocommunications**

Le nouvel appendice suivant est ajouté au Règlement des radiocommunications à la suite du nouvel appendice 28:

APPENDICE 29**Méthode de calcul à suivre pour évaluer le degré de brouillage
entre des réseaux à satellite
géostationnaire partageant les mêmes bandes
de fréquences****1. Introduction**

La méthode de calcul des brouillages repose sur le principe en vertu duquel la température de bruit du système brouillé augmente avec le niveau des brouillages qu'il subit. Cette méthode est donc applicable quelles que soient les caractéristiques de modulation des réseaux à satellite en jeu, et quelles que soient les fréquences exactes qu'ils utilisent.

Selon cette méthode, on calcule pour une liaison par satellite donnée l'accroissement apparent de la température de bruit équivalente⁽¹⁾, résultant du brouillage causé par un système donné, et on compare cet accroissement à une valeur prédéterminée d'accroissement de la température de bruit (voir la section 3 ci-dessous).

2. Calcul de l'accroissement de la température de bruit de la liaison par satellite subissant le brouillage

Soient A et A' les liaisons par satellite⁽²⁾ des deux réseaux à satellite considérés. Les symboles tels que a , b , c , se rapportent à la liaison par satellite A et les symboles tels que a' , b' , c' à la liaison par satellite A'.

Les notations utilisées pour la liaison par satellite A sont les suivantes:

ΔT_s = accroissement de la température de bruit de réception du satellite S, causé par les brouillages subis par le récepteur de ce satellite (en K);

⁽¹⁾ Voir le numéro 103A.

⁽²⁾ Voir le numéro 84AFC.

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ΔT_c = accroissement de la température de bruit de réception de la station terrienne e_R , causé par les brouillages subis par le récepteur de cette station (en K);

p_s = densité maximale de puissance par Hz fournie à l'antenne du satellite S (moyenne prise dans la bande de 4 kHz la plus défavorisée lorsque la fréquence de la porteuse est inférieure à 15 GHz, ou prise dans la bande de 1 MHz la plus défavorisée lorsque la fréquence de la porteuse est supérieure à 15 GHz) (en W/Hz);

$g_3(\eta_{e'})$ = gain de l'antenne d'émission du satellite S dans la direction de la station terrienne de réception e'_R pour la liaison par satellite A' (rapport numérique de puissances);

Note: le produit de p_s par $g_3(\eta_{e'})$ est la p.i.r.e. maximale par Hz du satellite S dans la direction de la station terrienne de réception e'_R pour la liaison par satellite A';

p_e = densité maximale de puissance par Hz fournie à l'antenne de la station terrienne d'émission e_T (moyenne prise dans la bande de 4 kHz la plus défavorisée lorsque la fréquence de la porteuse est inférieure à 15 GHz, ou prise dans la bande de 1 MHz la plus défavorisée lorsque la fréquence de la porteuse est supérieure à 15 GHz) (en W/Hz);

$g_2(\delta_{e'})$ = gain de l'antenne de réception du satellite S dans la direction de la station terrienne d'émission e'_T (rapport numérique de puissances);

$g_1(0)$ = gain de l'antenne d'émission de la station terrienne e_T dans la direction du satellite S' (rapport numérique de puissances);

$g_4(0)$ = gain de l'antenne de réception de la station terrienne e_R dans la direction du satellite S' (rapport numérique de puissances);

k = constante de Boltzmann (en J/K);

l_d = affaiblissement de transmission en espace libre sur le trajet descendant (rapport numérique de puissances) (*);

l_u = affaiblissement de transmission en espace libre sur le trajet montant (rapport numérique de puissances) (*);

(*) Pour simplifier les calculs, on a supposé:

- que les affaiblissements de transmission de référence sur les trajets descendants sont identiques, quels que soient le satellite et la station terrienne considérés;
- que les affaiblissements de transmission de référence sur les trajets montants sont identiques, quels que soient la station terrienne et le satellite considérés.

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- γ = gain de transmission de la liaison par satellite, évalué depuis la sortie de l'antenne de réception de la station spatiale S jusqu'à la sortie de l'antenne de réception de la station terrière e_r (rapport numérique de puissances, habituellement inférieur à 1);
- θ = espacement angulaire géocentrique entre deux satellites (en degrés) (*).

ΔT_s et ΔT_e peuvent être calculés d'après les expressions suivantes:

$$\Delta T_s = \frac{p'_e g'_1(\theta) g_2(\delta_e)}{kl_u} \quad (1)$$

$$\Delta T_e = \frac{p'_s g'_3(\eta_e) g_4(\theta)}{kl_d} \quad (2)$$

On utilise le symbole ΔT pour représenter l'accroissement apparent, dû aux brouillages causés par la liaison A', de la température de bruit équivalente pour la liaison par satellite tout entière à l'entrée du récepteur de la station terrière de réception e_r .

Cet accroissement de la température de bruit résulte des brouillages qui affectent à la fois le récepteur du satellite de la liaison A et celui de la station terrière de cette liaison. On peut donc écrire:

$$\Delta T = \gamma \Delta T_s + \Delta T_e \quad (3)$$

D'où:

$$\Delta T = \gamma \frac{p'_e g'_1(\theta) g_2(\delta_e)}{kl_u} + \frac{p'_s g'_3(\eta_e) g_4(\theta)}{kl_d} \quad (4)$$

L'expression (4) donne le résultat de l'effet des brouillages à la fois sur le trajet montant et sur le trajet descendant. S'il y a un changement de modulation dans le satellite ou si les fréquences de transfert du satellite utile et du satellite brouilleur sont différentes, on peut être amené à traiter séparément le trajet montant et le trajet descendant en utilisant les expressions (1) et (2).

(*) Pour simplifier les calculs, on a supposé que l'espacement angulaire topocentrique entre les deux satellites, observé à partir d'une station terrière quelconque, est égal à l'espacement angulaire géocentrique entre les deux satellites.

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Dans les formules qui précèdent, les gains $g'_1(\theta)$ et $g'_4(\theta)$ sont ceux des stations terriennes considérées. Faute de renseignements plus précis, on peut utiliser un diagramme de rayonnement de référence approprié pour exprimer les gains $g'_1(\theta)$ et $g'_4(\theta)$ dans une direction faisant un angle θ avec celle du rayonnement maximal. Dans le cas où on ne dispose pas de données numériques précises, on se sert du diagramme de rayonnement de référence ayant pour expression $32 - 25 \log_{10}\theta$ lorsqu'il s'agit d'antennes de stations terriennes pour lesquelles le rapport *diamètre/longueur d'onde* est supérieur à 100.

On peut obtenir de la même façon la valeur $\Delta T'$ de l'accroissement de la température de bruit équivalente pour la liaison par satellite tout entière, à l'entrée du récepteur de la station terrienne de réception e'_n subissant les brouillages causés par la liaison par satellite A, en utilisant les expressions suivantes:

$$\Delta T'_{s'} = \frac{p_e g_1(\theta) g'_2(\delta_e)}{kl_u} \quad (5)$$

$$\Delta T'_{e'} = \frac{p_s g_3(\eta_{e'}) g'_4(\theta)}{kl_d} \quad (6)$$

$$\Delta T' = \gamma' \frac{p_e g_1(\theta) g'_2(\delta_e)}{kl_u} + \frac{p_s g_3(\eta_{e'}) g'_4(\theta)}{kl_d} \quad (7)$$

Dans le cas de deux satellites à accès multiple, on doit faire ce calcul pour chacune des liaisons par satellite établies par l'intermédiaire de l'un d'eux par rapport à chacune des liaisons par satellite établies par l'intermédiaire de l'autre.

3. Comparaison entre l'accroissement relatif calculé et l'accroissement relatif prédéterminé de la température de bruit équivalente de la liaison par satellite

Les valeurs calculées de ΔT et $\Delta T'$ doivent être comparées à des valeurs prédéterminées, prises égales à 2% des températures de bruit équivalentes correspondantes de la liaison:

— si la valeur calculée de ΔT est inférieure à la valeur prédéterminée, le niveau de brouillage causé par la liaison par satellite A' à la liaison par satellite A est admissible, quelles que soient les caractéristiques

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de modulation des deux liaisons par satellite et les fréquences exactes qu'elles utilisent;

— si la valeur calculée de ΔT est supérieure à la valeur prédéterminée, il convient d'effectuer un calcul détaillé en appliquant les méthodes définies dans les Avis et Rapports pertinents du C.C.I.R.

La comparaison entre la valeur calculée et la valeur prédéterminée de $\Delta T'$ doit être faite de la même façon.

A titre d'exemple, on peut dire que, dans le cas d'une liaison par satellite dont les caractéristiques de fonctionnement sont conformes aux Avis en vigueur du C.C.I.R., qui utilise la téléphonie à modulation de fréquence et dans lequel le bruit total dans une voie téléphonique est de 10 000 pW0p, dont 1 000 pW0p sont dus aux faisceaux hertziens de Terre et 1 000 pW0p sont causés par d'autres liaisons par satellite, une augmentation de 2% de la température de bruit équivalente correspondrait à un niveau de bruit dû au brouillage de 160 pW0p.

La liste des caractéristiques fondamentales qui doivent être fournies pour chaque réseau est donnée à l'appendice 1B au Règlement des radiocommunications. Un exemple détaillé de calcul de brouillage entre deux liaisons par satellite géostationnaire est donné dans l'annexe au présent appendice.

4. Détermination des liaisons par satellite à prendre en considération pour le calcul de l'accroissement de la température équivalente de bruit à partir des données fournies pour la publication anticipée d'un réseau à satellite

Il faut déterminer le plus grand accroissement de température de bruit équivalente causé à n'importe quelle liaison de tout réseau à satellite existant ou en projet, sous l'effet des brouillages produits par le réseau à satellite considéré.

Pour chaque antenne de réception du satellite du réseau brouillé, il convient de déterminer l'emplacement le plus défavorable de station terrienne d'émission du réseau brouilleur en superposant, sur une carte de la surface terrestre, les zones de service « Terre vers espace » du réseau brouilleur aux contours de gain de l'antenne de réception de la station spatiale. L'emplacement le plus défavorable de station terrienne d'émission est celui en direction duquel le gain de l'antenne de réception du satellite du réseau brouillé est le plus élevé.

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De même, pour chaque zone de service « espace vers Terre » du réseau brouillé, il convient de déterminer de façon analogue l'emplacement le plus défavorable de station terrienne de réception de ce réseau. L'emplacement le plus défavorable de station terrienne de réception est celui en direction duquel le gain de l'antenne d'émission du satellite du réseau brouilleur est le plus élevé.

Dans le cas où le satellite du réseau brouillé est équipé de simples répéteurs-changeurs de fréquence, ces déterminations d'emplacement se font par couple, d'une part pour l'antenne de réception du satellite associée à un répéiteur particulier et, d'autre part, pour la zone de service « espace vers Terre » associée à l'antenne d'émission de ce répéteur.

La méthode de calcul ci-dessus permet de la même façon de déterminer le plus grand accroissement de température de bruit équivalente subi par une liaison quelconque d'un réseau à satellite en projet sous l'effet des brouillages produits par n'importe quel autre réseau à satellite.

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ANNEXE A L'APPENDICE 29

**Exemple de calcul du brouillage entre deux liaisons
par satellite géostationnaire partageant
la même bande de fréquences**

A. Généralités

Par souci de simplification, on a supposé dans cet exemple deux réseaux à satellite identiques et un espacement angulaire géocentrique $\theta = 6^\circ$ entre les satellites. Le diagramme de rayonnement de référence de l'antenne de la station terrière ($32 - 25 \log_{10} \theta$) indique, pour cet espacement angulaire, un gain de 12,5 dB dans la direction du satellite de l'autre réseau.

Les calculs ont été effectués en décibels, de sorte que les multiplications numériques deviennent des additions de décibels et que les divisions numériques deviennent des soustractions de décibels. A chaque étape du calcul, on a introduit les facteurs contribuant au brouillage, dans un ordre qui correspond à la direction de la propagation. Les trois premières étapes servent à définir les paramètres de chaque liaison. Les étapes 4, 5 et 6 correspondent aux calculs de brouillage proprement dits.

Pour déterminer la température de bruit équivalente d'une liaison, il faut connaître le rapport entre le bruit interne total de la liaison et le bruit thermique sur le trajet descendant. On a donc supposé, pour cet exemple, le bilan de bruit ci-après:

Bilan de bruit

Bruit interne	Bruit thermique sur le trajet descendant	5 000 pW0p
8 000 pW0p	Bruit thermique sur le trajet montant	1 000 pW0p
	Bruit d'intermodulation	2 000 pW0p
Bruit externe	Bruit dû au brouillage causé par les liaisons qui utilisent d'autres satellites	1 000 pW0p
2 000 pW0p	Bruit dû au brouillage causé par des systèmes de Terre	1 000 pW0p
	Bruit total	<hr/> 10 000 pW0p

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On peut noter que, puisque les deux satellites utilisent des faisceaux à couverture mondiale, l'antenne du satellite n'apporte pratiquement pas de discrimination entre le signal utile et le signal brouilleur; il s'agit donc d'un cas défavorable à l'extrême.

B. Paramètres des systèmes

	Symbole	Liaison A ou A'	Unité
Etape 1) Trajet montant sur 6 175 MHz			
Densité maximale de puissance par Hz fournie à l'antenne de la station terrienne d'émission dans la bande de 4 kHz la plus défavorisée	p_e	-37	dBW/Hz
Gain de l'antenne de la station terrienne	g_1	62,5	dB
Affaiblissement en espace libre sur 38 500 km, à 6 175 MHz	l_u	200	dB
Gain de l'antenne du satellite (faisceau à couverture mondiale)	g_2	15,5	dB
Niveau à l'entrée du récepteur du satellite		-159	dBW/Hz
$p_e + g_1 - l_u + g_2$			
Etape 2) Trajet descendant sur 3 950 MHz			
Densité maximale de puissance par Hz fournie à l'antenne du satellite dans la bande de 4 kHz la plus défavorisée	p_s	-57	dBW/Hz
Gain de l'antenne d'émission du satellite	g_3	15,5	dB
Affaiblissement en espace libre sur 38 500 km, à 3 950 MHz	l_d	196	dB
Gain de l'antenne de réception de la station terrienne	g_4	58,5	dB
Niveau du signal à l'entrée du récepteur de la station terrienne		-179	dBW/Hz
$p_s + g_3 - l_d + g_4$			
Etape 3) Calculs pour l'ensemble de la liaison			
Gain de transmission entre l'entrée du récepteur du satellite et l'entrée du récepteur de la station terrienne	γ	-20	dB
159 dB - 179 dB			

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	Symbole	Liaison A ou A'	Unité
Température de bruit de la station terrienne (pour G/T = 40,7 dB)		60	K
Bruit thermique sur le trajet descendant (voir le bilan de bruit)		5 000	pW0p
Bruit interne total sur la liaison (voir le bilan de bruit)		8 000	pW0p
Température de bruit équivalente pour la liaison $\frac{8\ 000}{5\ 000} \times 60$	T	96	K

C. Calcul du brouillage

Etape 4) Brouillage sur le trajet montant			
Densité de puissance de la station terrienne brouilleuse (comme pour l'étape 1)	p'_e	-37	dBW/Hz
Gain de l'antenne de la station terrienne brouilleuse dans la direction du satellite brouillé (6° en dehors de l'axe du faisceau)	$g_1(\theta)$	12,5	dB
Affaiblissement en espace libre sur 38 500 km, à 6 175 MHz (voir étape 1)	l_u	200	dB
Gain de l'antenne du satellite dans la direction de la station terrienne brouilleuse	$g_2(\delta_{e'})$	15,5	dB
Constante de Boltzmann $1,38 \times 10^{-23}$ J/K	k	-228,6	dBW/K
Accroissement de la température de bruit de réception du satellite $p'_e + g_1(0) - l_u + g_2(\delta_{e'}) - k$ (en unités logarithmiques)		19,6	
Accroissement de la température de bruit de réception du satellite	ΔT_s	91	K
Etape 5) Brouillage sur le trajet descendant			
Densité de puissance de l'émetteur du satellite brouilleur (comme pour l'étape 2)	p'_s	-57	dBW/Hz

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	Symbole	Liaison A ou A'	Unité
Gain de l'antenne du satellite brouilleur dans la direction de la station terrienne brouillée	$g_s(\eta_e)$	15,5	dB
Affaiblissement en espace libre sur 38 500 km, à 3 950 MHz (voir étape 2)	I_d	196	dB
Gain de l'antenne de la station terrienne dans la direction du satellite brouilleur (6° en dehors de l'axe du faisceau)	$g_s(0)$	12,5	dB
Constante de Boltzmann $1,38 \times 10^{-23} \text{ J/K}$	k	-228,6	dBW/K
Accroissement de la température de bruit de réception de la station terrienne $p'_s + g_s(\eta_e) - I_d + g_s(0) - k$ (en unités logarithmiques)		3,6	
Accroissement de la température de bruit de réception de la station terrienne	ΔT_e	2,29	K
Etape 6) Brouillage total sur la liaison			
Accroissement de la température de bruit de réception du satellite (déduit de l'étape 4)	ΔT_s	91	K
Valeur numérique de γ (déduite de l'étape 3)	γ	0,01	nombre
Accroissement de la température de bruit de réception de la station terrienne (déduit de l'étape 5)	ΔT_e	2,29	K
Accroissement de la température de bruit équivalente de la liaison $\gamma\Delta T_s + \Delta T_e = 0,01 \times 91 + 2,29$	ΔT	3,2	K
Pourcentage d'accroissement $\frac{3,2}{96} \times 100\%$	$(\Delta T/T) \times 100\%$	3,33	%
Accroissement, dû au brouillage, du bruit de la liaison $(3,33/100) \times 8 000 \text{ pWOp}$		266	pWOp

D. Conclusions

Dans l'exemple choisi, l'accroissement de la température de bruit équivalente de la liaison par satellite est de 3,33 %, ce qui dépasse la valeur

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prédéterminée fixée à 2 % et ne peut plus être considéré comme admissible. La coordination des deux réseaux est donc requise. Il convient alors de faire des calculs plus précis, en utilisant en particulier les diagrammes de rayonnement réels des antennes des stations terriennes, l'espacement angulaire topocentrique des satellites et les valeurs exactes des affaiblissements de transmission de référence. On tient compte également, le cas échéant, de facteurs supplémentaires tels que la discrimination de polarisation, l'entrelacement des fréquences, la répartition spectrale du bruit de brouillage, qui ont tous pour effet de réduire le brouillage calculé.

On peut montrer qu'en choisissant, dans l'exemple étudié, un espacement angulaire plus grand entre les satellites ($7,4^\circ$), l'accroissement de la température de bruit équivalente de la liaison ne serait plus que de 2 %, ce qui rendrait toute coordination inutile.

PROTOCOLE FINAL

Au moment de procéder à la signature des Actes finals de la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), les délégués soussignés prennent note de ce que les déclarations suivantes ont été formulées par certaines délégations signataires:

GÉNÉRALITÉ

La Conférence administrative mondiale des télécommunications spatiales, Genève 1971, a décidé que la déclaration ci-dessous présentée par l'Inde serait incluse dans le Protocole final incorporé aux Actes finals de la Conférence:

«En Inde, la bande 845-935 MHz est également utilisée pour des expériences de radiodiffusion télévisuelle par satellite en modulation de fréquence avec dispersion d'énergie, sous réserve d'accords avec les administrations dont certains services fonctionnant conformément aux dispositions du Tableau d'attribution des bandes de fréquences peuvent être défavorablement influencés.

La limite de densité surfacique de puissance spécifiée au numéro 332A du Règlement des radiocommunications s'appliquera à la protection des services de télévision de Terre; les limites analogues spécifiées au numéro 470NI et au numéro 470NK du Règlement des radiocommunications s'appliqueront d'autre part à la protection des services fixes et des services mobiles fonctionnant dans cette bande.»

RÉPUBLIQUE FÉDÉRALE DU CAMEROUN

La délégation de la République Fédérale du Cameroun à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) ne pouvant, d'une part, dans l'état actuel de son développement, faire des remarques pertinentes sur les propositions d'attribution de bandes de fréquences comprises entre 40 et 275 GHz, et, d'autre part, désirant vivement encourager le progrès de la technologie,

signe les Actes finals de la présente conférence, en réservant toutefois à son Gouvernement le droit de prendre toutes les mesures jugées nécessaires

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pour sauvegarder ses intérêts, le cas échéant, et pour protéger son réseau de télécommunications au cas où certains Membres ou Membres associés ne respecteraient pas les dispositions des Règlements des radiocommunications ainsi révisés et complétés.

RÉPUBLIQUE CENTRAFRICAINE

La délégation de la République Centrafricaine à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) signe les Actes finals de la présente Conférence en réservant au Gouvernement de la République Centrafricaine le droit de prendre toutes mesures qu'il jugera utiles à la sauvegarde de ses intérêts au cas où certains Membres ou Membres associés manqueraient de quelque façon que ce soit de se conformer aux décisions de la présente Conférence ou si des actes découlant des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses services de télécommunications.

CEYLAN

La délégation de Ceylan réserve à son Gouvernement le droit de prendre toutes mesures qu'il pourra juger nécessaires à la sauvegarde de ses intérêts au cas où certains Membres manqueraient, de quelque façon que ce soit, de se conformer aux décisions de la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), ou encore si des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses propres services de télécommunications.

CHILI

La délégation du Chili déclare qu'elle réserve à la République du Chili le droit de prendre, en collaboration avec l'Union internationale des télécommunications, les mesures qu'elle juge utiles à la sauvegarde de la souveraineté et des intérêts de la République du Chili au cas où un Membre ou Membre associé manquerait partiellement ou totalement de se conformer aux dispositions du Règlement des radiocommunications, révision de Genève, 1971, et de la Convention de Montreux (1965), ou bien si les réserves formulées par d'autres pays affectent directement ou indirectement les intérêts et/ou les systèmes de télécommunications de la République du Chili.

PRÓTOCOLE FINAL

RÉPUBLIQUE DÉMOCRATIQUE DU CONGO

La délégation de la République Démocratique du Congo à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) réserve à son Gouvernement le droit de prendre, en collaboration avec l'Union internationale des télécommunications, toutes mesures qu'il jugerait nécessaires pour sauvegarder ses intérêts, si des Membres ou Membres associés ne respectaient pas les dispositions des Règlements des radiocommunications révisés ou si, le cas échéant, des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses propres services de télécommunications.

RÉPUBLIQUE DE CÔTE D'IVOIRE

La délégation de Côte d'Ivoire déclare qu'elle réserve pour son Gouvernement, en vertu des pouvoirs qui lui sont conférés, le droit de prendre, en collaboration avec l'Union internationale des télécommunications, toutes mesures qu'il jugerait nécessaires à la sauvegarde de ses intérêts si des Membres ou Membres associés n'observaient pas, de quelque façon que ce soit, les stipulations de la révision du Règlement des radiocommunications de Genève (1959) établie par la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), ou si des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses services de télécommunications.

RÉPUBLIQUE D'INDONÉSIE

La délégation de l'Indonésie croit fermement que seule une étroite coopération internationale fondée sur une entente aussi générale que possible permettra de tirer parti des vastes possibilités offertes par les télécommunications par satellite.

L'Indonésie, dont le territoire est un archipel où de grandes étendues de terres sont séparées par de vastes étendues maritimes, considère comme très prometteuse l'expansion des télécommunications par satellite, laquelle faciliterait la solution des graves problèmes qui se posent à ce pays en matière de télécommunications.

Les pays en voie de développement reconnaissent pleinement l'importance du rôle des télécommunications par satellite dans la diffusion de l'éducation,

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de l'information et des autres services publics en des lieux éloignés des grandes villes.

Il convient néanmoins que les pays en voie de développement participent sans réserve aux discussions et aux décisions importantes concernant l'avenir des systèmes à satellites. Ces pays doivent être continuellement tenus au courant des progrès et des développements survenus dans ce domaine.

Il convient, de plus, que les pays en voie de développement n'aient pas l'impression de dépendre, pour bénéficier de ces progrès, de la bonne volonté d'un petit groupe de pays. L'utilisation des systèmes à satellites ne doit pas être réservée à un petit nombre de pays riches; il faut en conséquence prévoir des mesures d'assistance telles que même les plus pauvres des pays en voie de développement bénéficient des progrès des systèmes de télécommunications par satellite.

Si l'on veut que le progrès de cette technologie profite à l'ensemble de l'humanité et qu'il contribue substantiellement au succès de la Deuxième Décennie du Développement, il convient de prêter la plus grande attention aux intérêts des pays en voie de développement.

L'Indonésie est reconnaissante à l'U.I.T. et au P.N.U.D. de l'assistance qui lui a jusqu'ici été fournie pour améliorer son réseau de télécommunications. Il reste cependant des projets qui doivent encore être menés à bien: projet de réseau régional de télécommunications en Asie du sud-est, projets éducatifs, projets de télécommunications en Irian occidental dans le cadre des Fonds pour le développement de l'Irian occidental et d'autres projets pour lesquels l'assistance doit se poursuivre. L'Indonésie espère sincèrement bénéficier d'une assistance technique qui lui permettra de mettre au point son propre système national de télécommunications par satellite.

IRAN

Le Gouvernement impérial de l'Iran se réserve le droit de prendre toutes les mesures qu'il estimera nécessaires en vue de protéger et d'utiliser ses services qui fonctionnent actuellement ou qui entreront en fonctionnement à l'avenir, au cas où ceux-ci seraient affectés par des services d'autres pays.

Il se réserve aussi le droit de ne pas accepter les procédures d'enregistrement à l'I.F.R.B. pour les fréquences utilisées actuellement ou à l'avenir pour ses équipements et sur son territoire.

La délégation de l'Iran se réserve donc le droit, au nom de son pays, de prendre les mesures nécessaires pour répondre à ses besoins en matière de

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télécommunications et pour protéger ses services existants et futurs sans prévoir de restriction d'aucune sorte pour les équipements utilisés ou destinés à être utilisés à l'avenir dans toutes les bandes de fréquences.

JAMAÏQUE

La délégation de la Jamaïque réserve pour son gouvernement le droit de prendre telles mesures qu'il jugerait nécessaires pour préserver ses intérêts au cas où un Membre ne respecterait pas de quelque manière que ce soit les décisions de la Conférence administrative mondiale des radiocommunications spatiales de Genève (1971) et compromettrait ainsi le fonctionnement des services de télécommunications de la Jamaïque.

RÉPUBLIQUE ISLAMIQUE DE MAURITANIE

La délégation de la République Islamique de Mauritanie à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), en signant les Actes finals de la présente Conférence, réserve à son Gouvernement le droit de prendre, en collaboration avec l'Union internationale des télécommunications (U.I.T.) toutes les mesures qu'il jugerait nécessaires pour:

- sauvegarder ses intérêts, le cas échéant;
- protéger, dans toutes les bandes de fréquences concernées, son réseau de télécommunications existant, projeté ou futur, dans le cas où certains Membres ou Membres associés ne respecteraient pas, de quelque façon que ce soit, les dispositions révisées et complétées du Règlement des radiocommunications, ou si les réserves formulées par d'autres pays en compromettaient le fonctionnement normal.

RÉPUBLIQUE DU NIGER

La délégation de la République du Niger réserve à son Gouvernement le droit de prendre toutes mesures qu'il pourra estimer nécessaires et adéquates en vue de la sauvegarde de ses intérêts, au cas où un pays quelconque manquerait d'une façon ou d'une autre de se conformer aux dispositions qui figurent dans les Actes finals de cette Conférence, ou encore si des réserves formulées par un pays quelconque compromettaient le bon fonctionnement des télécommunications nigériennes.

PROTOCOLE FINAL

PAKISTAN

En signant les Actes finals de la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), la délégation du Pakistan réserve à son Gouvernement le droit d'adhérer à tout ou partie des dispositions du Règlement des radiocommunications de Genève (1959) révisé.

La délégation du Pakistan déclare de plus qu'elle réserve à son Gouvernement le droit d'accepter ou non les conséquences que pourrait entraîner la non-adhésion d'un autre pays Membre de l'Union aux dispositions dudit Règlement des radiocommunications révisé.

RÉPUBLIQUE RWANDAISE

La délégation de la République Rwandaise signe les Actes finals de la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) en réservant à son Gouvernement le droit de prendre toutes mesures qu'il jugerait nécessaires à la sauvegarde de ses intérêts si des Membres ou Membres associés n'observaient pas de quelque façon que ce soit les stipulations de la révision du Règlement des radiocommunications de Genève (1959) effectuée par la présente Conférence, ou si des réserves formulées par d'autres pays compromettaient le bon fonctionnement de ses services de télécommunications.

RÉPUBLIQUE DU SÉNÉGAL

La délégation de la République du Sénégal à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) signe les Actes finals de la présente Conférence en réservant au Gouvernement du Sénégal le droit de prendre toutes mesures qu'il jugera:

- utiles à la sauvegarde de ses intérêts dans l'utilisation des bandes de fréquences au-dessus de 40 GHz;
- nécessaires au cas où certains Membres manqueraient de quelque façon que ce soit de se conformer aux décisions de la présente conférence ou si des actes découlant des réserves formulées par d'autres Membres compromettaient le bon fonctionnement de ses services de télécommunications.

PROTOCOLE FINAL**RÉPUBLIQUE DE SINGAPOUR**

En signant les Actes finals de la Conférence administrative mondiale des télécommunications spatiales de Genève (1971), la délégation de la République de Singapour réserve à son Gouvernement le droit de prendre toutes mesures qu'il pourra juger nécessaires à la sauvegarde de ses intérêts au cas où un pays quelconque manquerait, de quelque façon que ce soit, de se conformer aux dispositions des Actes finals de cette Conférence, ou encore si des réserves formulées par un pays quelconque compromettaient le bon fonctionnement des services de télécommunications de la République de Singapour.

RÉPUBLIQUE DE VENEZUELA

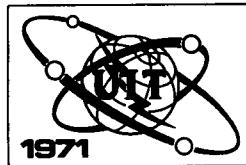
La délégation de la République de Venezuela à la Conférence administrative mondiale des télécommunications spatiales de Genève (1971) fait savoir qu'en signant les Actes finals de cette Conférence, elle réserve expressément à son Gouvernement le droit d'adopter ou non les conclusions de ladite Conférence et aussi de prendre toute mesure qu'il estimera opportune pour sauvegarder ses intérêts et protéger ses réseaux de télécommunications pour le cas où un pays Membre ou Membre associé ne respecterait pas les dispositions du Règlement des radiocommunications tel qu'il a été révisé et complété par la Conférence.

(Suivent les signatures)

(Les signatures qui suivent le Protocole final sont les mêmes que celles qui suivent la révision du Règlement des radiocommunications aux pages 5 à 36.)

ACTAS FINALES

DE LA
CONFERENCIA ADMINISTRATIVA
MUNDIAL DE TELECOMUNICACIONES
ESPACIALES
GINEBRA, 1971



C O P I E
certifiée conforme à l'original
Genève, le 6 JAN. 1972

Le Secrétaire général
de l'Union internationale des
télécommunications

ABREVIATURAS

En los anexos se utilizan las abreviaturas siguientes para caracterizar la clase de enmiendas introducidas durante la revisión parcial del Reglamento de Radiocomunicaciones:

Símbolo	Significado
MOD	Modificación
SUP	Supresión
ADD	Adición
NOC	No cambia

Nota: Si una modificación sólo afecta a la redacción de un número, sin modificar el fondo, se utiliza el símbolo:

(MOD)

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de la Conferencia Administrativa Mundial de Telecomunicaciones espaciales

Ginebra, 1971

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¹ Not printed herein. [Footnote added by the Department of State.]

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REVISIÓN PARCIAL DEL REGLAMENTO DE RADIOCOMUNICACIONES¹

En su Recomendación N.^o Spa 9, la Conferencia Administrativa Extraordinaria de Radiocomunicaciones encargada de atribuir bandas de frecuencias para las radiocomunicaciones espaciales, celebrada en Ginebra en 1963, recomendó que el Consejo de Administración de la Unión examinara en cada una de sus reuniones anuales los progresos realizados por las administraciones en materia de radiocomunicaciones espaciales y los informes y recomendaciones que a este respecto formulen los organismos permanentes de la Unión. Recomendó, asimismo, que el Consejo de Administración, basándose en sus exámenes anuales sobre los progresos realizados, y en la fecha que él mismo fije, recomiende a las administraciones la convocatoria de una Conferencia Administrativa encargada de preparar nuevos acuerdos sobre la reglamentación internacional de la utilización de las bandas de frecuencias atribuidas por la Conferencia de 1963 a las radiocomunicaciones espaciales.

En la Resolución N.^o 632, adoptada en su 23.^a reunión, en 1968, el Consejo de Administración recomendó la convocatoria, para fines de 1970 o principios de 1971, de una Conferencia Administrativa mundial de radiocomunicaciones e invitó a las administraciones a que enviaran al Secretario General sus proposiciones sobre el orden del día de dicha conferencia.

¹ Se trata del Reglamento de Radiocomunicaciones, Ginebra, 1959, tal como ha sido parcialmente revisado por la Conferencia Administrativa Extraordinaria de Radiocomunicaciones encargada de atribuir bandas de frecuencias para las radiocomunicaciones espaciales (Ginebra, 1963), la Conferencia Administrativa Extraordinaria de Radiocomunicaciones encargada de elaborar un plan revisado de adjudicación para el servicio móvil aeronáutico (R) (Ginebra, 1966) y la Conferencia Administrativa Mundial de Radiocomunicaciones encargada de cuestiones relativas al servicio móvil marítimo (Ginebra, 1967).

En virtud de lo dispuesto en los números 56 y 64 del Convenio Internacional de Telecomunicaciones (Montreux, 1965), el Consejo de Administración, en su reunión de 1969 y previo acuerdo de la mayoría de los Miembros de la Unión estableció, en la Resolución N.^o 653, el orden del día de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales, y decidió que se reuniera en Ginebra el 7 de junio de 1971 durante seis semanas, con posibilidad de prolongación una semana más en caso necesario.

En 1970, sin embargo, el Consejo de Administración, teniendo en cuenta las disposiciones de la Resolución N.^o 40 de la XII Asamblea Plenaria del C.C.I.R. relativas a la convocatoria, antes de la Conferencia, de una Reunión especial mixta de las comisiones de estudio de este Comité, acordó en su Resolución N.^o 665 que la duración de la conferencia fuera de seis semanas.

* * *

Reunida en consecuencia en la fecha fijada, la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales ha examinado y revisado, de conformidad con su orden del día, las partes pertinentes del Reglamento de Radiocomunicaciones. El detalle de la revisión del Reglamento de Radiocomunicaciones figura en los Anexos 1 a 19 adjuntos.

Las disposiciones del Reglamento de Radiocomunicaciones, así revisadas, forman parte integrante del Reglamento de Radiocomunicaciones anexo al Convenio Internacional de Telecomunicaciones y entrarán en vigor el 1.^o de enero de 1973, fecha en que quedarán derogadas las disposiciones del Reglamento de Radiocomunicaciones, anuladas o modificadas como consecuencia de esta revisión.

* * *

Al firmar la presente revisión del Reglamento de Radiocomunicaciones, los delegados respectivos declaran que, si una administración formulara reservas con respecto a la aplicación de una o varias de las disposiciones revisadas del Reglamento de Radiocomunicaciones, ninguna otra administración estará obligada a observar tal o tales disposiciones en sus relaciones con la administración que haya formulado esas reservas.

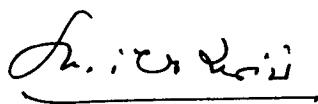
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Los Miembros y Miembros asociados de la Unión deberán notificar al Secretario General su aprobación de la revisión del Reglamento de Radiocomunicaciones por la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales, Ginebra, 1971. El Secretario General comunicará estas aprobaciones, a medida que las reciba, a los Miembros y Miembros asociados de la Unión.

En fe de lo cual, los delegados de los Miembros de la Unión representados en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales, Ginebra, 1971, suscriben, en nombre de sus países respectivos, la presente revisión del Reglamento de Radiocomunicaciones, cuyo único ejemplar quedará depositado en los archivos de la Unión Internacional de Telecomunicaciones y del que se remitirá una copia certificada conforme a cada uno de los Miembros y Miembros asociados de la Unión.

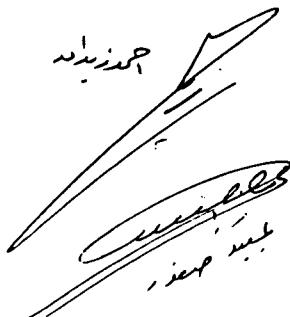
En Ginebra, a 17 de julio de 1971.

Pour l'Algérie (République Algérienne Démocratique et Populaire):



M. IBNOU-ZEKRI
M. HARBI

Pour le Royaume de l'Arabie Saoudite:



A. ZAIDAN
OBAID AL RAHMAN SAFFDAR

Pour la République Argentine:



N. J. MAZZARO
R. SAIDMAN

Pour le Commonwealth de l'Australie:



L. M. HARRIS
E. SANDBACH

Pour l'Autriche:



H. PANGRATZ

Pour la Belgique:



P. C. M. BOUCHIER

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Z. L. PODORSKI

Pour le Brésil:

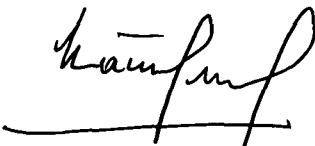
P. RIBENBOIM
J. V. PARETO NETO
A. J. A. SALGADO
N. V. DA SILVA
C. P. QUEVEDO
M. A. DE BIASE SILVA PICOT
R. R. RAMOS
M. B. MARSIAJ
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A. B. CARLEIAL
B. HIMELGRYN
J. SANTELLI JUNIOR

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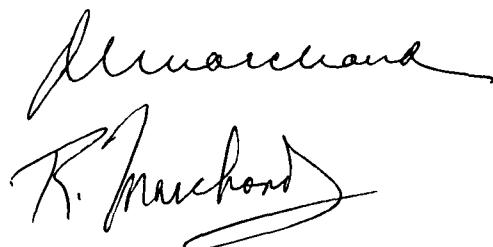
I. IGNATOV

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P. N. KAMGA

Pour le Canada:



DE MONTIGNY MARCHAND
R. MARCHAND

Pour la Republique Centrafricaine:



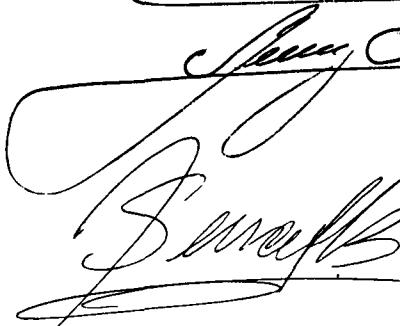
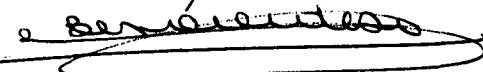
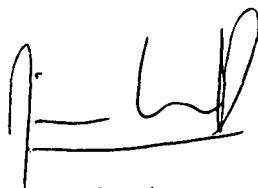
F. D. DIMA

Pour Ceylan:



M. B. RODRIGO

Pour le Chili:



J. S. SCHATZ
S. H. MORALES
R. ARAGAY
R. B. E. BENAVIDES
A. M. LUENGO
J. B. SERRAT

Pour la Chine:

Cheng Paman 鄭文彌

T V Miao 楊廷茂

Cheng Chen 陳勤

P. CHENG
T. V. MIAO
C. CHEN

Pour la Republique de Chypre:

R Michaelides

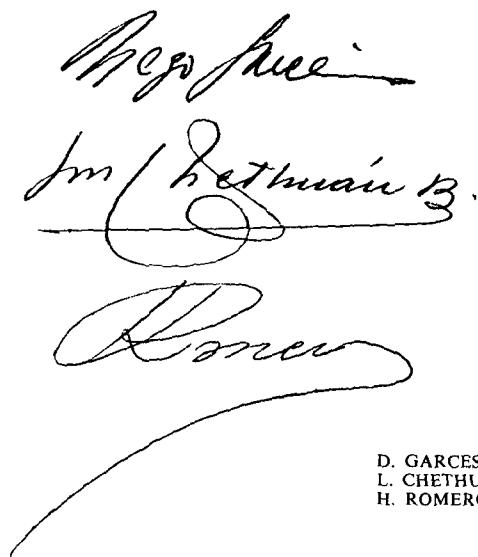
R. MICHAELIDES

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Hans de Riedmatt O.P
Stefanizzi Antonio
Giudici Pier Vincenzo

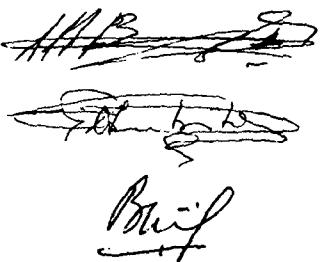
H. M. DE RIEDMATTEN
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P. V. GIUDICI

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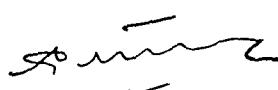
D. GARCES
L. CHETHUAN
H. ROMERO

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A. BANANISA
G. NKUBITO
B. MVILAKANI

Pour la Republique Populaire du Congo:



F. BATOLA

Pour la Republique de Coree:

31 乞乞
李基哲
01 06/36
21 2H 81

D.S. Choy
BK. Cho
Younghwan
J.U. Kim

J. S. CHOY
B. K. CHO
Y. H. LEE
J. U. KIM

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P. K. KOPOIN
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Pour Cuba:





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et télécommunications d'Outre-Mer:


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Pour l'Espagne:

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Fernando Molina Negro
José M. Arto Madrazo
Juan M. Paredes Quevedo
B. A. Duran Mingorance

E. PÉREZ-HERNANDEZ
F. MOLINA NEGRO
J. M. ARTO MADRAZO
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B. A. DURAN MINGORANCE

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W. Dean, Jr.
Gordon L. Huffcutt
Robert E. Lee

R. C. TYSON
W. DEAN, JR.
G. L. HUFFCUTT
R. E. LEE

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Bayo Desta
Tsehhatu

B. DESTA
T. SEBHATU

Pour la Finlande:

T. Kytoniemi
A. Sinkkonen

T. KYTONIEMI
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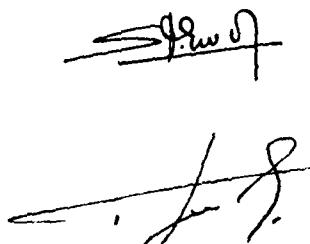
Pour la France:



A handwritten signature consisting of two parts. The top part is a stylized 'M' followed by 'Huet'. Below it is a larger, flowing signature that includes 'Chaspoul'.

F. JOB
M. HUET
P. L. CHASPOUL
J. B. BES

Pour la Republique Gabonaise:



Two handwritten signatures. The first is a stylized 'S. Ewore'. Below it is another signature that appears to be 'T. Souah'.

S. EWORE
T. SOUAH

Pour le Ghana:



A handwritten signature that appears to be 'R. K. Baffour'.

R. K. BAFFOUR

Pour la Grèce:

L. PARAVANTIS
E. NICOLAIDES
G. DEBONOS

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J. M. OUEDRAOGO
J. GUISSOU

Pour la Republique Populaire Hongroise:

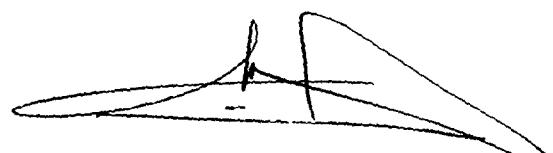
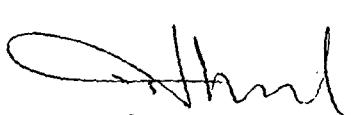
D. HORN

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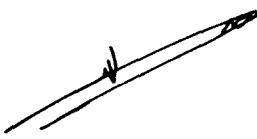

N. C. Srivastava
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M. V. Krishnaswamy
R. B. Mukherjee
S. Thiruvenkatachari
B. S. Rao

N. C. SHRIVASTAVA
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M. V. KRISHNASWAMY
R. B. MUKHERJEE
S. THIRUVENKATACHARI
B. S. RAO

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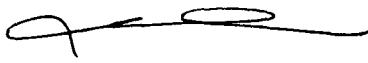

M. K. M. MANGOENDIPRODJO

W. M. MANGOENDIPRODJO
SOEGIHARTO

Pour l'Iran:



A. MOTAMEDI
H. ANSARI
S. FATEMI

Pour la Republique d'Iraq:



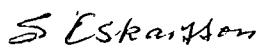
A. H. ALI

Pour l'Irlande:



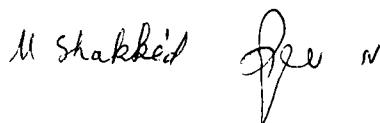
J. MALONE

Pour l'Islande:



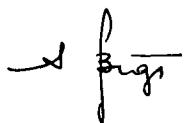
S. THORKELSSON
S. OSKARSSON

Pour l'Etat d'Israël:



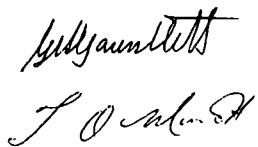
M. SHAKKÉD

Pour l'Italie:



A. BIGI
A. PETTI

Pour la Jamaïque:



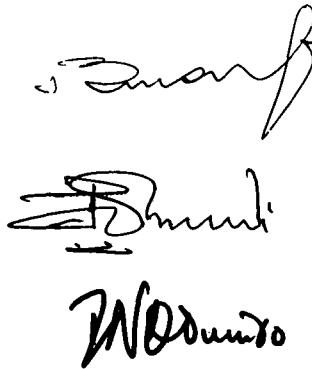
G. A. GAUNTLETT
T. O. MINOTT

Pour le Japon:



S. FUJIKI
Y. OKAWA

Pour le Kenya:



R. M. YUSUF
P. O. OKUNDI
I. N. ODUndo

Pour l'Etat de Koweït:

A. A. AL-SARAWI
A. A. ALSAADOOON
A. M. ALSABEJ
A. A. ALAYOUB
J. A. ALMAZEEDI

Pour la Republique du Liberia:

S. H. BUTLER

Pour la Republique Arabe Libyenne:

N. S. TULTI

Pour la Principaute de Liechtenstein:

M. LEDEBUR

Pour le Luxembourg:

P. FABER

Pour la Malaisie:

Tun V. T. SAMBANTHAN
K. P. CHEW
S. bin ABDUL KADIR
D. S. VARIYAN

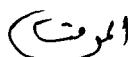
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Pour la Republique du Mali:

A handwritten signature consisting of two parts. The top part is a stylized 'K' or 'M'. The bottom part is a more fluid, cursive signature.

M. L. KANE
M. M. KEITA

Pour le Royaume du Maroc:

A handwritten signature enclosed in a circle.

M. MOUKITE

Pour la Republique Islamique de Mauritanie:

A handwritten signature consisting of a stylized 'D' or 'A' above a horizontal line.

A. DUFFAU

Pour le Mexique:

A handwritten signature consisting of a stylized 'H' or 'J' above a long, sweeping cursive line.

J. HERNANDEZ

Pour Monaco:



C. C. SOLAMITO

Pour le Nicaragua:



A. A. MULLHAUPT

Pour la Republique du Niger:



M. ABBA

Pour la République Fédérale de Nigeria:



A. A. BODÉDE

Pour la Norvège:



H. NYMOEN
A. BØE

Pour la Nouvelle-Zélande:



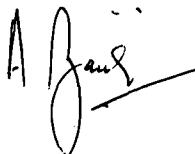
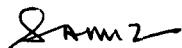
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R. J. BUNDLE

Pour l'Ouganda:



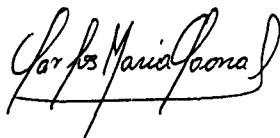
P. O. OKUNDI

Pour le Pakistan:



A. KHAN
S. A. AZIZ
A. ZAIDI

Pour le Paraguay:



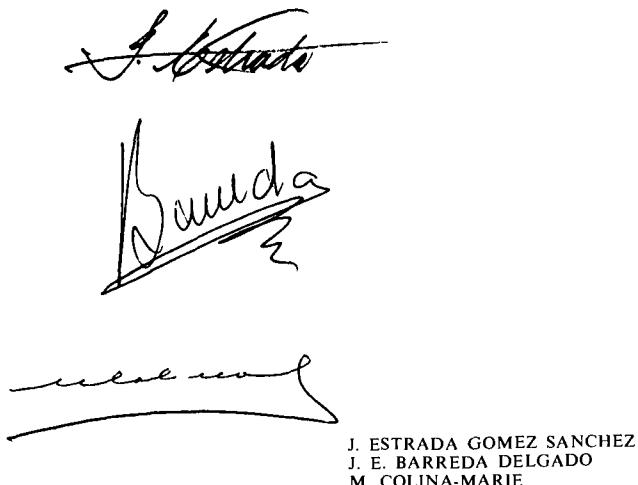
C. M. GAONA VELAZCO

Pour le Royaume des Pays-Bas:



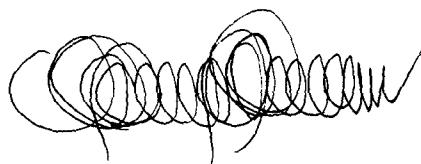
F. R. NEUBAUER
P. E. WILLEMS
K. J. KERLING
F. S. LATOUR

Pour le Pérou:



J. ESTRADA GOMEZ SANCHEZ
J. E. BARREDA DELGADO
M. COLINA-MARIE

Pour la Republique des Philippines:



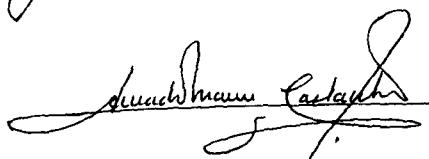
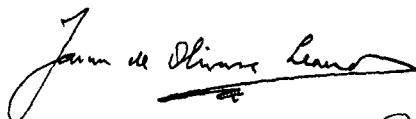
C. S. CARREON
L. A. GARCIA

Pour la Republique Populaire de Pologne:



K. KOZŁOWSKI

Pour le Portugal:



F. DE ALCAMBAR PEREIRA
D. A. PIRES FRANCO
J. O. LEANDRO
A. MARINI CASTANHEIRA
M. J. LOPES DA SILVA

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F. de Alcambar Pereira

J. D. Ferraz de Carvalho

J. O. Leandro

F. DE ALCAMBAR PEREIRA
J. D. FERRAZ DE CARVALHO
J. O. LEANDRO

Pour la République Arabe Syrienne:

N. Kisrawi

M. Hammoude

N. KISRAWI
M. HAMMOUDE

Pour la République Arabe Unie:

E. Elkashlan

Nabil Khodair

E. ELKASHLAN
N. KHODAIR

Pour la Republique Fédérale d'Allemagne:



J. KUPPER

Pour la Republique Socialiste Soviétique de l'Ukraine:



I. E. TIMCHENKO

Pour la Republique Socialiste de Roumanie:



G. AIRINEI
L. CONSTANTINESCU

Pour le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, les Iles Anglo-Normandes et l'Île de Man:

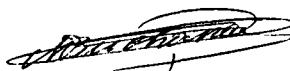
D. E. Baptiste

C. W. Sowton

S. G. Hicks

D. E. BAPTISTE
C. W. SOWTON
S. G. HICKS

Pour la République Rwandaise:



M. BUCYANA

Pour la République du Sénégal:

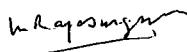


L. Dia



A. M'BODJI
L. DIA I. N'DOYE

Pour la Republique de Singapour:



R. G. RAJASINGAM

Pour la Republique Sudafricaine:



A. BIRRELL
P. H. de V. VAN TONDER

Pour la Suede:



B. BJUREL
C.-G. ÅSDAL
P. ÅKERLIND

Pour la Confédération Suisse:

F. Locher
H. R. Probst.
C. Steffen
H. A. Kieffer

F. LOCHER
H. R. PROBST
C. STEFFEN
H. A. KIEFFER

Pour la République Unie de Tanzanie:

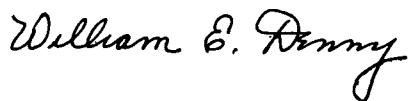
R. M. Yusuf
P. O. Okundi

Pour la République Socialiste Tchécoslovaque:

J. Maršíček
M. Zahradníček
J. Vrba

J. MARŠÍČEK
M. ZAHRADNÍČEK
J. VRBA

Pour les Territoires des Etats-Unis d'Amérique:



W. E. DENNY

Pour les Territoires d'Outre-Mer dont les relations internationales sont assurées par le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord:



T. F. H. HOWARTH

Pour la Thaïlande:



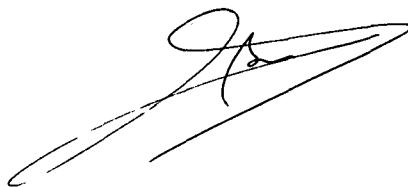
P. SURASIDHI
P. KASEMSRI
C. KANCHANINDU

Pour la République Togolaise:



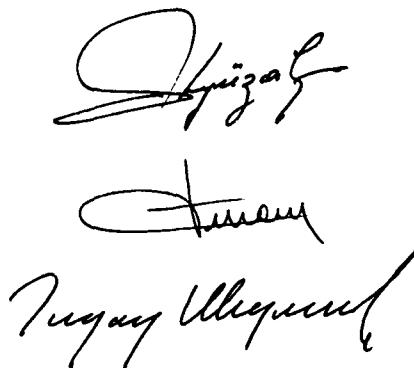
A. AITHNARD

Pour la Tunisie:



B. KHOUADJA

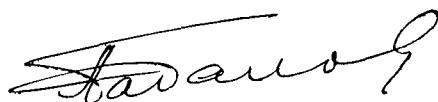
Pour la Turquie:



The block contains three signatures stacked vertically. The top signature is 'N. AKYÜZALP'. Below it is 'O. TURAN'. At the bottom is 'Tugay Uluçevik'.

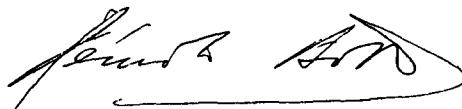
N. AKYÜZALP
O. TURAN
T. ULUÇEVİK

Pour l'Union des Républiques Socialistes Soviétiques:



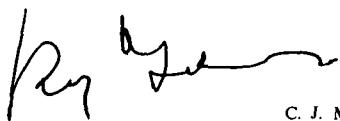
A. L. BADALOV

Pour la Republique Orientale de l'Uruguay



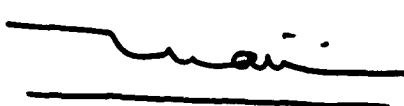
R. BOTTO

Pour la Republique de Venezuela:



C. J. MARTINEZ
R. ZERPA

Pour la Republique du Viet-Nam:

VUONG QUANG NGHIA
PHAM VAN TRINH
NGUYEN CONG ANH-TUAN

Pour la Republique Socialiste Federative de Yougoslavie:



M. DAKIĆ

ANEXO 1

Revisión del artículo 1 del Reglamento de Radiocomunicaciones *

El artículo 1 del Reglamento de Radiocomunicaciones se revisa como sigue:

Sección II. Sistemas, servicios y estaciones radioeléctricas

Despues del numero 21, agreguense los nuevos numeros siguientes

ADD **21A**
Spa2

Estación espacial

Estación situada en un objeto que se encuentra, que está destinado a ir o que ya estuvo, fuera de la parte principal de la atmósfera de la Tierra.

** Nota de la Secretaría General*

En algunos casos, la Conferencia ha procedido a una reagrupación de las definiciones atribuyéndoles un nuevo número, o modificándolas, o manteniéndolas como estaban.

Se trata de las siguientes definiciones:

<i>Nuevo numero</i>	<i>Definición</i>	<i>Antiguo numero</i>	<i>Observaciones</i>
21A	Estación espacial	84AE	MOD
21B	Estación terrena	84AD	MOD
21C	Radiocomunicación espacial	84AC	MOD
21D	Radiocomunicación terrenal	84AA	MOD
21E	Estación terrenal	84AB	MOD
84AFA	Sistema de satélites	84AL	MOD
84ATD	Servicio de investigación espacial	84AM	MOD
84ATE	Servicio de operaciones espaciales	84AC	MOD
84ATF	Servicio entre satélites	84AC	MOD
84BAA	Vehículo espacial	84BH	MOD
84BAC	Satélite activo	84AJ	NOC
84BAD	Satélite pasivo	84AK	NOC

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ADD	21B Spa2	<i>Estación terrena</i>
		Estación situada en la superficie de la Tierra o en la parte principal de la atmósfera terrestre destinada a establecer comunicación:
		— con una o varias estaciones espaciales;
		— o con una o varias estaciones de la misma naturaleza, mediante el empleo de uno o varios satélites pasivos u otros objetos situados en el espacio.
ADD	21C Spa2	<i>Radiocomunicación espacial</i>
		Toda radiocomunicación que utilice una o varias estaciones espaciales, uno o varios satélites pasivos o cualquier otro objeto situado en el espacio.
ADD	21D Spa2	<i>Radiocomunicación terrenal</i> ¹
		Toda radiocomunicación distinta de la radiocomunicación espacial o de la radioastronomía.
ADD	21D.1 Spa2	¹ En el presente Reglamento, y siempre que no se indique expresamente lo contrario, todo servicio de radiocomunicación que se menciona en el mismo corresponde a una radiocomunicación terrenal.
ADD	21E Spa2	<i>Estación terrenal</i> ¹
		Estación que efectúa radiocomunicaciones terrenales.
ADD	21E.1 Spa2	¹ En el presente Reglamento, y siempre que no se indique expresamente lo contrario, toda estación que se menciona en el mismo corresponde a una estación terrenal.
		<i>El numero 69 queda sustituido por el nuevo texto siguiente</i>
MOD	69 Spa2	<i>Servicio de seguridad</i>
		Servicio de radiocomunicación utilizado de manera permanente o temporal para garantizar la seguridad de la vida humana y de los bienes sobre la superficie de la Tierra, en la atmósfera terrestre o en el espacio.

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Suprímanse los números 84AA y 84AB.

Sección II A. Sistemas, servicios y estaciones espaciales

Suprímanse los números 84AC, 84AD y 84AE.

El número 84AF queda sustituido por el nuevo texto siguiente:

MOD 84AF *Sistema espacial*
Spa2 Cualquier conjunto coordinado de estaciones terrenas, de estaciones espaciales, o de ambas, que utilicen la radiocomunicación espacial para determinados fines.

Después del número 84AF, agréguese los nuevos números siguientes:

ADD 84AFA *Sistema de satélites*
Spa2 Sistema espacial que utiliza uno o varios satélites artificiales de la Tierra.

ADD 84AFB *Red de satélite*
Spa2 Sistema de satélites o parte de un sistema de satélites que consta de un solo satélite y de estaciones terrenas asociadas.

ADD 84AFC *Enlace por satélite*
Spa2 Enlace radioeléctrico efectuado entre una estación terrena transmisora y una estación terrena receptora por medio de un satélite.

Un enlace por satélite está formado por un trayecto ascendente y un trayecto descendente.

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ADD **84AFD** *Enlace multisatélite*
Spa2

Enlace radioeléctrico efectuado entre una estación terrena transmisora y una estación terrena receptora por medio de dos satélites por lo menos y sin ninguna estación terrena intermedia.

Un enlace multisatélite está formado por un trayecto ascendente, uno o varios trayectos entre satélites y un trayecto descendente.

El número 84AG queda sustituido por el nuevo texto siguiente:

MOD **84AG** *Servicio fijo por satélite*
Spa2

Servicio de radiocomunicación:

- entre estaciones terrenas situadas en puntos fijos determinados, cuando se utilizan uno o más satélites; en algunos casos, este servicio incluye enlaces entre satélites que pueden realizarse también dentro del servicio entre satélites;
- o que establece el enlace entre una o varias estaciones terrenas situadas en puntos fijos determinados y satélites utilizados por un servicio diferente del servicio fijo por satélite (por ejemplo, el servicio móvil por satélite, el servicio de radiodifusión por satélite, etc.).

Después del número 84AG, agréguese los nuevos números siguientes:

ADD **84AGA** *Servicio móvil por satélite*
Spa2

Servicio de radiocomunicación:

- entre estaciones terrenas móviles y una o varias estaciones espaciales o entre estaciones espaciales utilizadas por este servicio;
- o entre estaciones terrenas móviles por intermedio de una o varias estaciones espaciales;
- y, si así lo exige el sistema utilizado, realiza el enlace entre estas estaciones espaciales y una o varias estaciones terrenas situadas en puntos fijos determinados.

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ADD **84AGB** *Servicio móvil aeronáutico por satélite*
Spa2
Servicio móvil por satélite en el que las estaciones terrenas móviles están situadas a bordo de aeronaves. También pueden considerarse incluidas en este servicio las estaciones de embarcación o dispositivo de salvamento y las estaciones de radiobaliza de localización de siniestros.

ADD **84AGC** *Servicio móvil marítimo por satélite*
Spa2
Servicio móvil por satélite en el que las estaciones terrenas móviles están situadas a bordo de barcos. También pueden considerarse incluidas en este servicio las estaciones de embarcación o dispositivo de salvamento y las estaciones de radiobaliza de localización de siniestros.

ADD **84AGD** *Servicio móvil terrestre por satélite*
Spa2
Servicio móvil por satélite en el que las estaciones terrenas móviles están situadas en Tierra.

Suprímanse los números 84AH a 84AO.

El número 84AP queda sustituido por el nuevo texto siguiente :

MOD **84AP** *Servicio de radiodifusión por satélite*
Spa2
Servicio de radiocomunicación en el cual las señales emitidas o retransmitidas por estaciones espaciales están destinadas a la recepción directa ¹ por el público en general.

ADD **84AP.1** ¹ En el servicio de radiodifusión por satélite el término « recepción directa »
Spa2 abarcará tanto la recepción individual como la recepción comunal.

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Después del número 84AP, agréguese los nuevos números siguientes:

ADD 84APA *Recepción individual* (en el servicio de radiodifusión por satélite)

Recepción de las emisiones de una estación espacial del servicio de radiodifusión por satélite con instalaciones domésticas sencillas y, en particular, aquéllas que disponen de antenas de pequeñas dimensiones.

ADD 84APB *Recepción comunal* (en el servicio de radiodifusión por satélite)

Recepción de las emisiones de una estación espacial del servicio de radiodifusión por satélite con instalaciones receptoras que en ciertos casos pueden ser complejas y comprender antenas de mayores dimensiones que las utilizadas para la recepción individual y destinadas a ser utilizadas:

- por un grupo del público en general en un mismo lugar;
- o mediante un sistema de distribución que dé servicio a una zona limitada.

ADD 84APC *Servicio de radiodeterminación por satélite*

Servicio de radiocomunicación que entraña el empleo de la radiodeterminación y la utilización de una o más estaciones espaciales.

El número 84AQ queda sustituido por el nuevo texto siguiente :

MOD 84AQ *Servicio de radionavegación por satélite*

Servicio de radiodeterminación por satélite utilizado para los mismos fines que el servicio de radionavegación; en algunos

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casos, este servicio incluye la emisión o retransmisión de informaciones complementarias necesarias para el funcionamiento de los sistemas de radionavegación.

Después del número 84AQ, agréguese los nuevos números siguientes:

ADD **84AQA** *Servicio de radionavegación aeronáutica por satélite*
Spa2

Servicio de radionavegación por satélite en el que las estaciones terrenas móviles están situadas a bordo de aeronaves.

ADD **84AQB** *Servicio de radionavegación marítima por satélite*
Spa2

Servicio de radionavegación por satélite en el que las estaciones terrenas móviles están situadas a bordo de barcos.

Suprímanse los números 84AR y 84AS.

Antes del número 84AT, agréguese el nuevo número siguiente:

ADD **84ASA** *Servicio de exploración de la Tierra por satélite*
Spa2

Servicio de radiocomunicación entre estaciones terrenas y una o varias estaciones espaciales en el que:

- se obtiene información sobre las características de la Tierra y sus fenómenos naturales por medio de instrumentos a bordo de satélites de la Tierra;
- se reúne información análoga por medio de plataformas situadas en el aire o sobre la superficie de la Tierra;
- dichas informaciones pueden ser distribuidas a estaciones terrenas dentro de un mismo sistema;
- puede incluirse asimismo la interrogación a las plataformas.

El número 84AT queda sustituido por el nuevo texto siguiente:

- MOD **84AT** *Servicio de meteorología por satélite*
Spa2 Servicio de exploración de la Tierra por satélite con fines meteorológicos.

Después del número 84AT, agréguense los nuevos números siguientes:

- ADD **84ATA** *Servicio de aficionados por satélite*
Spa2 Servicio de radiocomunicación que utiliza estaciones espaciales situadas en satélites de la Tierra para los mismos fines que el servicio de aficionados.

- ADD **84ATB** *Servicio de frecuencias patrón por satélite*
Spa2 Servicio de radiocomunicación que utiliza estaciones espaciales situadas en satélites de la Tierra para los mismos fines que el servicio de frecuencias patrón.

- ADD **84ATC** *Servicio de señales horarias por satélite*
Spa2 Servicio de radiocomunicación en el que se utilizan estaciones espaciales situadas en satélites de la Tierra para los mismos fines que el servicio de señales horarias.

- ADD **84ATD** *Servicio de investigación espacial*
Spa2 Servicio de radiocomunicación que utiliza vehículos u otros objetos espaciales para fines de investigación científica o tecnológica.

- ADD **84ATE** *Servicio de operaciones espaciales*
Spa2 Servicio de radiocomunicación que concierne exclusivamente al funcionamiento de los vehículos espaciales, en particular el seguimiento, la telemedida y el telemundo.
Estas funciones serán normalmente realizadas dentro del servicio en el que funcione la estación espacial.

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ADD **84ATF** *Servicio entre satélites*
Spa2
Servicio de radiocomunicaciones que establece enlaces entre satélites artificiales de la Tierra.

Suprimanse los números 84AU y 84AV.

Sección IIB. Espacio, órbitas y tipos de objetos espaciales

El número 84BA queda sustituido por el nuevo texto siguiente:

MOD **84BA** *Espacio lejano*
Spa2
Región del espacio situada a una distancia de la Tierra aproximadamente igual o superior a la existente entre la Tierra y la Luna.

Después del número 84BA, agréguese los nuevos números siguientes:

ADD **84BAA** *Vehículo espacial*
Spa2
Vehículo construido por el hombre y destinado a salir fuera de la parte principal de la atmósfera terrestre.

ADD **84BAB** *Satélite*
Spa2
Cuerpo¹ que gira alrededor de otro cuerpo de masa preponderante y cuyo movimiento está principalmente determinado, de modo permanente, por la fuerza de atracción de este último.

ADD **84BAB.1** ¹ Todo cuerpo que corresponda a la definición de satélite y gire alrededor del Sol, se denomina planeta o planetoide.

ADD **84BAC** *Satélite activo*
Spa2
Satélite de la Tierra provisto de una estación destinada a emitir o retransmitir señales de radiocomunicación.

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ADD **84BAD** *Satélite pasivo*
Spa2
Satélite de la Tierra destinado a transmitir señales de radio-comunicación por reflexión.

Los números 84BB a 84BE quedan sustituidos por los nuevos textos siguientes:

MOD **84BB** *Órbita*
Spa2
1. Trayectoria que describe, con relación a un sistema de referencia especificado, el centro de gravedad de un satélite o de otro objeto espacial, por la acción única de fuerzas naturales, fundamentalmente las de gravitación.
2. Por extensión, trayectoria que describe el centro de gravedad de un objeto espacial sometido a la acción de las fuerzas naturales a las que eventualmente vienen a agregarse acciones correctivas de poca energía, ejercidas por un dispositivo de propulsión con el objeto de lograr y mantener la trayectoria deseada.

MOD **84BC** *Inclinación de una órbita* (de un satélite de la Tierra)
Spa2
Ángulo determinado por el plano que contiene una órbita y el plano del ecuador terrestre.

MOD **84BD** *Periodo* (de un satélite)
Spa2
Periodo de tiempo comprendido entre dos pasos consecutivos de un satélite o de un planeta por un punto característico de su órbita.

MOD **84BE** *Altitud del apogeo (perigeo)*
Spa2
Altitud del apogeo (perigeo) sobre una superficie de referencia dada que sirve para representar la superficie de la Tierra.

Suprímase el número 84BF.

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Antes del numero 84BG, agreguese el nuevo numero siguiente

ADD **84BFA**
Spa2

Satélite geosincronico

Satélite de la Tierra cuyo periodo de revolucion es igual al periodo de rotación de la Tierra alrededor de su eje.

El numero 84BG queda sustituido por el nuevo texto siguiente

MOD **84BG**
Spa2

Satélite geoestacionario

Satélite cuya orbita circular se encuentra en el plano ecuatorial de la Tierra y que gira en torno al eje polar de la misma en el mismo sentido y con un periodo igual al de rotación de la Tierra.

La orbita sobre la que debe desplazarse el satélite para que éste sea geoestacionario se llama « orbita de los satélites geoestacionarios ».

Suprimase el numero 84BH.

Sección III. Características tecnicas

Despues del numero 98, agreguese el numero siguiente

ADD **98A**
Spa2

Potencia isotropa radiada equivalente (p.i.r.e.)

Potencia de una emision suministrada a una antena multiplicada por la ganancia de la antena en una dirección dada con relación a una antena isotropa.

Despues del numero 103, agreguense los nuevos numeros siguientes:

ADD **103A**
Spa2

Temperatura de ruido equivalente de un enlace por satélite

Temperatura de ruido en la entrada del receptor de la estación terrena que corresponde a la potencia de ruido de radiofrecuencia que produce el ruido total observado en la salida del enlace

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por satélite, con exclusión del ruido debido a las interferencias provocadas por los enlaces por satélite que utilizan otros satélites y por los sistemas terrenales.

ADD **103B** *Distancia de coordinación*
Spa2

Distancia medida a partir de una estación terrena, en un acimut dado, dentro de la cual una estación terrenal que comparte la misma banda de frecuencias, puede producir o sufrir una interferencia cuyo nivel sea superior al valor admisible.

ADD **103C** " *Contorno de coordinación*
Spa2

Línea que une los puntos que se encuentran, en todos los acimutes a partir de una estación terrena, a una distancia de esta estación igual a la distancia de coordinación correspondiente a cada acimut.

ADD **103D** " *Zona de coordinación*
Spa2

Zona en torno a una estación terrena y limitada por el contorno de coordinación.

ANEXO 2

Revisión del artículo 2 del Reglamento de Radiocomunicaciones

El artículo 2 del Reglamento de Radiocomunicaciones se revisa como sigue:

Sección III. Nomenclatura de las bandas de frecuencias y de las longitudes de onda empleadas en las radiocomunicaciones

El numero 112 queda sustituido por el nuevo texto siguiente

MOD 112 § 7. El espectro radioeléctrico se subdivide en nueve bandas de Spa2. frecuencias, que se designan por numeros enteros, en orden creciente, de acuerdo con el siguiente cuadro. Las frecuencias se expresan:

- en kilohertzios (kHz) hasta 3 000 kHz, inclusive,
- en megahertzios (MHz) por encima de esta frecuencia hasta 3 000 MHz, inclusive,
- en gigahertzios (GHz), a partir de esta última frecuencia hasta 3 000 GHz, inclusive..

Sin embargo, siempre que la aplicación de esta disposición plantea graves dificultades, por ejemplo, en la notificación y registro de frecuencias, en las listas de frecuencias y en cuestiones conexas, se podrán efectuar cambios razonables.

AN 2 (ART 2)

Número de la banda	Gama de frecuencias (excluido el límite inferior, pero incluido el superior)	Subdivisión métrica correspondiente
4	3 a 30 kHz	Ondas miriamétricas
5	30 a 300 kHz	Ondas kilométricas
6	300 a 3 000 kHz	Ondas hectométricas
7	3 a 30 MHz	Ondas decamétricas
8	30 a 300 MHz	Ondas métricas
9	300 a 3 000 MHz	Ondas decímetricas
10	3 a 30 GHz	Ondas centimétricas
11	30 a 300 GHz	Ondas milimétricas
12	300 a 3 000 GHz o 3 THz	Ondas decímilimétricas

Nota 1 La «Banda N» se extiende de $0,3 \times 10^N$ a 3×10^N Hz.

Nota 2. Símbolos y prefijos

Hz = hertzio

k = kilo (10^3), M = mega (10^6), G = giga (10^9), T = tera (10^{12})

Nota 3 Abreviaturas calificativas que pueden servir para designar las bandas:

Banda 4 = VLF Banda 8 = VHF

Banda 5 = LF Banda 9 = UHF

Banda 6 = MF Banda 10 = SHF

Banda 7 = HF Banda 11 = EHF

ANEXO 3

Revisión del Artículo 5 del Reglamento de Radiocomunicaciones

El artículo 5 del Reglamento de Radiocomunicaciones se revisa como sigue:

El título del artículo 5 queda sustituido por el nuevo título siguiente

MOD Spa2

**Atribución¹ de bandas de frecuencias
entre 10 kHz y 275 GHz**

Sección I. Regiones y Zonas

El numero 125 queda sustituido por el nuevo texto siguiente:

(MOD) 125 § 1. Desde el punto de vista de la atribucion de las bandas de frecuencias, se ha dividido el mundo en tres Regiones² (véase el apéndice 24):

Agreguese la nueva nota siguiente al pie de la pagina:

ADD Spa2

¹ Véase la Resolución N.^o 6

El numero 125.1 queda sustituido por el nuevo texto siguiente:

(MOD) 125.1 § 2. Debe tenerse en cuenta que cuando, en el presente Reglamento, las palabras «región» y «regional» van escritas con minúscula, no se refieren a las tres Regiones aquí definidas para los efectos de la atribución de las bandas de frecuencias.

AN 3 (ART 5)

MOD Spa2

Sección IV Cuadro de atribución de bandas de frecuencias entre 10 kHz y 275 GHz

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 1 800 kHz y 2 000 kHz, por el siguiente para las Regiones 2 y 3

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
NOC	1 800 – 2 000 AFICIONADOS FIJO MÓVIL salvo móvil aeronáutico RADIONAVEGACIÓN 198	

NOC 198

SUP 199 199.1

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 2 170 y 2 194 kHz, por el siguiente

kHz

Región 1	Región 2	Región 3
	2 170 – 2 194 MÓVIL (Socorro y llamada) 201 201A	

NOC 201

ADD 201A Las frecuencias 2 182 kHz, 3 023,5 kHz, 5 680 kHz, 8 364 kHz, 121,5 MHz,
 Spa2 156,8 MHz y 243 MHz pueden además utilizarse, de conformidad con los procedimientos en vigor para los servicios de radiocomunicación terrenal, en operaciones de búsqueda y salvamento de vehículos espaciales tripulados.

También pueden utilizarse las frecuencias 10 003 kHz, 14 993 kHz, y 19 993 kHz, aunque, en este caso, las emisiones deben restringirse a una banda de ± 3 kHz con respecto a la frecuencia.

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 2 498 kHz y 2 502 kHz para la Región 1 y entre 2 495 kHz y 2 505 kHz para las Regiones 2 y 3, por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
2 300 - 2 498 NOC	2 300 - 2 495 NOC	
2 498 - 2 502 FRECUENCIA PATRÓN 203 203A	2 495 - 2 505 FRECUENCIA PATRÓN 203 203A	
2 502 - 2 625 NOC	2 505 - 2 625 NOC	

NOC 203

ADD 203A Las bandas 2 501 - 2 502 kHz, 5 003 - 5 005 kHz, 10 003 - 10 005 kHz, 15 005 - 15 010 kHz, 19 990 - 19 995 kHz, 20 005 - 20 010 kHz y 25 005 - 25 010 kHz están también atribuidas, a título secundario, al servicio de investigación espacial.

SUP 204

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 2 850 kHz y 3 025 kHz por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
2 850 – 3 025		
	MÓVIL AERONÁUTICO (R)	
	201A	

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 4 995 kHz y 5 005 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
4 995 – 5 005		
	FRECUENCIA PATRÓN	
	203A 210	

NOC 210

TIAS 7435

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 5 480 kHz y 5 730 kHz por el siguiente.

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
5 480 – 5 680		
MÓVIL AERONÁUTICO (R)		
201A		
5 680 – 5 730		
MÓVIL AERONÁUTICO (OR)		
201A		

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 7 000 kHz y 7 100 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
7 000 – 7 100		
AFICIONADOS AFICIONADOS POR SATÉLITE		

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 8 195 kHz y 8 815 kHz por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
8 195 – 8 815		
	MÓVIL MARITIMO	
	201A 213	

NOC 213

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 9 995 kHz y 10 100 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
9 995 – 10 005		
	FRECUENCIA PATRÓN	
	201A 203A 214	
10 005 – 10 100		
	MOVIL AERONAUTICO (R)	
	201A	

NOC 214

SUP 215 215A

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 14 000 kHz y 14 350 kHz por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
14 000 – 14 250		
AFICIONADOS		
AFICIONADOS POR SATELITE		
14 250 – 14 350		
AFICIONADOS		
	218	

NOC 218

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 14 990 kHz y 15 010 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
14 990 – 15 010		
FRECUENCIA PATRON		
201A 203A 219		

NOC 219

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 15 762 kHz y 15 768 kHz por el siguiente.

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
15 762 – 15 768		
	FIJO	

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 18 030 kHz y 20 010 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
18 030 – 18 052		
	FIJO	
18 052 – 18 068		
	FIJO <i>Investigación espacial</i>	
18 068 – 19 990		
	FIJO	
19 990 – 20 010		
	FRECUENCIA PATRÓN	
	201A 203A 220	

NOC 220

SUP 221 221A

AN 3 (ART 5)

Sustitúyase el actual Cuadro de atribución de bandas de frecuencias entre 21 000 kHz y 21 450 kHz por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
21 000 – 21 450		
	AFICIONADOS	
	AFICIONADOS POR SATÉLITE	

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 21 850 kHz y 22 000 kHz por el siguiente

kHz

Región 1	Región 2	Región 3
21 850 – 21 870		
	RADIOASTRONOMIA	
	221B	
21 870 – 22 000		
	FIJO AERONAUTICO	
	MÓVIL AERONÁUTICO (R)	

- ADD **221B** En Bulgaria, Hungria, Polonia, Rumania, Checoslovaquia, y U.R.S.S., la banda 21 850 - 21 870 kHz está también atribuida a los servicios fijo aeronáutico y móvil aeronáutico (R). Las administraciones interesadas tomarán todas las medidas prácticamente posibles a fin de proteger, en esta banda, las observaciones de radioastronomía contra interferencias perjudiciales.

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 23 350 kHz y 25 010 kHz por el siguiente

kHz

Atribución a los servicios		
Región 1	Región 2	Región 3
23 350 - 24 990		
Fijo MOVIL TERRESTRE 222 222A		
24 990 - 25 010		
FRECUENCIA PATRON 203A 223		

NOC 222

ADD 222A En Argentina y Uruguay, la banda 24 528 - 24 538 kHz puede ser utilizada
Spa2 por el servicio de investigación espacial, previo acuerdo entre las administraciones
interesadas y aquéllas cuyos servicios explotados de conformidad con el Cuadro,
puedan resultar afectados.

NOC 223

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 28 MHz y 47MHz para la Región 1, entre 28MHz y 50 MHz para la Región 2 y entre 28 MHz y 44MHz para la Región 3, por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
28 - 29,7		
	AFICIONADOS AFICIONADOS POR SATELITE	
29,7 - 30,005		
	Fijo 228 229 231 232 MÓVIL	
30,005 - 30,01		
	OPERACIONES ESPACIALES (Identificación de satélites) Fijo 228 229 231 MÓVIL INVESTIGACIÓN ESPACIAL	
30,01 - 37,75		
	Fijo 228 229 230 231 MÓVIL 233A	

NOC **228 229 230 231 232**

SUP **233**

ADD **233A** En Argentina y Uruguay, las bandas 36,65 - 36,85 MHz, 41,15 - 41,35 MHz Spa2 y 45,65 - 45,85 MHz y en Argentina, Brasil y Uruguay, la banda 170,55 - 170,95 MHz están atribuidas al servicio de radioastronomía y en estas bandas no asignarán frecuencias a estaciones de los servicios fijo y móvil.

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
37,75 - 38,25		
FIJO 228 229 231		
MÓVIL		
<i>Radioastronomía</i>		
233B		
38,25 - 41		
FIJO 228 229 230 231		
MÓVIL		
235 236 236A		
41 - 47	41 - 50	41 - 44
RADIODIFUSIÓN	FIJO 228 231 237	FIJO 228 237
<i>Fijo</i> 228 237	MÓVIL	MÓVIL
<i>Móvil</i>		236A
236A 238 239 240 241		44 - 50
	233A 236A	NOC

- ADD 233B Se ruega a las administraciones que, al asignar frecuencias a estaciones de Spa2 los demás servicios a que están atribuidas las bandas 37,75 - 38,25 MHz, 150,05 - 153 MHz, 406,1 - 410 MHz, 2 690 - 2 700 MHz y 4 700 - 5 000 MHz, adopten todas las medidas prácticamente posibles para proteger las observaciones de radioastronomía contra interferencias perjudiciales.
- MOD 235 La banda 39,986 - 40,02 MHz está también atribuida, a título secundario, Spa2 al servicio de investigación espacial.
- NOC 236
- ADD 236A La banda 40,98 - 41,015 MHz está también atribuida, a título secundario, Spa2 al servicio de investigación espacial, especialmente para las mediciones del efecto Faraday diferencial.
- NOC 237 238 239 240 241

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 80 MHz y 100 MHz para la Región 3 por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
NOC	NOC	80 - 87 Fijo Móvil 254 255 256 257 261 266
NOC	NOC	87 - 100 Fijo Móvil RADIODIFUSIÓN 254 267 268

NOC **254 255 256 257 261 266**

MOD **267** En Nueva Zelanda, las bandas 87 - 88 MHz y 94 - 108 MHz están atribuidas
 Spa2 a los servicios fijo y móvil.

NOC **268**

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 117,975 MHz y 174 MHz para la Region 1, entre 117,975 MHz y 146 MHz, entre 148 MHz y 174 MHz para la Region 2 y entre 117,975 MHz y 146 MHz, entre 148 MHz y 170 MHz para la Región 3 por el siguiente:

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
117,975 – 132		
MOVIL AERONAUTICO (R)		
201A 273 273A		
132 – 136		
MOVIL AERONAUTICO (R)		
273A 274 274A 274B 275		
136 – 137		
INVESTIGACION ESPACIAL (espacio-Tierra)		
281A 281AA		
137 – 138		
OPERACIONES ESPACIALES (Telemedida y seguimiento)		
METEOROLOGIA POR SATELITE		
INVESTIGACION ESPACIAL (espacio-Tierra)		
275A 279A 281C 281E		

NOC **273 273A**

MOD **274** En Bulgaria, Japón, Polonia, Portugal, Provincias portuguesas de Ultramar de la Región 1 al sur del ecuador, Rumania, Suecia, Checoslovaquia y U.R.S.S., las estaciones existentes del servicio móvil aeronáutico (OR) en la banda 132-136 MHz pueden continuar funcionando, durante un período indeterminado, a título primario.

ADD **274A** En las Regiones 2 y 3, las estaciones de los servicios fijo y móvil pueden seguir utilizando la banda 132 - 136 MHz hasta el primero de enero de 1976. Hasta esta fecha, las asignaciones de frecuencia a las estaciones del servicio móvil aeronáutico (R) se coordinaran entre las administraciones interesadas y se protegerán contra las interferencias perjudiciales.

AN 3 (ART 5)

ADD **274B** En Cuba y en México, la banda 132 - 136 MHz está también atribuida a los servicios fijo y móvil.
Spa2

MOD **275** En Burundi, Etiopía, Gambia, Malauí, Nigeria, Provincias portuguesas de Ultramar de la Región I al sur del ecuador, Rhodesia, Ruanda, Sierra Leona y República Sudafricana, la banda 138 - 144 MHz está atribuida a los servicios fijo y móvil. En estos países, las estaciones existentes de los servicios fijo y móvil pueden seguir utilizando la banda 132 - 136 MHz hasta el 1.^o de enero de 1976.
Spa2

NOC **275A**

SUP **276 277**

MOD **278** En Nueva Zelanda, la banda 138 - 144 MHz está atribuida al servicio móvil
Spa2 aeronáutico (OR).

SUP **279**

NOC **279A 281A**

ADD **281AA** En Bulgaria, China, Chipre, Corea, España, Etiopía, Ghana, Hungría, India, Indonesia, Irán, Iraq, Kenya, Kuwait, Malasia, Uganda, Pakistán, Filipinas, Polonia, Portugal, República Árabe Unida, Rumanía, Senegal, Siria, Tanzania, Checoslovaquia y U.R.S.S., la banda 136 - 137 MHz está también atribuida a los servicios fijo y móvil.
Spa2

SUP **281B**

MOD **281C** En Bulgaria, Hungría, Kuwait, Líbano, Polonia, República Árabe Unida, Rumanía, Checoslovaquia, U.R.S.S. y Yugoslavia, la banda 137 - 138 MHz está también atribuida al servicio móvil aeronáutico (OR).
Spa2

SUP **281D**

MOD **281E** En Malasia, Pakistán y Filipinas, la banda 137 - 138 MHz está también atribuida a los servicios fijo y móvil
Spa2

SUP **281F**

1

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
138 – 143,6 MÓVIL AERONAUTICO (OR) 275 281G 282A 283	138 – 143,6 FIJO MÓVIL Radiolocalización <i>Investigación espacial</i> (espacio-Tierra) 283A	138 – 143,6 FIJO MÓVIL <i>Investigación espacial</i> (espacio-Tierra) 278 279A 284

ADD **281G** En la R.F de Alemania, la banda 138 - 140 MHz está también atribuida, a Spa2 título secundario, al servicio de investigación espacial (espacio-Tierra).

SUP **282**

ADD **282A** En Bélgica, Francia, Israel, Italia, Liechtenstein, Países Bajos, Reino Unido Spa2 y Suiza, las bandas 138 - 143,6 MHz y 143,65 - 144 MHz están también atribuidas, a título secundario, al servicio de investigación espacial (espacio-Tierra).

MOD **283** En Austria, Dinamarca, Grecia, Noruega, Países Bajos, Portugal, R.F de Spa2 Alemania, Reino Unido, Suecia, Suiza y Turquía, la banda 138 - 144 MHz está también atribuida al servicio fijo y al servicio móvil, salvo móvil aeronáutico (R).

ADD **283A** En Argentina, la frecuencia 138,54 MHz \pm 7,5 kHz y la banda 143,6 - Spa2 143,65 MHz pueden ser utilizadas por el servicio de investigación espacial (telemando), previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.

NOC **284**

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
143,6 – 143,65 MÓVIL AERONÁUTICO (OR) INVESTIGACIÓN ESPACIAL (espacio-Tierra) 275 283	143,6 – 143,65 FIJO MÓVIL INVESTIGACIÓN ESPACIAL (espacio-Tierra) Radiolocalización 283A	143,6 – 143,65 FIJO MÓVIL INVESTIGACIÓN ESPACIAL (espacio-Tierra) 278 279A 284
143,65 – 144 MÓVIL AERONÁUTICO (OR) 275 282A 283	143,65 – 144 FIJO MÓVIL Radiolocalización <i>Investigación espacial</i> (espacio-Tierra)	143,65 – 144 FIJO MÓVIL <i>Investigación espacial</i> (espacio-Tierra) 278 279A 284
144 – 146 AFICIONADOS AFICIONADOS POR SATÉLITE	146 – 148 NOC	
146 – 149,9 FIJO MÓVIL salvo móvil aeronáutico (R) 285 285A	148 – 149,9 FIJO MÓVIL 285A 290	
149,9 – 150,05 RADIONAVEGACIÓN POR SATÉLITE 285B 285C		

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
150,05 – 151 Fijo Móvil salvo móvil aeronáutico (R) RADIOASTRONOMIA 233B 285 286A	150,05 – 174 Fijo MOVIL	150,05 – 170 Fijo MÓVIL
151 – 153 Fijo Móvil salvo móvil aeronáutico (R) RADIOASTRONOMIA Ayudas a la meteorología 233B 285 286A		
153 – 154 Fijo Móvil salvo móvil aeronáutico (R) Ayudas a la meteorología 285		
154 – 156 Fijo Móvil salvo móvil aeronáutico (R) 285		201A 287 287A 290
156 – 174 Fijo Móvil salvo móvil aeronáutico 201A 285 287 287A 288	201A 233A 287 287A	170 – 174 NOC

AN 3 (ART 5)

SUP 284A

NOC 285

MOD 285A **Spa2** La utilización de frecuencias de la banda 148 - 149,9 MHz puede autorizarse para el telemando espacial, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados. La anchura de banda de cada emisión no deberá ser superior a ± 15 kHz.

MOD 285B **Spa2** En Austria, Bulgaria, Cuba, Hungría, Irán, Kuwait, Pakistán, Polonia, República Árabe Unida, Rumania y Yugoslavia, la banda 149,9 - 150,05 MHz está también atribuida a los servicios fijo y móvil (véase la Recomendación N.^o Spa 8).

ADD 285C **Spa2** Las emisiones del servicio de radionavegación por satélite en las bandas 149,9 - 150,05 MHz y 399,9 - 400,05 MHz pueden además ser utilizadas por las estaciones terrenas receptoras del servicio de investigación espacial.

SUP 286 (véase ADD 233B)

NOC 286A 287

ADD 287A **Spa2** En las bandas de frecuencias designadas para el servicio móvil marítimo de acuerdo con el apéndice 18 al presente Reglamento, podrá autorizarse en ciertos canales, a título exclusivo, el empleo de sistemas de satélites con fines de socorro y seguridad, en la banda 157,3125 - 157,4125 MHz para las transmisiones en el sentido barco-satélite y en la banda 161,9125 - 162,0125 MHz, para las transmisiones satélite-barco. No podrán ponerse en servicio los sistemas de satélites antes del 1.^o de enero de 1976. (Véase la Resolución N.^o Spa2 - 5).

NOC 288 289 290

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 235 MHz y 470 MHz y entre 582 MHz y 790 MHz para la Región 1, entre 235 MHz y 942 MHz para la Región 2; entre 235 MHz y 470 MHz y entre 585 MHz y 890 MHz para la Región 3 por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
235 - 267	Fijo Móvil 201A 305 305A 308A 309	
267 - 272	Fijo Móvil <i>Operaciones espaciales (Telemedida)</i> 309A 309B 308A	
272 - 273	OPERACIONES ESPACIALES (Telemedida) 309A Fijo Móvil 308A	
273 - 328,6	Fijo Móvil 308A 310 310A	
328,6 - 335,4	RADIONAVEGACIÓN AERONAUTICA 311	

AN 3 (ART 5)

NOC 305

ADD 305A En Nueva Zelandia, la banda 235 - 239,5 MHz está también atribuida al
Spa2 servicio de radionavegación aeronáutica.ADD 308A Las bandas 240 - 328,6 MHz y 335,4 - 399,9 MHz pueden también ser
Spa2 utilizadas por el servicio móvil por satélite. La utilización y el desarrollo de este
servicio serán objeto de acuerdo entre las administraciones interesadas y aquéllas
cuyos servicios, explotados de conformidad con el Cuadro, pueden resultar
afectados.

NOC 309 309A 309B

MOD 310 En cierto número de países se llevan a cabo, en virtud de acuerdos nacionales,
Spa2 observaciones de radioastronomía en la banda 322 - 328,6 MHz. Conviene que,
en la utilización de esta banda, las administraciones tengan en cuenta las necesi-
dades del servicio de radioastronomía.ADD 310A En India, la banda 322 - 328,6 MHz está también atribuida al servicio de
Spa2 radioastronomía.

NOC 311

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
335,4 – 399,9		
FIJO		
MÓVIL		
308A		
399,9 – 400,05		
RADIONAVEGACIÓN POR SATÉLITE		
285C 311A		
400,05 – 400,15		
FRECUENCIA PATRÓN POR SATÉLITE		
312B 313 314		
400,15 – 401		
AYUDAS A LA METEOROLOGÍA		
METEOROLOGÍA POR SATÉLITE (Telemedida de mantenencia)		
INVESTIGACIÓN ESPACIAL (Telemedida y seguimiento)		
313 314		

MOD 311A En Bulgaria, Cuba, Grecia, Hungría, Indonesia, Irán, Kuwait, Líbano,
 Spa2 República Árabe Unida, Siria y Yugoslavia, la banda 399,9 - 400,05 MHz está
 también atribuida a los servicios fijo y móvil (véase la Recomendación N.^o Spa 8).

SUP 312A

ADD 312B En esta banda la frecuencia patrón es 400,1 MHz. Las emisiones deben
 Spa2 restringirse a una banda de \pm 25 kHz con respecto a la frecuencia.

NOC 313 314

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
401 - 402		
AYUDAS A LA METEOROLOGIA		
EXPLOTACIÓN ESPACIAL (Telemedida) 315A		
<i>Fijo</i>		
<i>Meteorología por satélite</i> (Tierra-espacio)		
<i>Móvil</i> salvo móvil aeronáutico		
314 315 315B 315C 316		
402 - 403		
AYUDAS A LA METEOROLOGIA		
<i>Fijo</i>		
<i>Meteorología por satélite</i> (Tierra-espacio)		
<i>Móvil</i> salvo móvil aeronáutico		
314 315 315C 316		
403 - 406		
AYUDAS A LA METEOROLOGÍA		
<i>Fijo</i>		
<i>Móvil</i> salvo móvil aeronáutico		
314 315 316		

NOC 315 315A 315B

ADD 315C La banda 401 - 403 MHz puede también ser utilizada en las aplicaciones del servicio de exploración de la Tierra por satélite distintas de las del servicio de meteorología por satélite, para las transmisiones Tierra-espacio, a reserva de no causar interferencia perjudicial a las estaciones que funcionan de conformidad con el Cuadro.

NOC 316

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
406 – 406,1		
	MÓVIL POR SATELITE (Tierra-espacio)	
	314 317A 317B	
406,1 – 410		
	FIJO	
	MÓVIL salvo móvil aeronáutico	
	RADIOASTRONOMIA	
	233B 314	
410 – 420		
	FIJO	
	MÓVIL salvo móvil aeronáutico	
	314	

SUP 317 (*please ADD 233B*)

ADD 317A La banda 406 - 406,1 MHz está reservada únicamente para la utilización y
Spa2 desarrollo de sistemas de radiobalizas de localización de siniestros de pequeña
potencia (que no excedan de 5 W) que utilicen técnicas espaciales.

ADD 317B En Austria, Bulgaria, Chile, Cuba, Etiopía, Hungría, India, Irán, Kenia,
Spa2 Kuwait, Liechtenstein, Malasia, Uganda, Polonia, República Árabe Unida,
Ruanda, Suecia, Suiza, Siria, Tanzania, Checoslovaquia y U.R.S.S., la banda
406 - 406,1 MHz está también atribuida a los servicios fijo y móvil, salvo móvil
aeronáutico.

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
420 – 430 Fijo MÓVIL salvo móvil aeronautico <i>Radiolocalización</i> 318 319	420 – 450	
430 – 440 AFICIONADOS RADIOLOCALIZACIÓN 318 319 319B 320 320A 321 322		RADIOLOCALIZACIÓN <i>Aficionados</i>
440 – 450 Fijo MÓVIL salvo móvil aeronautico <i>Radiolocalización</i> 318 319 319A		318 319A 319B 320A 323 324
450 – 460 Fijo MÓVIL 318 319A		
460 – 470 Fijo MÓVIL <i>Meteorología por satélite</i> (espacio-Tierra) 318A 324B		

AN 3 (ART 5)

- MOD 318 Los radioaltímetros se pueden utilizar también en la banda 420 - 460 MHz
Spa2 hasta el 31 de diciembre de 1974. Sin embargo, después de esta fecha, podrán ser autorizados a seguir funcionando a título secundario salvo en la U.R.S.S. donde podrán seguir funcionando a título primario.
- NOC 318A 319
- MOD 319A La banda 449,75 - 450,25 MHz puede utilizarse para el telemundo espacial y Spa2 la investigación espacial (Tierra-espacio), previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- ADD 319B En Francia y en el Departamento francés de la Guayana (Región 2), la frecuencia 434 MHz \pm 0,25 MHz puede ser utilizada para la explotación espacial en el sentido Tierra-espacio, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- NOC 320
- ADD 320A En la banda 435 - 438 MHz podrá autorizarse el servicio de aficionados por satélite siempre que no se cause interferencia perjudicial a otros servicios que funcionen de conformidad con el Cuadro. Las administraciones que autoricen tal utilización se asegurarán de que toda interferencia perjudicial causada por emisiones del servicio de aficionados por satélite será inmediatamente eliminada, en cumplimiento de lo dispuesto en el número 1567A.
- NOC 321
- MOD 322 En Dinamarca, Noruega y en Suecia, las bandas 430 - 432 MHz y 438 - 440 MHz están también atribuidas a los servicios fijo y móvil.
- NOC 323 324
- (MOD) 324A Se ha previsto que las estaciones espaciales de satélite de meteorología que Spa2 funcionen en la banda 1 670 - 1 690 MHz transmitan hacia estaciones terrenas especialmente elegidas. La ubicación de estas estaciones terrenas se determinará mediante acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- ADD 324B Las bandas 460 - 470 MHz y 1 690 - 1 700 MHz pueden también ser utilizadas para las aplicaciones del servicio de exploración de la Tierra por satélite distintas de las del servicio de meteorología por satélite, para las transmisiones espacio-Tierra a reserva de no causar interferencia perjudicial a las estaciones que funcionan de conformidad con el Cuadro.

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
470 – 582 NOC	470 – 890 RADIODIFUSION	470 – 585 NOC
582 – 606 RADIODIFUSION RADIONAVEGACION 325 327 328 329		585 – 610 RADIONAVEGACION 330B 336 337
606 – 790 RADIODIFUSION 329 330 330A 331 332 332A		610 – 890 FIJO MOVIL RADIODIFUSION 330B 332 332A 338 339
790 – 890 NOC	329A 332 332A	
890 – 942 NOC	890 – 942 FIJO RADIOLOCALIZACION 339A 340	890 – 942 NOC

NOC 325

SUP 326

AN 3 (ART 5)

NOC 327 328 329

ADD 329A En Argentina y Uruguay, la banda 602 - 608 MHz está atribuida al servicio de
Spa2 radioastronomía.

NOC 330 330A

ADD 330B En la India, la banda 608 - 614 MHz está también atribuida al servicio de
Spa2 radioastronomía.

NOC 331 332

ADD 332A En la banda de frecuencias 620 - 790 MHz pueden asignarse frecuencias a las
Spa2 estaciones de televisión con modulación de frecuencia del servicio de radiodifusión por satélite, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro puedan resultar afectados (véanse las Resoluciones N.^o Spa2-2 y N.^o Spa2-3). Estas estaciones no podrán producir una densidad de flujo de potencia superior a -129 dBW/m² para ángulos de llegada inferiores a 20° (véase la Recomendación N.^o Spa2-10) en el territorio de otros países sin el consentimiento de las administraciones de estos países.

NOC 336 337 338 339 339A

MOD 340 En la Región 2, la frecuencia de 915 MHz se destina para fines industriales, científicos y médicos. La energía radioeléctrica emitida por los equipos empleados para estos fines deberá hallarse contenida en la banda cuyos límites se fijan en ± 13 MHz de esta frecuencia. Los servicios de radiocomunicación que funcionen dentro de estos límites deberán aceptar las interferencias perjudiciales que puedan causarles estas emisiones.

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 1 350 MHz y 1 400 MHz por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
1 350 – 1 400 FIJO MÓVIL RADIOLocalización 349 349A	1 350 – 1 400 RADIOLocalización 349 349A	

NOC **349**

ADD **349A** En cierto numero de paises se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía en la raya del hidrógeno desplazada hacia las frecuencias más bajas. Conviene que las administraciones tengan en cuenta las necesidades del servicio de radioastronomía en la planificación de la utilización futura de la banda 1 350 - 1 400 MHz.

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 1 427 MHz y 1 429 MHz por el siguiente

MHz

Región 1	Región 2	Región 3
1 427 – 1 429 OPERACIONES ESPACIALES (Telemundo) FIJO MÓVIL salvo móvil aeronáutico		

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 1 525 MHz y 2 300 MHz por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
1 525 – 1 535 OPERACIONES ESPACIALES (Telemedida) 350A Fijo 350B <i>Exploración de la Tierra por satélite</i> Móvil salvo móvil aeronáutico 350C	1 525 – 1 535 OPERACIONES ESPACIALES (Telemedida) 350A <i>Exploración de la Tierra por satélite</i> Fijo Móvil 350D	1 525 – 1 535 OPERACIONES ESPACIALES (Telemedida) 350A Fijo 350B <i>Exploración de la Tierra por satélite</i> Móvil

MOD 350A Las estaciones espaciales que utilizan frecuencias de la banda 1 525 - 1 535
 Spa2 MHz para las necesidades de telemedida, pueden igualmente emitir señales de seguimiento en esta banda.

NOC 350B 350C 350D

SUP 350E

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
1 535 – 1 542,5		
	MÓVIL MARITIMO POR SATÉLITE	
	352. 352D 352E	
1 542,5 – 1 543,5		
	MÓVIL AERONAUTICO POR SATÉLITE (R)	
	MÓVIL MARITIMO POR SATÉLITE	
	352 352D 352F	
1 543,5 – 1 558,5		
	MÓVIL AERONAUTICO POR SATÉLITE (R)	
	352 352D 352G	
1 558,5 – 1 636,5		
	RADIONAVEGACIÓN AERONAUTICA	
	352 352A 352B 352D 352K	
1 636,5 – 1 644		
	MÓVIL MARÍTIMO POR SATÉLITE	
	352 352D 352H	
1 644 – 1 645		
	MÓVIL AERONAUTICO POR SATÉLITE (R)	
	MÓVIL MARITIMO POR SATÉLITE	
	352 352D 352I	
1 645 – 1 660		
	MÓVIL AERONAUTICO POR SATÉLITE (R)	
	352 352D 352J	

AN 3 (ART 5).

- SUP 351
- NOC 352
- MOD 352A **Spa2** Las bandas 1 558,5 - 1 636,5 MHz, 4 200 - 4 400 MHz, 5 000 - 5 250 MHz y 15,4 15,7 GHz se reservan, en todo el mundo, para el uso y desarrollo de equipos electrónicos de ayuda a la navegación aérea instalados a bordo de aeronaves así como para el uso y desarrollo de las instalaciones terrestres o a bordo de satélites, directamente asociadas a dichos equipos.
- MOD 352B **Spa2** Las bandas 1 558,5 - 1 636,5 MHz, 5 000 - 5 250 MHz y 15,4 15,7 GHz están también atribuidas al servicio móvil aeronáutico (R) para el uso y desarrollo de sistemas en los que se utilicen técnicas de radiocomunicación espacial. Este uso y desarrollo deben ser objeto de acuerdo y coordinación entre las administraciones interesadas y aquéllas otras cuyos servicios, explotados de conformidad con el Cuadro, puedan ser afectados.
- SUP 352C
- NOC 352D
- ADD 352E **Spa2** La utilización de la banda 1 535 - 1 542,5 MHz está limitada a las transmisiones, en el sentido estaciones espaciales-estaciones terrenas, del servicio móvil marítimo por satélite para las comunicaciones, la radiodeterminación, o ambas. Se autorizan también las transmisiones directas de estaciones costeras a estaciones de barco y entre barcos si esas transmisiones están destinadas a aumentar o a completar los enlaces satélite-barco establecidos.
- ADD 352F **Spa2** La utilización de la banda 1 542,5 - 1 543,5 MHz está limitada a las transmisiones, en el sentido estaciones espaciales-estaciones terrenas, de los servicios móvil aeronáutico por satélite (R) y móvil marítimo por satélite para las comunicaciones, la radiodeterminación, o ambas. Las transmisiones directas de estaciones terrestres a estaciones móviles o entre estaciones móviles de los servicios móvil aeronáutico (R) y marítimo están también autorizadas. La utilización de esta banda está subordinada a una coordinación previa operacional entre los dos servicios.
- ADD 352G **Spa2** La utilización de la banda 1 543,5 - 1 558,5 MHz está limitada a las transmisiones, en el sentido estaciones espaciales-estaciones terrenas, del servicio móvil aeronáutico por satélite (R) para las comunicaciones, la radiodeterminación, o ambas. Las transmisiones directas de estaciones aeronáuticas terrenales a estaciones de aeronave, o entre estaciones de aeronave, del servicio móvil aeronáutico (R) están también autorizadas si esas transmisiones están destinadas a aumentar o a completar los enlaces entre estaciones de satélite y estaciones de aeronave establecidos.
- ADD 352H **Spa2** La utilización de la banda 1 636,5 - 1 644 MHz está limitada a las transmisiones; en el sentido estaciones terrenas-estaciones espaciales, del servicio móvil marítimo por satélite para las comunicaciones, la radiodeterminación, o ambas. Las transmisiones directas de estaciones de barco a estaciones costeras o entre estaciones de barco están también autorizadas si esas transmisiones están destinadas a aumentar o a completar los enlaces entre estaciones de barco y estaciones de satélite establecidos.

AN 3 (ART 5)

- ADD 352I La utilización de la banda 1 644 - 1 645 MHz está limitada a las transmisiones, en el sentido estaciones terrenas-estaciones espaciales, de los servicios móvil aeronáutico por satélite (R) y móvil marítimo por satélite para las comunicaciones, la radiodeterminación, o ambas. Las transmisiones directas de estaciones móviles a estaciones terrestres o entre estaciones móviles del servicio móvil aeronáutico (R) y del servicio móvil marítimo están también autorizadas. La utilización de esta banda está subordinada a una coordinación previa operacional entre los dos servicios.
- ADD 352J La utilización de la banda 1 645 - 1 660 MHz está limitada a las transmisiones, en el sentido estaciones terrenas-estaciones espaciales, del servicio móvil aeronáutico por satélite (R) para las comunicaciones, la radiodeterminación, o ambas. Las transmisiones directas de estaciones de aeronave del servicio móvil aeronáutico (R) a estaciones aeronáuticas terrenales, o entre estaciones de aeronave, están también autorizadas si esas transmisiones están destinadas a aumentar o a completar los enlaces entre estaciones de aeronave y estaciones de satélite establecidos.
- ADD 352K En cierto numero de países se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía en rayas espectrales importantes del radical oxhidrilo OH en las frecuencias de 1 612,231 MHz y 1 720,530 MHz. Las bandas en que se efectuan las observaciones son: 1 611,5 - 1 612,5 MHz y 1 720 - 1 721 MHz, respectivamente. Conviene que las administraciones tengan en cuenta las necesidades del servicio de radioastronomía en la planificación de la utilización futura de las bandas 1 558,5 - 1 636,5 MHz y 1 710 - 1 770 MHz.

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
1 660 – 1 670		
	AYUDAS A LA METEOROLOGIA RADIOASTRONOMIA	
	353A 354 354A 354B	
1 670 – 1 690		
	AYUDAS A LA METEOROLOGÍA Fijo METEOROLOGIA POR SATÉLITE (espacio-Tierra) 324A MÓVIL salvo móvil aeronáutico	
	354	
1 690 – 1 700	1 690 – 1 700	
AYUDAS A LA METEOROLOGÍA METEOROLOGIA POR SATELITE (espacio-Tierra) <i>Fijo</i> <i>Móvil</i> salvo móvil aeronáutico	AYUDAS A LA METEOROLOGIA METEOROLOGÍA POR SATELITE (espacio-Tierra)	
324B 354A	324B 354A 354C	
1 700 – 1 710	1 700 – 1 710	
Fijo INVESTIGACIÓN ESPACIAL (espacio-Tierra) <i>Móvil</i>	Fijo MÓVIL INVESTIGACIÓN ESPACIAL (espacio-Tierra)	
354D	354D	

AN 3 (ART 5)

SUP 353

MOD 353A Como consecuencia del descubrimiento efectuado por los astrónomos de dos rayas espectrales del radical oxhidrilo en las proximidades de 1 665 MHz y de 1 667 MHz, se ruega encarecidamente a las administraciones que aseguren la mayor protección prácticamente posible en la banda 1 660 - 1 670 MHz para futuras investigaciones de radioastronomía, especialmente eliminando cuanto antes las transmisiones aire-tierra del servicio de ayudas a la meteorología en la banda 1 664,4 - 1 668,4 MHz.

NOC 354

MOD 354A En Bulgaria, Cuba, Etiopía, Hungría, Israel, Jordania, Kenia, Kuwait, Líbano, Uganda, Pakistán, Polonia, República Árabe Unida, Rumanía, Siria, Tanzania, Checoslovaquia, U.R.S.S. y Yugoslavia, las bandas 1 660 - 1 670 MHz y 1 690 - 1 700 MHz están también atribuidas al servicio fijo y al servicio móvil, salvo móvil aeronáutico.

NOC 354B 354C

ADD 354D La banda 1 700 - 1 700,2 MHz puede utilizarse, a título secundario, para emitir, desde satélites, frecuencias en relación armónica con las emitidas en las bandas 149,9 - 150,05 MHz y 399,9 - 400,05 MHz para atender las necesidades de la investigación ionosférica y en geodesia.

SUP 355A

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
1 710 – 1 770 Fijo <i>Móvil</i> 352K 356	1 710 – 1 770 Fijo MÓVIL 352K 356A	
1 770 – 1 790 Fijo <i>Meteorología por satélite</i> 356AA <i>Móvil</i> 356	1 770 – 1790 Fijo MÓVIL <i>Meteorología por satélite</i> 356AA 356A	
1 790 – 2 290 Fijo <i>Móvil</i> 356 356AB 356ABA 356AC	1 790 – 2 290 Fijo MÓVIL 356A 356AB 356ABA	
2 290 – 2 300 Fijo INVESTIGACIÓN ESPACIAL (espacio-Tierra) <i>Móvil</i> 356C	2 290 – 2 300 Fijo MÓVIL INVESTIGACIÓN ESPACIAL (espacio-Tierra)	

AN 3 (ART 5)

- MOD 356 **Spa2** En Suiza, la banda 1 710 - 2 290 MHz está atribuida al servicio fijo y al servicio móvil, salvo móvil aeronáutico y la banda 1 770 - 1 790 MHz está también atribuida, a título secundario, al servicio de meteorología por satélite.
- MOD 356A **Spa2** En la Región 2, en Australia y en Japón, la banda 1 750 - 1 850 MHz puede también utilizarse para transmisiones Tierra-espacio del servicio de investigación espacial y en las Regiones 2 y 3 la banda 2 200 - 2 290 MHz puede también utilizarse para transmisiones espacio-Tierra del servicio de investigación espacial, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- MOD) 356AA **Spa2** En Bulgaria, Cuba, Hungría, Polonia, Rumanía, Checoslovaquia y U.R.S.S., el servicio de meteorología por satélites, es un servicio primario en la banda 1 770 - 1 790 MHz, previa coordinación entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados por la situación de las estaciones terrenas.
- ADD 356AB **Spa2** En las Regiones 2 y 3 y en España, en la banda 2 025 - 2 120 MHz pueden autorizarse las transmisiones Tierra-espacio del servicio de exploración de la Tierra por satélite con iguales derechos que las estaciones de los otros servicios de radiocomunicación espacial en esta banda, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- ADD 356ABA **Spa2** En la Región 2, en Australia y en España en la banda 2 025 - 2 120 MHz, y en las Regiones 1 y 3 en la banda 2 110 - 2 120 MHz, podrán autorizarse las transmisiones Tierra-espacio del servicio de investigación espacial sobre la base de igualdad de derechos con los otros servicios de radiocomunicación espacial en estas bandas, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- ADD 356AC **Spa2** En la Región 1, en la banda 2 096 - 2 120 MHz pueden autorizarse las transmisiones Tierra-espacio del servicio de exploración de la Tierra por satélite, con iguales derechos que las estaciones de los otros servicios de radiocomunicación espacial en esta banda, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados (véase el número 356AB).
- SUP 356B
- NOC 356C

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 2 450 MHz y 2 700 MHz por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
2 450 – 2 500	2 450 – 2 500	
FIJO	FIJO	
MÓVIL	MÓVIL	
Radiolocalización	RADIOLOCALIZACIÓN	
357 361	357	
2 500 – 2 550	2 500 – 2 535	
FIJO 364C	FIJO 364C	
MÓVIL salvo móvil aeronáutico	FIJO POR SATÉLITE (espacio-Tierra)	
RADIODIFUSIÓN POR SATÉLITE 361B	MÓVIL salvo móvil aeronáutico RADIODIFUSIÓN POR SATÉLITE 361B 361A 364E 364F	
	2 535 – 2 550	
	FIJO 364C	
	MÓVIL salvo móvil aeronáutico	
	RADIODIFUSIÓN POR SATÉLITE 361B	
361A 362 364F	361A 364F	
2 550 – 2 655		
	FIJO 364C	
	MÓVIL salvo móvil aeronáutico	
	RADIODIFUSIÓN POR SATÉLITE 361B	
	362 363 364 364F	

AN 3 (ART 5)

Atribución a los servicios		
Región 1	Región 2	Región 3
2 655 – 2 690 FIJO 364C 364D MOVIL salvo móvil aeronáutico RADIODIFUSIÓN POR SATELITE 361B 364H	2 655 – 2 690 FIJO 364C 364D FIJO POR SATELITE (Tierra-espacio) MOVIL salvo móvil aeronáutico RADIODIFUSIÓN POR SATELITE 361B 364H	
363 364 364F 364G		364E 364F 364G
2 690 – 2 700		
	RADIOASTRONOMIA	
	233B 363 364A 364B	

NOC **357**

MOD **361** En Francia y en el Reino Unido, la banda 2 450 - 2 500 MHz está atribuida, a título primario, al servicio de radiolocalización y, a título secundario, a los servicios fijo y móvil.

ADD **361A** En Francia, la banda 2 500 - 2 550 MHz esta también atribuida, a título primario, al servicio de radiolocalización y, a título secundario, a los servicios fijo y móvil. En Canadá, la banda 2 500 - 2 550 MHz esta también atribuida, a título primario, al servicio de radiolocalización.

ADD **361B** La utilización de la banda 2 500 - 2 690 MHz por el servicio de radiodifusión por satélite está limitada a sistemas nacionales y regionales para recepción comunal. Esta utilización se hará previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados (veanse las Resoluciones N.^o **Spa2** - 2 y N.^o **Spa2** - 3). La densidad de flujo de potencia producida en la superficie de la Tierra no excederá los valores indicados en los numeros **470NH** a **470NK**.

MOD **362** En el Reino Unido, la banda 2 500 - 2 600 MHz está también atribuida, a título secundario, al servicio de radiolocalización.

NOC **363**

AN 3 (ART 5)ⁱ

- MOD 364 En la Región 1, los sistemas que emplean la dispersión troposférica podrán funcionar en la banda 2 550 - 2 690 MHz, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios de radiocomunicación terrenal, explotados de conformidad con el Cuadro, puedan resultar afectados.
- MOD 364A En Bulgaria, Cuba, Hungría, India, Israel, Kuwait, Líbano, Marruecos, Pakistán, Filipinas, Polonia, República Árabe Unida, Rumanía, Checoslovaquia, U.R.S.S. y Yugoslavia, la banda 2 690 - 2 700 MHz está también atribuida a los servicios fijo y móvil.
- NOC 364B
- ADD 364C Al planificar nuevos radioenlaces por dispersión troposférica en la banda 2 500 - 2 690 MHz, deben tomarse todas las medidas posibles para evitar que las antenas de estos enlaces estén dirigidas hacia la órbita de los satélites geostacionarios.
- ADD 364D Las administraciones harán todos los esfuerzos prácticamente posibles para evitar el desarrollo de nuevos sistemas que utilicen la técnica de difusión troposférica en la banda 2 655 - 2 690 MHz.
- ADD 364E La utilización de las bandas 2 500 - 2 535 MHz y 2 655 - 2 690 MHz por el servicio fijo por satélite está limitada a sistemas nacionales y regionales. Esta utilización se hará previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados (vease el artículo 9A). En el sentido espacio-Tierra la densidad de flujo de potencia producida en la superficie de la Tierra no excederá los valores indicados en el numero 470NE.
- ADD 364F En Bulgaria, Irán, Portugal y U.R.S.S., la banda 2 500 - 2 690 MHz está atribuida a los servicios fijo y móvil, excepto móvil aeronáutico.
- ADD 364G En cierto numero de países se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía en la banda 2 670 - 2 690 MHz. Conviene que las administraciones tengan en cuenta las necesidades del servicio de radioastronomía en la planificación de la utilización futura de esta banda.
- ADD 364H Al proyectar sistemas del servicio de radiodifusión por satélite se insta a las administraciones a que tomen todas las medidas necesarias para proteger el servicio de radioastronomía en la banda 2 690 - 2 700 MHz.
- SUP 365 (*vease ADD 233B*)

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 3 400 MHz y 5 250 MHz por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
3 400 – 3 600 Fijo FIJO POR SATÉLITE (espacio-Tierra) Móvil Radiolocalización 372 373 374 375	3 400 – 3 500 Fijo FIJO POR SATÉLITE (espacio-Tierra) RADIOLOCALIZACIÓN Aficionados 376	
3 600 – 4 200 Fijo FIJO POR SATÉLITE (espacio-Tierra) Móvil	3 500 – 3 700 Fijo FIJO POR SATÉLITE (espacio-Tierra) Móvil RADIOLOCALIZACIÓN	3 500 – 3 700 Fijo FIJO POR SATÉLITE (espacio-Tierra) RADIOLOCALIZACIÓN Fijo Móvil 377 378
	3 700 – 4 200 Fijo FIJO POR SATÉLITE (espacio-Tierra) Móvil 374	379
4 200 – 4 400 RADIONAVEGACIÓN AERONÁUTICA 352A 379A 381 382 383		
4 400 – 4 700 Fijo FIJO POR SATÉLITE (Tierra-espacio) Móvil		

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
4 700 – 4 990		
Fijo Móvil 233B 354 382A 382B		
4 990 – 5 000 Fijo Móvil RADIOASTRONOMIA 233B	4 990 – 5 000 RADIOASTRONOMIA 383A	4 990 – 5 000 Fijo Móvil RADIOASTRONOMIA 233B
5 000 – 5 250		
RADIONAVEGACION AERONAUTICA 352A 352B 383B		

NOC 372

(MOD) 373 En Dinamarca, Noruega, Suecia y Suiza, los servicios fijo, móvil, de radiolocalización y fijo por satélite funcionan sobre la base de igualdad de derechos en la banda 3 400 - 3 600 MHz.

Spa2

SUP 374A

NOC 375 376

MOD 377 En China y Japón, la banda 3 500 - 3 700 MHz está también atribuida a los servicios fijo y móvil.

Spa2

NOC 378

(MOD) 379 En Australia, la banda 3 700 - 3 770 MHz está atribuida a los servicios de radiolocalización y fijo por satélite.

AN 3 (ART 5)

- ADD **379A** Los servicios de frecuencias patrón por satélite y de señales horarias por satélite pueden ser autorizados a utilizar la frecuencia de 4 202 MHz para las emisiones espacio-Tierra y la frecuencia de 6 427 MHz para las emisiones Tierra-espacio. Tales emisiones deberán estar contenidas dentro de los límites de \pm 2 MHz de dichas frecuencias y estarán sujetas a acuerdos entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.
- NOC **381 382**
- ADD **382A** En cierto numero de paises se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía de la raya de formaldehido (frecuencia de reposo 4 829,649 MHz). Conviene que las administraciones tengan en cuenta las necesidades del servicio de radioastronomía en la planificación de la utilización futura de la banda 4 825 - 4 835 MHz.
- ADD **382B** En cierto numero de paises se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía en la banda 4 950 - 4 990 MHz. Conviene que las administraciones tengan en cuenta las necesidades del servicio de radioastronomía en la planificación de la utilización futura de esta banda.
- NOC **383**
- (MOD) **383A** En Cuba, la banda 4 990 - 5 000 MHz está también atribuida a los servicios fijo y móvil, y se aplican las disposiciones del numero **233B**.
- ADD **383B** La banda 5 000 - 5 250 MHz está también atribuida al servicio fijo por satélite para el enlace entre una o varias estaciones terrenas situadas en puntos fijos determinados de la Tierra y satélites utilizados por el servicio móvil aeronáutico (R), el de radiodeterminación, o por ambos. Este uso y su desarrollo deben ser objeto de acuerdo y coordinación entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, pueden resultar afectados.

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 5 725 MHz y 7 750 MHz para las Regiones 1 y 3, entre 5 725 MHz y 5 850 MHz y entre 5 925 MHz y 7 750 MHz para la Región 2 por el siguiente

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
5 725 – 5 850 FIJO POR SATELITE (Tierra-espacio) RADIOLOCALIZACION <i>Aficionados</i> 354 388 390 391 391A	5 725 – 5 850 RADIOLOCALIZACION <i>Aficionados</i> 389 391 391A	

NOC 388 389

(MOD) 390 En Albania, Bulgaria, Hungria, Polonia, Rumania, Checoeslovaquia y
 Spa2 U.R.S.S., la banda 5 800 - 5 850 MHz está atribuida a los servicios fijo, móvil y
 fijo por satélite.

NOC 391

ADD 391A En cierto numero de países se llevan a cabo, en virtud de acuerdos nacionales,
 Spa2 observaciones de radioastronomía en las bandas 5 750 - 5 770 MHz y 36,458
 36,488 GHz. Se encarece a las administraciones adopten todas las medidas
 prácticamente posibles para proteger en estas bandas las observaciones de
 radioastronomía contra las interferencias perjudiciales.

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
5 850 – 5 925 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL 391	5 850 – 5 925 NOC	5 850 – 5 925 FIJO FIJO POR SATELITE (Tierra-espacio) MÓVIL <i>Radiolocalización</i> 391
5 925 – 6 425 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL		
6 425 – 7 250 FIJO MÓVIL 379A 392AA 392B 393		
7 250 – 7 300 FIJO POR SATÉLITE (espacio-Tierra) 392D 392G		

AN 3 (ART 5)

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
7 300 – 7 450		
FIJO		
FIJO POR SATELITE (espacio-Tierra)		
MÓVIL		
392D		
7 450 – 7 550		
FIJO		
FIJO POR SATELITE (espacio-Tierra)		
METEOROLOGIA POR SATÉLITE (espacio-Tierra)		
MÓVIL		
392D		
7 550 – 7 750		
FIJO		
FIJO POR SATÉLITE (espacio-Tierra)		
MÓVIL		
392D		

AN 3 (ART 5)**SUP 392A**

ADD 392AA En Brasil, Canadá y en los Estados Unidos de América, la banda 6 625 - 7 125 MHz está también atribuida, a título secundario, al servicio fijo por satélite (espacio-Tierra). En la Región 2, la densidad de flujo de potencia producida por las estaciones espaciales en esta banda, deberá ajustarse a lo dispuesto en el número 470NM. En las Regiones 1 y 3, debe ser 6 dB inferior, por lo menos. Las estaciones receptoras terrenas en esta banda no podrán imponer restricciones en lo que concierne a la ubicación o a las características técnicas de las estaciones terrenales existentes o futuras de otros países.

MOD 392B La banda 7 145 - 7 235 MHz podrá utilizarse para transmisiones Tierra-espacio del servicio de investigación espacial, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados.

SUP 392C

MOD 392D Por excepción, cuando el servicio fijo por satélite emplea satélites pasivos, puede utilizar además la banda 7 250 - 7 750 MHz siempre que:

- a) haya acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados;
- b) se apliquen los procedimientos de coordinación establecidos en los artículos 9 y 9A.

En este caso, las estaciones de este servicio no deben causar, en las estaciones terrenas que reciben emisiones de satélites activos, interferencias mayores que las que producirían en ellas los servicios fijo y móvil. Los valores de la densidad de flujo de potencia en la superficie de la Tierra, después de reflexión en los satélites pasivos del servicio fijo por satélite, no podrán exceder de los límites estipulados en el presente Reglamento para el servicio fijo por satélite que utiliza satélites activos.

SUP 392F**NOC 392G 392H 393**

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 7 900 MHz y 8 500 MHz por el siguiente

MHz

Atribución a los servicios		
Region 1	Región 2	Región 3
7 900 – 7 975		
FIJO FIJO POR SATELITE (Tierra-espacio) MÓVIL		
7 975 – 8 025		
FIJO POR SATELITE (Tierra-espacio) 392H		

MHz

Atribución a los servicios		
Región 1	Región 2	Región 3
8 025 – 8 175 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i> 394B	8 025 – 8 175 EXPLORACIÓN DE LA TIERRA POR SATÉLITE (espacio-Tierra) FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL	8 025 – 8 175 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i>
8 175 – 8 215 FIJO FIJO POR SATÉLITE (Tierra-espacio) METEOROLOGÍA POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i> 394B	8 175 – 8 215 EXPLORACIÓN DE LA TIERRA POR SATÉLITE (espacio-Tierra) FIJO FIJO POR SATÉLITE (Tierra-espacio) METEOROLOGÍA POR SATÉLITE (Tierra-espacio) MÓVIL	8 175 – 8 215 FIJO FIJO POR SATÉLITE (Tierra-espacio) METEOROLOGÍA POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i>
8 215 – 8 400 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i> 394 394B	8 215 – 8 400 EXPLORACIÓN DE LA TIERRA POR SATÉLITE (espacio-Tierra) FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL	8 215 – 8 400 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL <i>Exploración de la Tierra por satélite (espacio-Tierra)</i> 394

AN 3 (ART 5)

Atribución a los servicios		
Región 1	Región 2	Región 3
8 400 – 8 500		
Fijo		
MÓVIL		
INVESTIGACION ESPACIAL (espacio-Tierra)		
394A 394D		

- (MOD) **394** En Australia y en el Reino Unido, la banda 8 250 - 8 400 MHz está atribuida
Spa2 al servicio de radiolocalización y al servicio fijo por satélite.
- MOD **394A** En el Reino Unido, la banda 8 400 - 8 500 MHz está atribuida a los servicios
Spa2 de radiolocalización y de investigación espacial.
- (MOD) **394B** En Israel, la banda 8 025 - 8 400 MHz está atribuida, a título primario, a los
Spa2 servicios fijo y móvil y, a título secundario, al servicio fijo por satélite.
- SUP **394C**
- NOC **394D**

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 10,55 GHz y 15,35 GHz por el siguiente

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
10,55 – 10,6	NOC	
10,6 – 10,68	Fijo MÓVIL RADIOASTRONOMÍA <i>Radiolocalización</i> 404A	
10,68 – 10,7	RADIOASTRONOMÍA 405B	

ADD 404A En la R. F de Alemania, en la banda 10,6 - 10,68 GHz, el servicio de Spa2 radioastronomía es un servicio secundario.

SUP 405A

NOC 405B

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
10,7 – 10,95 Fijo Móvil		
10,95 – 11,2 Fijo Fijo por satélite (espacio-Tierra) (Tierra-espacio) Móvil	10,95 – 11,2 Fijo Fijo por satélite (espacio-Tierra) Móvil	
11,2 – 11,45 Fijo Móvil		
11,45 – 11,7 Fijo Fijo por satélite (espacio-Tierra) Movil		

TIAS 7435

AN 3 (ART 5)

103

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
11,7 – 12,5 FIJO MÓVIL salvo móvil aeronáutico RADIODIFUSIÓN RADIODIFUSIÓN POR SATÉLITE	11,7 – 12,2 FIJO FIJO POR SATÉLITE (espacio-Tierra) MÓVIL salvo móvil aeronáutico RADIODIFUSIÓN RADIODIFUSIÓN POR SATÉLITE 405BB 405BC	11,7 – 12,2 FIJO MÓVIL salvo móvil aeronáutico RADIODIFUSIÓN RADIODIFUSIÓN POR SATÉLITE 405BA
405BA	12,2 – 12,5 FIJO MÓVIL salvo móvil aeronáutico RADIODIFUSIÓN	
12,5 – 12,75 FIJO POR SATÉLITE (espacio-Tierra) (Tierra-espacio) 405BD 405BE	12,5 – 12,75 FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL salvo móvil aeronáutico	12,5 – 12,75 FIJO FIJO POR SATÉLITE (espacio-Tierra) MÓVIL salvo móvil aeronáutico
12,75 – 13,25 FIJO MÓVIL		
13,25 – 13,4	RADIONAVEGACIÓN AERONÁUTICA 406 407 407A	
13,4 – 14	RADIOLOCALIZACIÓN 407 407A 408 409	

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
14 – 14,3		
	FIJO POR SATÉLITE (Tierra-espacio) RADIONAVEGACIÓN 408A 407 407A	
14,3 – 14,4		
	FIJO POR SATÉLITE (Tierra-espacio) RADIONAVEGACIÓN POR SATÉLITE 408A	
14,4 – 14,5		
	FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL 408B 408C	
14,5 – 15,35		
	FIJO MÓVIL 408B 408C	

- ADD 405BA** En la banda 11,7 - 12,2 GHz en la Región 3, y en la banda 11,7 - 12,5 GHz en Spa2 la Región 1 los servicios fijo, móvil y de radiodifusión existentes y futuros no causarán interferencia perjudicial a las estaciones de radiodifusión por satélite que funcionen de acuerdo con las decisiones de la conferencia que se encargue de elaborar un plan de asignación de frecuencias para la radiodifusión (véase la Resolución N.^o Spa2 - 2); en sus decisiones, dicha conferencia deberá tener en cuenta esta necesidad.
- ADD 405BB** En la banda 11,7 - 12,2 GHz en la Región 2, los servicios de radiocomunicación terrenal sólo se introducirán después de haberse preparado y aprobado planes para los servicios de radiocomunicación espacial, a fin de asegurar la compatibilidad entre las utilizaciones que cada país decida para esta banda.
- ADD 405BC** La utilización de la banda 11,7 - 12,2 GHz en la Región 2 por los servicios de radiodifusión por satélite y fijo por satélite está limitada a los sistemas nacionales y sujeta a previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el Cuadro, puedan resultar afectados (véanse el artículo 9A y la Resolución N.^o Spa2 - 3).

AN 3 (ART 5)

- ADD **405BD** En Bulgaria, Camerun, Congo (Brazzaville), Costa de Marfil, Gabón, Ghana, Hungria, Iraq, Israel, Jordania, Kuwait, Libia, Malí, Niger, Polonia, Siria, República Árabe Unida, Rumania, Senegal, Checoslovaquia, Togo y U.R.S.S., la banda 12,5 - 12,75 GHz está atribuida también a los servicios fijo y móvil, salvo móvil aeronáutico.
- ADD **405BE** En Argelia, Bélgica, Dinamarca, España, Etiopía, Finlandia, Francia, Grecia, Kenya, Liechtenstein, Luxemburgo, Mónaco, Noruega, Uganda, Paises Bajos, Portugal, R.F de Alemania, Suecia, Suiza, Tanzania y Túnez, la banda 12,5 - 12,75 GHz, esta también atribuida, a título secundario, a los servicios fijo y móvil, salvo móvil aeronáutico.
- NOC **406**
- MOD **407** En Albania, Bulgaria, Hungria, Polonia, Rumania, Checoslovaquia y U.R.S.S., las bandas 13,25 - 13,5 GHz, 14,175 - 14,3 GHz, 15,4 - 17,7 GHz, 23,6 - 24 GHz, 24,05 - 24,25 GHz y 33,4 - 36 GHz están también atribuidas a los servicios fijo y móvil.
- ADD **407A** La banda 13,25 - 14,2 GHz puede también utilizarse, a título secundario, para transmisiones Tierra-espacio en el servicio de investigación espacial previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el presente Cuadro, puedan resultar afectados.
- MOD **408** En Suecia, las bandas 13,4 - 14 GHz, 15,7 - 17,7 GHz y 33,4 - 36 GHz están también atribuidas a los servicios fijo y móvil.
- ADD **408A** La utilización de las bandas 14 - 14,3 GHz y 14,3 - 14,4 GHz por los servicios de radionavegación y de radionavegación por satélite, respectivamente, deberá realizarse de tal manera que se asegure una protección suficiente a las estaciones espaciales del servicio fijo por satélite (véase la Recomendación N.^o Spa2-15, punto 2.14).
- ADD **408B** La banda 14,4 - 15,35 GHz puede también utilizarse, a título secundario, para transmisiones espacio-Tierra en el servicio de investigación espacial, previo acuerdo entre las administraciones interesadas y aquéllas cuyos servicios, explotados de conformidad con el presente Cuadro, puedan resultar afectados.
- ADD **408C** En ciertos países se llevan a cabo, en virtud de acuerdos nacionales, observaciones de radioastronomía en la raya del formaldehido (frecuencia de reposo: 14,489 GHz). Se encarece a las administraciones que, al asignar frecuencias a estaciones de los servicios fijo y móvil, adopten todas las medidas prácticamente posibles para proteger contra las interferencias perjudiciales las observaciones de radioastronomía en la banda de 14,485 - 14,515 GHz.
- NOC **409**
- SUP **409A** **409B**

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribucion de bandas de frecuencias entre 17,7 GHz y 24,25 GHz por el siguiente

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
17,7 – 19,7		
FIJO FIJO POR SATÉLITE (espacio-Tierra) MÓVIL		
19,7 – 21,2		
FIJO POR SATELITE (espacio-Tierra) 409E		
21,2 – 22		
EXPLORACIÓN DE LA TIERRA POR SATÉLITE (espacio-Tierra) FIJO MÓVIL		
22 – 22,5		
FIJO MÓVIL 410A		
22,5 – 23		22,5 – 23
FIJO MÓVIL		FIJO MÓVIL RADIODIFUSIÓN POR SATÉLITE 410B
23 – 23,6		
FIJO MÓVIL		

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
23,6 - 24	RADIOASTRONOMÍA	
	407	
24 - 24,05	AFICIONADOS	
	AFICIONADOS POR SATÉLITE	
	410C	
24,05 - 24,25	RADIOLOCALIZACIÓN	
	<i>Aficionados</i>	
	407 410C	

SUP 409D

ADD 409E En Japón, las bandas 19,7 - 21,2 GHz y 29,5 - 31 GHz están también atribuidas a los servicios fijo y móvil. Esta utilización adicional no debe imponer limitaciones a la densidad de flujo de potencia de las estaciones espaciales del servicio fijo por satélite.

SUP 410

ADD 410A La banda 22,21 - 22,26 GHz está también atribuida al servicio de radioastronomía para las observaciones de una raya espectral del vapor de agua (frecuencia de reposo: 22,235 GHz). Se ruega a las administraciones que aseguren la mayor protección prácticamente posible para futuras investigaciones de radioastronomía en esta banda.

ADD 410B En la Región 3, el servicio de radiodifusión por satélite está autorizado en la banda 22,5 - 23 GHz sujeto a límites de densidad de flujo de potencia para la protección de los servicios terrenales en esta banda.

ADD 410C La frecuencia de 24,125 GHz se destina para fines industriales, científicos y médicos. La energía radioeléctrica emitida por los equipos empleados para estos fines deberá estar contenida en la banda cuyos límites se fijan en \pm 125 MHz de esta frecuencia. Los servicios de radiocomunicaciones que funcionen dentro de estos límites deberán aceptar las interferencias perjudiciales que estas emisiones puedan causarles.

AN 3 (ART 5)

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 25,25 GHz y 31,3 GHz por el siguiente

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
25,25 – 27,5	FIJO MÓVIL	
27,5 – 29,5	FIJO FIJO POR SATÉLITE (Tierra-espacio) MÓVIL	
29,5 – 31	FIJO POR SATÉLITE (Tierra-espacio) 409E	
31 – 31,3	FIJO MÓVIL <i>Investigación espacial</i> 412H 412I	

NOC 412E 412H

ADD 412I En cierto numero de países se llevan a cabo, en virtud de acuerdos nacionales, Spa2 observaciones de radioastronomía en la banda 31,2 - 31,3 GHz. Se encarece a las administraciones que adopten todas las medidas prácticamente posibles para proteger en esta banda las observaciones de radioastronomía contra las interferencias perjudiciales.

Sustituyase el actual Cuadro de atribución de bandas de frecuencias entre 36 GHz y 40 GHz por el siguiente:

GHz

Región 1	Región 2	Región 3
36 – 40	FIJO MÓVIL	

AN 3 (ART 5)

En el actual Cuadro de atribución de bandas de frecuencias, reemplácese «Por encima de 40 (No atribuida)» por el nuevo texto siguiente

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
40 - 41	FIJO POR SATELITE (espacio-Tierra)	
41 - 43	RADIODIFUSIÓN POR SATÉLITE	
43 - 48	MÓVIL AERONAUTICO POR SATELITE MÓVIL MARITIMO POR SATÉLITE RADIONAVEGACIÓN AERONAUTICA POR SATELITE RADIONAVEGACIÓN MARITIMA POR SATÉLITE	
48 - 50	(No atribuida)	
50 - 51	FIJO POR SATELITE (Tierra-espacio)	
51 - 52	EXPLORACIÓN DE LA TIERRA POR SATÉLITE INVESTIGACIÓN ESPACIAL	
52 - 54,25	INVESTIGACIÓN ESPACIAL (pasiva) 412J	
54,25 - 58,2	ENTRE SATÉLITES	

ADD

412J Quedan prohibidas todas las emisiones en las bandas 52 - 54,25 GHz, 58,2 - 59

Spa2 GHz, 64 - 65 GHz, 86 - 92 GHz, 101 - 102 GHz, 130 - 140 GHz, 182 - 185 GHz y 230 - 240 GHz. En ellas está también autorizada la utilización de sensores pasivos por otros servicios.

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3'
58,2 – 59	INVESTIGACIÓN ESPACIAL (pasiva) 412J	
59 – 64	ENTRE SATÉLITES	
64 – 65	INVESTIGACIÓN ESPACIAL (pasiva) 412J	
65 – 66	EXPLORACIÓN DE LA TIERRA POR SATELITE INVESTIGACIÓN ESPACIAL	
66 – 71	MOVIL AERONAUTICO POR SATELITE MÓVIL MARITIMO POR SATELITE RADIONAVEGACIÓN AERONAUTICA POR SATELITE RADIONAVEGACIÓN MARITIMA POR SATELITE	
71 – 84	(No atribuida)	
84 – 86	RADIODIFUSIÓN POR SATELITE	
86 – 92	RADIOASTRONOMIA INVESTIGACIÓN ESPACIAL (pasiva) 412J	

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
92 - 95		
	FIJO POR SATÉLITE (Tierra-espacio)	
95 - 101		
	MÓVIL AERONAUTICO POR SATÉLITE	
	MÓVIL MARÍTIMO POR SATÉLITE	
	RADIONAVEGACIÓN AERONÁUTICA POR SATÉLITE	
	RADIONAVEGACIÓN MARÍTIMA POR SATÉLITE	
101 - 102		
	INVESTIGACIÓN ESPACIAL (pasiva)	
	412J	
102 - 105		
	FIJO POR SATÉLITE (espacio-Tierra)	
105 - 130		
	ENTRE SATÉLITES	
	412K	
130 - 140		
	RADIOASTRONOMIA	
	INVESTIGACIÓN ESPACIAL (pasiva)	
	412J	
140 - 142		
	FIJO POR SATÉLITE (Tierra-espacio)	

ADD | 412K En cierto número de países se llevan a cabo, en virtud de acuerdos nacionales,
Spa2 observaciones de radioastronomía en la raya del óxido de carbono (frecuencia 115,271 GHz). Las administraciones deben de tener en cuenta, al proceder a hacer asignaciones a estaciones de otros servicios de acuerdo con el Cuadro, la necesidad de proteger las observaciones de radioastronomía contra interferencias perjudiciales en la banda 115,16 - 115,38 GHz.

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
142 – 150		
	MÓVIL AERONÁUTICO POR SATÉLITE MÓVIL MARÍTIMO POR SATÉLITE RADIONAVEGACIÓN AERONÁUTICA POR SATÉLITE RADIONAVEGACIÓN MARÍTIMA POR SATÉLITE	
150 – 152		
	FIJO POR SATÉLITE (espacio-Tierra)	
152 – 170		
	(No atribuida)	
170 – 182		
	ENTRE SATÉLITES	
182 – 185		
	INVESTIGACIÓN ESPACIAL (pasiva) 412J	
185 – 190		
	ENTRE SATÉLITES	
190 – 200		
	MÓVIL AERONÁUTICO POR SATÉLITE MÓVIL MARÍTIMO POR SATÉLITE RADIONAVEGACIÓN AERONÁUTICA POR SATÉLITE RADIONAVEGACIÓN MARÍTIMA POR SATÉLITE	
200 – 220		
	(No atribuida)	
220 – 230		
	FIJO POR SATÉLITE	

AN 3 (ART 5)

GHz

Atribución a los servicios		
Región 1	Región 2	Región 3
230 - 240	RADIOASTRONOMÍA INVESTIGACIÓN ESPACIAL (pasiva)	412J
240 - 250	(No atribuida)	
250 - 265	MÓVIL AERONÁUTICO POR SATÉLITE MÓVIL MARÍTIMO POR SATÉLITE RADIONAVEGACIÓN AERONAUTICA POR SATÉLITE RADIONAVEGACIÓN MARÍTIMA POR SATÉLITE	
265 - 275	FIJO POR SATÉLITE	
Por encima de 275	(No atribuida)	

ANEXO 4

Revisión del artículo 6 del Reglamento de Radiocomunicaciones

El artículo 6 del Reglamento de Radiocomunicaciones se revisa como sigue:

El numero 415 queda sustituido por el nuevo texto siguiente

MOD **415** § 2. (1) Cuando circunstancias especiales así lo exijan, una administración podrá recurrir a los procedimientos excepcionales de trabajo que a continuación se enumeran, con la condición expresa de que las características de las estaciones sigan siendo las mismas que figuren en el Registro internacional de frecuencias:

- a) una estación fija del servicio de radiocomunicación terrenal o una estación terrena del servicio fijo por satélite podrá, a título secundario, efectuar, en sus frecuencias normales, transmisiones destinadas a estaciones móviles;
- b) una estación terrestre podrá, a título secundario, comunicar con estaciones fijas del servicio de radiocomunicación terrenal o con estaciones terrenas del servicio fijo por satélite o con otras estaciones terrestres de la misma categoría.

El numero 417 queda sustituido por el nuevo texto siguiente

MOD **417** § 3. Toda administración podrá asignar una frecuencia elegida en una banda atribuida al servicio fijo o al servicio fijo por satélite, a una estación autorizada para transmitir unilateralmente desde un punto fijo determinado hacia uno o varios puntos fijos determinados, siempre que dichas emisiones no estén destinadas a ser recibidas directamente por el público en general.

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*El nuevo texto siguiente se añade después del
numero 419*

ADD 419A § 5A. Las estaciones terrenas a bordo de aeronaves están
Spa2 autorizadas a utilizar las frecuencias de las bandas atribuidas al
servicio móvil marítimo por satélite para ponerse en comunicación,
por conducto de estaciones de este servicio, con las redes telegráfica
y telefónica públicas.

ANEXO 5

Revisión del artículo 7 del Reglamento de Radiocomunicaciones

El artículo 7 del Reglamento de Radiocomunicaciones se revisa como sigue:

*El nuevo subtítulo y el nuevo numero siguientes se
añaden a continuación de la Sección I*

ADD Spa2 Sección IA. Servicio de radiodifusión por satélite

ADD 428A § 2A. Al establecer las características de una estación espacial Spa2 del servicio de radiodifusión por satélite, deberán utilizarse todos los medios técnicos disponibles para reducir al máximo la radiación sobre el territorio de otros países, salvo en los casos en que estos países hayan dado su acuerdo previo.

El título de la Sección VII queda sustituido por el nuevo título siguiente

MOD Spa2 Sección VII. Servicios de radiocomunicación terrenal que comparten bandas de frecuencias con los servicios de radiocomunicación espacial por encima de 1 GHz

Eleccion de ubicación y de frecuencias

El numero 470A queda sustituido por el nuevo texto siguiente:

(MOD) 470A § 18. La ubicación y las frecuencias de las estaciones terrenales que funcionen en bandas compartidas, con los mismos derechos, entre servicios de radiocomunicación terrenal y espacial, se elegirán teniendo en cuenta las Recomendaciones pertinentes del C.C.I.R. relativas a la separación geográfica entre estaciones terrenales y estaciones terrenas.

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*Después del número 470A, agréguense los nuevos
números siguientes*

- ADD **470AA§ 18A.** (1) En la medida de lo posible, la ubicación de las estaciones transmisoras¹, de los servicios fijo o móvil, que empleen valores máximos de potencia isótropa radiada equivalente superiores a +35 dBW en las bandas de frecuencias comprendidas entre 1 y 10 GHz se elegirán de modo que la dirección de máxima radiación de cualquier antena se aparte por lo menos 2° de la órbita de los satélites geoestacionarios, teniendo en cuenta el efecto de la refracción atmosférica²
- ADD **470AB** (2) En la medida de lo posible, la ubicación de las estaciones transmisoras³, de los servicios fijo o móvil, que empleen valores máximos de potencia isótropa radiada equivalente superiores a 45 dBW en las bandas de frecuencias comprendidas entre 10 y 15 GHz se elegirán de modo que la dirección de máxima radiación de cualquier antena se aparte por lo menos 1,5° de la órbita de los satélites geoestacionarios, teniendo en cuenta el efecto de la refracción atmosférica⁴
- ADD **470AC** (3) En las bandas de frecuencias superiores a 15 GHz no existirán restricciones en lo que respecta a la dirección de máxima radiación de las estaciones de los servicios fijo o móvil.
-
- ADD **470AA.1** ¹ Para su protección, conviene que las estaciones receptoras de los servicios fijo o móvil que funcionan en las bandas compartidas con servicios de radio-comunicación espacial, (sentido espacio-Tierra) eviten dirigir sus antenas hacia la órbita de los satélites geoestacionarios si su sensibilidad es lo suficientemente elevada para que sufran interferencia apreciable de las transmisiones de estaciones espaciales.
- ADD **470AA.2** ² El Informe N.º 393 del C.C.I.R., última edición, contiene información sobre esta materia.
- ADD **470AB.1** ³ Véase el número **470AA.1**.
- ADD **470AB.2** ⁴ Véase el numero **470AA.2**.

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Límites de potencia

El numero 470B queda sustituido por el nuevo texto siguiente

MOD 470B § 19. (1) El nivel máximo de potencia isótropa radiada equivalente de una estación de los servicios fijo o móvil no será superior a +55 dBW

Después del numero 470B, agréguese los nuevos numeros siguientes

ADD 470BA (1A) Cuando no sea posible cumplir con lo establecido en el numero 470AA, el nivel máximo de potencia isótropa radiada equivalente de una estación de los servicios fijo o móvil no será superior a.

+47 dBW en cualquier dirección que se aparte menos de 0,5° de la órbita de los satélites geoestacionarios; o

+47 dBW a +55 dBW, segun una escala lineal en decibelios (8 dB por grado), en cualquier dirección comprendida entre 0,5° y 1,5° con respecto a la orbita de los satélites geoestacionarios, teniendo en cuenta el efecto de la refracción atmosférica¹

El numero 470C queda sustituido por el nuevo texto siguiente

MOD 470C (2) El nivel de la potencia suministrada a la antena por un transmisor de los servicios fijo o móvil, en las bandas de frecuencias comprendidas entre 1 y 10 GHz, no sera superior a +13 dBW

Despues del numero 470C, agréguese el nuevo numero siguiente

ADD 470CA (2A) El nivel de la potencia suministrada a la antena por un transmisor de los servicios fijo o móvil, en las bandas de frecuencias superiores a 10 GHz, no excederá de +10 dBW

ADD 470BA.1 ¹ Véase el numero 470AA.2.
Spa2

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El numero 470D queda sustituido por el nuevo texto siguiente

MOD 470D (3) Los límites indicados en los numeros **470AA, 470B, 470BA** y **470C** se aplican en las siguientes bandas de frecuencias, que están atribuidas, para la recepción por estaciones espaciales, al servicio fijo por satélite y al servicio de meteorología por satélite, cuando están compartidas con los mismos derechos con los servicios fijo o móvil:

2 655 - 2 690 MHz (para las Regiones 2 y 3)
5 800 - 5 850 MHz (para los paises mencionados en el numero 390)
5 850 - 5 925 MHz (para las Regiones 1 y 3)
5 925 - 6 425 MHz
7 900 - 7 975 MHz
7 975 - 8 025 MHz (para los paises mencionados en el numero 392H)
8 025 - 8 400 MHz

Despues del numero 470D, agreguense los nuevos numeros siguientes

ADD 470DA (4) Los límites indicados en los numeros **470AB, 470B** y **470CA** se aplican en las siguientes bandas de frecuencias, que están atribuidas, para la recepción por estaciones espaciales, al servicio fijo por satélite, cuando están compartidas con los mismos derechos con los servicios fijo o móvil:

10,95 - 11,20 GHz (Region 1)
12,50 - 12,75 GHz (Regiones 1 y 2)
14,175 - 14,300 GHz (para los paises mencionados en el numero 407)
14,4 - 14,5 GHz

ADD 470DB (5) Los límites indicados en los numeros **470B** y **470CA** se aplican en las siguientes bandas de frecuencias, que están atribuidas, para la recepción por estaciones espaciales, al servicio fijo

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por satélite, cuando están compartidas, con los mismos derechos, con los servicios fijo o móvil:

27,5 - 29,5 GHz
29,5 - 31,0 GHz (para el país mencionado en el numero
409E)

El título de la Sección VIII queda sustituido por el nuevo título siguiente

MOD Spa2 **Sección VIII. Servicios de radiocomunicación espacial que comparten bandas de frecuencias con los servicios de radiocomunicación terrenal por encima de 1 GHz**

Eleccion de ubicacion y de frecuencias

El numero 470E queda sustituido por el nuevo texto siguiente

(MOD) 470E § 20. La ubicación y las frecuencias de las estaciones terrenas Spa2 que funcionen en bandas de frecuencias compartidas, con los mismos derechos, entre servicios de radiocomunicación terrenal y de radiocomunicación espacial, se elegirán teniendo en cuenta las Recomendaciones pertinentes del C.C.I.R. relativas a la separación geográfica entre estaciones terrenas y estaciones terrenales.

Límites de potencia

Los numeros 470F y 470G quedan sustituidos por los nuevos textos siguientes

MOD 470F § 21. (1) Estaciones terrenas.
Spa2

MOD 470G (2) Salvo cuando pueda aplicarse lo dispuesto en el numero Spa2 470H o 470GC, la potencia isotropa radiada equivalente emitida en cualquier dirección hacia el horizonte por una estación terrena que trabaje en bandas de frecuencias comprendidas entre 1 y 15 GHz, no deberá exceder de los siguientes límites:

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+40 dBW en cualquier banda de 4 kHz de anchura para
 $\theta \leqslant 0^\circ$

+40 +3 θ dBW en cualquier banda de 4 kHz de anchura
 para $0^\circ < \theta \leqslant 5^\circ$

siendo θ el angulo de elevación (en grados) del horizonte visto desde el centro de radiacion de la antena de la estación terrena. Este ángulo se considera positivo por encima del plano horizontal y negativo por debajo de dicho plano.

Despues del numero 470G, agreguense los nuevos numeros siguientes

ADD 470GA (2A) Salvo cuando pueda aplicarse lo dispuesto en el numero Spa2 470H ó 470GD, la potencia isótropa radiada equivalente emitida en cualquier dirección hacia el horizonte por una estación terrena que trabaje en las bandas de frecuencias por encima de 15 GHz no deberá exceder los siguientes límites:

+64 dBW en cualquier banda de 1 MHz de anchura para
 $\theta \leqslant 0^\circ$

+64 +3 θ dBW en cualquier banda de 1 MHz de anchura
 para $0^\circ < \theta \leqslant 5^\circ$

siendo θ el angulo definido en el numero.470G.

ADD 470GB (2B) En el caso de ángulos de elevación del horizonte superiores Spa2 a 5° no existirán limitaciones para la potencia isotropa radiada equivalente emitida por una estacion terrena hacia el horizonte.

MOD 470GC (2C) Como excepcion a los límites indicados en el numero 470G, Spa2 la potencia isótropa radiada equivalente emitida hacia el horizonte por una estación terrena del servicio de investigación espacial (espacio lejano) no debera exceder de +55 dBW en cualquier banda de 4 kHz de anchura.

ADD 470GD (2D) Como excepción a los límites indicados en el numero Spa2 470GA, la potencia isotropa radiada equivalente emitida hacia el horizonte por una estación terrena del servicio de investigación

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espacial (espacio lejano) no deberá exceder de +79 dBW en cualquier banda de 1 MHz de anchura.

El numero 470H queda sustituido por el nuevo texto siguiente

- MOD **470H** (3) Los límites indicados en los numeros **470G**, **470GA**, **470GC** Spa2 y **470GD** segun el caso, podrán excederse, en 10 dB como máximo. Sin embargo, cuando la zona de coordinación resultante se extienda al territorio de otro país, dicho aumento deberá estar sujeto a la aprobación de la administración de este país.

Suprímase el numero 470I.

El numero 470J queda sustituido por el nuevo texto siguiente

- MOD **470J** (3A) Los limites indicados en el numero **470G** se aplican en las siguientes bandas de frecuencias, que están atribuidas, para la transmisión de estaciones terrenas al servicio fijo por satélite y al servicio de exploración de la Tierra por satélite, especialmente al servicio de meteorología por satélite, cuando dichas bandas están compartidas, con igualdad de derechos, con los servicios fijo o móvil.

2 655 - 2 690 MHz (Regiones 2 y 3)
4 400 - 4 700 MHz
5 800 - 5 850 MHz (para los países mencionados en el numero 390)
5 850 - 5 925 MHz (Regiones 1 y 3)
5 925 - 6 425 MHz
7 900 - 7 975 MHz
7 975 - 8 025 MHz (para los países mencionados en el numero 392H)
8 025 - 8 400 MHz
10,95 - 11,20 GHz (Región 1)
12,50 - 12,75 GHz (Regiones 2 y 3 y para los países mencionados en el número 405BD)
14,175 - 14,300 GHz (para los países mencionados en el numero 407)
14,4 - 14,5 GHz

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Despues del numero 470J, agreguese el nuevo numero siguiente

- ADD **470JA** (3B) Los límites especificados en el numero **470GA** se aplican
Spa2 en la siguiente banda de frecuencias, que está atribuida, para la transmisión de estaciones terrenas, al servicio fijo por satélite, cuando está compartida con los mismos derechos con los servicios fijo o móvil:

27,5 - 29,5 GHz

Ángulo minimo de elevación

Los numeros 470K y 470L quedan sustituidos por los nuevos textos siguientes

- MOD **470K** § 22. (1) Estaciones terrenas.
Spa2

- MOD **470L** (2) Las antenas de las estaciones terrenas no podran utilizarse para la transmisión con angulos de elevación inferiores a 3°, medidos desde el plano horizontal en la dirección de radiación máxima, salvo acuerdo entre las administraciones interesadas o aquéllas cuyos servicios puedan ser afectados. En el caso de recepción por una estacion terrena, se utilizará el valor antes citado a efectos de coordinación si el ángulo de elevación empleado es inferior a dicho valor.

Despues del numero 470L, agréguese el nuevo numero siguiente

- ADD **470LA** (2A) Como excepción a lo dispuesto en el numero **470L**, las antenas de las estaciones terrenas del servicio de investigacion espacial (espacio cercano), no deberan utilizarse para transmisión con ángulos de elevación inferiores a 5°, ni en el servicio de investigación espacial (espacio lejano) con ángulos de elevación inferiores a 10°, medidos ambos ángulos desde el plano horizontal en la dirección

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de radiación máxima. En el caso de recepción por una estación terrena, se utilizarán los valores antes citados a efectos de coordinación si el ángulo de elevación empleado es inferior a dichos valores.

Suprímase el numero 470M.

El subtítulo «Límites del flujo de potencia» así como el numero 470N quedan sustituidos por los nuevos subtítulo y texto siguientes

MOD **Spa2** *Límites de la densidad de flujo de potencia producida por las estaciones espaciales*

MOD **470N** § 23. (1) Límites de densidad de flujo de potencia entre 1 690 MHz
Spa2 y 1 700 MHz.

Despues del numero 470N, agreguense los nuevos numeros siguientes

ADD **470NA** a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espacial, o por reflexión en un satélite pasivo, para todas las condiciones y métodos de modulación, no deberá exceder de —133 dBW/m² en cualquier banda de 1,5 MHz de anchura. Este límite se refiere a la densidad del flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

ADD **470NB** b) El límite indicado en el numero 470NA se aplica a la banda de frecuencias mencionada en el numero 470NC, que esta atribuida, para la transmisión de estaciones espaciales, al servicio de exploración de la Tierra por satélite, y especialmente al servicio de meteorología por satélite, cuando esta banda esta compartida, con igualdad de derechos, con el servicio de ayudas a la meteorología

ADD **470NC** 1 690 - 1 700 MHz
Spa2

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ADD 470ND (2) Límites de densidad de flujo de potencia entre 1 670 MHz
Spa2 y 2 535 MHz.

ADD 470NE Spa2 a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espacial, o por reflexión en un satélite pasivo, para todas las condiciones y métodos de modulación, no deberá exceder de los valores siguientes:

— 154 dBW/m².en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

$$- 154 + \frac{\delta - 5}{2} \text{ dBW/m}^2 \text{ en cualquier banda de 4 kHz}$$

de anchura, para ángulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal;

— 144 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad de flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

ADD 470NF Spa2 b) Los límites indicados en el número 470NE se aplican en las bandas de frecuencias enumeradas en el número 470NG, que están atribuidas, para la transmisión de estaciones espaciales, a los siguientes servicios de radio-comunicación espacial:

— servicio de exploración de la Tierra por satélite y, especialmente, el servicio de meteorología por satélite (espacio-Tierra)

— servicio de investigación espacial (espacio-Tierra)

— servicio fijo por satélite (espacio-Tierra)

cuando dichas bandas están compartidas, con igualdad de derechos, con los servicios fijo o móvil:

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ADD 470NG 1 670 - 1 690 MHz
Spa2 1 690 - 1 700 MHz (para los países mencionados en el numero 354A)
1 700 - 1 710 MHz
1 770 - 1 790 MHz (para los países mencionados en el numero 356AA)
2 200 - 2 290 MHz
2 290 - 2 300 MHz
2 500 - 2 535 MHz

ADD 470NGA **Spa2** c) Los valores de la densidad de flujo de potencia especificados en el numero 470NE se han calculado con miras a proteger al servicio fijo que funciona con visibilidad directa. Cuando en las bandas enumeradas en el numero 470NG se explote un servicio fijo que utilice dispersion troposférica y la separación de frecuencias sea insuficiente, deberá preverse la suficiente separación angular entre la dirección en que se encuentre la estación espacial y la dirección de máxima radiación de la antena de la estación receptora del servicio fijo que utilice dispersion troposférica, a fin de que la potencia interferente a la entrada del receptor de la estación del servicio fijo no exceda de -168 dBW, en cualquier banda de 4 kHz de anchura.

ADD 470NH (3) Límites de densidad de flujo de potencia entre 2 500 MHz
Spa2 y 2 690 MHz.

ADD 470NI **Spa2** a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espacial del servicio de radiodifusión por satélite, para todas las condiciones y métodos de modulación, no deberá exceder de los siguientes valores:
—152 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

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$$-152 + \frac{3(\delta - 5)}{4} \text{ dBW/m}^2 \text{ en cualquier banda de } 4 \text{ kHz}$$

de anchura, para angulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal,

—137 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad de flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

- | | |
|-------------------|--|
| ADD 470NJ
Spa2 | b) Los límites indicados en el numero 470NI se aplican en la banda de frecuencias

2 500 - 2 690 MHz

compartida por el servicio de radiodifusión por satélite con el servicio fijo o el servicio móvil. |
| ADD 470NK
Spa2 | c) Los valores de densidad de flujo de potencia especificados en el numero 470NI se han calculado con miras a proteger el servicio fijo que funciona en visibilidad directa. Cuando, en la banda mencionada en el numero 470NJ, se explote un servicio fijo que utilice dispersión troposférica, y si la separación de frecuencias es insuficiente, deberá preverse la suficiente separación angular entre la dirección en que se encuentre la estación espacial y la dirección de máxima radiación de la antena de la estación receptora del servicio fijo que utilice dispersión troposférica, a fin de que la potencia interferente a la entrada del receptor de la estación del servicio fijo no exceda de —168 dBW, en cualquier banda de 4 kHz de anchura. |
| ADD 470NL
Spa2 | (4) Límites de densidad de flujo de potencia entre 3 400 MHz y 7 750 MHz. |
| ADD 470NM
Spa2 | a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espa- |

cial, o por reflexión en un satélite pasivo, para todas las condiciones y métodos de modulación, no deberá exceder de los valores siguientes:

—152 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

$$-152 + \frac{\delta - 5}{2} \text{ dBW/m}^2 \text{ en cualquier banda de 4 kHz}$$

de anchura, para ángulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal,

—142 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad de flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

ADD **470NN**
Spa2

b) Los límites indicados en el numero **470NM** se aplican en las bandas de frecuencias enumeradas en el numero **470NO**, que están atribuidas, para la transmisión de estaciones espaciales, a los siguientes servicios de radio-comunicación espacial:

- servicio fijo por satélite (espacio-Tierra)
- servicio de meteorología por satélite (espacio-Tierra)

cuando dichas bandas están compartidas, con igualdad de derechos, con los servicios fijo o móvil:

ADD **470NO**
Spa2

3 400 - 4 200 MHz
7 250 - 7 300 MHz (para los países mencionados en el numero **392G**)
7 300 - 7 750 MHz

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ADD **470NP** (5) Límites de densidad de flujo de potencia entre 8 025 MHz
Spa2 y 11,7 GHz.

ADD **470NQ** Spa2 a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estacion espacial, o por reflexion en un satélite pasivo, para todas las condiciones y metodos de modulacion, no debera exceder de los valores siguientes:

—150 dBW/m² en cualquier banda de 4 kHz de anchura, para angulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

—150 + $\frac{\delta - 5}{2}$ dBW/m² en cualquier banda de 4 kHz de anchura, para angulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal;

—140 dBW/m² en cualquier banda de 4 kHz de anchura, para angulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad de flujo de potencia que se obtendria en condiciones hipotéticas de propagacion en el espacio libre.

ADD **470NR** Spa2 b) Los límites indicados en el numero **470NQ** se aplican en las bandas de frecuencias enumeradas en el numero **470NS**, que estan atribuidas, para la transmision de estaciones espaciales, a los siguientes servicios de radio-comunicacion espacial.

- servicio de exploracion de la Tierra por satélite (espacio-Tierra)
- servicio de investigacion espacial (espacio-Tierra)
- servicio fijo por satélite (espacio-Tierra)

cuando dichas bandas estan compartidas, con igualdad de derechos, con los servicios fijo o movil:

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ADD	470NS	8 025 - 8 400 MHz
	Spa2	8 400 - 8 500 MHz
		10,95 - 11,20 GHz
		11,45 - 11,70 GHz

ADD **470NT** (6) Límites de densidad de flujo de potencia entre 12,50 GHz y
Spa2 12,75 GHz.

ADD **470NU** *a)* La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espacial, o por reflexión en un satélite pasivo, para todas las condiciones y métodos de modulación, no deberá exceder de los valores siguientes:

— 148 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

$$- 148 + \frac{\delta - 5}{2} \text{ dBW/m}^2 \text{ en cualquier banda de 4 kHz}$$

de anchura, para ángulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal;

— 138 dBW/m² en cualquier banda de 4 kHz de anchura, para ángulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad del flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

ADD **470NV** *b)* Los límites indicados en el número **470NU** se aplican en la banda de frecuencias indicada en el número **470NW**, que está atribuida, para la transmisión de estaciones espaciales, al servicio fijo por satélite cuando dicha banda está compartida, con igualdad de derechos, con los servicios fijo o móvil.

ADD **470NW** 12,50 - 12,75 GHz (Región 3 y en los países mencionados
Spa2 en el número **405BD**)

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ADD **470NX** (7) Límites de densidad de flujo de potencia entre 17,7 GHz
Spa2 y 22,0 GHz.

ADD **470NY**
Spa2

a) La densidad de flujo de potencia producida en la superficie de la Tierra por las emisiones de una estación espacial o por reflexión en un satélite pasivo, para todas las condiciones y métodos de modulación, no deberá exceder de los siguientes valores:

—115 dBW/m² en cualquier banda de 1 MHz de anchura, para ángulos de llegada comprendidos entre 0 y 5 grados por encima del plano horizontal;

$$-115 + \frac{\delta - 5}{2} \text{ dBW/m}^2 \text{ en cualquier banda de 1 MHz}$$

de anchura, para ángulos de llegada δ (en grados) comprendidos entre 5 y 25 grados por encima del plano horizontal;

—105 dBW/m² en cualquier banda de 1 MHz de anchura, para ángulos de llegada comprendidos entre 25 y 90 grados por encima del plano horizontal.

Estos límites se refieren a la densidad de flujo de potencia que se obtendría en condiciones hipotéticas de propagación en el espacio libre.

ADD **470NZ**
Spa2

b) Los límites indicados en el numero **470NY** se aplican en las bandas de frecuencias enumeradas en el numero **470NZA**, que están atribuidas, para la transmisión de estaciones espaciales, a los siguientes servicios de radio-comunicación espacial:

— servicio fijo por satélite (espacio-Tierra)

— servicio de exploración de la Tierra por satélite (espacio-Tierra)

cuando dichas bandas están compartidas, con igualdad de derechos, con los servicios fijo o móvil:

ADD **470NZA**
Spa2

17,7 - 19,7 GHz
21,2 - 22,0 GHz

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ADD **470NZB** (8) Los límites indicados en los numeros **470NA**, **470NE**,
Spa2 **470NI**, **470NM**, **470NQ**, **470NU** y **470NY** podrán rebasarse en
los territorios de aquellos países cuyas administraciones hayan dado
previamente su acuerdo a este respecto.

Suprímanse los numeros 470O a 470U.

*Suprímase la nota¹ al pie de la pagina 140 (Regla-
mento de Radiocomunicaciones — edición de 1968).*

La Sección IX queda sustituida por el nuevo texto siguiente

MOD Spa2 **Sección IX. Servicios de radiocomunicación espacial**

Cesación de las emisiones

MOD **470V** § 24. Las estaciones espaciales deberán estar dotadas de dispo-
Spa2 sitivos que aseguren la cesación inmediata, por telemando, de sus
emisiones radioeléctricas siempre que sea necesario en virtud de las
disposiciones del presente Reglamento.

ADD Spa2 *Medidas contra las interferencias entre sistemas de satélites geo-
estacionarios y sistemas de satélites no sincronicos de orbita inclinada*

ADD **470VA** § 25. Las estaciones espaciales no geoestacionarias del servicio
Spa2 fijo por satélite deberán cesar sus emisiones o reducirlas a un nivel
despreciable, y las estaciones terrenas que comunican con ellas
deberán cesar sus emisiones cuando sea insuficiente la separación
angular entre satélites no geoestacionarios y geoestacionarios y se
produzca interferencia de nivel inaceptable¹ a los sistemas espaciales
de satélites geoestacionarios explotados de conformidad con las
disposiciones del presente Reglamento.

ADD **470VA.1** ¹ El nivel de interferencia inaceptable se determinará por acuerdo entre las
Spa2 administraciones interesadas, utilizando como guía las Recomendaciones
pertinentes del C.C.I.R.

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- ADD **Spa2** *Mantenimiento en posición de las estaciones espaciales*¹
- ADD **470VB** § 26. Las estaciones espaciales instaladas a bordo de satélites geoestacionarios:
- ADD **470VC** — deben poder mantenerse en posición a menos de $\pm 1^\circ$ de longitud con relación a su posición nominal; pero se tratará de reducir esta tolerancia a $\pm 0,5^\circ$ o menos;
- ADD **470VD** — deben mantenerse en posición a menos de $\pm 1^\circ$ de longitud con relación a su posición nominal, cualquiera que sea la causa de la variación de su posición;
- ADD **470VE** — sin embargo, no será necesario que se observen los límites indicados en el número **470VD** mientras la red de satélite a la que pertenezca la estación no produzca interferencia inaceptable² a otra red de satélite cuya estación espacial respete los límites especificados en el número **470VD**.
- ADD **Spa2** *Precisión de orientación de las antenas de satélites geoestacionarios*
- ADD **470VF** § 27 La orientación en la dirección de máxima radiación de todo haz dirigido hacia la Tierra de una antena instalada en un satélite geoestacionario ha de poder mantenerse dentro de los valores que se indican a continuación.
- 10% de la abertura del haz entre puntos representativos de la mitad de potencia, con relación a la dirección de orientación nominal, o
- $0,5^\circ$ con relación a la dirección de orientación nominal,
-
- ADD **Spa2** ¹ En el caso de estaciones espaciales instaladas a bordo de satélites geosíncronos cuya órbita tenga una inclinación superior a 5° las tolerancias de posición se referirán al punto nodal.
- ADD **470VE.1** ² El nivel de interferencia inaceptable se determinará por acuerdo entre las administraciones interesadas, utilizando como guía las Recomendaciones pertinentes del C.C.I.R.

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debiendo tomarse el valor que resulte mayor. Esta disposición se aplicará únicamente cuando el haz esté destinado a asegurar una cobertura menor que la global.

Cuando el haz no sea simétrico con relación al eje de máxima radiación, la tolerancia en cualquier plano que contenga este eje se referirá a la abertura del haz entre puntos de media potencia en dicho plano.

Esta precisión sólo se mantendrá si fuese necesaria para evitar interferencias de nivel inaceptable¹ a otros sistemas.

ADD **Spa2** *Densidad de flujo de potencia en la órbita de los satélites geoestacionarios*

ADD **470VG** § 28. En la banda de frecuencias 8 025 a 8 400 MHz, que el **Spa2** servicio de exploración de la Tierra por satélite, utilizando satélites no geoestacionarios, comparte con el servicio fijo por satélite (Tierra-espacio), o con el servicio de meteorología por satélite (Tierra-espacio), la máxima densidad de flujo de potencia producida en la órbita de los satélites geoestacionarios por cualquier estación espacial del servicio de exploración de la Tierra por satélite no deberá exceder de -174 dBW/m^2 en cualquier banda de 4 kHz de anchura.

ADD **470VF.1** ¹ El nivel de interferencia inaceptable se determinará por acuerdo entre **Spa2** las administraciones interesadas, utilizando como guía las Recomendaciones pertinentes del C.C.I.R.

ANEXO 6**Revisión del artículo 8 del Reglamento de Radiocomunicaciones**

El artículo 8 del Reglamento de Radiocomunicaciones se revisa como sigue:

El numero 477 queda sustituido por el nuevo texto siguiente.

MOD 477
Spa2

- e) efectuar un estudio continuo y metódico de la utilización del espectro radioeléctrico con el fin de formular recomendaciones para lograr la máxima eficacia en dicha utilización;
-

ANEXO 7

Revisión del artículo 9 del Reglamento de Radiocomunicaciones

El artículo 9 del Reglamento de Radiocomunicaciones se revisa como sigue:

El título del artículo así como el texto de la nota ^o que figuran en la página 143 del Reglamento de Radiocomunicaciones (edición de 1968) quedan sustituidos por el nuevo título y las nuevas notas siguientes

MOD Spa2 Notificación e inscripción en el Registro internacional de frecuencias de asignaciones de frecuencia ¹ a estaciones de radiocomunicación terrenal ²

¹ Cuando aparezca en este artículo la expresión *asignación de frecuencia* se entenderá que se refiere tanto a nuevas asignaciones de frecuencia como a modificaciones de asignaciones ya inscritas en el Registro internacional de frecuencias (llamado en adelante *Registro*).

² Para la notificación e inscripción en el Registro internacional de frecuencias de asignaciones de frecuencia a estaciones de radioastronomía y a estaciones de radiocomunicación espacial, véase el artículo 9A.

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Sección I. Notificación de asignaciones de frecuencia y procedimiento de coordinación a aplicar en ciertos casos

Suprímase el numero 486.1.

Los numeros 486, 486.2, 486.3 y 486.4 quedan sustituidos por los nuevos textos siguientes

- (MOD) **486** § 1. (1) Deberá notificarse a la Junta Internacional de Registro de Frecuencias toda asignación de frecuencia¹ relativa a una estación fija, terrestre, de radiodifusión², terrestre de radionavegación, terrestre de radiolocalización, de frecuencias patrón o a una estación situada en tierra del servicio de ayudas a la meteorología.
- a) si la utilización de la frecuencia en cuestión es capaz de causar interferencia perjudicial a cualquier servicio de otra administración³;
 - b) si la frecuencia se utiliza para la radiocomunicación internacional,
 - c) si se desea obtener el reconocimiento internacional de la utilización de dicha frecuencia³

[(MOD) 487 sólo se aplica al texto francés]

- (MOD) **486.1** ¹ En el caso en que una frecuencia se utilice por numerosas estaciones bajo la jurisdicción de la misma administración, véase el apéndice 1 (sección E, II, columna 5a, párrafos 2c y 2d).
- (MOD) **486.2** ² Para asignaciones a las estaciones de radiodifusión en las bandas entre 5 950 kHz y 26 100 kHz atribuidas exclusivamente al servicio de radiodifusión, véase el artículo 10.
- MOD **486.3** ³ Se llama especialmente la atención de las administraciones sobre la aplicación de los párrafos a) y c) del número 486, en los casos en que hagan una asignación de frecuencia a una estación terrenal situada dentro de la zona de coordinación de una estación terrena (véase el número 492A), en una banda de frecuencias superiores a 1 GHz, compartida, con los mismos derechos, por los servicios de radiocomunicación terrenal y espacial.

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Los numeros 490, 491, 492, 492A, 492A.1, 492B, 492B.1, 492C, 492D, 492E y 492F quedan sustituidos por los nuevos textos siguientes

- MOD **490** (2) Cuando estaciones del mismo servicio, tal como el servicio móvil terrestre, utilizan una banda de frecuencias superiores a 28 000 kHz en una o varias zonas específicas, cada frecuencia asignada en esta banda debiera ser objeto de una notificación por separado en la forma prescrita en el apendice 1, cuya Sección C fija las características esenciales que se deben proporcionar; sin embargo, las características notificadas deberan referirse a una sola estación tipo. Esta disposición no se aplica a las estaciones de radiodifusión ni a las demás estaciones terrenales a las cuales se aplican las disposiciones de la subsección IIB del presente artículo, ni tampoco a las estaciones de los servicios fijo y móvil que funcionan en las bandas de frecuencias enumeradas en el Cuadro II del apéndice 28 y que tengan una potencia isótropa radiada equivalente que exceda a los valores correspondientes indicados en dicho cuadro.
- MOD **491** § 3. (1) Cuando sea posible, conviene que toda notificaciónobre en poder de la Junta con anterioridad a la fecha en que la asignación se ponga en servicio. Sin embargo, la Junta deberá recibir la notificación con antelación no superior a noventa días respecto de la fecha de puesta en servicio de la asignación. En todo caso, deberá recibirla antes de transcurridos treinta días a partir de dicha fecha. Sin embargo, para una asignación de frecuencia a una estación terrenal a la que se refiere la subsección IIB del presente artículo o el numero **639AQ**, la Junta deberá recibir la notificación con antelación no superior a tres años y no mas tarde de noventa días antes de la fecha de puesta en servicio de la asignación.
- MOD **492** (2) Toda asignación de frecuencia cuya notificación sea recibida por la Junta treinta días después de la fecha notificada de puesta en servicio o, en el caso de una estación terrenal a la que se refiere la subsección IIB del presente artículo, toda asignación de frecuencia cuya notificación sea recibida por la Junta noventa días antes de la fecha de puesta en servicio, llevará en el Registro, de

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ser inscrita, una observación que indique que no está conforme con las disposiciones del numero 491.

MOD **492A** § 3A. (1) Antes de notificar a la Junta o de poner en servicio una asignación de una frecuencia de emisión a una estación terrenal¹ en una banda atribuida, con los mismos derechos, a los servicios de radiocomunicación terrenal y espacial (sentido espacio-Tierra) en la gama de frecuencias superior a 1 GHz, toda administración comenzará a coordinar la asignación en proyecto con la administración de la que dependa la estación terrena de recepción interesada si la asignación de frecuencia en proyecto está destinada a ser utilizada en el interior de la zona de coordinación de una estación terrena de recepción existente o de una estación terrena de recepción para la cual ha sido iniciado el procedimiento de coordinación de que se trata en el numero 639AN. Para efectuar esta coordinación enviará a cada una de las administraciones de que se trate y por el medio más rápido posible, una copia de un diagrama a escala apropiada en el que se indique la ubicación de la estación terrenal incluyendo todos los detalles pertinentes de la asignación de frecuencia en proyecto así como una indicación de la fecha aproximada prevista para poner en servicio la estación.

MOD **492B** (2) Una administración con la cual se trata de efectuar la coordinación, de conformidad con el numero 492A, deberá acusar recibo inmediatamente por telegrama de los detalles referentes a la coordinación. Si la administración que solicita la coordinación no recibe acuse de recibo alguno en los quince días que sigan a la fecha de envio de la información relativa a la coordinación, podra enviar

MOD **492A.1** ¹ El apéndice 28 contiene únicamente los criterios relativos a la coordinación entre estaciones terrenas y estaciones del servicio fijo o móvil. Hasta que el C.C.I.R. establezca, de acuerdo con la Recomendación Nº Spa2-9, los criterios relativos a otros servicios de radiocomunicación terrenal, las administraciones establecerán de común acuerdo los criterios que se vayan a utilizar para la coordinación entre las estaciones terrenas y las estaciones terrenales distintas de las de los servicios fijo o móvil.

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un telegrama solicitando este acuse de recibo, al que deberá responder la administración destinataria. Recibidos los detalles referentes a la coordinación, la administración de la que se solicita la coordinación deberá examinarlos sin demora desde el punto de vista de las interferencias¹ que se causarán al servicio prestado por sus estaciones terrenas que funcionen de conformidad con el Convenio y el Reglamento o que así hayan de funcionar dentro de los tres años próximos, a reserva de que en este último caso la coordinación definida en el numero 639AN se haya efectuado o que el procedimiento a seguir, a efectos de tal coordinación, haya sido iniciado y deberá, en un plazo total de sesenta días a contar de la fecha de envío de la información relativa a los detalles referentes a la coordinación, notificar su acuerdo a la administración que solicita la coordinación o bien, si ello no es posible, indicar los motivos de su desacuerdo con las sugerencias que pueda formular para llegar a una solución satisfactoria del problema.

-MOD **492C** (3) No es necesaria la coordinación que se establece en el
Spa2 numero 492A, cuando una administración se propone:

- a) poner en servicio una estación terrenal que se encuentra situada fuera de la zona de coordinación de una estación terrena,
- b) modificar las características de una asignación existente de manera que no aumente el nivel de interferencia causado antes a las estaciones terrenas de otras administraciones.

ADD **492B.1** ¹ Los criterios que se emplearán para la evaluación de los niveles de interferencia se basarán en las Recomendaciones pertinentes del C.C.I.R. o, en ausencia de ellas, en un acuerdo entre las administraciones interesadas.

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MOD **492D** (4) La administración que solicita la coordinación puede
Spa2 requerir a la Junta que trate de efectuar la coordinación en aquellos
casos en los que:

- a) la administración con la que se trata de efectuar coordinación de conformidad con el numero **492A** no haya acusado recibo, de conformidad con el numero **492B**, dentro de un periodo de treinta días contado a partir de la fecha en que se ha enviado la información correspondiente a la coordinación,
- b) la administración que haya acusado recibo de conformidad con el numero **492B** no haya comunicado su decisión dentro de un plazo de noventa días contados a partir de la fecha en que se ha enviado la información relativa a la coordinación,
- c) exista desacuerdo entre la administración que solicita la coordinación y aquélla con la que se trate de efectuarla con respecto al nivel de interferencia aceptable, o
- d) no sea posible la coordinación por cualquier otra razón.

Al hacer su solicitud a la Junta la administracion interesada deberá suministrar la informacion necesaria para permitirle tratar de efectuar tal coordinacion.

MOD **492E** (5) La administracion que solicita la coordinacion o toda
Spa2 administracion con la que se trate de efectuar la coordinacion o bien la Junta, podran pedir la informacion suplementaria que estimen necesaria para evaluar el nivel de interferencia que se cause a los servicios interesados.

MOD **492F** (6) Cuando la Junta reciba una solicitud conforme al numero **492D a)**, enviará inmediatamente un telegrama a la administración con la que se trata de efectuar coordinacion, solicitando acuse de recibo inmediato.

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*Despues del numero 492F, agréguense los nuevos
números siguientes*

- ADD **492FA** (7) Cuando la Junta reciba un acuse de recibo como consecuencia de la medida tomada en el numero **492F** o cuando la Junta reciba una solicitud de acuerdo con lo dispuesto en el numero **492D b**), enviará inmediatamente un telegrama a la administración con la que se trata de efectuar coordinación solicitando que tome una pronta decisión sobre la cuestión.
- ADD **492FB** (8) Cuando la Junta reciba una solicitud de acuerdo con lo dispuesto en el numero **492D d**), tomará las medidas necesarias para efectuar la coordinación de acuerdo con lo dispuesto en el numero **492A**. Cuando la Junta no reciba acuse de recibo a su solicitud de coordinación en el plazo especificado en el numero **492B**, la Junta actuará de conformidad con lo dispuesto en el numero **492F**
- ADD **492FC** (9) Cuando una administración no responda en un plazo de treinta días al telegrama que la Junta le ha enviado de conformidad con el numero **492F** pidiendo acuse de recibo o cuando una administración no comunique su decisión sobre la cuestión en el plazo de sesenta días que sigue a la fecha de envío por la Junta del telegrama de conformidad con el numero **492FA**, se considerará que la administración con la que se trata de efectuar la coordinación se compromete a no formular ninguna queja con respecto a las interferencias perjudiciales que pueda causar la estación terrenal, que se coordina, al servicio prestado por su estación terrena.

^
*El numero 492G queda sustituido por el nuevo texto
siguiente*

- MOD **492G** (10) En caso necesario y como parte del procedimiento mencionado en el numero **492D**, la Junta deberá evaluar el nivel de interferencia. En todo caso, comunicará a las administraciones interesadas los resultados obtenidos.

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Despues del numero 492G, agreguense los nuevos numeros siguientes

ADD 492GA (11) En caso de que persista el desacuerdo entre la administración que trata de efectuar la coordinación y la administración con la que se pretenda efectuar dicha coordinación, la administración que solicita la coordinación tendrá derecho, a condición de que haya solicitado la asistencia de la Junta, a enviar a ésta la notificación relativa a la asignación propuesta, sesenta días después de la fecha en que se ha solicitado la asistencia de la Junta teniendo en cuenta las disposiciones del numero 491.

ADD 492GB § 3B. Cuando la Junta reciba de una administración la información mencionada en el numero 639AQ, en respuesta a una solicitud de coordinación relativa a una estación terrena, considerará como notificaciones, a los efectos de la presente sección, solamente la información relativa a las asignaciones a estaciones terrenales existentes o a las que sean puestas en servicio en los plazos definidos en el numero 491. La Junta examinará estas notificaciones con respecto a las disposiciones de los numeros 570AB y 570AD, segun el caso, y las tratará en consecuencia.

El numero 493 queda sustituido por el nuevo texto siguiente

(MOD) 493 § 3C. (1) Sea cual fuese el medio de comunicación, incluso el telégrafo, por el cual se envía una notificación a la Junta, se la considerará completa cuando contenga, por lo menos, las características esenciales apropiadas que se especifican en el apéndice 1.

El título de la subsección IIA queda sustituido por el nuevo título siguiente

MOD Spa2 Subsección IIA. Procedimiento a seguir en los casos no tratados en la subsección IIB del presente artículo

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El numero 501 queda sustituido por el nuevo texto siguiente

(MOD) **501**
Spa2

- a) Su conformidad con las disposiciones del Convenio, con el Cuadro de atribución de bandas de frecuencias y con las demás disposiciones del Reglamento de Radiocomunicaciones (a excepción de las relativas a la probabilidad de interferencia perjudicial), y

El título de la subsección IIB queda sustituido por el nuevo título siguiente

MOD Spa2 Subsección IIB. Procedimiento a seguir en los casos de estaciones terrenas que funcionan en la misma banda de frecuencias que una estación terrena y están situadas dentro de la zona de coordinación de esta estación terrena, tanto si se trata de una estación terrena existente como de una estación terrena para la cual la coordinación ha sido efectuada o iniciada

El numero 570AB queda sustituido por el nuevo texto siguiente

(MOD) **570AB**
Spa2

- a) En cuanto a su conformidad con las disposiciones del Convenio, con el Cuadro de atribución de bandas de frecuencias y con las demás disposiciones del Reglamento de Radiocomunicaciones (a excepción de las relativas al procedimiento de coordinación y a la probabilidad de interferencia perjudicial);

El numero 570AD queda sustituido por el nuevo texto siguiente

(MOD) **570AD**
Spa2

- c) Cuando sea apropiado, en cuanto a la probabilidad de que cause interferencia perjudicial al servicio realizado por una estación terrena de recepción para la cual exista inscrita en el Registro una asignación de frecuencia que esté conforme con las disposiciones del numero 639BM, siempre que la asignación de frecuencia correspondiente

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de la estación transmisora espacial no haya causado en la práctica interferencia perjudicial a cualquier otra asignacion anteriormente inscrita en el Registro que este conforme con el numero **501** ó **570AB**, segun el caso.

El numero 570AG queda sustituido por el nuevo texto siguiente

MOD **570AG** (2) Cuando la notificación incluya una referencia segun la Spaz2 cual la estación funcionará de conformidad con las disposiciones del numero **115**, la notificación se examinará inmediatamente con respecto a los numeros **570AC** y **570AD**.

Después del numero 570AG, agreguense los nuevos numeros siguientes

ADD **570AGA** (3) Si la conclusión es favorable con respecto al numero Spaz2 **570AC** ó **570AD**, segun el caso, la asignacion se inscribirá en el Registro. La fecha de recepcion de la notificación por parte de la Junta se inscribirá en la columna 2d.

ADD **570AGB** (4) Si la conclusion es desfavorable con respecto al Spaz2 numero **570AC** o **570AD**, segun el caso, la notificacion se devolverá inmediatamente, por correo aereo, a la administracion notificante con la exposición de las razones en que se funda la conclusion de la Junta. Si la administracion notificante insiste en que se examine nuevamente la notificacion, se inscribirá la asignacion en el Registro. Sin embargo, esta inscripcion se efectuara solamente si la administracion que ha presentado la notificacion informa a la Junta que la asignacion ha estado en servicio por lo menos durante ciento veinte días, sin que haya dado motivo a queja alguna de interferencia perjudicial. Se inscribirá en la columna 2d la fecha de recepcion por la Junta de la notificación original. Se inscribirá en la columna de Observaciones la fecha de recepcion por la Junta de la informacion relativa a no haberse recibido queja alguna de interferencia perjudicial.

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ADD **570AGC** (5) El periodo de ciento veinte días mencionado en los numeros
Spa2 **570AGB** y **570AX** debe contarse a partir de:

- la fecha de puesta en servicio de la asignación a la estación terrenal que ha sido objeto de la conclusión desfavorable, si entonces se halla en servicio la asignación a la estación terrena,
- la fecha de puesta en servicio de la asignación a la estación terrena en el caso contrario.

Sin embargo, si la asignación a la estación terrena no ha sido puesta en servicio en la fecha notificada, el periodo de ciento veinte días se contara a partir de esta última fecha. Cuando sea apropiado se tendrá en cuenta el plazo suplementario fijado en el numero **570BF**

Los numeros 570AH a 570AK quedan sustituidos por los nuevos textos siguientes

(MOD) **570AH** (6) Cuando la notificación no incluya una referencia según la
Spa2 cual la estación funcionará de conformidad con las disposiciones del numero **115**, se devolverá la misma inmediatamente, por correo aéreo, a la administración notificante, con una exposición de las razones en que se basa la conclusión de la Junta y, cuando sea apropiado, con las sugerencias que ésta pueda formular para lograr una solución satisfactoria del problema.

(MOD) **570AI** (7) Si la administración notificante somete de nuevo su notificación sin modificaciones, se tratará la notificación de conformidad con las disposiciones del numero **570AH**.

MOD **570AJ** (8) Si la administración notificante somete de nuevo su notificación con una referencia según la cual la estación funcionará de conformidad con las disposiciones del numero **115**, la notificación se examinará con respecto a los numeros **570AG** y **570AGA** ó **570AGB**, según el caso.

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(MOD) **570AK** (9) Si la administración notificante somete de nuevo su notificación con modificaciones que den lugar, después de nuevo examen, a una conclusión favorable de la Junta respecto al numero **570AB**, se tratará la notificación de conformidad con los numeros **570AL** a **570AX**. Si ulteriormente la asignación ha de ser inscrita en el Registro, la fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificación sometida de nuevo.

Los numeros 570AM a 570AP quedan sustituidos por los nuevos textos siguientes

(MOD) **570AM** (2) Cuando la Junta concluya que el procedimiento de coordinación mencionado en el número **570AC** se ha completado con éxito con todas las administraciones cuyas estaciones terrenas puedan ser desfavorablemente afectadas, se inscribirá la asignación en el Registro. La fecha de recepción de la notificación por parte de la Junta se inscribirá en la columna 2d.

(MOD) **570AN** (3) Cuando la Junta concluya que el procedimiento de coordinación mencionado en el numero **570AC** no se ha aplicado, y la administración notificante solicite a la Junta efectuar la coordinación requerida, la Junta tomará las medidas necesarias a tal efecto e informará a las administraciones interesadas de los resultados obtenidos. Si la tentativa de la Junta para llevar a cabo la coordinación tiene éxito, se tratará la notificación de conformidad con el numero **570AM**. Si la tentativa de la Junta no tiene éxito, la Junta examinará la notificación con respecto a las disposiciones del numero **570AD**.

(MOD) **570AO** (4) Cuando la Junta concluya que el procedimiento de coordinación mencionado en el numero **570AC** no se ha aplicado y la administración notificante no solicite de la Junta que efectue la coordinacion requerida, la notificación se devolverá inmediatamente, por correo aéreo, a la administración notificante con la exposición de las razones en que se funda la conclusión de la Junta y, cuando sea apropiado, con las sugerencias que pueda formular para lograr una solución satisfactoria del problema.

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(MOD) **570AP** (5) Cuando la administración notificante somete de nuevo la notificación y la Junta concluye que el procedimiento de coordinación mencionado en el número **570AC** se ha aplicado con éxito con todas las administraciones cuyas estaciones terrenas puedan ser desfavorablemente afectadas, se inscribirá la asignación en el Registro. La fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificación sometida originalmente. Se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la notificación sometida de nuevo.

El numero 570AV queda sustituido por el nuevo texto siguiente

(MOD) **570AV** (2) La notificación se devolverá inmediatamente, por correo aereo, a la administración notificante, con una exposición de las razones en que se funda la conclusión de la Junta y, cuando sea apropiado, con las sugerencias que ésta pueda formular para lograr una solución satisfactoria del problema.

El numero 570AX queda sustituido por el nuevo texto siguiente

MOD **570AX** (4) En el caso de que la administración que ha presentado la notificación la someta de nuevo sin modificaciones o con modificaciones que reduzcan la probabilidad de interferencia perjudicial pero no lo suficiente para que permitan la aplicación de las disposiciones del numero **570AW**, y dicha administración insiste en que se examine nuevamente la notificación, si la conclusión de la Junta sigue siendo la misma, se inscribirá la asignación en el Registro. Sin embargo, esta inscripción se efectuará solamente si la administración que ha presentado la notificación informa a la Junta que la asignación ha estado en servicio por lo menos durante ciento veinte días sin que haya dado motivo a queja alguna de interferencia perjudicial. La fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificacion sometida originalmente. Se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la información relativa a no haberse recibido queja alguna de interferencia perjudicial. El periodo de ciento veinte dias deberá contarse a partir de la fecha indicada en el numero **570AGC**.

Suprímase el numero 570AY

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El numero 570BA queda sustituido por el nuevo texto siguiente:

MOD **570BA** (2) Toda notificación de modificación de las características esenciales de una asignación ya inscrita en el Registro, tal como vienen definidas en el apéndice 1 (a excepción de las inscritas en las columnas 3 y 4a del Registro) se examinará por la Junta según las disposiciones de los números **570AB** y **570AC** y, según el caso, del **570AD** y se aplicarán las disposiciones de los números **570AF** a **570AX** ambos inclusive. En el caso de que proceda la inscripción de la modificación en el Registro, la asignación original se modificará conforme a la notificación.

El numero 570BC queda sustituido por el nuevo texto siguiente

(MOD) **570BC** §. 23H. En la aplicación de las disposiciones de esta subsección, toda notificación sometida de nuevo que sea recibida por la Junta después de haber transcurrido más de dos años desde la fecha de devolución a la administración notificante se considerará como una nueva notificación.

.....

[(MOD) **570BF** sólo se aplica al texto inglés]

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Los numeros 570BG y 570BH quedan sustituidos por los nuevos textos siguientes

MOD **570BG** (4) En el caso previsto en el numero **570AX**, y en tanto que una asignación de frecuencia que haya sido objeto de una conclusión desfavorable no pueda presentarse de nuevo en virtud de las disposiciones del numero **570AGC**, la administración notificante podrá pedir a la Junta que inscriba provisionalmente esta asignación en el Registro, un simbolo especial se inscribirá en la columna de Observaciones, indicativo del carácter provisional de esta inscripción. La Junta suprimirá dicho simbolo cuando la administración notificante le haya informado, a la expiración del periodo previsto en el numero **570AX**, sobre la ausencia de quejas de interferencia perjudicial.

MOD **570BH** (5) Si la Junta no recibe la confirmación en el plazo previsto en el numero **570BF** o al término del periodo mencionado en el numero **570BG**, se anulará la inscripción correspondiente. Antes de tomar esta medida, la Junta avisará a la administración interesada.

El numero 611A queda sustituido por el nuevo texto siguiente:

(MOD) **611A** (6) Si la utilización de una asignación de frecuencia que no se ajuste a las disposiciones del numero **501** o **570AB** causa efectivamente interferencia perjudicial en la recepción de cualquier estación que funcione de conformidad con las disposiciones del numero **639BM**, la estación que utilice la asignación de frecuencia que no se ajuste a las disposiciones del numero **501** o **570AB**, deberá eliminar inmediatamente esta interferencia al recibir aviso de la misma.

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Sección VIII. Disposiciones varias

Después del numero 635, agreguense los nuevos numeros siguientes

ADD **635A** § 47A. (1) Si cualquier administración lo solicitase, en particular si Spa2 se trata de la administración de un país que necesita asistencia especial y si las circunstancias parecieran justificarlo, la Junta, utilizando todos los medios apropiados de que disponga, proporcionará la asistencia siguiente:

- a) verificación del gráfico que muestra la zona de coordinación a que se refiere el numero **639AN**;
- b) cálculo de los niveles de interferencia a que se refiere el numero **492B**;
- c) cualquier otra asistencia de índole técnica para la aplicación de las disposiciones del presente artículo.

ADD **635B** (2) La administración que presente a la Junta una solicitud de Spa2 conformidad con lo dispuesto en el numero **635A** deberá proporcionarle la información necesaria.

ANEXO 8

Revisión del artículo 9A del Reglamento de Radiocomunicaciones

El artículo 9A del Reglamento de Radiocomunicaciones se revisa como sigue:

El artículo 9A, en su totalidad, queda reemplazado por el siguiente texto

MOD Spa2

ARTÍCULO 9A

Coordinación, notificación e inscripción en el Registro internacional de frecuencias de asignaciones de frecuencia¹ a estaciones de radioastronomía y a las de radiocomunicación espacial excepto las estaciones del servicio de radiodifusión por satélite

Sección I. Procedimiento para la publicación anticipada de la información relativa a los sistemas de satélites en proyecto

639AA § 1. (1) Toda administración que proyecte, en su nombre o en nombre de un grupo de administraciones determinadas, establecer un sistema de satélites deberá enviar a la Junta Internacional de Registro de Frecuencias la información enumerada en el apéndice 1B antes del procedimiento de coordinación que figura en el número **639AJ**, si éste es aplicable, y con antelación no superior a cinco años respecto de la fecha de la puesta en servicio de cada red de satélite del sistema en proyecto.

¹ Cuando aparezca en este artículo la expresión *asignación de frecuencia*, se entenderá que se refiere tanto a nuevas asignaciones de frecuencia como a modificaciones de asignaciones de frecuencia ya inscritas en el Registro internacional de frecuencias (llamado en adelante *Registro*).

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639AB (2) Deberan enviarse a la Junta, tan pronto como se disponga de ellas, todas las modificaciones a la informacion enviada en relacion con un proyecto de sistema de satélites de conformidad con el numero **639AA**.

639AC (3) La Junta publicara la informacion enviada en virtud de los numeros **639AA** y **639AB** en una sección especial de su circular semanal y, cuando la circular semanal contenga esta informacion, enviara un telegrama circular a todas las administraciones llamando su atencion sobre la publicacion de esta informacion.

639AD (4) Si, despues de estudiar la informacion publicada en virtud del numero **639AC**, cualquier administracion estima que podrian existir interferencias que puedan resultar inaceptables para sus servicios de radiocomunicacion espacial existentes o previstos, enviara sus comentarios a la administracion interesada en un plazo de noventa dias contados a partir de la fecha de publicacion, en la circular correspondiente, de la informacion enumerada en el apéndice 1B. Enviara igualmente a la Junta una copia de esos comentarios. Si la administracion interesada no recibe estos comentarios de otra administracion dentro del periodo anteriormente mencionado, podra suponer que esta ultima administracion no tiene objeciones fundamentales respecto a la red o redes de satélite en proyecto del sistema de las que se haya publicado informacion.

639AE (5) Toda administracion que reciba observaciones formuladas de acuerdo con lo dispuesto en el numero **639AD** procurara resolver cualquier dificultad que pueda presentarse.

639AF (6) Cuando surjan dificultades respecto a cualquiera de las redes de satélite en proyecto de un sistema que vaya a utilizar la orbita de los satélites geoestacionarios:

- a) la administracion responsable del sistema en proyecto examinara en primer lugar todos los medios posibles para satisfacer sus necesidades, teniendo en cuenta las caracteristicas de las redes de satélite geoestacionario

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que forman parte de otros sistemas de satélites geostacionarios pero sin tomar en consideración la posibilidad de hacer reajustes en los sistemas dependientes de otras administraciones. Si la administración no llega a encontrar dichos medios, podrá dirigirse entonces a las otras administraciones interesadas a fin de resolver las dificultades encontradas;

- b) toda administración a la que se solicite la colaboración indicada en el apartado a) anterior buscará, de acuerdo con la administración solicitante, todos los medios para satisfacer dichas necesidades; por ejemplo, cambiando la ubicación de una o varias de sus estaciones espaciales geoestacionarias o modificando las emisiones, la utilización de las frecuencias (incluyendo cambios de bandas de frecuencias) o bien variando cualquier otra de las características técnicas o de explotación,
- c) si, después de haber aplicado el procedimiento descrito en a) y b) anteriores subsisten las dificultades, las administraciones interesadas harán todo lo posible por resolverlas mediante modificaciones que sean aceptables para ambas partes, por ejemplo, cambiando las ubicaciones de las estaciones espaciales geoestacionarias o las demás características de los sistemas en cuestión, a fin de lograr el funcionamiento normal tanto del sistema en proyecto como de los sistemas existentes.

639AG (7) Las administraciones podrán solicitar la ayuda de la Junta Spa2 en las tentativas que realicen para resolver las dificultades antes mencionadas.

639AH (8) Al aplicar lo dispuesto en los números **639AE** a **639AG**, Spa2 la administración responsable del sistema de satélites en proyecto deberá, si fuera necesario, demorar el comienzo del procedimiento de coordinación y si éste no es aplicable, retrasará el envío a la Junta de sus notificaciones hasta ciento cincuenta días después de la fecha de la circular semanal en que se ha publicado la información

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enumerada en el apéndice 1B relativa a la red de satélite de que se trate. Sin embargo, el procedimiento de coordinación, cuando sea aplicable, puede empezarse antes del límite citado de ciento cincuenta días con respecto a aquellas administraciones con las cuales se han resuelto las dificultades o que han contestado favorablemente.

639AI (9) La administración en nombre de la cual se haya publicado información sobre las redes de satélite en proyecto de su sistema, de acuerdo con lo establecido en los numeros **639AA** a **639AC**, informará periódicamente a la Junta si ha recibido o no comentarios así como de los progresos hechos con otras administraciones en la solución de sus dificultades. La Junta publicará esta información en una sección especial de su circular semanal y, cuando la circular semanal contenga esta información, enviará un telegrama circular a todas las administraciones llamando su atención sobre la publicación de esta información.

Sección II. Procedimientos de coordinación a aplicar en ciertos casos

639AJ § 2. (1) Antes de que una administración notifique a la Junta o ponga en servicio una asignación de frecuencia a una estación espacial instalada a bordo de un satélite geoestacionario o a una estación terrena que haya de comunicar con dicha estación espacial, coordinará la utilización de esa asignación de frecuencia con cualquier otra administración a cuyo nombre estén inscritas en el Registro asignaciones de frecuencia situadas en la misma banda y referentes a estaciones espaciales instaladas a bordo de satélites geoestacionarios o referentes a estaciones terrenas que comunican con estas estaciones espaciales o que dichas asignaciones hayan sido coordinadas o estén coordinándose en virtud de las disposiciones de este numero. A tal fin, la administración que solicite la coordinación proporcionará a las administraciones comprendidas en este parrafo la información que se enumera en el apéndice 1A.

639AK (2) No es necesaria la coordinación que se establece en el numero **639AJ**

- a) cuando, debido a la utilización de una nueva asignación de frecuencia, la temperatura de ruido del receptor

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de cualquier estación espacial o terrena, o la temperatura equivalente de ruido de cualquier enlace por satélite, según el caso, que dependa de otra administración, sufra un incremento que no sobrepase el incremento predeterminado de la temperatura de ruido calculado según el método que figura en el apéndice 29;

- b) cuando una administración se propone modificar las características de una asignación existente de tal manera que las condiciones del apartado a) anterior hayan sido satisfechas con respecto a cualquier otro servicio de otra administración o cuando esta asignación haya sido ya coordinada y el incremento de la temperatura de ruido no exceda de los valores convenidos durante la coordinación.

639AL (3) Al mismo tiempo que comience el procedimiento de coordinación que se indica en el número 639AJ, la administración enviará a la Junta una copia de la solicitud de coordinación con la información enumerada en el apéndice 1A, así como el nombre de la administración o administraciones con las que trata de efectuar la coordinación. La Junta publicará esta información en una sección especial de su circular semanal, con una referencia a la circular en que se haya publicado la información relativa al sistema de satélites de acuerdo con lo dispuesto en la sección I del presente artículo. Asimismo, enviará un telegrama circular a todas las administraciones cuando la circular semanal contenga esta clase de información.

639AM (4) Toda administración que considere que debería haber sido incluida en el procedimiento de coordinación que se indica en el número 639AJ, tiene el derecho de pedir se le incluya en dicho procedimiento.

639AN§ 3. (1) Antes de que una administración notifique a la Junta o ponga en servicio cualquier asignación de frecuencia a una estación terrena, sea para transmisión o recepción, en una banda particular

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atribuida con los mismos derechos a los servicios de radiocomunicación espacial y de radiocomunicación terrenal¹, en las bandas de frecuencias superiores a 1 GHz, deberá efectuar la coordinación de esta asignación con cualquier administración de otro país cuyo territorio esté situado, con respecto a la estación terrena, total o parcialmente, dentro de la zona de coordinación². A tal fin enviará a cada una de las administraciones una copia de un diagrama a escala apropiada en el que se indique la ubicación de la estación terrena en proyecto y la zona de coordinación de la estación terrena, tanto en el caso de que ésta sea transmisora como receptora, le comunicara además los parámetros en los que se basan los cálculos de estas zonas², así como todos los detalles pertinentes de la asignación de frecuencia propuesta, tal como son enumerados en el apéndice 1A y una indicación de la fecha aproximada prevista para poner en servicio la estación.

639AO (2) Una administración con la que se trate de efectuar coordinación de conformidad con el numero 639AJ deberá acusar recibo inmediatamente por telegrama de los detalles referentes a la coordinación. Si la administración que solicita la coordinación no obtiene acuse de recibo en los treinta días que sigan a la fecha de la circular semanal en que se ha publicado la información especificada en el numero 639AL, enviará un telegrama solicitando dicho acuse de recibo, al que la administración destinataria deberá responder dentro de un nuevo periodo de treinta días. Al recibir los detalles referentes a la coordinación, la administración con la que se trata de efectuar la coordinación los examinará sin demora, teniendo en cuenta la fecha proyectada de puesta en servicio de la asignación para la cual se pide la coordinación, a fin de determinar la interfe-

639AN.1 ¹ El apéndice 28 contiene sólo los criterios relativos a la coordinación entre las estaciones del servicio fijo o móvil y las estaciones terrenas. Hasta que el C.C.I.R. establezca, de conformidad con la Recomendación N.^o Spa2-9, los criterios relativos a los otros servicios de radiocomunicación terrenal, las administraciones establecerán de común acuerdo los criterios que se vayan a utilizar para efectuar la coordinación entre las estaciones terrenas y las estaciones de radiocomunicación terrenal distintas de las de los servicios fijo y móvil.

639AN.2 ² Calculada conforme a los métodos indicados en el apendice 28, en relación a las estaciones de los servicios fijo o móvil.

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rencia¹ que se produciría al servicio prestado por aquéllas de sus estaciones respecto de las cuales se trata de efectuar la coordinación de conformidad con el numero 639AJ y notificará su acuerdo a la administración que solicita la coordinación en un plazo de noventa días a partir de la fecha de la circular semanal pertinente. Si la administración con la que se trata de efectuar la coordinación no esta de acuerdo con ella, enviara dentro del mismo periodo a la administración que solicita la coordinación, los datos técnicos y las razones en que basa su desacuerdo así como las sugerencias que pueda formular a fin de obtener una solución satisfactoria del problema. Una copia de estos comentarios deberá enviarse a la Junta.

639AP (3) Una administración con la que se trate de efectuar la coordinación de conformidad con el numero 639AN, deberá acusar recibo inmediatamente por telegrama de los detalles referentes a la coordinación. Si la administración que solicita la coordinación no obtiene acuse de recibo en los quince días que sigan a la fecha de envío de la solicitud, enviara un telegrama solicitando dicho acuse de recibo al que la administración destinataria deberá responder dentro de un nuevo periodo de quince días. Al recibir los detalles referentes a la coordinación, la administración con la que se trata de efectuar la coordinación, teniendo en cuenta la fecha proyectada de puesta en servicio de la asignación para la cual se pide la coordinación, deberá examinarlos sin demora.

a) con respecto a la interferencia² que se causaría al servicio prestado por sus estaciones de radiocomunicación terrenal que funcionen de conformidad con las disposiciones del Convenio y del Reglamento o que hayan de funcionar antes de la fecha proyectada para la puesta en servicio de la asignación de la estación terrena o dentro de los próximos tres años. Se tomará en consideración a este efecto el lapso que resulte mayor; y

639AO.1 ¹ Los criterios que se empleen para la evaluación de los niveles de interferencia se basarán en las Recomendaciones pertinentes del C.C.I.R. o, en ausencia de ellas, en un acuerdo entre las administraciones interesadas.

639AP.1 ² Los criterios que se empleen para la evaluación de los niveles de interferencia se basarán en las Recomendaciones pertinentes del C.C.I.R. o, en ausencia de ellas, en un acuerdo entre las administraciones interesadas.

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b) con respecto a la interferencia¹ que causaría a la recepción de dicha estación terrena el servicio prestado por sus estaciones de radiocomunicación terrenal que funcionen de conformidad con las disposiciones del Convenio y del Reglamento o que hayan de funcionar antes de la fecha proyectada para la puesta en servicio de la asignación de la estación terrena o dentro de los tres años siguientes. Se tomará en consideración a este efecto el lapso que resulte mayor.

Después, esta administración deberá notificar, en un plazo total de sesenta días a contar de la fecha de envío de los detalles referentes a la coordinación, su acuerdo a la administración que solicita la coordinación. Si la administración con la que se trata de efectuar la coordinación no comunica su acuerdo, deberá, dentro del mismo periodo, enviar a la administración que solicita la coordinación una copia de un diagrama en escala apropiada indicando la ubicación de sus estaciones de radiocomunicación terrenal que se encuentran o se encontrarán dentro de la zona de coordinación de la estación terrena de transmisión o de recepción, según el caso, así como cualquier otra característica esencial pertinente y las sugerencias que pueda formular con vistas a una solución satisfactoria del problema.

639AQ (4) Cuando la administración con la que se trata de efectuar la coordinación envía a la administración que solicita la coordinación la información mencionada en el número **639AP**, enviará también a la Junta una copia de dicha información. La Junta considerará como notificaciones, de conformidad con la sección I del artículo 9, solamente la información relativa a las asignaciones de frecuencia a estaciones de radiocomunicación terrenal existentes o que vayan a ser puestas en servicio en los tres años siguientes.

639AR (5) No es necesaria la coordinación previa que se establece en el número **639AN** cuando una administración se propone:

639AP.1 ¹ Los criterios que se empleen para la evaluación de los niveles de interferencia se basarán en las Recomendaciones pertinentes del C.C.I.R. o, en ausencia de ellas, en un acuerdo entre las administraciones interesadas.

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- a) poner en servicio una estación terrena cuya zona de coordinación no comprenda parte alguna del territorio de cualquier otro país;
- b) modificar las características de una asignación existente de manera que no haya aumento del nivel de interferencia a las estaciones de radiocomunicación terrenal de otras administraciones, ni que tampoco aumente dicho nivel en la propia estación;
- c) poner en funcionamiento una estación terrena móvil. Sin embargo, si la zona de coordinación de esta estación que funciona en una de las bandas de frecuencias a las que se hace referencia en el número 639AN, cubre total o parcialmente el territorio de otro país, su funcionamiento estará sujeto a un acuerdo previo entre las administraciones interesadas, con objeto de evitar que se produzca interferencia perjudicial a las estaciones existentes de radiocomunicación terrenal de dicho país. Este acuerdo previo estará basado en las características de la estación o estaciones terrenas móviles o en las de la estación terrena móvil tipo y se aplicará a una zona de servicio dada, siempre que no se disponga lo contrario en el acuerdo, éste se aplicara a cualquier estación terrena móvil que se desplace en la zona de servicio considerada, a condición de que la probabilidad de interferencia perjudicial producida por ella no sea mayor que la producida por la estación terrena tipo.

639AS § 4. (1) La administración que solicita la coordinación puede requerir a la Junta que trate de efectuar dicha coordinación en aquellos casos en los que:

- a) la administración con la que se trata de efectuar coordinación de conformidad con el número 639AJ no hubiera enviado acuse de recibo según lo dispuesto en el número

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639AO, en un plazo de sesenta días a partir de la fecha de la circular semanal en la que se haya publicado la información relativa a la solicitud de coordinacion,

- b) la administración con la que se trata de efectuar coordinación de conformidad con el numero **639AN** no hubiera enviado acuse de recibo según lo dispuesto en el número **639AP**, en un plazo de treinta días a partir del envio de los datos referentes a la coordinacion,
- c) la administración hubiera enviado acuse de recibo de acuerdo con el numero **639AO**, pero no hubiera comunicado su decisión en un plazo de noventa días a partir de la fecha de la circular semanal pertinente;
- d) la administración hubiera enviado acuse de recibo de acuerdo con el número **639AP**, pero no hubiera comunicado su decisión en un plazo de sesenta días a partir del envio de los datos referentes a la coordinación,
- e) exista desacuerdo de la administracion que solicita la coordinacion con aquella que se trate de efectuar coordinacion con respecto al nivel de interferencia aceptable;
- f) no sea posible la coordinación por cualquier otra razón.

Con este objeto, la administración interesada debera suministrar a la Junta la informacion necesaria para que pueda efectuar tal coordinacion.

639AT (2) Tanto la administracion que solicita la coordinacion como **Spa2** cualquier otra administración con la que se trate de efectuarla o bien la Junta, podran pedir la información suplementaria que estimen necesaria para evaluar el nivel de interferencia causado a los servicios interesados.

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639AU (3) Cuando la Junta reciba una solicitud conforme al número **639AS a)** o al **639AS b)**, enviara inmediatamente un telegrama a la administración con la que se trata de efectuar coordinación, solicitando acuse de recibo inmediato.

639AV (4) Cuando la Junta reciba un acuse de recibo como consecuencia de la medida tomada en el numero **639AU** o cuando la Junta reciba una solicitud de acuerdo con lo dispuesto en el número **639AS c)** o en el **639AS d)**, enviara inmediatamente un telegrama a la administración con la que se trata de efectuar coordinación solicitando que tome rápidamente una decisión sobre la cuestión.

639AW (5) Cuando la Junta reciba una solicitud de acuerdo con lo dispuesto en el número **639AS f)**, tomará las medidas necesarias para efectuar la coordinación de acuerdo con lo dispuesto en los números **639AJ** y **639AN**, según el caso. La Junta tomará asimismo, en caso necesario, las medidas previstas en el número **639AL**. Cuando la Junta no reciba acuse de recibo a su solicitud de coordinación en el plazo especificado en el numero **639AO** ó **639AP**, según el caso, la Junta actuará de conformidad con lo dispuesto en el número **639AU**.

639AX (6) Cuando una administración no responda en un plazo de treinta días al telegrama que la Junta le ha enviado de conformidad con el número **639AU** pidiendo acuse de recibo o cuando una administración no comunique su decisión sobre la cuestión en el plazo de treinta días que sigue a la fecha de envío por la Junta del telegrama de conformidad con el numero **639AV**, la administración con la que se trata de efectuar la coordinación se considera que se compromete a

- a) no formular ninguna queja con respecto a interferencias perjudiciales que la utilización de la asignación de frecuencia para la cual se ha buscado la coordinación pueda causar al servicio prestado por sus estaciones de radiocomunicación espacial o de radiocomunicación terrenal,
- b) que sus estaciones de radiocomunicación espacial o de radiocomunicación terrenal no causen inter-

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ferencia perjudicial a la utilización de la asignación de frecuencia para la que se ha buscado la coordinación.

639AY (7) Si es necesario, como parte del procedimiento mencionado en el número 639AS, la Junta evaluará el nivel de interferencia. En todo caso comunicará a las administraciones interesadas los resultados obtenidos.

639AZ § 5. En caso de que persista el desacuerdo entre la administración que intenta efectuar la coordinación y la administración con la que se trata de efectuar dicha coordinación, y siempre que se haya recabado la asistencia de la Junta, la administración que solicita la coordinación tendrá derecho, ciento cincuenta días después de la fecha en que se ha solicitado la coordinación, a enviar a la Junta la notificación relativa a la asignación propuesta, teniendo en cuenta las disposiciones del número 639BF.

Sección III. Notificación de asignaciones de frecuencia

639BA § 6. (1) Deberá notificarse a la Junta toda asignación de frecuencia relativa a una estación terrena o espacial:

- a) si la utilización de la frecuencia de que se trate es capaz de causar interferencia perjudicial a cualquier servicio de otra administración;
- b) si la frecuencia se utiliza para la radiocomunicación internacional, o
- c) si se desea obtener el reconocimiento internacional de la utilización de dicha frecuencia.

639BB (2) Análoga notificación se hará en el caso de cualquier frecuencia que haya de utilizarse para la recepción de emisiones de estaciones terrenas o espaciales por una estación espacial o terrena determinada, siempre que sea aplicable por lo menos una de las condiciones especificadas en el número 639BA.

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639BC (3) Análoga notificación se hará en el caso de cualquier Spa2 frecuencia o banda de frecuencias que haya de utilizarse para la recepción por una estación de radioastronomía determinada, si se desea que dicha información se incluya en el Registro.

639BD (4) Una notificación efectuada de conformidad con las disposiciones del número 639BA ó 639BB, relativa a una asignación de frecuencia a estaciones terrenas móviles de un sistema de satélites, deberá incluir las características técnicas de cada estación terrena móvil o de una estación terrena móvil tipo así como la zona de servicio en la cual han de funcionar estas estaciones.

639BE § 7. Con respecto a las notificaciones que se hagan en cumplimiento del número 639BA, 639BB, 639BC ó 639BD, cada asignación de frecuencia será objeto de una notificación por separado, en la forma prescrita en las diferentes secciones del apéndice 1A. Las características esenciales que deben suministrarse se especifican en el citado apéndice. Además, se recomienda a la administración notificante que comunique a la Junta los restantes datos previstos en la sección A de dicho apéndice, así como cualquier otra información que estime oportuna.

639BF § 8. (1) Para una asignación de frecuencia a una estación terrena o espacial, la Junta deberá recibir la notificación con antelación no mayor de tres años respecto de la fecha de puesta en servicio de la asignación. En todo caso, deberá recibirla, a más tardar, noventa días¹ antes de dicha fecha, excepto en el caso de asignaciones del servicio de investigación espacial en las bandas atribuidas exclusivamente a este servicio o en las bandas compartidas en que este servicio es el único servicio primario. En el caso de que tal asignación sea del servicio de investigación espacial, la notificación debiera obrar en poder de la Junta, siempre que sea posible, con anterioridad a la fecha en que la asignación se ponga en servicio, pero deberá, en todo caso, recibirla antes de transcurridos treinta días a partir de dicha fecha.

639BF.1 ¹ La administración notificante deberá iniciar el procedimiento o procedimientos de coordinación, cuando sea apropiado, con la antelación suficiente para que se cumpla esta fecha límite.

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639BG (2) Toda asignación de frecuencia a una estación terrena o
Spa2 espacial cuya notificación sea recibida por la Junta en una fecha posterior a los plazos aplicables que se mencionan en el número 639BF tendrá en el Registro, si llega a ser inscrita, una observación que indique que no se ajusta a las disposiciones del número 639BF.

Sección IV. Procedimiento para el examen de las notificaciones y la inscripción de las asignaciones de frecuencia en el Registro

639BH § 9. Cuando la Junta reciba una notificación que no contenga
Spa2 como mínimo las características esenciales especificadas en el apéndice 1A, la devolverá inmediatamente, por correo aéreo, a la administración notificante, indicando los motivos de su devolución.

639BI § 10. Cuando la Junta reciba una notificación completa, incluirá
Spa2 los detalles de la misma, con su fecha de recepción, en la circular semanal mencionada en el número 497. Esta circular contendrá los detalles de todas las notificaciones completas recibidas desde la publicación de la circular anterior.

639BJ § 11. Esta circular servirá a la administración notificante como
Spa2 acuse de recibo de la notificación completa.

639BK § 12. La Junta examinará cada notificación completa por orden
Spa2 de recepción y no podrá aplazar su conclusión, a menos que carezca de datos suficientes para adoptar una decisión; además, la Junta no se pronunciará sobre una notificación que tenga alguna correlación técnica con otra anteriormente recibida y que se encuentre aún en curso de examen, antes de haber adoptado una decisión en lo que concierne a esta última.

639BL § 13. La Junta examinará cada notificación:
Spa2

639BM *a)* en cuanto a su conformidad con las disposiciones
Spa2 del Convenio, con el Cuadro de atribución de bandas

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de frecuencias y con las demás disposiciones del Reglamento de Radiocomunicaciones (a excepción de las relativas a los procedimientos de coordinación y a la probabilidad de interferencia perjudicial);

- 639BN**
Spa2 b) cuando sea apropiado, en cuanto a su conformidad con las disposiciones del número **639AJ** relativas a la coordinación de la utilización de la asignación de frecuencia con otras administraciones interesadas, respecto a las estaciones de radiocomunicación espacial;
- 639BO**
Spa2 c) cuando sea apropiado, en cuanto a su conformidad con las disposiciones del número **639AN** relativas a la coordinación de la utilización de la asignación de frecuencia con las estaciones de radiocomunicación terrenal de las demás administraciones interesadas;
- 639BP**
Spa2 d) cuando sea apropiado, en cuanto a la probabilidad de que cause interferencia perjudicial al servicio efectuado por una estación de radiocomunicación espacial para la cual exista inscrita en el Registro una asignación de frecuencia conforme con las disposiciones del número **639BM**, siempre que esta asignación de frecuencia no haya causado en la práctica interferencia perjudicial a cualquier otra asignación anteriormente inscrita en el Registro de conformidad con el número **639BM**;
- 639BQ**
Spa2 e) cuando sea apropiado, en cuanto a la probabilidad de que cause interferencia perjudicial al servicio efectuado por una estación de radiocomunicación terrenal para la cual exista inscrita en el Registro una asignación de frecuencia que esté conforme con las disposiciones del número **501** ó **570AB**, según el caso, siempre que esta asignación de frecuencia no haya causado en la práctica interferencia perjudicial a cualquier otra asignación anteriormente inscrita en el Registro que esté conforme con el número **639BM**;

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639BR f) cuando sea apropiado, en cuanto a la probabilidad de que una estación terrena de recepción reciba interferencia perjudicial de una estación de radiocomunicación terrenal para la cual exista inscrita en el Registro una asignación de frecuencia conforme con las disposiciones del número 501 ó 570AB, según el caso.

639BS § 14. Cuando, después de realizado el examen de una notificación en aplicación de lo dispuesto en el número 639BP, la Junta formule una conclusión desfavorable basada en la probabilidad de que se cause interferencia perjudicial a una asignación inscrita en el Registro y relativa a una estación espacial, acerca de la cual tiene razones para suponer que no se utiliza regularmente, la Junta consultará inmediatamente a la administración a cuyo nombre se halla registrada dicha asignación. Si, después de estas consultas y basándose en la información disponible, se establece que la mencionada asignación no se ha utilizado durante dos años, no se la tendrá en cuenta en el examen que está realizando ni en cualquier otro examen posterior que realice según el número 639BP antes de la fecha en que la asignación sea puesta en servicio de nuevo. Antes de que la asignación sea puesta en servicio nuevamente, deberá ser sometida a nueva coordinación de acuerdo con el número 639AJ o a nuevo examen por la Junta con respecto al número 639BP, según el caso. La fecha de nueva puesta en servicio se inscribirá en el Registro.

639BT § 15. Según sea la conclusión a que llegue la Junta como consecuencia del examen previsto en los números 639BM, 639BN, 639BO, 639BP, 639BQ y 639BR, según el caso, el procedimiento se proseguirá en la forma siguiente:

639BU § 16. (1) Conclusión favorable respecto del número 639BM cuando las disposiciones de los números 639BN y 639BO no sean aplicables.

639BV (2) Se inscribirá la asignación en el Registro. La fecha a inscribir en la columna 2d será la fecha de recepción de la notificación por parte de la Junta.

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639BW § 17. (1) *Conclusión desfavorable respecto del número 639BM.*
Spa2

639BX (2) Cuando la notificación incluya una referencia según la cual
Spa2 la estación funcionará de conformidad con las disposiciones del
número 115 y la conclusión sea favorable respecto a los números
639BN, 639BO, 639BP, 639BQ y 639BR, según el caso, se inscribirá la asignación en el Registro. La fecha de recepción de la notificación por parte de la Junta se inscribirá en la columna 2d.

639BY (3) Cuando la notificación incluya una referencia según la cual
Spa2 la estación funcionará de conformidad con lo dispuesto en el número
115 y la conclusión sea desfavorable respecto del número 639BN,
639BO, 639BP, 639BQ ó 639BR, según el caso, se devolverá la
misma inmediatamente, por correo aéreo, a la administración notificante con una exposición de las razones en que se funde la conclusión de la Junta. Si la administración insiste en que se examine nuevamente su notificación, se inscribirá la asignación en el Registro. Sin embargo, esta inscripción se efectuará solamente si la administración que ha presentado la notificación informa a la Junta que la asignación ha estado en servicio durante ciento veinte días, por lo menos, sin que haya dado motivo a queja alguna de interferencia perjudicial. La fecha de recepción por la Junta de la notificación original se inscribirá en la columna 2d. La fecha de recepción por la Junta de la información de que no se ha recibido queja alguna de interferencia perjudicial se inscribirá en la columna Observaciones.

639BZ (4) El periodo de ciento veinte días mencionado en los números
Spa2 639BY y 639CP se contará:

- desde la fecha de puesta en servicio de la asignación a la estación de radiocomunicación espacial que haya sido objeto de la conclusión desfavorable, si entonces se halla en servicio la asignación a la estación que hubiera motivado dicha conclusión desfavorable;
- desde la fecha de puesta en servicio de la asignación a la estación que hubiera motivado la conclusión desfavorable en caso contrario.

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Sin embargo, si la asignación a la estación que hubiera motivado la conclusión desfavorable no ha sido puesta en servicio en la fecha notificada, el periodo de ciento veinte días se contará a partir de esta última fecha. En su caso, se tendrá en cuenta el plazo suplementario fijado en el número **639CY**.

639CA (5) Cuando la notificación no incluya una referencia según la cual la estación funcionará de conformidad con las disposiciones del número **115**, se devolverá la misma inmediatamente, por correo aéreo, a la administración notificante con una exposición de las razones en que se funda la conclusión de la Junta y, en su caso, con las sugerencias que ésta pueda formular para lograr una solución satisfactoria del problema.

639CB (6) Si la administración notificante somete de nuevo su notificación sin modificaciones, se tratará de conformidad con las disposiciones del número **639CA**. Si la somete de nuevo incluyendo una referencia según la cual la estación funcionará de conformidad con las disposiciones del número **115**, se tratará de conformidad con las disposiciones del número **639BX** ó **639BY**, según el caso. Si la somete de nuevo con modificaciones que den lugar, después de nuevo examen, a una conclusión favorable de la Junta con respecto al número **639BM**, se tratará como una nueva notificación.

639CC § 18. (1) *Conclusión favorable respecto del número **639BM**, cuando las disposiciones del número **639BN** ó **639BO** sean aplicables.*

639CD (2) Cuando la Junta concluya que los procedimientos de coordinación mencionados en los números **639BN** ó **639BO** se han completado con éxito con todas las administraciones cuyas estaciones de radiocomunicación espacial o de radiocomunicación terrenal puedan ser afectadas, se inscribirá la asignación en el Registro. La fecha de recepción de la notificación por parte de la Junta se inscribirá en la columna 2d.

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639CE (3) Cuando la Junta concluya que cualquiera de los procedimientos de coordinación mencionados en los números **639BN** y **639BO** no se han aplicado, y la administración notificante solicite a la Junta efectuar la coordinación requerida, la Junta tomará las medidas necesarias a tal efecto e informará a las administraciones interesadas de los resultados obtenidos. Si la tentativa de la Junta tiene éxito, se tratará la notificación de conformidad con el número **639CD**. Si la tentativa de la Junta no tiene éxito, la Junta examinará la notificación con respecto a las disposiciones de los números **639BP**, **639BQ** y **639BR**, según el caso.

639CF (4) Cuando la Junta concluya que cualquiera de los procedimientos de coordinación mencionados en los números **639BN** y **639BO** no se han aplicado, y la administración notificante no solicite de la Junta que efectúe la coordinación requerida, la notificación se devolverá inmediatamente, por correo aéreo, a la administración con la exposición de las razones en que se funda la conclusión de la Junta y, en su caso, con las sugerencias que pueda formular para lograr una solución satisfactoria del problema.

639CG (5) Cuando la administración notificante somete de nuevo la notificación y la Junta concluye que los procedimientos de coordinación mencionados en los números **639BN** y **639BO** se han aplicado con éxito con todas las administraciones cuyas estaciones de radio-comunicación espacial o de radiocomunicación terrenal puedan ser afectadas, la asignación se inscribirá en el Registro. La fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificación sometida originalmente. Se inscribirá en la columna Observaciones la fecha de recepción por la Junta de la notificación sometida de nuevo.

639CH (6) Si la administración notificante somete de nuevo la notificación solicitando a la Junta que efectúe la coordinación requerida de conformidad con el número **639AJ** ó **639AN**, se tratará la notificación de conformidad con las disposiciones del número **639CE**. Si ulteriormente la asignación ha de ser inscrita, se inscribirá en la

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columna de Observaciones la fecha de recepción por la Junta de la notificación sometida de nuevo.

639CI (7) Cuando la administración notificante somete de nuevo la notificación y declare que no ha tenido éxito en efectuar la coordinación, la Junta informará a las administraciones interesadas sobre el particular. La Junta examinará la notificación con respecto a las disposiciones de los números **639BP**, **639BQ** y **639BR**, según el caso. Si ulteriormente la asignación ha de ser inscrita, se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la notificación sometida de nuevo.

639CJ § 19. (1) *Conclusión favorable respecto de los números **639BM**, **639BP**, **639BQ** y **639BR**, según el caso.*

639CK (2) Se inscribirá la asignación en el Registro. La fecha de recepción de la notificación por parte de la Junta se inscribirá en la columna 2d.

639CL (3) Sin embargo, si el resultado del examen muestra que el nivel de ruido de interferencia o el porcentaje de tiempo durante el cual dicha interferencia se manifiesta o ambos a la vez, son ligeramente superiores a los valores que se utilizan para calcular la probabilidad de interferencia perjudicial (condiciones especiales de propagación, humedad anormal de la atmósfera, etc.), deberá incluirse una observación en el Registro de que existe cierta probabilidad de interferencia perjudicial y que deberían tomarse precauciones adicionales para evitar que se cause interferencia perjudicial a las asignaciones ya inscritas en el Registro.

639CM § 20. (1) *Conclusión favorable respecto del número **639BM**, pero desfavorable respecto del número **639BP**, **639BQ** ó **639BR**, según el caso.*

639CN (2) La notificación se devolverá inmediatamente, por correo aéreo, a la administración notificante con una exposición de las

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razones en que se funda la conclusión de la Junta y, en su caso, con las sugerencias que ésta pueda formular para lograr una solución satisfactoria del problema.

639CO (3) Si la administración que haya presentado la notificación somete de nuevo con modificaciones que den lugar, después de nuevo examen, a una conclusión favorable de la Junta con respecto de los números **639BP**, **639BQ** y **639BR**, según el caso, se inscribirá la asignación en el Registro. La fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificación sometida originalmente. Se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la notificación sometida de nuevo.

639CP (4) En el caso de que la administración que ha presentado la notificación la someta de nuevo sin modificaciones o con modificaciones que reduzcan la probabilidad de interferencia perjudicial pero no lo suficiente para que permitan la aplicación de las disposiciones del número **639CO**, y dicha administración insista en que se examine nuevamente la notificación, si la conclusión de la Junta sigue siendo la misma, se inscribirá la asignación en el Registro. Sin embargo, esta inscripción se efectuará solamente si la administración que ha presentado la notificación informa a la Junta de que la asignación ha estado en servicio por lo menos durante ciento veinte días, sin que haya dado motivo a queja alguna de interferencia perjudicial. La fecha a inscribir en la columna 2d será la fecha de recepción por la Junta de la notificación sometida originalmente. Se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la información relativa a no haberse recibido queja alguna de interferencia perjudicial. El periodo de ciento veinte días se contará a partir de la fecha indicada en el número **639BZ**.

639CQ § 21. (1) *Notificaciones relativas a estaciones de radioastronomía.*
Spa2

639CR (2) Toda notificación relativa a una estación de radioastronomía somete de nuevo no será examinada por la Junta respecto de los números **639BN**, **639BO**, **639BP**, **639BQ** y **639BR**. Cualquiera que sea la conclusión,

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se inscribirá la asignación en el Registro con una fecha en la columna 2c. La fecha de recepción por la Junta de la notificación se inscribirá en la columna de Observaciones.

639CS § 22. (1) *Modificación de las características esenciales de las asignaciones ya inscritas en el Registro.*

639CT (2) Toda notificación de modificación de las características esenciales de una asignación ya inscrita en el Registro, tal como se estipulan en el apéndice 1A (excepto las que se refieren al nombre de la estación o al nombre de la localidad en que está situada), se examinará por la Junta según las disposiciones de los números 639BM y, según el caso, 639BN, 639BO, 639BP, 639BQ y 639BR y se aplicarán las disposiciones de los números 639BU a 639CR, ambos inclusive. En el caso de que proceda la inscripción de la modificación en el Registro, la asignación original se modificará conforme a la notificación.

639CU (3) Sin embargo, en el caso de una modificación de las características de una asignación que esté conforme con las disposiciones del número 639BM, y si la Junta formulara una conclusión favorable respecto de los números 639BN, 639BO, 639BP, 639BQ y 639BR, según el caso, o concluyese que no hay un aumento en la probabilidad de que se cause interferencia perjudicial a las asignaciones de frecuencia ya inscritas en el Registro, la asignación modificada conservará la fecha original inscrita en la columna 2d. Además se inscribirá en la columna de Observaciones la fecha de recepción por la Junta de la notificación relativa a la modificación.

639CV § 23. En la aplicación de las disposiciones de esta sección toda notificación sometida de nuevo que sea recibida por la Junta después de haber transcurrido más de dos años desde la fecha de devolución, se considerará como una nueva notificación.

639CW § 24. (1) *Inscripción de asignaciones de frecuencia notificadas antes de ser puestas en servicio.*

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639CX (2) Cuando una asignación de frecuencia que se notifique antes de su puesta en servicio sea objeto de una conclusión favorable formulada por la Junta respecto de los números **639BM** y, según el caso, **639BN**, **639BO**, **639BP**, **639BQ** y **639BR**, se inscribirá provisionalmente en el Registro con un símbolo especial en la columna de Observaciones, indicativo del carácter provisional de esta inscripción.

639CY (3) Si en un plazo de treinta días a partir de la fecha de puesta en servicio prevista, la Junta recibe de la administración notificante confirmación de la fecha efectiva de puesta en servicio, se suprimará el símbolo especial inscrito en la columna de Observaciones. En el caso de que la Junta, como consecuencia de una petición hecha por la administración notificante recibida antes de finalizar el periodo de treinta días, concluya que existen circunstancias excepcionales que justifican una extensión de este plazo, esta extensión de ningún modo deberá exceder de ciento cincuenta días.

639CZ (4) En el caso previsto en los números **639BY** y **639CP**, y en tanto que una asignación de frecuencia que haya sido objeto de una conclusión desfavorable no pueda presentarse de nuevo en virtud de las disposiciones del número **639BZ**, la administración notificante podrá pedir a la Junta que inscriba provisionalmente esta asignación en el Registro; un símbolo especial se inscribirá en la columna de Observaciones, indicativo del carácter provisional de esta inscripción. La Junta suprimirá dicho símbolo cuando la administración notificante le haya informado, a la expiración del periodo previsto en el número **639BY** ó **639CP**, según el caso, de no haber recibido quejas de interferencia perjudicial.

639DA (5) Si la Junta no recibe la confirmación en el plazo previsto en el número **639CY** o al terminar el periodo previsto en el número **639BY** ó **639CP**, según el caso, se anulará la inscripción correspondiente. La Junta informará a la administración interesada antes de tomar esta medida.

Sección V. Inscripción de conclusiones en el Registro

639DB § 25. Siempre que la Junta inscriba en el Registro una asignación de frecuencia, indicará su conclusión en la columna 13a por medio

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de un símbolo e insertará en la columna de Observaciones una indicación de los motivos de toda conclusión desfavorable.

Sección VI. Categorías de asignaciones de frecuencias

639DC § 26. (1) La fecha a inscribir en la columna 2c es la fecha de puesta Spa2 en servicio notificada por la administración interesada. Esta fecha se indica a título de información.

639DD (2) Cuando una asignación de frecuencia a una estación de Spa2 radiocomunicación espacial que figura inscrita en el Registro de acuerdo con lo dispuesto en el número 639CP, causa efectivamente interferencia perjudicial a la recepción de cualquier estación de radiocomunicación espacial cuya asignación de frecuencia ha sido inscrita anteriormente en el Registro como resultado de una conclusión favorable con respecto a los números 639BM, 639BN, 639BO, 639BP, 639BQ y 639BR, según el caso, la estación que utilice la primera de dichas asignaciones de frecuencia deberá eliminar inmediatamente esta interferencia al recibir aviso de la misma.

639DE (3) Si la utilización de una asignación de frecuencia que no Spa2 se ajuste a las disposiciones del número 639BM causa efectivamente interferencia perjudicial en la recepción de cualquier estación que funcione de conformidad con las disposiciones del número 501, 570AB ó 639BM, según el caso, la estación que utilice la asignación de frecuencia que no se ajuste a las disposiciones del número 639BM deberá eliminar inmediatamente esta interferencia al recibir aviso de la misma.

Sección VII. Revisión de conclusiones

639DF § 27. (1) La revisión por la Junta de una conclusión podrá efectuarse: Spa2 — a petición de la administración notificante,

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- a petición de cualquier otra administración interesada en la cuestión, pero sólo con motivo de una interferencia perjudicial comprobada,
- por propia iniciativa de la Junta, cuando estime que la medida está justificada.

639DG (2) A la vista de toda la información de que disponga, la Junta Spa2 examinará nuevamente la cuestión teniendo en cuenta las disposiciones del número 639BM y, según el caso, las de los números 639BN, 639BO, 639BP, 639BQ y 639BR, y formulará una conclusión apropiada, informando a la administración notificante de esta conclusión, ya sea antes de publicarla, ya sea antes de inscribirla en el Registro.

639DH § 28. (1) Después de la utilización efectiva, durante un periodo razonable, de una asignación de frecuencia inscrita en el Registro a insistencia de la administración notificante, como consecuencia de una conclusión desfavorable respecto del número 639BP, 639BQ ó 639BR, esta administración puede solicitar de la Junta la revisión de la conclusión. La Junta entonces examinará de nuevo el asunto, previa consulta con las administraciones interesadas.

639DI (2) Si la conclusión de la Junta fuese entonces favorable, se Spa2 efectuarán en el Registro las modificaciones necesarias para que la inscripción figure como si la conclusión inicial hubiese sido favorable.

639DJ (3) Si la conclusión relativa a la probabilidad de interferencia Spa2 perjudicial sigue siendo desfavorable, no se introducirá modificación alguna en la inscripción inicial.

Sección VIII. Modificación, anulación y revisión de las inscripciones del Registro

639DK § 29. (1) Si se abandonara el uso de una asignación de frecuencia Spa2 a una estación espacial inscrita en el Registro por un periodo superior a dieciocho meses, la administración notificante deberá, dentro de este mismo plazo de dieciocho meses, informar a la Junta la fecha

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en que ha sido suspendido el funcionamiento y la fecha en que se reanudará el servicio regular.

639DL (2) Siempre que la Junta considere, como consecuencia de la aplicación de lo dispuesto en el número **639DK** o por otras razones, que una asignación a una estación espacial inscrita en el Registro no ha estado en servicio regular durante más de dieciocho meses, solicitará a la administración a cuyo nombre figura inscrita la asignación, la fecha en que podrá poner de nuevo en servicio regular esta asignación.

639DM (3) Si la Junta no recibe respuesta dentro de un plazo de seis meses a la solicitud indicada en el número **639DL** o si la respuesta no confirma que la asignación a una estación espacial va a ser utilizada de nuevo regularmente dentro de dicho periodo de seis meses, se insertará un símbolo especial en la inscripción del Registro y la asignación será tratada de conformidad con el número **639BS** del mismo modo como ha sido establecido para las asignaciones que no han estado en servicio regular durante dos años.

639DN § 30. Si se abandonara definitivamente el uso de una asignación de frecuencia inscrita en el Registro, la administración notificante informará de ello a la Junta en un plazo de noventa días y, en consecuencia, se anulará la inscripción en el Registro.

639DO § 31. Siempre que la Junta, a base de la información de que dispone, compruebe que una asignación inscrita no ha sido puesta en servicio regular conforme a las características esenciales notificadas o no se utiliza conforme a dichas características esenciales, consultará a la administración notificante y, previa su conformidad, anulará la inscripción de la asignación o efectuará en ella las modificaciones oportunas.

639DP § 32. Si, en relación con una investigación efectuada por la Junta según el número **639DO**, la administración notificante no le hubiere

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suministrado antes de transcurridos cuarenta y cinco días la información necesaria o pertinente, la Junta inscribirá en la columna de Observaciones del Registro una observación apropiada en la que se refleje la situación.

Sección IX. Estudios y recomendaciones

639DQ § 33. (1) Si cualquier administración lo solicitase y si las circunstancias parecieren justificarlo, la Junta, utilizando todos los medios apropiados de que disponga, efectuará un estudio de los casos de presunta contravención o incumplimiento del presente Reglamento, o de los casos de interferencia perjudicial.

639DR (2) La Junta redactará seguidamente un informe que comunicará a las administraciones interesadas, en el que consigne sus conclusiones y sus recomendaciones para la solución del problema.

639DS § 34. En el caso de que, como consecuencia de un estudio, la Junta presente a una o varias administraciones proposiciones o recomendaciones que tiendan a la solución de un problema, y si en un lapso de noventa días no se ha recibido la respuesta de una o varias de estas administraciones, la Junta considerará que sus proposiciones o recomendaciones no son aceptadas por las administraciones que no han respondido. Si la administración que ha hecho la petición no respondiere dentro de dicho plazo, la Junta dará por terminado el estudio.

Sección X. Disposiciones varias

639DT § 35. (1) Si cualquier administración lo solicitase, en particular si se trata de la administración de un país que necesita asistencia especial, y si las circunstancias parecieren justificarlo, la Junta, utilizando todos los medios apropiados de que disponga, proporcionará la asistencia siguiente:

- a) cálculo de los incrementos de la temperatura de ruido, de acuerdo con lo dispuesto en el número **639AK**;

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- b) elaboración de los diagramas correspondientes a las zonas de coordinación a que se refiere el número 639AN;
- c) cualquier otra asistencia de índole técnica para la aplicación de las disposiciones de este artículo.

639DU (2) La administración que presente a la Junta una solicitud de Spa2 conformidad con lo dispuesto en el número 639DT, deberá proporcionarle la información necesaria.

639DV § 36. Las normas técnicas de la Junta deberán basarse en las dis-
Spa2 posiciones pertinentes del presente Reglamento y sus apéndices; en las decisiones, cuando sea apropiado, de las Conferencias administrativas de la Unión; en las Recomendaciones del C.C.I.R.; en el estado de la técnica radioeléctrica y en el desarrollo de nuevas técnicas de transmisión.

639DW § 37. La Junta pondrá en conocimiento de las administraciones Spa2 sus conclusiones, las razones en que se basan y las modificaciones efectuadas en el Registro, por medio de la circular semanal a que se refiere el número 497.

639DX § 38. Cuando un Miembro o Miembro asociado de la Unión Spa2 recurra a las disposiciones del artículo 28 del Convenio, la Junta pondrá sus documentos a disposición de las partes interesadas, si así se le pidiere, para la aplicación de cualquier procedimiento prescrito por el Convenio para la solución de diferencias internacionales.

ANEXO 9

Revisión del artículo 14 del Reglamento de Radiocomunicaciones

El artículo 14 del Reglamento de Radiocomunicaciones se revisa como sigue:

El número 695 queda sustituido por el nuevo texto siguiente:

- MOD **695** § 3. Con el fin de evitar las interferencias:
Spa2
- se escogerá con especial cuidado la ubicación de las estaciones transmisoras y, cuando la naturaleza del servicio lo permita, la de las estaciones receptoras;
 - se reducirán lo más posible, cuando la naturaleza del servicio lo permita, la radiación y la recepción en direcciones inútiles, aprovechando para ello al máximo prácticamente posible, las cualidades de las antenas directivas;
 - la elección y la utilización de transmisores y receptores se ajustarán a lo dispuesto en el artículo 12;
 - deberán cumplirse las condiciones especificadas en el número **470V**.
-

ANEXO 10

Revisión del artículo 15 del Reglamento de Radiocomunicaciones

El artículo 15 del Reglamento de Radiocomunicaciones se revisa como sigue:

El número 717 queda sustituido por el nuevo texto siguiente:

MOD 717 (2) En tal caso, la administración interesada podrá además solicitar que la Junta proceda de conformidad con las disposiciones de las secciones VII y VIII del artículo 9 y de las secciones IX y X del artículo 9A, pero, entonces, deberá suministrar a la Junta los detalles completos del caso, incluyendo todos los datos técnicos y de explotación, así como copias de la correspondencia.

ANEXO 11

Revisión del artículo 27 del Reglamento de Radiocomunicaciones

El artículo 27 del Reglamento de Radiocomunicaciones se revisa como sigue:

Los números 951 y 952 quedan sustituidos por los nuevos textos siguientes:

- MOD **951** § 3. (1) Las estaciones a bordo de aeronaves podrán comunicar con las estaciones del servicio móvil marítimo o del servicio móvil marítimo por satélite, ajustándose para ello a las disposiciones del presente Reglamento relativas a estos servicios.
- MOD **952** (2) Con este fin, conviene que las estaciones a bordo de aeronaves utilicen las frecuencias atribuidas al servicio móvil marítimo o al servicio móvil marítimo por satélite. Sin embargo, teniendo en cuenta las interferencias que pueden causar las estaciones de aeronave al volar a gran altura, no utilizarán las frecuencias de las bandas de dichos servicios superiores a 30 MHz, en una zona determinada, sin previo acuerdo de todas las administraciones afectadas por la posibilidad de que se cause interferencia. En particular, las estaciones de aeronave que funcionen en la Región 1 no utilizarán frecuencias de las bandas superiores a 30 MHz atribuidas al servicio móvil marítimo en virtud de acuerdos entre las administraciones de esa Región.

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ANEXO 12

Revisión del artículo 41 del Reglamento de Radiocomunicaciones

El artículo 41 del Reglamento de Radiocomunicaciones se revisa como sigue:

Después del número 1567 agréguese el nuevo número siguiente:

ADD 1567A § 6. Las estaciones espaciales del servicio de aficionados por satélite que funcionen en bandas compartidas con otros servicios, estarán dotadas de dispositivos apropiados para el control de sus emisiones para el caso de que se notifique interferencia perjudicial, de conformidad con el procedimiento establecido en el artículo 15. Las administraciones que autoricen tales estaciones espaciales lo comunicarán a la I.F.R.B. y tomarán las medidas del caso para que antes del lanzamiento estén instaladas estaciones terrenas de control en número suficiente para garantizar que cualquier interferencia perjudicial que se notifique puede ser eliminada por la administración que ha dado la autorización (véase el número 470V).

ANEXO 13**Revisión del apéndice 1 al Reglamento de Radiocomunicaciones**

El apéndice 1 al Reglamento de Radiocomunicaciones se revisa como sigue:

**Sección A. Características esenciales que deben suministrarse
al hacer una notificación en cumplimiento del número 486
del Reglamento**

*El párrafo « Información complementaria » queda
sustituido por el nuevo párrafo siguiente :*

MOD Spa2 Información complementaria:

- a) frecuencia de referencia, en su caso, y la coordinación requerida en el número 492A;
- b) nombre de toda administración con la que se ha efectuado un acuerdo para rebasar los límites establecidos en el presente Reglamento y el contenido de dicho acuerdo.

**Sección B. Características esenciales que deben suministrarse al hacer
una modificación en cumplimiento del número 487
del Reglamento**

*El párrafo « Información complementaria » queda
sustituido por el nuevo párrafo siguiente :*

MOD Spa2 Información complementaria:

- a) toda la coordinación requerida en el número 492A;
- b) nombre de toda administración con la que se ha efectuado un acuerdo para rebasar los límites establecidos en el presente Reglamento y el contenido de dicho acuerdo.

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**Sección C. Características esenciales que deben suministrarse
al hacer una notificación en cumplimiento del número 490
del Reglamento**

*El párrafo « Información complementaria » queda
sustituido por el nuevo párrafo siguiente :*

MOD Spa2 Información complementaria:

- a) toda coordinación requerida en el número 492A;
 - b) nombre de toda administración con la que se ha efectuado un acuerdo para rebasar los límites establecidos en el presente Reglamento y el contenido de dicho acuerdo.
-

ANEXO 14**Revisión del apéndice 1A al Reglamento de Radiocomunicaciones**

El apéndice 1A al Reglamento de Radiocomunicaciones se revisa como sigue:

El apéndice 1A, en su totalidad, queda sustituido por el texto siguiente:

MOD Spa2

APÉNDICE 1A**Notificaciones relativas a estaciones de radiocomunicación espacial y de radioastronomía**

(Véase el artículo 9A)

Sección A. Instrucciones generales

1. Se enviará a la Junta Internacional de Registro de Frecuencias una notificación por separado para notificar:
 - cada nueva asignación de frecuencia;
 - toda modificación de características de una asignación de frecuencia inscrita en el Registro internacional de frecuencias, llamado en adelante *Registro*;
 - toda anulación total de una asignación de frecuencia inscrita en el Registro.
2. La notificación de asignaciones de frecuencia a estaciones terrenas o espaciales, transmisoras o receptoras, a que se refieren el número 639BA para las frecuencias de emisión y el número 639BB para las de recepción se hará por separado a la Junta para cada asignación a una estación terrena o espacial. Cuando se trate de un sistema de satélites pasivos, sólo se notificarán las asignaciones para las estaciones terrenas, transmisoras y receptoras.
3. En el caso de un sistema de satélites que comprenda varias estaciones espaciales de las mismas características generales, se enviará una notificación por cada estación espacial:

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- si se halla a bordo de un satélite geoestacionario;
- si se halla a bordo de un satélite no geoestacionario, excepto si cierto número de satélites tienen las mismas características de radiofrecuencia e iguales características orbitales (salvo la posición del nodo ascendente). En este último caso, puede enviarse a la Junta una sola notificación para todas las estaciones espaciales.

4. En la notificación deberá facilitarse la siguiente información esencial:

- a) número de orden de la notificación y fecha en que ésta se envía a la Junta;
- b) nombre de la administración notificante;
- c) datos suficientes para identificar la red de satélite en que ha de funcionar la estación terrena o espacial;
- d) si la notificación se refiere a:
 - 1) la primera utilización de una frecuencia por una estación;
 - 2) un cambio de las características de una asignación de frecuencia inscrita en el Registro (indíquese si se trata de una sustitución, de una adición o de una supresión de características existentes); o
 - 3) la anulación de una asignación con todas las características notificadas;
- e) una referencia a la circular semanal de la I.F.R.B. que contenga la publicación anticipada de la información requerida en virtud del número 639AA;
- f) las características esenciales indicadas en las secciones B, C, D, E o F, según el caso;
- g) cualquier otra información que la administración considere pertinente, por ejemplo, cualquier factor que se haya tomado en cuenta al aplicar las disposiciones del apéndice 28 para determinar la zona de coordinación así como, si ha lugar, una indicación de que la asigna-

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ción considerada se utilizará de conformidad con el número 115, información sobre la utilización de la frecuencia notificada si esa utilización es restringida o, tratándose de notificaciones relativas a estaciones espaciales, si las emisiones de la estación se interrumpirán indefinidamente después de cierto periodo.

Sección B. Características esenciales que deben suministrarse en las notificaciones relativas a frecuencias utilizadas por estaciones terrenas para la transmisión

Punto 1 Frecuencia asignada

Indíquese la frecuencia asignada tal y como se define en el artículo 1, en kHz hasta 30 000 kHz inclusive, y en MHz a partir de 30 000 kHz (véase el número 85).

Punto 2 Banda de frecuencias asignada

Indíquese la anchura de la banda de frecuencias asignada, en kHz (véase el número 89).

Punto 3 Fecha de puesta en servicio

a) En el caso de una nueva asignación, indíquese la fecha efectiva o prevista, según el caso, de puesta en servicio de la asignación.

*b) Siempre que se modifique alguna de las características esenciales de la asignación indicadas en esta sección, excepto la que figura en el punto 4 *a*), la fecha a indicar será la del último cambio, efectivo o previsto, según el caso.*

Punto 4 Nombre y ubicación de la estación terrena de transmisión

a) Indíquese el nombre por el cual se conoce la estación o el de la localidad en que está situada.

b) Indíquese el país en que está ubicada la estación. Conviene utilizar para ello los símbolos del Prefacio de la Lista internacional de frecuencias.

c) Indíquense las coordenadas geográficas (en grados y minutos) de la ubicación del transmisor.

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Punto 5 Estación(es) con la(s) que se establece la comunicación

Indíquese la identidad de la estación o estaciones espaciales receptoras asociadas a la estación terrena haciendo referencia a las notificaciones de las mismas o mediante cualquier otra forma apropiada; en el caso de un satélite pasivo, indíquense la identidad del satélite y la ubicación de la estación o estaciones terrenas receptoras asociadas a él.

Punto 6 Clase de estación y naturaleza del servicio

Indíquese la clase de estación y la naturaleza del servicio utilizando los símbolos del apéndice 10.

Punto 7 Clase de emisión, anchura de banda necesaria y descripción de la transmisión

De conformidad con el artículo 2 y el apéndice 5:

- a) indíquese la clase de emisión;
- b)¹ indíquese la frecuencia o frecuencias portadoras de la emisión;
- c)¹ indíquense, para cada frecuencia portadora, la clase de emisión, la anchura de banda necesaria y la descripción de la transmisión.

Punto 8 Características de la potencia de transmisión

a)¹ Indíquese, para cada portadora la potencia de cresta aplicada a la entrada de la antena.

b) Indíquense la potencia total de cresta y la máxima densidad de potencia por Hz aplicada a la entrada de la antena (valor medio calculado en la banda de 4 kHz más desfavorable para las portadoras inferiores a 15 GHz y en la banda de 1 MHz más desfavorable para las portadoras superiores a 15 GHz).

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 9 Características de la antena transmisora

- a) Indíquese la ganancia isótropa (dB) de la antena en la dirección de máxima radiación (véase el número 100).
- b) Indíquese la anchura del haz, en grados, entre los puntos en los que la potencia se reduce a la mitad (si el haz no es simétrico, describase en detalle).
- c) Adjúntese a la notificación el diagrama de radiación medido de la antena (tomando como referencia la dirección de máxima radiación), o indíquese el diagrama de radiación de referencia que deba utilizarse para la coordinación.
- d) Adjúntese a la notificación un gráfico en el que se indique el ángulo de elevación del horizonte para cada acimut alrededor de la estación terrena.
- e) Indíquese, en grados a partir del plano horizontal, el ángulo mínimo de elevación en la dirección de máxima radiación en que se prevé va a funcionar la antena.
- f) Indíquense, en grados a partir del norte verdadero y en el sentido de las agujas del reloj, los límites entre los que puede variar, durante la explotación, el acimut de la dirección de máxima radiación.
- g)¹ Indíquese el tipo de polarización de la onda radiada en la dirección de máxima radiación; indíquese, asimismo, el sentido en el caso de polarización circular y el plano de polarización en el caso en que ésta sea lineal.
- h) Indíquese la altitud de la antena (en metros) sobre el nivel medio del mar.

Punto 10¹ Características de modulación

Para cada frecuencia portadora, según la naturaleza de la moduladora de la portadora y según el tipo de modulación, indíquense las características siguientes:

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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- a) portadora modulada en frecuencia por una banda de base telefónica multicanal por distribución de frecuencia (MDF-MF) o por otra señal que pueda representarse por una banda de base telefónica multicanal por distribución de frecuencia; indíquense las frecuencias inferior y superior de la banda de base y la excusión de frecuencia-eficaz del tono de prueba en función de la frecuencia de la banda de base;
- b) portadora modulada en frecuencia por una señal de televisión: indíquense la norma de la señal de televisión (incluyendo, si ha lugar, la norma utilizada para el color), la excusión de frecuencia para la frecuencia central de referencia de la característica de preacentuación y esta característica de preacentuación. Indíquense también, si ha lugar, las características de multiplaje de la señal de video con el sonido o sonidos, o de otras señales;
- c) portadora modulada por desplazamiento de fase por una señal con modulación por impulsos codificados (MIC/MDFase); indíquense el régimen binario y el número de fases;
- d) portadora modulada en amplitud (incluidas las emisiones de banda lateral única): indíquense con la mayor precisión posible la naturaleza de la señal moduladora y el tipo de modulación de amplitud utilizado;
- e) para los demás tipos de modulación, indíquense los datos que puedan ser de utilidad para un estudio de interferencia;
- f) para cualquier tipo de modulación utilizado, indíquense las características de dispersión de la energía, si ha lugar.

Punto 11 Horario máximo de funcionamiento

Indíquese el horario máximo de funcionamiento (T.M.G.) en la frecuencia de cada portadora.

Punto 12 Coordinación

Indíquese el nombre de toda administración con la que se haya coordinado satisfactoriamente la utilización de la frecuen-

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cia de conformidad con lo dispuesto en los números 639AJ y 639AN y, si ha lugar, el nombre de toda administración a la que se haya pedido la coordinación pero con la que ésta no se haya efectuado.

Punto 13 Acuerdos

Indíquense también, si ha lugar, el nombre de toda administración con la cual se ha efectuado un acuerdo para exceder los límites establecidos en el presente Reglamento y el contenido de este acuerdo.

Punto 14 Administración o compañía explotadora

Indíquense el nombre de la administración o compañía explotadora y las direcciones postal y telegráfica de la administración a la que hayan de dirigirse comunicaciones urgentes sobre interferencia, calidad de las emisiones y cuestiones relativas a la explotación técnica de las estaciones (véase el artículo 15).

**Sección C. Características esenciales que deben suministrarse
en las notificaciones relativas a frecuencias utilizadas por estaciones terrenas
para la recepción**

Punto 1 Frecuencia asignada

Indíquese la frecuencia asignada de la emisión que ha de recibirse, tal y como se define en el artículo 1, en kHz hasta 30 000 kHz inclusive, y en MHz a partir de 30 000 kHz (véase el número 85).

Punto 2 Banda de frecuencias asignada

Indíquese la anchura de la banda de frecuencias asignada, en kHz (véase el número 89).

Punto 3 Fecha de puesta en servicio

a) En el caso de una nueva asignación, indíquese la fecha efectiva o prevista, según el caso, en que ha de comenzar la recepción en la frecuencia asignada.

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b) Siempre que se modifique alguna de las características esenciales de la asignación, indicadas en esta sección, excepto la que figura en el punto 4 a), la fecha a indicar será la del último cambio, efectivo o previsto, según el caso.

Punto 4 Identidad y ubicación de la estación terrena receptora

- a) Indíquese el nombre por el cual se conoce la estación receptora o el de la localidad en que está situada.
- b) Indíquese el país en que está situada la estación terrena receptora. Conviene utilizar para ello los símbolos del Prefacio a la Lista internacional de frecuencias.
- c) Indíquense las coordenadas geográficas (en grados y minutos) de la ubicación del receptor.

Punto 5 Estación(es) con la(s) que se establece la comunicación

Indíquese la identidad de la estación o estaciones espaciales transmisoras asociadas a la estación terrena haciendo referencia a las notificaciones de las mismas o mediante cualquier otra forma apropiada; en el caso de un satélite pasivo indíquese la identidad del satélite y de la estación o estaciones terrenas transmisoras asociadas a él.

Punto 6 Clase de estación y naturaleza del servicio

Indíquense la clase de estación y la naturaleza del servicio efectuado, utilizando los símbolos del apéndice 10.

Punto 7 Clase de emisión, anchura de banda necesaria y descripción de la transmisión que ha de recibirse

De conformidad con el artículo 2 y el apéndice 5:

- a) indíquese la clase de emisión de la transmisión que ha de recibirse;

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b)¹ indíquese la frecuencia o frecuencias portadoras que han de recibirse;

c)¹ indíquense, para cada frecuencia portadora que ha de recibirse, la clase de emisión, la anchura de banda necesaria y la descripción de la transmisión.

Punto 8 Características de la antena receptora de una estación terrena

a) Indíquese la ganancia isótropa (dB) de la antena en la dirección de máxima radiación (véase el número 100).

b) Indíquese la anchura del haz, en grados, entre los puntos en los que la potencia se reduce a la mitad (si el haz no es simétrico, descríbese en detalle).

c) Adjúntese a la notificación el diagrama de radiación medido de la antena (tomando como referencia la dirección de máxima radiación), o indíquese el diagrama de radiación de referencia que deba utilizarse para la coordinación.

d) Adjúntese a la notificación un gráfico en el que se indique para cada acimut el ángulo de elevación del horizonte alrededor de la estación terrena.

e) Indíquese, en grados a partir del plano horizontal, el ángulo mínimo de elevación en la dirección de máxima radiación en que se prevea va a funcionar la antena.

f) Indíquense, en grados a partir del norte verdadero y en el sentido de las agujas del reloj, los límites entre los que puede variar, durante la explotación, el acimut de la dirección máxima de radiación.

g) Indíquese la altitud (en metros) de la antena sobre el nivel medio del mar.

Punto 9 Temperatura de ruido

Indíquese, en kelvins, la más baja temperatura de ruido equivalente del enlace por satélite (véase el número 103A)

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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en condiciones de « cielo sereno ». Se dará esta indicación para el valor nominal del ángulo de elevación si la estación transmisora asociada se halla a bordo de un satélite geoestacionario y, en los otros casos, para el valor mínimo del ángulo de elevación.

Punto 10 Horario máximo de recepción

Indíquese el horario máximo de recepción (T.M.G.) en la frecuencia de cada portadora.

Punto 11 Coordinación

Indíquese el nombre de toda administración con la que se haya coordinado satisfactoriamente la utilización de la frecuencia de conformidad con lo dispuesto en los números 639AJ y 639AN y, si ha lugar, el nombre de toda administración a la que se haya pedido la coordinación pero con la que ésta no se haya efectuado.

Punto 12 Acuerdos

Indíquense también, si ha lugar, el nombre de toda administración con la cual se ha efectuado un acuerdo para exceder los límites establecidos en el presente Reglamento y el contenido de este acuerdo.

Punto 13 Administración o compañía explotadora

Indíquense el nombre de la administración o compañía explotadora y las direcciones postal y telegráfica de la administración a la que hayan de dirigirse comunicaciones urgentes sobre interferencia y cuestiones relativas a la explotación técnica de las estaciones (véase el artículo 15).

**Sección D. Características esenciales que deben suministrarse
en las notificaciones relativas a frecuencias utilizadas por estaciones espaciales
para la transmisión**

Punto 1 Frecuencia asignada

Indíquese la frecuencia asignada tal y como se define en el artículo 1, en kHz hasta 30 000 kHz inclusive, y en MHz a

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partir de 30 000 kHz (véase el número 85). Conviene que cada haz de radiación de antena sea objeto por lo menos de una notificación distinta.

Punto 2 Banda de frecuencias asignada

Indíquese la anchura de la banda de frecuencias asignada, en kHz (véase el número 89).

Punto 3 Fecha de puesta en servicio

a) En el caso de una nueva asignación, indíquese la fecha efectiva o prevista, según el caso, de puesta en servicio de la asignación.

b) Siempre que se modifique alguna de las características esenciales de la asignación indicadas en esta sección, excepto aquéllas que figuran en el punto 4, la fecha a indicar será la del último cambio, efectivo o previsto, según el caso.

Punto 4 Identidad de la(s) estación(es) espacial(es)

Indíquese la identidad de la estación o estaciones espaciales.

Punto 5 Información relativa a la órbita

a) En el caso de una estación espacial a bordo de un satélite geoestacionario, indíquense la longitud geográfica nominal prevista en la órbita de los satélites geoestacionarios y las tolerancias previstas de longitud y de inclinación. Indíquense, asimismo:

- 1) el arco de la órbita de los satélites geoestacionarios en el que la estación es visible con un ángulo de elevación de 10°, por lo menos, desde las estaciones terrenas o zonas de servicio asociadas a ella;
- 2) el arco de la órbita de los satélites geoestacionarios a lo largo del cual la estación espacial podría prestar el servicio requerido con las estaciones terrenas o zonas de servicio asociadas a ella;

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3) si el arco considerado en el párrafo 2) precedente es menor que el mencionado en el párrafo 1), se explicarán las razones de esta diferencia.

Nota: Los arcos a que se refieren los párrafos 1) y 2) se definirán por la longitud geográfica de sus extremos en la órbita de los satélites geoestacionarios.

b) En el caso de una o varias estaciones espaciales a bordo de uno o varios satélites no geoestacionarios, indíquense el ángulo de inclinación de la órbita, el periodo y las altitudes en kilómetros del apogeo y perigeo de la estación o estaciones espaciales así como el número de satélites utilizados.

Punto 6 Zona de servicio

Indíquense la zona o zonas de servicio previstas en la Tierra o el nombre de la localidad y del país en que están ubicadas la estación o estaciones receptoras asociadas a las estaciones espaciales.

Punto 7 Clase de estación y naturaleza del servicio

Indíquense la clase de estación y la naturaleza del servicio efectuado, utilizando los símbolos del apéndice 10.

Punto 8 Clase de emisión, anchura de banda necesaria y descripción de la transmisión

De conformidad con el artículo 2 y el apéndice 5:

- a) indíquese la clase de emisión de la transmisión;
- b)¹indíquese la frecuencia o frecuencias portadoras de la transmisión;
- c)¹indíquense, para cada portadora, la clase de emisión, la anchura de banda necesaria y la descripción de la transmisión.

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 9 Características de la potencia de transmisión

- a)¹ Indíquese, para cada frecuencia portadora, la potencia de cresta aplicada a la entrada de la antena.
- b) Indíquense la potencia total de cresta y la densidad máxima de potencia por Hz aplicada a la entrada de la antena (valor medio calculado en la banda de 4 kHz más desfavorable para las portadoras inferiores a 15 GHz y en la banda de 1 MHz más desfavorable para las portadoras superiores a 15 GHz).

Punto 10 Características de las antenas transmisoras de la estación espacial

Para cada zona de servicio:

- a) en el caso de una estación espacial a bordo de un satélite geoestacionario, indíquese la ganancia de la antena transmisora de la estación espacial, mediante curvas de ganancia trazadas en un mapa de la superficie terrestre; en cada curva se indicará la ganancia isótropa correspondiente a una ganancia de 2, 4, 6, 10, 20 dB por debajo del valor máximo y los valores subsiguientes, si fuese necesario, de 10dB en 10 dB;
- b) en el caso de una estación espacial a bordo de un satélite no geoestacionario, indíquense la ganancia isótropa de la antena transmisora de la estación espacial en la dirección principal de radiación y el diagrama de radiación de esta antena en las direcciones en que puede encontrar a la superficie terrestre, tomando como referencia la ganancia en la dirección principal de radiación;
- c)¹ indíquense el tipo de polarización de la antena, su sentido si se trata de polarización circular, y el plano de polarización en el caso en que ésta sea lineal. Indíquese también el índice de excentricidad más desfavorable en el haz de media potencia;
- d) indíquese, en el caso de un satélite geoestacionario, la precisión con que se mantiene la orientación de la antena.

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 11¹ Características de modulación

Para cada frecuencia portadora, según la naturaleza de la señal de modulación de la frecuencia portadora y según el tipo de modulación, indíquense las características siguientes:

- a) portadora modulada en frecuencia por una banda de base telefónica multicanal por distribución de frecuencia (MDF-MF) o por otra señal que pueda representarse por una banda de base telefónica multicanal por distribución de frecuencia: indíquense las frecuencias inferior y superior de la banda de base y la excursión de frecuencia eficaz del tono de prueba en función de la frecuencia de la banda de base;
- b) portadora modulada en frecuencia por una señal de televisión: indíquense la norma de la señal de televisión (incluyendo, si ha lugar, la norma utilizada para el color), la excursión de frecuencia para la frecuencia central de referencia de la característica de preacentuación y esta característica de preacentuación. Indíquense también, si ha lugar, las características de multiplaje de la señal de video con el sonido o sonidos, o de otras señales;
- c) portadora modulada por desplazamiento de fase por una señal con modulación por impulsos codificados (MIC/MDFase): indíquense el régimen binario y el número de fases;
- d) portadora modulada en amplitud (incluidas las emisiones de banda lateral única): indíquense con la mayor precisión posible la naturaleza de la señal moduladora y el tipo de modulación de amplitud utilizado;
- e) para los demás tipos de modulación, indíquense los datos que puedan ser de utilidad para un estudio de interferencia;
- f) para cualquier tipo de modulación utilizado, indíquense las características de dispersión de la energía, si ha lugar.

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 12 Horario máximo de funcionamiento

Indíquese el horario máximo de funcionamiento (T.M.G.) en la frecuencia de cada portadora.

Punto 13 Coordinación

Indíquese el nombre de toda administración o grupo de administraciones con las que se haya coordinado satisfactoriamente la utilización de la red de satélite a que pertenece la estación espacial, de conformidad con lo dispuesto en el número 639AJ.

Punto 14 Acuerdos

Indíquense también, si ha lugar, el nombre de toda administración con la que se haya efectuado un acuerdo para exceder los límites establecidos en el presente Reglamento y el contenido de este acuerdo.

Punto 15 Administración o compañía explotadora

Indíquense el nombre de la administración o compañía explotadora y las direcciones postal y telegráfica de la administración a la que hayan de dirigirse comunicaciones urgentes sobre interferencia, calidad de las emisiones y cuestiones relativas a la explotación técnica de las estaciones (véase el artículo 15).

Sección E. Características esenciales que deben suministrarse en las notificaciones relativas a frecuencias utilizadas por estaciones espaciales para la recepción

Punto 1 Frecuencia asignada

Indíquese la frecuencia asignada de la emisión que se ha de recibir, tal y como está definida en el artículo 1, en kHz hasta 30 000 kHz inclusive, y en MHz a partir de 30 000 kHz (véase el número 85). Conviene que cada haz de radiación de antena sea objeto por lo menos de una notificación distinta.

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Punto 2 Banda de frecuencias asignada

Indíquese la anchura de la banda de frecuencias asignada, en kHz (véase el número 89).

Punto 3 Fecha de puesta en servicio

a) En el caso de una nueva asignación, indíquese la fecha efectiva o prevista, según el caso, en que haya de comenzar la recepción en la frecuencia asignada.

b) Siempre que se modifique alguna de las características esenciales de la asignación indicadas en esta sección, excepto aquéllas que figuran en el punto 4, la fecha a indicar será la del último cambio, efectivo o previsto, según el caso.

Punto 4 Identidad de la estación o estaciones espaciales receptoras

Indíquese la identidad de la estación o estaciones espaciales receptoras.

Punto 5 Información relativa a la órbita

a) En el caso de una estación espacial a bordo de un satélite geoestacionario, indíquense la longitud geográfica nominal prevista en la órbita de los satélites geoestacionarios y las tolerancias previstas de longitud y de inclinación. Indíquense, asimismo:

- 1) el arco de la órbita de los satélites geoestacionarios en el que la estación es visible con un ángulo de elevación de 10°, por lo menos, desde las estaciones terrenas o zonas de servicio asociadas a ella;
- 2) el arco de la órbita de los satélites geoestacionarios a lo largo del cual la estación espacial podría prestar el servicio requerido con las estaciones terrenas o zonas de servicio asociadas a ella;
- 3) si el arco considerado en el párrafo 2) precedente es menor que el mencionado en el párrafo 1), se explicarán las razones de esta diferencia.

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Nota: Los arcos a que se refieren los párrafos 1) y 2) se definirán por la longitud geográfica de sus extremos en la órbita de los satélites geoestacionarios.

b) En el caso de una o varias estaciones espaciales a bordo de uno o varios satélites no geoestacionarios, indíquense el ángulo de inclinación de la órbita, el periodo y las altitudes en kilómetros del apogeo y del perigeo de la estación o estaciones espaciales así como al número de satélites utilizados.

Punto 6 Estación(es) terrena(s) transmisora(s) asociada(s) a la(s) estación(es) espacial(es)

Indíquese la identidad de la estación o estaciones terrenas transmisoras asociadas a la estación o las estaciones espaciales haciendo referencia a las notificaciones de estas estaciones, o mediante cualquier otra forma apropiada.

Punto 7 Clase de estación y naturaleza del servicio

Indíquense la clase de estación y la naturaleza del servicio efectuado, utilizando los símbolos del apéndice 10.

Punto 8 Clase de emisión, anchura de banda necesaria y descripción de la transmisión o transmisiones que han de recibirse

De conformidad con el artículo 2 y el apéndice 5 :

- a) indíquese la clase de emisión de la transmisión o transmisiones que han de recibirse;
- b)¹ indíquese la frecuencia o frecuencias portadoras de la transmisión o transmisiones que han de recibirse;
- c)¹ indíquense, para cada frecuencia portadora que haya de recibirse, la clase de emisión, la anchura de banda necesaria y la descripción de la transmisión o transmisiones que han de recibirse.

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 9 Características de la antena receptora de una estación espacial

Para cada haz de antena de recepción:

- a) en el caso de una estación espacial a bordo de un satélite geoestacionario, indíquese la ganancia de la antena receptora de la estación espacial, mediante curvas de ganancia trazadas en un mapa de la superficie terrestre; en cada curva se indicará la ganancia isótropa correspondiente a una ganancia de 2, 4, 6, 10, 20 dB por debajo del valor máximo y los valores subsiguientes, si fuese necesario, de 10dB en 10. dB;
- b) en el caso de una estación espacial a bordo de un satélite no geoestacionario, indíquese la ganancia isótropa de la antena receptora de la estación espacial en la dirección principal de radiación y el diagrama de radiación de esta antena en las direcciones en que puede encontrar a la superficie terrestre, tomando como referencia la ganancia en la dirección principal de radiación;
- c)¹ indíquense el tipo de polarización de la antena, su sentido si se trata de polarización circular, y el plano de polarización en el caso en que ésta sea lineal. Indíquese también el índice de excentricidad más desfavorable en el haz de media potencia;
- d) indíquese, en el caso de un satélite geoestacionario, la precisión con que se mantiene la orientación de la antena.

Punto 10 Temperatura de ruido

Indíquese, en kelvins, la temperatura de ruido del conjunto total del sistema receptor en la entrada del receptor de la estación espacial.

Punto 11 Horario máximo de recepción

Indíquese el horario máximo de recepción (T.M.G.) en la frecuencia de cada portadora.

¹ Esta información deberá suministrarse en la notificación sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

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Punto 12 Coordinación

Indíquese el nombre de toda administración o grupo de administraciones con las que se haya coordinado satisfactoriamente la utilización de la red de satélite a que pertenece la estación espacial, de conformidad con lo dispuesto en el número 639AJ.

Punto 13 Acuerdos

Indíquense también, si ha lugar, el nombre de toda administración con la que se haya efectuado un acuerdo para exceder los límites establecidos en el presente Reglamento y el contenido de este acuerdo.

Punto 14 Administración o compañía explotadora

Indíquense el nombre de la administración o compañía explotadora y las direcciones postal y telegráfica de la administración a la que hayan de dirigirse comunicaciones urgentes sobre interferencias y cuestiones relativas a la explotación técnica de las estaciones (véase el artículo 15).

**Sección F. Características esenciales que han de suministrarse
en las notificaciones relativas a frecuencias utilizadas por las estaciones
de radioastronomía para la recepción**

Punto 1 Frecuencia observada

Indíquese el centro de la banda de frecuencias observada, en kHz hasta 30 000 kHz inclusive, y en MHz a partir de 30 000 kHz.

Punto 2 Fecha de puesta en servicio

a) Indíquese la fecha efectiva o prevista, según el caso, en que comienza la recepción en la banda de frecuencias.

b) Siempre que se modifique alguna de las características esenciales indicadas en esta sección, excepto aquéllas que figuran en el punto 3 b), la fecha a indicar será la del último cambio, efectivo o previsto, según el caso.

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Punto 3 Nombre y ubicación de la estación

a) Inscríbanse las letras « RA ».

b) Indíquese el nombre por el cual se conoce la estación o el de la localidad en que está situada o ambos.

c) Indíquese el país en el que está situada la estación. Conviene utilizar para ello los símbolos del Prefacio a la Lista internacional de frecuencias.

d) Indíquense las coordenadas geográficas (en grados y minutos) de la ubicación de la estación.

Punto 4 Anchura de banda

Indíquese la anchura de la banda de frecuencias en kHz, sobre la que se hacen las observaciones.

Punto 5 Características de antena

Indíquese el tipo de antena y sus dimensiones, su superficie efectiva y los límites entre los cuales puede variar su acimut y su ángulo de elevación.

Punto 6 Horario máximo de recepción

Indíquese el horario máximo de recepción (T.M.G.) en la banda de frecuencias indicada en el punto 4.

Punto 7 Temperatura de ruido

Indíquese, en kelvins, la temperatura de ruido del conjunto del sistema receptor.

Punto 8 Clase de las observaciones

Indíquese la clase de observaciones que han de efectuarse en la banda de frecuencias indicada en el punto 4. Son observaciones de clase A aquéllas en que la sensibilidad del equipo

Sección G. Modelo de formulario (estación terrena)

Modelo de formulario (1)

que debe emplearse para notificar a la I.F.R.B. una asignación de frecuencia o una modificación de una asignación ya iniciada en el Decreto internacional de fomento.

(Véase el artículo 9A.)

ESTACIÓN TERRENA { para la transmisión (E), véase la sección B del apéndice 1A
para la recepción (R), véase la sección C del apéndice 1A

Frecuencia asignada 	(d1) Nueva asignación 	(d2) Modificación 	(d3) Anulación una asignación 
kHz MHz			

Nombre de la estación terrena	
2 Banda de frecuencias asignada en kHz	4a
4b	País
Para uso de la I.F.R.B.	

Administración o compañía explotadora

(2) Esta información deberá suministrarse sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

Nombre y dirección de la administración
...
13(R), 14(E)

T.A.: Adjúntese a este formulario la información correspondiente al *diagrama de radiación* 8c(R), 9c(E) y al *diagrama del ángulo de elevación del horizonte* en función del *ángulo de elevación* 8d(R), 9d(E).

Sección H. Modelo de formulario (estación espacial)

Modelo de formulario (1)

que debe emplearse para notificar a la I.F.R.B. una asignación de frecuencia o una modificación de una asignación ya inscrita en el Registro internacional de frecuencias.

(Véase el artículo 9A)

ESTACIÓN ESPACIAL		{ para la transmisión (E), véase la sección D del apéndice 1A para la recepción (R), véase la sección E del apéndice 1A}	
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(b)

Administración notificante

kHz
MHz

1 Frecuencia asignada

(d1) Nueva asignación
(d2) Modificación
(d3) Anulación de una asignación

2 Banda de frecuencias asignada en kHz

3 Fecha de puesta en servicio

5. Información relativa a la órbita	
Longitud nominal del satélite y tolerancias de longitud y de inclinación 5a (2)	
Longitud	Tolerancias
5b	
Angulo de inclinación de la órbita	Periodo del objeto espacial
5b	5b
Altitud del apogeo y del perigeo (km)	Número de estaciones espaciales
5b	5b

4 Nombre de la estación espacial

.....
.....
.....
.....

(a) { Notificación N.
Fecha

(c) Identidad de la red de satélite

(e) Referencia a la circular semanal relativa al número 639AA

Para uso de la I.F.R.B.

Zona(s) de servicio o estación(es) con la(s) comunicación	Clase de estación y naturaleza del servicio	Frecuencia(s) portadora(s) y anchura de banda necesaria y descripción de la transmisión (2)	Características de potencia	Características de la antena (4)			
7	Clase de emisión de la asignación 8a	(2)	Potencia de cresta (2)	Precisión de orientación (en caso de modulación geostacionaria)	Características de ruido de recepción del sistema	Temperatura máxima de funcionamiento en cada portadora (T.M.G.)	Horario máximo de funcionamiento en cada portadora (T.M.G.)
6	8b	8c	9a(E) 9b(E)	9c(R) 10c(E)	9d(R) 10d(E)	11(E)	10(R) 11(R) 12(E)
.....
.....
.....
.....

(2) Esta información deberá suministrarse sólo cuando haya sido utilizada como base para efectuar la coordinación con otra administración.

(3) Adjúntese la información sobre el *arco visible* y el *de servicio* y dense explicaciones cuando este último sea menor que el visible (5a.1, 5a.2, 5a.3).

(4) NOTA: Para las *características de antena* 10a(E) o 10b(E) y 9a(R) o 9b(R) adjúntense a este formulario los datos pertinentes.

(1) Cada administración determinará el tamaño del formulario de notificación.

14(R), 15(E) { Administración o compañía de explotación

12(R), 13(E) COORD /
13(R), 14(E) Acuerdos /

Nombre y dirección de la administración

(g) Otras informaciones:

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no es un factor primordial. Son observaciones de clase B las que sólo pueden efectuarse con receptores modernos de bajo nivel de ruido y muy perfeccionados.

Punto 9 Administración o compañía explotadora

Indíquense el nombre de la administración o compañía explotadora y las direcciones postal y telegráfica de la administración a la que hayan de dirigirse comunicaciones urgentes sobre interferencia y cuestiones relativas a la explotación técnica de las estaciones (véase el artículo 15).

ANEXO 15**Adición de un nuevo apéndice (apéndice 1B)
al Reglamento de Radiocomunicaciones**

A continuación del apéndice 1A al Reglamento de Radiocomunicaciones, agréguese el nuevo apéndice siguiente:

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APÉNDICE 1B**Información que ha de facilitarse para la publicación anticipada
relativa a una red de satélite
(Véase el artículo 9A)****Sección A. Instrucciones generales**

Punto 1 La información relativa a cada red de satélite se facilitará por separado.

Punto 2 Entre los datos que han de facilitarse para cada red de satélite deberán figurar las características generales (sección B) y, según el caso, las características para el sentido Tierra-espacio (sección C), las características para el sentido espacio-Tierra (sección D) y las características para los enlaces espacio-espacio (sección E).

**Sección B. Características generales que han de facilitarse
para una red de satélite**

Punto 1 Identidad de la red de satélite

Indíquense la identidad de la red de satélite con información suficiente para que se evite toda ambigüedad y, en caso necesario, la identidad del sistema de satélites del que formará parte como elemento.

Punto 2 Fecha de puesta en servicio

Indíquese la fecha prevista para la primera puesta en servicio de la red de satélite.

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Punto 3 Administración o grupo de administraciones que facilitan la información para la publicación anticipada

Indíquese el nombre de la administración o el nombre de las administraciones del grupo que faciliten la información relativa a la red de satélite para la publicación anticipada, así como la dirección postal y telegráfica de la administración o administraciones a quienes conviene enviar toda comunicación.

Punto 4 Información relativa a la órbita de la(s) estación(es) espacial(es)

a) En el caso de una estación espacial a bordo de un satélite geoestacionario, indíquense la longitud geográfica nominal prevista en la órbita de los satélites geoestacionarios y las tolerancias previstas de longitud y de inclinación. Indíquense, asimismo:

- 1) el arco de la órbita de los satélites geoestacionarios en que la estación espacial es visible con un ángulo de elevación de al menos 10° desde las estaciones terrenas o zonas de servicio asociadas a ella;
- 2) el arco de la órbita de los satélites geoestacionarios a lo largo del cual la estación espacial podría prestar el servicio requerido con las estaciones terrenas o zonas de servicio asociadas a ella;
- 3) si el arco considerado en el párrafo 2) precedente es menor que el mencionado en el párrafo 1), explíquese esta diferencia.

Nota: Los arcos a que se refieren los párrafos 1) y 2) se definirán por la longitud geográfica de sus extremos en la órbita de los satélites geoestacionarios.

b) En el caso de una o más estaciones espaciales a bordo de uno o más satélites no geoestacionarios, indíquense el ángulo de inclinación de la órbita, el periodo y las altitudes, en kilómetros,

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del apogeo y del perigeo de la estación o estaciones espaciales así como el número de satélites utilizados con las mismas características.

Sección C. Características de la red de satélite para el sentido « Tierra-espacio »

Punto 1 Zona(s) de servicio « Tierra-espacio »

Para cada antena receptora de la estación espacial, indíquese la zona o zonas de servicio asociadas en la superficie de la Tierra.

Punto 2 Clase de las estaciones y naturaleza del servicio

Para cada zona de servicio « Tierra-espacio », indíquense, utilizando los símbolos que figuran en el apéndice 10, la clase de las estaciones de la red de satélite y la naturaleza del servicio que ha de prestarse.

Punto 3 Gama de frecuencias

Para cada zona de servicio « Tierra-espacio », indíquese la gama de frecuencias dentro de la que estarán situadas las frecuencias portadoras.

Punto 4 Características de potencia de la onda emitida

a) Para cada zona de servicio « Tierra-espacio », indíquese la densidad espectral máxima de potencia (W/Hz) suministrada a la antena de las estaciones terrenas transmisoras (la banda en que se calcula el valor medio depende de la naturaleza del servicio considerado).

b) De ser posible, para cada zona de servicio « Tierra-espacio » indíquese, tomando como referencia el nivel isótropo, el diagrama de radiación real de la antena de la estación terrena transmisora que tenga el valor más alto de densidad espectral de potencia isótropa radiada equivalente fuera del haz principal.

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Punto 5 Características de las antenas receptoras de la estación espacial

Para cada zona de servicio «Tierra-espacio»:

- a) en el caso de una estación espacial a bordo de un satélite geoestacionario indíquese la ganancia estimada de la antena receptora de la estación espacial, mediante curvas de ganancia trazadas en un mapa de la superficie terrestre; en cada curva se indicará la ganancia isótropa correspondiente a una ganancia de 2, 4, 6, 10, 20 dB, inferior al valor máximo y los valores siguientes, si fuera necesario, de 10 dB en 10 dB;
- b) en el caso de una estación espacial a bordo de un satélite no geoestacionario, indíquense la ganancia isótropa estimada de la antena receptora de la estación espacial en la dirección principal de radiación y el diagrama de radiación de esta antena en las direcciones en que puede encontrar a la superficie terrestre, tomando como referencia la ganancia en la dirección principal de radiación.

Punto 6 Temperatura de ruido de la estación espacial de recepción

Para cada zona de servicio «Tierra-espacio», indíquese, cuando no se utilice un simple repetidor-convertidor de frecuencias a bordo de la estación espacial, la temperatura más baja de ruido del conjunto del sistema receptor.

Sección D. Características de la red de satélite en el sentido espacio-Tierra**Punto 1 Zona(s) de servicio «espacio-Tierra»**

Para cada antena transmisora de la estación espacial, indíquese la zona o zonas de servicio asociadas en la superficie de la Tierra.

Punto 2 Clase de las estaciones y naturaleza del servicio

Para cada zona de servicio «espacio-Tierra», indíquense, con los símbolos que figuran en el apéndice 10, la clase de las estaciones de la red de satélite y la naturaleza del servicio que se ha de prestar.

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Punto 3 Gama de frecuencias

Para cada zona de servicio «espacio-Tierra», indíquese la gama de frecuencias en la que estarán situadas las portadoras.

Punto 4 Características de potencia de la emisión

Para cada zona de servicio «espacio-Tierra», indíquese la densidad espectral máxima de potencia (W/Hz) suministrada a la antena transmisora de la estación espacial (la banda en la que se calcula el valor medio depende de la naturaleza del servicio considerado).

Punto 5 Características de las antenas transmisoras de la estación espacial

Para cada zona de servicio «espacio-Tierra»:

- a) en el caso de una estación espacial a bordo de un satélite geoestacionario, indíquese la ganancia estimada de la antena transmisora de la estación espacial, mediante curvas de ganancia trazadas en un mapa de la superficie terrestre; en cada curva se indicará la ganancia isótropa correspondiente a una ganancia de 2, 4, 6, 10, 20 dB inferior al valor máximo y los valores subsiguientes, si fuera necesario, de 10 dB en 10 dB;
- b) en el caso de una estación espacial a bordo de un satélite no geoestacionario, indíquense la ganancia isótropa estimada de la antena transmisora de la estación espacial en la dirección principal de emisión y el diagrama de radiación de esta antena en las direcciones en que puede encontrar a la superficie terrestre, tomando como referencia la ganancia en la dirección principal de emisión.

Punto 6 Características de recepción de las estaciones terrenas

- a) Para cada zona de servicio «espacio-Tierra», indíquese, cuando no se utilice un simple repetidor-convertidor de frecuencias a bordo de la estación espacial, la temperatura más baja de ruido del conjunto del sistema receptor de las estaciones terrenas.

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Para cada zona de servicio « espacio-Tierra » y para cada utilización¹ proyectada, indíquense, cuando se utilicen simples repetidores-convertidores de frecuencia a bordo de la estación espacial, la temperatura más baja de ruido equivalente del enlace por satélite y el valor asociado de ganancia de transmisión medida desde la salida de la antena receptora de la estación espacial hasta la salida de la antena receptora de la estación terrena. Para cada utilización proyectada se indicará, asimismo, la antena o antenas receptoras de la estación espacial a que estará conectado cada simple repetidor-convertidor de frecuencia.

b) Si fuese posible, para cada zona de servicio « espacio-Tierra », se indicará, tomando como referencia el nivel isótropo, el diagrama de radiación real de la antena de la estación terrena receptora que tenga el nivel más elevado fuera del haz principal. Cuando se utilicen simples repetidores-convertidores de frecuencia a bordo de la estación espacial, se indicará también, si fuera posible, el diagrama asociado a cada temperatura de ruido equivalente del enlace por satélite antes mencionada.

Sección E. Características que deben facilitarse para los enlaces espacio-espacio

Si la red de satélite está unida a otra u otras redes de satélite por medio de enlaces espacio-espacio, indíquense:

- a) la identidad de la red o redes de satélite a que está conectada la red de satélite considerada;
- b) las bandas de frecuencias de transmisión y recepción;
- c) las clases de emisión;
- d) las potencias isótropas radiadas equivalentes nominales en el eje de los haces de antena.

¹ Se considerará que se trata de utilizaciones diferentes cuando se haga uso de tipos diferentes de portadora (por su densidad espectral máxima de potencia) o de tipos diferentes de estaciones terrenas receptoras (por la ganancia de su antena receptora).

ANEXO 16**Revisión del apéndice 9 al Reglamento de Radiocomunicaciones**

El apéndice 9 al Reglamento de Radiocomunicaciones se revisa como sigue:

El título del apéndice 9 queda sustituido por el nuevo título siguiente:

APÉNDICE 9

MOD Spa2 Documentos de servicio

(Véanse los artículos 8, 9, 9A, 10 y 20)

Lista I. Lista internacional de frecuencias

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Las notas 1 a 8 quedan sustituidas por las nuevas notas siguientes (las notas 3 y 5 no se cambian):

MOD SpA2 1) En el caso de estaciones de televisión de la Región I, la frecuencia indicada en esta columna es la de la onda portadora de sonido o de imagen (véase el apéndice I al Reglamento de Radiocomunicaciones). 2) Véanse los números 607 y 608 del Reglamento de Radiocomunicaciones. 3) Un símbolo en vez de una fecha indica una asignación notificada con el número 272 del Acuerdo de la Conferencia Administrativa Extraordinaria de Radiocomunicaciones Ginebra 1951, o en las bandas de frecuencias superiores a 27 500 KHz una asignación cuya notificación ha sido recibida por la I.F.R.B. antes del 1.º de abril de 1952. 4) Véase el apéndice I al Reglamento de Radiocomunicaciones. 5) En las Columnas 12a y 12b se incluyen únicamente números o letras de referencia cuyo significado se indica en el Prefacio de la Lista internacional de frecuencias. 6) Véase la sección II del artículo 9 y la sección IV del artículo 9A del Reglamento de Radiocomunicaciones. 7) Véanse los números 516, 517, 621, 622, 639BS, 639DM, 639DO y 639DP del Reglamento de Radiocomunicaciones. 8) Incluyánselas las fechas a que se refieren la sección II del artículo 9 y la sección IV del artículo 9A del Reglamento de Radiocomunicaciones.

El título de la Lista VIII A queda sustituido por el nuevo título siguiente:

Lista VIII A. Nomenclátor de las estaciones de radiocomunicación espacial y de las estaciones de radioastronomía¹⁾

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*El título de la sección I queda sustituido por el nuevo título siguiente:***I. Estaciones terrenas del servicio fijo por satélites***Los encabezamientos de la sección I quedan sustituidos por los nuevos encabezamientos siguientes:*

MOD SpA2

MOD SpA2

Nombre por el cual se conoce la estación o nombre de la localidad en que	estación	Coordenadas geográficas (en grados y minutos) de la ubicación de la estación																
		1	2	3a	3b	3c	4a	4b	4c	5a	5b	6a	6b	7a	7b	8	9	10
Frecuencia (MHz o GHz)	Potencia (en kW)	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	Clase de emisión, anchura de banda necesaria y descriptión de la transmisión	
Freuencía (MHz o GHz)	Potencia (en kW)	comunicación si es necesario.	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	
Transmisión	Recepción	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	Telemetría	
Frecuencia (MHz o GHz)	Potencia (en kW)	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	comunicación	
Transmisión	Recepción	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	Señalimetro	
Frecuencia (MHz o GHz)	Potencia (en kW)	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	
Transmisión	Recepción	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	Radio-	
Frecuencia (MHz o GHz)	Potencia (en kW)	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	
Transmisión	Recepción	Observaciones	Administración o compañía explotadora establece la comunicación de los servicios espaciales con la(s) que se establece la comunicación, según el caso.															
Frecuencia (MHz o GHz)	Potencia (en kW)	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	descripción de la transmisión	

1) En los casos en que esta información deba suministrarse, véanse los números 639BA, 639BB y 639BC.

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- El título de la sección 2 queda sustituido por el nuevo título siguiente:*
- 2. Estaciones espaciales del servicio fijo por satélite**
- Los encabezamientos de la sección 2 quedan sustituidos por los nuevos encabezamientos siguientes:*

MOD Spac2

MOD Spac2	Transmisión	Recepción	Observaciones																	
			1. Datos relativos a la órbita :																	
<i>a) Ángulo de inclinación de la órbita;</i>																				
<i>b) Período del objeto espacial;</i>																				
<i>c) Altitud del apogeo en km;</i>																				
<i>d) Altitud del perigeo en km;</i>																				
<i>e) Número de satélites utilizados, si procede;</i>																				
<i>f) Si se trata de un satélite geostacionario:</i>																				
<i>— longitud geográfica nominal en la órbita de los satélites geostacionarios</i>																				
<i>— arco de la órbita de los satélites geostacionarios en el que la estación espacial puede asegurar el servicio necesario con las estaciones terrenas o las zonas de servicio que le están asociadas.</i>																				
<i>2. Disposición especial de los canales para:</i>																				
<i>a) la telegrafía;</i>																				
<i>b) la telefonía;</i>																				
<i>c) otros tipos de radiocomunicaciones, según el caso.</i>																				
<i>3. Métodos especiales de modulación.</i>																				
1	2a	2b	2c	3a	3b	3c	4a	4b	4c	5a	5b	6a	6b	7	8	9				

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El título de la sección 3 queda sustituido por el nuevo título siguiente:

3. Estaciones terrenas del servicio de exploración de la Tierra por satélite

Los encabezamientos de la sección 3 quedan sustituidos por los nuevos encabezamientos siguientes:

MOD Spa2

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- El título de la sección 4 queda sustituido por el nuevo título siguiente:*
- 4. Estaciones espaciales del servicio de exploración de la Tierra por satélite*
- Los encabezamientos de la sección 4 quedan sustituidos por los nuevos encabezamientos siguientes:*

MOD Sp2		MOD Sp2										
Transmisión	Recepción	Observaciones										
Potencia (en W)	Potencia (en W)	1. Datos relativos a la órbita:										
Frecuencia (MHz o GHz)	Frecuencia (MHz o GHz)	a) Ángulo de inclinación de la órbita;	a) Periodo del objeto espacial;									
Seguimiento	Seguimiento	b) Altitud del perigeo en km;	c) Altitud del apogeo en km;									
Telemetría	Telemetría	d) Altitud del perigeo en km;	e) Número de satélites utilizados;									
Potencia (en W)	Potencia (en W)	f) Si se trata de un satélite geostacionario:	— longitud geográfica nominal en la órbita de los satélites geostacionarios;									
Frecuencia (MHz o GHz)	Frecuencia (MHz o GHz)	— arco de la órbita de los satélites geostacionarios en el que la estación espacial puede asegurar el servicio necesario con las estaciones terrenas o las zonas de servicio que le están asociadas.	2. Disposición especial de los canales para:									
Clase de emisión, anchura de banda necesaria y des-	Clase de emisión, anchura de banda necesaria y des-	a) la telegrafía;	b) la telefonía;									
Transmisión de exploración de la Tierra	Transmisión de exploración de la Tierra	c) otros tipos de radio comunicaciones, según el caso.	3. Métodos especiales de modulación.									
Clase de emisión, anchura de banda necesaria y des-	Clase de emisión, anchura de banda necesaria y des-		8									
Clase de emisión, anchura de banda necesaria y des-	Clase de emisión, anchura de banda necesaria y des-		1	2a	2b	2c	3a	3b	3c	4a	4b	4c
			5a	5b	6	7						

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*El título de la sección 5 queda sustituido por el nuevo título siguiente:**5. Estaciones terrenas del servicio de radiodeterminación por satélite**Los encabezamientos de la sección 5 quedan sustituidos por los nuevos encabezamientos siguientes:*

MOD Spaz 2

MOD Spaz 2

Nombre por el cual se conoce la estación o nombre de la localidad en que está situada	1	2	3a	3b	3c	4a	4b	5a	5b	5a	6a	6b	7	8	9
Coordenadas geográficas (en grados y minutos) de la ubicación de la estación															
Frecuencia (MHz o GHz)															
Potencia (en kW)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión si es necesario.															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Telemecanica															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Transmisión															
Telemecanica (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión si es necesario.															
Transmisión															
Frecuencia (MHz o GHz)															
Potencia (en kW)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión si es necesario.															
Telemecanica															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Transmisión															
Telemecanida															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Recepción															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Seguimiento															
Frecuencia (MHz o GHz)															
Clase de emisión, anchura de banda necesaria y des- cripción de la transmisión															
Recepción															
Administración o compañía explotadora															
Métodos especiales de modulación.															
Observaciones															

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El título de la sección 6 queda sustituido por el nuevo título siguiente:

Los encabezamientos de la sección 6 quedan sustituidos por los nuevos encabezamientos siguientes:

Transmisión		Recepción		Observaciones							
				1. Datos relativos a la órbita:							
				a) Ángulo de inclinación de la órbita;							
				b) Período del órbita espacial;							
				c) Altitud del apogeo en km;							
				d) Altitud del perigeo en km;							
				e) Número de satélites utilizados, si procede;							
				f) Si se trata de un satélite geoestacionario:							
				— longitud geográfica nominal en la órbita de los satélites geoestacionarios;							
				— arco de la órbita de los satélites geoestacionarios en el que la estación espacial puede asegurar el servicio necesario con las estaciones terrenas o las zonas de servicio que le están asociadas.							
				2. Disposición especial de los canales para:							
				a) la telegrafía;							
				b) la telefonía;							
				c) otros tipos de radiocomunicaciones, según el caso.							
				3. Métodos especiales de modulación.							
				Zona donde está(n) situada(s) la(s) estación(es) terrena(s) asociada(s).							
				Administración o compañía explotadora							

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*El título de la sección 7 queda sustituido por el nuevo título siguiente:***7. Estaciones terrenas del servicio de investigación espacial***Los encabezamientos de la sección 7 quedan sustituidos por los nuevos encabezamientos siguientes:*

MOD Sp2	MOD Sp2	Nombre por el cual se conoce la estación o nombre de la localidad en que										Número de la sección	
		Coordenadas geográficas (en grados y minutos) de la ubicación de la estación											
Transmisión													
Telemetría													
Frecuencia (MHz o GHz)													
Clase de emisión, anchura de banda necesaria y demás datos													
Frecuencia (MHz o GHz)													
Clase de emisión, anchura de banda necesaria y demás datos													
Seguimiento													
Frecuencia (MHz o GHz)													
Clase de emisión, anchura de banda necesaria y demás datos													
Recepción													
Características especiales de la estación y objeto de las investigaciones.													
Observaciones													
Administración o compañía explotadora												9	

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El título de la sección 8 queda sustituido por el nuevo título siguiente:

8. Estaciones espaciales del servicio de investigación espacial
Los encabezamientos de la sección 8 quedan sustituidos por los nuevos encabezamientos siguientes:

MOD SpA2

MOD SpA2	Transmisión	Identidad de la estación										MOD SpA2
		1	2a	2b	2c	3a	.3b	.3c	4a	4b	4c	
	Frecuencia (MHz o GHz)											
	Potencia (en W)											
	Clase de emisión, anchura de banda necesaria y descriptivo de la transmisión											
	Seguimiento											
	Frecuencia (MHz o GHz)											
	Potencia (en W)											
	Clase de emisión, anchura de banda necesaria y descriptivo de la transmisión											
	Transmisión de la estación sobre las bandas necesarias para las comunicaciones entre los satélites geostacionarios en órbita terrestre y la estación espacial											
	Recepción											
	Zona(s) de servicio prevista(s) en la Tierra o norme(s) de localidad y del país donde está(n) situada(s) la(s) estación(es) terrena(s) asociada(s)											
	Administración o compañía explotadora											
	Observaciones											
	1. En el caso de un satélite de la Tierra datos relativos a la órbita: a) Ángulo de inclinación de la órbita; b) Período del objeto espacial; c) Altitud de apogeo en km; d) Altitud del perigeo en km; e) Número de satélites utilizados, si procede; f) Si se trata de un satélite geoestacionario: — longitud geográfica nominal en la órbita de los satélites geoestacionarios; — arco de la órbita de los satélites geoestacionarios en el que la estación espacial puede asegurar el servicio necesario con las estaciones terrenas o las zonas de servicio que estén asociadas.											

El título de la sección 9 queda sustituido por el nuevo título siguiente:

9. Estaciones del servicio de radioastronomía

MOD SpA2

ANEXO 17

Revisión del apéndice 10 al Reglamento de Radiocomunicaciones

El apéndice 10 al Reglamento de Radiocomunicaciones se revisa como sigue:

Suprímase el símbolo FE.

Los símbolos EC, TC, TH, TM y TN quedan sustituidos por los nuevos símbolos siguientes:

MOD	EC	Estación espacial del servicio fijo por satélite
MOD	TC	Estación terrena del servicio fijo por satélite
MOD	TH	Estación terrena del servicio de investigación espacial
MOD	TM	Estación terrena del servicio de meteorología por satélite
MOD	TN	Estación terrena del servicio de radionavegación por satélite

Insértense par orden alfabetico los nuevos símbolos siguientes:

ADD	EA	Estación espacial del servicio de aficionados por satélite
ADD	EB	Estación espacial del servicio de radiodifusión por satélite (radiodifusión sonora)
ADD	EV	Estación espacial del servicio de radiodifusión por satélite (televisión)
ADD	TA	Estación terrena de operaciones espaciales del servicio de aficionados por satélite
ADD	TE	Estación terrena transmisora
ADD	TF	Estación terrena fija del servicio de radiodeterminación por satélite
ADD	TL	Estación terrena móvil del servicio de radiodeterminación por satélite
ADD	TP	Estación terrena receptora
ADD	TT	Estación terrena del servicio de operaciones espaciales

ANEXO 18**Adición de un nuevo apéndice (apéndice 28) al
Reglamento de Radiocomunicaciones**

A continuación del apéndice 27 del Reglamento de Radiocomunicaciones, agréguese el nuevo apéndice siguiente:

APÉNDICE 28**Procedimiento para determinar la zona de coordinación de
una estación terrena en bandas de frecuencias comprendidas
entre 1 y 40 GHz, compartidas entre servicios de
radiocomunicación espacial y terrenal****1. Objetivos**

La zona de coordinación (véase el número 103D) se determina calculando las distancias de coordinación (véase el número 103B) en todos los acimutes de la estación terrena, y trazando a escala en un mapa apropiado el contorno de coordinación (véase el número 103C).

Se subraya que la presencia o la instalación de una estación terrenal en la zona de coordinación de una estación terrena, no impide necesariamente la explotación satisfactoria de la estación terrena o de la estación terrenal, pues el procedimiento se basa en las hipótesis más desfavorables en lo que respecta a la interferencia.

Para determinar la zona de coordinación habrá que considerar dos casos:

- 1) cuando la estación terrena está recibiendo (y por consiguiente expuesta a las interferencias de estaciones terrenales);
- 2) cuando la estación terrena está transmitiendo (y por consiguiente en condiciones de causar interferencia a las estaciones terrenales).

Cuando una estación terrena está destinada a funcionar en diferentes clases de emisiones, los parámetros de la estación terrena a utilizar para la determinación del contorno de coordinación deben ser aquéllos que conducen a las mayores distancias de coordinación, para cada haz de antena de la estación terrena y en cada banda de frecuencias atribuida que la estación terrena se propone utilizar en participación con los servicios terrenales.

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Dado que el procedimiento expuesto en este apéndice para determinar la zona de coordinación es bastante complicado, se ha estimado conveniente exponer en el anexo A una versión simplificada del mismo que facilite al usuario los pasos necesarios para obtener los contornos de coordinación. El método simplificado es aplicable en algunas de las bandas de frecuencias atribuidas.

Se sugiere trazar, además del contorno de coordinación, contornos auxiliares basados en hipótesis menos desfavorables que las empleadas para establecer el contorno de coordinación. Estos contornos auxiliares pueden utilizarse en ulteriores negociaciones entre las administraciones interesadas para eliminar de estas negociaciones, sin que sea necesario recurrir a cálculos más precisos, ciertas estaciones existentes o en proyecto situadas dentro de la zona de coordinación. El procedimiento para obtener y utilizar estos contornos auxiliares se explica en el anexo B a este apéndice.

2. Valores admisibles de interferencia

El nivel admisible de potencia de interferencia (en dBW) en la anchura de banda de referencia, que no debe rebasarse durante más de un porcentaje p del tiempo, a la entrada del receptor de una estación expuesta a interferencias, para cada una de las fuentes de interferencia, es dado por la siguiente fórmula general:

$$P_r(p) = 10 \log_{10} (kT_rB) + J + M(p) - W \quad (1)$$

donde:

$$M(p) \equiv M(p_0/n) = M_o(p_0) \quad (1a)$$

siendo:

k = constante de Boltzmann ($1,38 \times 10^{-23}$ julios por Kelvin);

T_r = temperatura de ruido térmico del sistema receptor (K);

B = anchura de banda de referencia (Hz) (anchura de banda, de interés para el sistema interferido, en que es posible promediar la potencia de interferencia);

J = relación (en dB), a largo plazo (durante el 20% del tiempo), entre la potencia admisible de interferencia y la potencia de ruido térmico, en el sistema receptor (¹);

(¹) Véase el texto de la nota (¹) en la página siguiente.

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- p_0 = porcentaje del tiempo durante el cual la interferencia procedente de todas las fuentes puede exceder el valor admisible;
- n = número previsto de casos de interferencia que se suponen sin correlación;
- p = porcentaje del tiempo durante el cual la interferencia de una fuente puede exceder el valor admisible; puesto que es probable que los casos de interferencias incidentes no se produzcan simultáneamente: $p = p_0/n$;
- $M_o(p_0)$ = relación (en dB) entre las potencias de interferencia admisible durante $p_0\%$ del tiempo, para todos los casos de interferencia, y la correspondiente al 20% del tiempo, para todos los casos de interferencia (*);
- $M(p)$ = relación (en dB) entre las potencias de interferencia admisible durante $p\%$ del tiempo, para un caso de interferencia, y la correspondiente al 20% del tiempo, para todos los casos de interferencia;

Notas

(¹) El factor J (en dB) es la relación entre la potencia de interferencia total admisible a largo plazo (durante el 20% del tiempo) en el sistema, y la potencia de ruido térmico a largo plazo en un receptor único. Por ejemplo, en un circuito ficticio de referencia de relevadores radioeléctricos con visibilidad directa que comprenda 50 tramos, la potencia de interferencia total tolerable es de 1000 pW0p (Recomendación 357-1 del C.C.I.R.) y la potencia media de ruido térmico por tramo puede suponerse que es de 25 pW0p. Por consiguiente, como en un sistema múltiplex por distribución de frecuencia con modulación de frecuencia (MDF/MF) la relación entre la potencia de ruido interferente y la potencia de ruido térmico en cualquier banda de 4 kHz de anchura es la misma antes y después de la demodulación, se obtiene $J = 16$ dB. En un enlace por satélite en el servicio fijo por satélite, la potencia de interferencia total admisible también es de 1000 pW0p (Recomendación 356-2 del C.C.I.R.) mientras que el ruido térmico del trayecto descendente no debe ser superior a 7000 pW0p, lo que hace $J \geq -8,5$ dB. En los sistemas numéricos puede resultar necesario proteger cada trayecto de comunicación por separado, en cuyo caso la potencia de interferencia a largo plazo puede ser del mismo orden que el ruido térmico a largo plazo, lo que hace $J = 0$ dB.

(²) $M_o(p_0)$ es el «margen de interferencia» (en dB) entre las potencias de ruido admisible a largo plazo (20%) y a corto plazo ($p_0\%$). Para los sistemas analógicos de relevadores radioeléctricos y del servicio fijo por satélite entre 1 y 15 GHz es la relación (en dB) entre 50000 y 1000 pW0p, es decir 17 dB. Para los sistemas de relevadores radioeléctricos del tipo numérico se puede considerar provisionalmente que $M_o(p_0)$ es igual al margen de desvanecimiento, el cual depende, entre otras cosas, de la zona hidrometeorológica.

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W = factor de equivalencia (en dB) que permite establecer una relación entre el efecto de interferencia y el de un ruido térmico de igual potencia en la anchura de banda de referencia (*).

En los Cuadros I y II se dan valores para los citados parámetros.

3. Determinación de la distancia de coordinación para casos de propagación en que las señales siguen de cerca el círculo máximo

Al determinar la distancia de coordinación para una estación terrena, es necesario tener en cuenta cierto número de mecanismos que intervienen en la propagación de las ondas radioeléctricas. En esta sección se trata de la determinación de la distancia de coordinación en presencia de fenómenos de superrefracción, propagación guiada (conductos), dispersión y reflexión debidas a irregularidades del índice de refracción de la baja atmósfera en ausencia de precipitaciones. En la sección 4 se estudia la determinación de la distancia de coordinación en el caso de propagación por dispersión debida a hidrometeoros.

(*) El factor W (en dB) es la relación entre la potencia de ruido térmico y la potencia de interferencia en la anchura de banda de referencia, que produce la misma interferencia después de la demodulación, por ejemplo, en un sistema MDF/MF, esto se expresaría admitiendo que las potencias de ruido son idénticas en un canal telefónico y admitiendo en un sistema numérico, que las probabilidades de error en los bitios son idénticas. Para señales con modulación de frecuencia se define como sigue:

$$W = 10 \log_{10} \left(\frac{\text{Potencia de interferencia en el sistema de recepción después de la demodulación}}{\text{Potencia de ruido térmico en el sistema de recepción después de la demodulación}} \times \frac{\text{Potencia de ruido térmico en la entrada del receptor en la anchura de banda de referencia}}{\text{Potencia de interferencia en radiofrecuencia en la anchura de banda de referencia}} \right)$$

Además, si la señal útil está modulada en frecuencia con índices de modulación eficaces superior a la unidad, W es aproximadamente 4 dB, independientemente de las características de la señal interferente. Para sistemas MDF/MF de pequeño índice de modulación, se ha utilizado una anchura de banda de referencia muy estrecha (4 kHz), con el fin de no tener que considerar un gran número de características posibles de las señales útiles e interferentes de los que dependería W si la banda de referencia fuese más ancha.

Si la señal útil es numérica, W es normalmente inferior o igual a 0 dB, independientemente de las características de la señal interferente.

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3.1 Pérdida de transmisión de referencia normalizada $L_o(0,01)$

Para facilitar la determinación gráfica de la distancia de coordinación, es conveniente normalizar el porcentaje de tiempo en 0,01 % y la frecuencia en 4 GHz.

El primer paso para determinar la distancia de coordinación es calcular la pérdida de transmisión de referencia normalizada $L_o(0,01)$, dada por medio de la siguiente ecuación:

$$L_o(0,01) = P_r' + G_r - P_r(p) - F(p) - 20 \log_{10} (f/4) \quad (2)$$

donde:

P_r' = potencia máxima de transmisión (en dBW), en la anchura de banda de referencia B , disponible a la entrada de la antena de una estación interferente *;

G_r' = ganancia isótropa (en dB) de la antena transmisora de la estación interferente. Si la estación interferente es una estación terrena, ésta es la ganancia isótropa de la antena en la dirección pertinente. Si se trata de una estación terrenal, P_r y G_r se combinan para obtener la potencia isótropa radiada equivalente E en la dirección del haz principal; se utilizarán los valores indicados en el Cuadro II. Cuando G_r es la ganancia en la dirección principal de radiación, se expresa mediante G_r , máx.;

G_r = ganancia isótropa (en dB) de la antena receptora de la estación interferida. Si la estación interferida es una estación terrena, es la ganancia isótropa en la dirección pertinente; en el caso de una estación terrenal, debe utilizarse la ganancia máxima de antena. Cuando G_r es la ganancia máxima, se expresa por G_r , máx. (En el caso de estaciones terrenales, véase el Cuadro I);

$F(p)$ = factor de corrección (en dB) para porcentajes de tiempo p distintos del 0,01 % (véase la figura 1);

f = frecuencia de trabajo en GHz.

La «dirección pertinente» mencionada en las definiciones de G_r' y G_r es generalmente la dirección hacia el horizonte físico en el acimut

* Las letras con apóstrofo se refieren a los parámetros correspondientes a la estación interferente.

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considerado (véase la sección 3.2), salvo cuando una estación terrena dirige su haz principal con ángulo de elevación inferior a 12°. En este último caso el trayecto de pérdida mínima de transmisión puede no ser el trayecto hacia el horizonte sino el trayecto del haz principal (véase la sección 3.6).

Si se consideran satélites no geoestacionarios, cualquiera de las dos ganancias G_r y G_t , que corresponda a la antena de la estación terrena, variará con el tiempo. Se sugiere en este caso emplear una ganancia equivalente de la antena *, invariable en el tiempo e igual al mayor de los dos valores siguientes: 10 dB menos que la máxima ganancia hacia el horizonte de la antena, o el valor de la ganancia hacia el horizonte de la antena que no se rebase durante más del 10% del tiempo.

3.2 Ganancia de la antena de una estación terrena en la dirección del horizonte, en el caso de satélites geoestacionarios

La componente de la ganancia de la antena de una estación terrena en la dirección del horizonte físico alrededor de la estación es una función del ángulo φ determinado por el eje del haz principal y la dirección del horizonte considerada. Por consiguiente, es necesario conocer el ángulo φ para cada acimut.

Existe una relación unívoca entre el ángulo de elevación ϵ y el acimut α de los satélites geoestacionarios vistos desde una estación terrena situada en la latitud λ . La figura 2 presenta, en un diagrama de ejes ortogonales, *ángulo de elevación/acimut*, los segmentos de arco « permitidos » de la órbita de los satélites geoestacionarios; cada arco corresponde a una latitud de la estación terrena.

Es posible que no se conozcan de antemano las longitudes relativas exactas de los satélites; pero aun cuando se conocieran, la posibilidad de añadir un nuevo satélite o de desplazar uno existente indica que debe considerarse ocupada por satélites la totalidad o parte del arco correspondiente.

* Esta ganancia equivalente de la antena no debe emplearse cuando la antena de la estación terrena está orientada hacia la misma dirección durante una parte apreciable del tiempo (por ejemplo, cuando trabaja con sondas espaciales para el espacio lejano o con satélites casi geoestacionarios).

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Una vez elegido y marcado el arco o el segmento de arco apropiado, se superpone al gráfico de la figura 3 el perfil del horizonte $\theta(\alpha)$. En la figura 3 se da un ejemplo para una estación terrena situada a 45° de latitud norte y un satélite que se proyecta colocar entre las longitudes relativas 10° E y 45° W; la figura indica también la línea del horizonte.

Para cada punto del horizonte local $\theta(\alpha)$ se determina y se mide la menor distancia con relación al arco, sobre la escala de los ángulos de elevación. El ejemplo de la figura 3 muestra cómo se determina el ángulo φ para un acimut $\alpha_0 = 210^\circ$, con un ángulo de elevación del horizonte $\theta = 4^\circ$.

Si se hace esto mismo para todos los acimutes (por incrementos adecuados, por ejemplo de 5°), se obtiene una relación $\varphi(\alpha)$, que puede utilizarse para obtener la ganancia de la antena en la dirección del horizonte $G(\alpha)$ mediante el diagrama de radiación efectiva de la antena de la estación terrena o mediante una fórmula que dé suficiente aproximación; por ejemplo, en los casos en que la relación entre el diámetro de la antena y la longitud de onda sea superior a 100 conviene emplear la formula:

$$\begin{aligned} G(\varphi) &= 32 - 25 \log_{10} \varphi \text{ (dB)} & (1^\circ \leq \varphi < 48^\circ) \\ &= -10 \text{ dB} & (48^\circ \leq \varphi \leq 180^\circ) \end{aligned}$$

Si se aplica esta fórmula de la ganancia a la curva $\varphi(\alpha)$, se obtiene la ganancia de antena en la dirección del horizonte en función del acimut.

Los parámetros utilizados se definen como sigue:

- α = acimut considerado al este del norte verdadero ;
- φ = ángulo mínimo, en grados, entre el eje del haz principal de la antena de la estación terrena y la recta que une la estación terrena con el horizonte físico en el acimut α ;
- ϵ = ángulo de elevación del haz principal de la antena de la estación terrena sobre el plano horizontal ;
- λ = latitud de la estación terrena ;
- θ = ángulo de elevación del horizonte físico sobre el plano horizontal en el acimut α .

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3.3 Zonas radioclimáticas

Se ha dividido el Globo en tres regiones radioclimáticas básicas denominadas, respectivamente, Zonas A, B y C.

Estas zonas se definen a continuación:

- Zona A: tierra. Se excluyen de la Zona A las partes de tierra emergente cuya altitud es inferior a 1000 metros y están situadas a menos de 100 km de las costas;
- Zona B: mar, en latitudes superiores a 23,5° N y 23,5° S, excepto el Mar Mediterráneo y el Mar Negro. Se incluyen en la Zona B las partes de tierra emergente cuya altitud es inferior a 1000 metros y están situadas a menos de 100 km de las costas consideradas;
- Zona C: mar, en latitudes comprendidas entre 23,5° N y 23,5° S, incluyendo en ellas el Mar Mediterráneo y el Mar Negro. Se incluyen en la Zona C las partes de tierra emergente cuya altitud es inferior a 1000 metros y están situadas a menos de 100 km de las costas consideradas.

3.4 Procedimiento para determinar la distancia de coordinación — Modo de propagación (a)

Para hallar la distancia de coordinación en la Zona A es preciso sustraer de $L_o(0,01)$ una corrección ΔL , que expresa la diferencia en la pérdida de transmisión de referencia a lo largo de trayectorias que tienen distintos ángulos de elevación sobre el horizonte de la estación terrena. ΔL se calcula en dos etapas. De la figura 4 se obtiene primeramente un factor de corrección ΔL_o por unidad de ángulo de elevación (es decir, para un ángulo de elevación de 1°), en función del valor normalizado de la pérdida de transmisión de referencia y de la frecuencia. Para las frecuencias no indicadas en las curvas se aplica una interpolación lineal entre las curvas de la figura 4.

Para cualquier otro ángulo de elevación θ sobre el horizonte, el valor correspondiente a ΔL , en dB, se determina según la figura 5 a base del valor de ΔL_o previamente obtenido con arreglo a la figura 4. Si se necesitaran valores para ángulos de elevación distintos de los indicados, se

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procederá de nuevo a una interpolación lineal. En los casos en que el ángulo de elevación es inferior a 0,2°, ΔL se considera igual a 0 dB.

La corrección ΔL así hallada debe sustraerse de la pérdida de transmisión de referencia normalizada $L_o(0,01)$ para obtener una «pérdida de coordinación» L_c :

$$L_c = L_o(0,01) - \Delta L \quad (3)$$

Esta pérdida de coordinación, asociada con la frecuencia correspondiente en la figura 6, da la distancia de coordinación.

De modo análogo, podrá hallarse la distancia de coordinación para las Zonas B y C, empleando las figuras 7, 8 y 9 para la Zona B y las figuras 10, 11 y 12 para la Zona C.

Las distancias así obtenidas deben designarse, a efectos de referencia, d_{aA} , d_{aB} y d_{aC} para las Zonas A, B y C respectivamente.

3.5 *Distancia de coordinación para trayectos mixtos*

3.5.1 *Dos zonas*

El método a utilizar para un trayecto mixto en dos zonas se ilustra en el ejemplo de la figura 13b. La estación terrena está situada en la Zona A a 75 km de distancia de la Zona B. El método gráfico descrito a continuación es especialmente útil cuando regiones no adyacentes pertenecen a la misma zona, como en este ejemplo.

Se supone que en una frecuencia de 4 GHz la pérdida de transmisión de referencia normalizada $L_o(0,01)$ tiene un valor de 200 dB y que el ángulo de elevación del horizonte es de cero grados. Esto entraña para L_c un valor de 200 dB independiente de la zona considerada (éste no será el caso cuando el ángulo sobre el horizonte sea superior a 0,2 grados.) El método es el siguiente:

- i) se determina la distancia que, en la Zona A, produciría la pérdida de coordinación, L_c . Esta distancia, que en este caso es 350 km, se lleva a partir del origen sobre el eje de abscisas del gráfico de papel milimetrado, lo que da el punto A (figura 13a);

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- ii) se determina la distancia que, en la Zona B produciría el mismo valor de L_c . Esta distancia, que en este caso es de 530 km, se lleva sobre el eje de ordenadas del gráfico a partir del origen, lo que da el punto B ;
- iii) se unen los puntos A y B por una recta ;
- iv) sobre el eje de abscisas del gráfico a partir del origen, se lleva la distancia de 75 km entre la estación terrena y la Zona B, lo que da el punto A_1 ;
- v) a partir del punto A_1 se lleva paralelamente al eje de ordenadas del gráfico la longitud del trayecto en la Zona B, 375 km, lo que da el punto B_1 ;
- vi) la distancia que queda por recorrer en la segunda parte de la Zona A se determina trazando una paralela al eje de las abscisas desde el punto B_1 hasta el punto X de intersección con la recta trazada para el trayecto mixto. En la figura 13a se obtiene para esta distancia 30 km;
- vii) la distancia de coordinación es la suma de las distancias OA_1 , A_1B_1 y B_1X y vale:

$$75 + 375 + 30 = 480 \text{ km}$$

La distancia B_1X puede también obtenerse numéricamente con mayor precisión partiendo de la distancia total en las dos partes de la Zona A, $OA_1 + B_1X$ en la forma siguiente:

$$OA_1 + B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right)$$

de donde:

$$B_1X = OA \left(1 - \frac{A_1B_1}{OB} \right) - OA_1$$

y de aquí:

$$B_1X = 350 \left(1 - \frac{375}{530} \right) - 75 = 27 \text{ km}$$

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3.5.2 *Tres zonas*.

En ciertos casos especiales, el trayecto mixto atraviesa las tres zonas radioclimáticas A, B y C. Se puede resolver el problema agregando una tercera dimensión al método descrito para el caso en que el trayecto mixto atraviesa sólo dos zonas. Teóricamente, eso quiere decir que hay que hallar la tercera coordenada de un punto cuyas dos primeras coordenadas corresponden a las distancias conocidas en las dos primeras zonas y que está situado en el plano que pasa por los tres puntos de los ejes Ox, Oy y Oz correspondientes a las distancias que en las Zonas A, B y C, respectivamente, darán el valor requerido de la pérdida de transmisión de referencia.

En la práctica se puede hacer esta determinación por el método gráfico simple representado en la figura 14 en la que se supone que la pérdida de coordinación (L_c) es igual a 200 dB, para una frecuencia de 4 GHz. El problema consiste en encontrar la distancia de coordinación a partir de la estación terrena, en la dirección dada en la figura 14a. En esta dirección la longitud del trayecto en la Zona A es 75 km (OA_1); sigue luego una longitud de 375 km en la Zona B (A_1B_1), y luego una longitud desconocida, que es la que se debe determinar en la Zona C (figura 14a).

El método que hay que aplicar es entonces el siguiente (figura 14b):

- i) se comienza por aplicar el mismo método que en el caso en el que hay sólo dos zonas, aplicando solamente las etapas i) a v) y se continúa como sigue:
 - ii) desde el punto B_1 , se traza una paralela a la recta AB, que cortará el eje de abscisas en el punto D;
 - iii) se determina la distancia que, situada enteramente en la Zona C, daría el mismo valor de pérdida de coordinación. Se lleva dicha distancia (en este caso, 930 km) sobre el eje de ordenadas obteniéndose el segmento OC. Se unen los puntos C y A por medio de una recta;
 - iv) desde el punto D se traza la paralela al eje de ordenadas, que corta a la recta CA en X;
 - v) la distancia DX es la longitud del trayecto en la Zona C que se trata de hallar, que en este caso es igual a 75 km;

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vi) la distancia de coordinación es la suma de las longitudes OA_1 , A_1B_1 y DX , que en este ejemplo es:

$$75 + 375 + 75 = 525 \text{ km}$$

La distancia DX puede también calcularse numéricamente con mayor precisión por medio de la fórmula:

$$DX = OC \left(1 - \frac{OA_1}{OA} - \frac{A_1B_1}{OB} \right)$$

de donde:

$$DX = 930 \left(1 - \frac{75}{350} - \frac{375}{530} \right) = 73 \text{ km}$$

La distancia así obtenida se designa por d_a tanto en el caso de zona única (punto 3.4) como en el de varias zonas (punto 3.5).

3.6 Determinación de la distancia de coordinación — Modo de propagación (b)

Si el ángulo de elevación del eje del haz principal de la antena de la estación terrena es inferior a 12° durante largos períodos de tiempo, como puede ocurrir en el caso de satélites geoestacionarios, la distancia de coordinación en el acimut del haz principal se determina del mismo modo que en el caso anterior pero empleando el ángulo de elevación (ϵ) de la antena en vez del ángulo respecto del horizonte (θ), y la ganancia del haz principal de la antena en vez de la ganancia respecto del horizonte. *En todos estos casos, conviene utilizar las curvas correspondientes a la Zona A, cualquiera que sea la zona realmente considerada.*

Este procedimiento da una distancia para el modo de propagación (b), que se designará por d_b .

En el caso de satélites no geoestacionarios conviene no tomar en consideración más que la interferencia por el trayecto del lóbulo principal cuando la antena de la estación terrena esté dirigida en la misma dirección durante períodos de tiempo considerables (por ejemplo al trabajar con sondas espaciales para el espacio lejano o con satélites casi geoestacionarios).

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3.7 *Evaluación de los resultados obtenidos para los modos de propagación (a) y (b)*

Si resulta aplicable el modo de propagación (b), se compara la distancia de coordinación obtenida por este modo con la correspondiente al modo de propagación (a). En el caso de que la distancia de coordinación calculada para el trayecto del haz principal sea superior a la calculada para el trayecto del horizonte, se deberá emplear el método siguiente (figura 15), para obtener el contorno de coordinación correspondiente a la propagación a lo largo del círculo máximo:

- i) se trazarán dos rectas desde la estación terrena que formen ángulos de $\pm 5^\circ$ con el acimut del haz principal y se prolongarán hasta su intersección con el contorno de coordinación obtenido para el modo de propagación (a);
- ii) desde el punto correspondiente a la distancia de coordinación determinada para el modo de propagación (b), en el acimut del haz principal, se trazarán dos rectas hasta estas dos intersecciones;
- iii) los dos segmentos de recta así obtenidos representan la parte del contorno de coordinación que deberá utilizarse en el sector $\pm 5^\circ$ con respecto al acimut del haz principal;
- iv) fuera de este sector de $\pm 5^\circ$, el contorno de coordinación para la propagación a lo largo del círculo máximo, es el mismo que se ha obtenido para el modo de propagación (a).

Las distancias obtenidas después de aplicar los procedimientos expuestos en los puntos 3.4 a 3.7 se designan por d_{ab} .

4. *Determinación de la distancia de coordinación — Modo de propagación (c) (dispersión debida a hidrometeoros)*

La distancia de coordinación cuando interviene el fenómeno de propagación por dispersión debida a los hidrometeoros, se determina por medio de un trayecto fundamentalmente diferente del correspondiente a la propagación a lo largo de un círculo máximo.

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4.1 Pérdida de transmisión normalizada $L_1(0,01)$

Para determinar la distancia de coordinación en el caso de dispersión debida a los hidrometeoros, es necesario calcular la «pérdida de transmisión normalizada», aplicando la fórmula siguiente:

$$L_1(0,01) = P_t + \Delta G - P_r(p) - F_1(p,f) \quad (4)$$

donde

ΔG = es la diferencia (en dB) entre la ganancia máxima de las antenas de las estaciones terrenales que funcionan en la banda de frecuencias considerada y el valor de 42 dB. Cuando la estación terrena es una estación transmisora los valores de ΔG figuran en el Cuadro I. Cuando se trate de una estación receptora deberán emplearse los valores de ΔG indicados en el Cuadro II.

$F_1(p,f)$ = factor de corrección (en dB) para pasar del porcentaje de 0,01% al porcentaje efectivo de tiempo p , en la banda de frecuencias considerada (véase la figura 16).

En el punto 2 se han definido los demás parámetros. En el Cuadro II se indican los valores de P_t para las estaciones terrenales.

4.2 Zonas hidrometeorológicas

Se ha dividido el mundo en cinco zonas hidrometeorológicas básicas, enumeradas del 1 al 5 según ilustra la figura 17.

4.3 Procedimiento para la determinación de la distancia de coordinación en el caso de dispersión debida a los hidrometeoros

Para obtener la distancia de coordinación en el caso de dispersión debida a los hidrometeoros y para la Zona hidrometeorológica 1 se utiliza la pérdida de transmisión normalizada, que se obtiene aplicando la fórmula (4) para la frecuencia apropiada (véase la figura 18). La distancia de dispersión debida a los hidrometeoros se designa por d_{cr} .

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En las figuras 19 a 21, se representan las curvas correspondientes a las Zonas 2 a 5. En todos los casos, debe escogerse la zona hidrometeorológica correspondiente a la ubicación de la estación terrena. Debido a la peculiar configuración propia de la propagación por dispersión debida a los hidrometeoros, el centro del contorno de coordinación trazado en el caso de dispersión debida a los hidrometeoros no coincide con la ubicación de la estación terrena; la distancia que les separa se designa por Δd .

La distancia de dispersión debida a los hidrometeoros (d_{cr}) junto con el ángulo de elevación ϵ del haz principal de la antena de la estación terrena, se utilizan en la figura 22 para obtener la distancia designada por Δd . Esta distancia se mide desde la ubicación de la estación terrena a lo largo del acimut del haz principal de su antena, y se traza un círculo de radio d_{cr} que tiene por centro el punto así obtenido. Este círculo es el contorno de coordinación en el caso de dispersión debida a los hidrometeoros.

La distancia de coordinación en el caso de dispersión debida a los hidrometeoros, que se designa por d_c , es la distancia desde la estación terrena al contorno de coordinación en el acimut considerado.

5. Valor mínimo de la distancia de coordinación

Si cuando se efectúan los cálculos para determinar la distancia de coordinación para los modos de propagación (a) o (b) se obtienen valores que necesitarían una extrapolación de las curvas de distancia de coordinación a distancias inferiores de 100 km, la distancia de coordinación (d_a o d_b) para el modo de que se trata se considerará de 100 km.

Si al determinar la distancia de coordinación para el modo de propagación (c) se obtienen valores que necesitarían una extrapolación de las curvas de distancia de dispersión debida a los hidrometeoros a distancias inferiores a 100 km, la distancia de dispersión (d_{cr}) se considerará de 100 km y este valor es el que se utilizará con el valor adecuado de Δd .

6. Distancia de coordinación

Para cada uno de los tres modos de propagación, en cualquier acimut, la mayor de las distancias de coordinación d_a , d_b o d_c , es la distancia de coordinación que debe utilizarse en los procedimientos de coordinación.

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En la figura 23 se da un ejemplo de un contorno de coordinación.

7. Parámetros para el cálculo

Los valores de los parámetros necesarios para la determinación del contorno de coordinación figuran en el Cuadro I en el caso de una estación terrena transmisora y en el Cuadro II en el caso de una estación terrena receptora.

En algunos casos, una administración puede tener razones para creer que está justificado, para su estación terrena, adoptar valores diferentes de los que se indican en el Cuadro II. Hay que destacar el hecho de que para algunos sistemas determinados puede ser necesario cambiar las anchuras de banda B o, por ejemplo en el caso de sistemas de asignación en función de la demanda, cambiar los porcentajes de tiempo p y p_0 indicados en el Cuadro II.

Con el fin de facilitar las negociaciones subsiguientes entre administraciones (según se indica en el anexo B), se ha estimado útil aislar de la ecuación (2) dos parámetros compuestos asociados únicamente con estaciones terrenales, un factor de sensibilidad a las interferencias $S = G_r - P_r(p)$, para el caso de estaciones terrenas transmisoras, y la p.i.r.e. $E = P_r + G_r$, para el caso de estaciones terrenas receptoras. Los valores de S y E que se utilizan figuran también en los Cuadros I y II, respectivamente.

Si es necesario calcular la distancia de coordinación en una banda de frecuencias que no figura en el Cuadro I o II, se deben utilizar los valores correspondientes a la banda de frecuencias más próxima atribuida para el mismo servicio.

CUADRO II

Características necesarias para determinar la distancia de coordinación para una estación terrena receptora

Designación del servicio de radiocomunicación espacial	Características necesarias para determinar la distancia de coordinación para una estación terrena receptora											
	Operaciones espaciales (telemedida) ⁽¹⁾				Meteorología por satélite ⁽¹⁾				Exploración de la Tierra por satélite ⁽¹⁾			
	Investigación espacial		Espacio cercano		Investigación espacial		Espacio cercano		Investigación espacial		Espacio cercano	
	Fijo por satélite		Fijo por satélite		Fijo por satélite		Fijo por satélite		Fijo por satélite		Fijo por satélite	
Bandas de frecuencias (GHz)	1,525-1,535	1,670-1,690	1,700-1,710	2,290-2,300	2,500-2,535	3,400-4,200	7,300-7,750	8,025-8,400	8,400-8,500	10,95-11,20	11,70-12,20	17,7-19,7-21,2-22,0
Tipo de señal moduladora de la estación terrenal ⁽²⁾	—	—	A	N	A	N	A	N	—	A	N	N
p_0 (%)	0,1	0,001	0,03	0,03	0,003	0,03	0,003	0,003	0,1	0,001	0,03	0,003
n	2	1	3	3	3	3	3	3	2	1	2	1
p (%)	0,05	0,001	0,01	0,01	0,001	0,01	0,001	0,001	0,05	0,001	0,015	0,003
Características y criterios de interferencia	—	—	-8	-8	0	-8	0	-8	—	-8	0	0
J (dB)	—	—	—8	—8	0	—8	0	—8	—	—8	0	0
$M_0(p_0)$ (dB)	—	—	17	17	5 ⁽³⁾	17	5 ⁽³⁾	—	—	17	5 ⁽³⁾	5 ⁽³⁾
W (dB)	—	—	4	4	0	4	0	—	—	4	0	0
E (dBW) en B	55	55	62 ⁽⁴⁾ (⁶)	62 ⁽⁴⁾ (⁶)	92 ⁽⁶⁾	55	55	55	25 ⁽⁴⁾	25 ⁽⁴⁾	55	55
P_T (dBW) en B	13	13	10 ⁽⁴⁾ (⁶)	10 ⁽⁴⁾ (⁶)	40 ⁽⁶⁾	13	13	13	-17(⁴)	-17(⁴)	5	5
ΔG (dB)	0	0	10 ⁽⁶⁾	10 ⁽⁶⁾	0	0	0	0	0	0	0	0
Banda de frecuencias de referencia	—	1	1	10 ⁶	10 ⁶	10 ⁶	10 ⁶	10 ⁶	1	1	10 ⁶	10 ⁶
Potencia de interferencia admisible	$P_I(p)$ (dBW) en B	—	—220	—220	—	—	—	—	—220	—220	—	—

⁽¹⁾ Las características relativas a estos servicios pueden variar sobre un margen bastante amplio. Son necesarios estudios complementarios para poder dar valores representativos.

⁽²⁾ A = modulación analógica; N = modulación numérica.

⁽³⁾ Véase la nota ⁽²⁾ en el punto 2. $M_0(p_0)$ puede adquirir valores entre 5 y 40 dB, dependiendo de la frecuencia, de la zona hidrometeorológica y del diseño del sistema.

⁽⁴⁾ Estos valores se estiman para una anchura de banda de 1 Hz e inferiores en 30 dB a la potencia total supuesta para la emisión.

⁽⁵⁾ Estos valores suponen una anchura de banda de radiofrecuencia no inferior a 100 MHz, y son inferiores en 20 dB a la potencia total supuesta para la emisión.

⁽⁶⁾ En estas bandas, se han utilizado las características de las estaciones terrenales correspondientes a los sistemas transhorizonte.



CUADRO I

Características necesarias para la determinación de la distancia de coordinación
en el caso de una estación terrena transmísora

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Tipo de servicios		Operaciones espaciales (telemundo)									
		Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite	Fijo por satélite
Bandas de frecuencias (GHz)		1,427–1,429	2,655–2,690	4,400–4,700	5,850–6,425	7,900–7,975	10,95–11,20	12,50–12,75	14,4–14,5	27,5–29,5	
Tipo de señal moduladora de la estación terrenal (¹)	A	A	A	A	A	A	A	A	A	N	
Características y criterios de interferencia	p_o (%)	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,003	
	n	2	1	1	2	2	2	2	2	1	
	p (%)	0,005	0,01	0,01	0,005	0,005	0,005	0,005	0,005	0,003	
	J (dB)	16	9	9	16	16	16	16	16	0	
	$M_o(p_o)$ (dB)	17	17	17	17	17	17	17	17	30	
	W (dB)	0	0	0	0	0	0	0	0	0	
Características de la estación terrenal	B (Hz)	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	4×10^3	1×10^6	
	G_r (dB) (²)	35	52 (³)	52 (³)	45	47	50	50	50	50	
	ΔG (dB)	-7	10 (³)	10 (³)	3	5	8	8	8	8	
	T_r (K)	750	500 (³)	500 (³)	750	750	1500	1500	1500	3200	
Características auxiliares	S (dBW)	166	192	192	176	178	178	178	178	154	
	$P_r(p)$ (dBW) en B	-131	-140	-140	-131	-131	-128	-128	-128	-104	

(¹) A = modulación analógica; N = modulación numérica.

(²) Las pérdidas de la línea de alimentación no están incluidas.

(³) En estas bandas se han utilizado los parámetros de las estaciones terrenales correspondientes a los sistemas transhorizonte.

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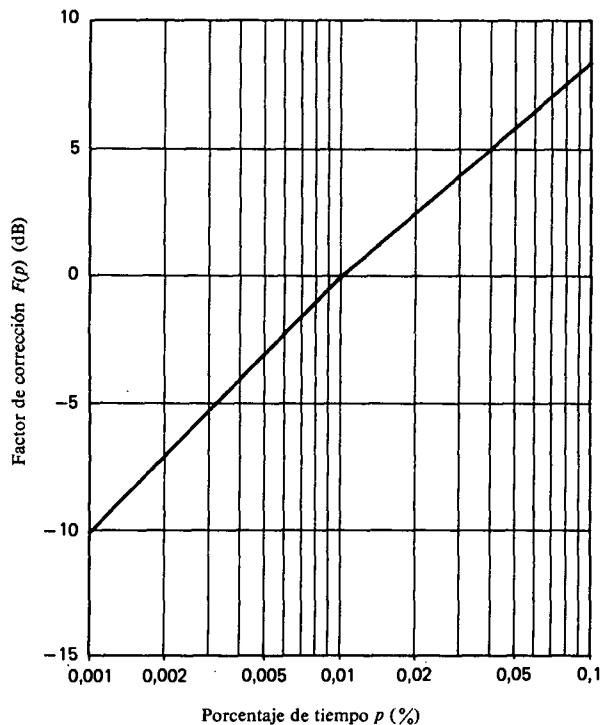


FIGURA 1

Factor de corrección $F(p)$ para porcentajes de tiempo p distintos a 0,01%

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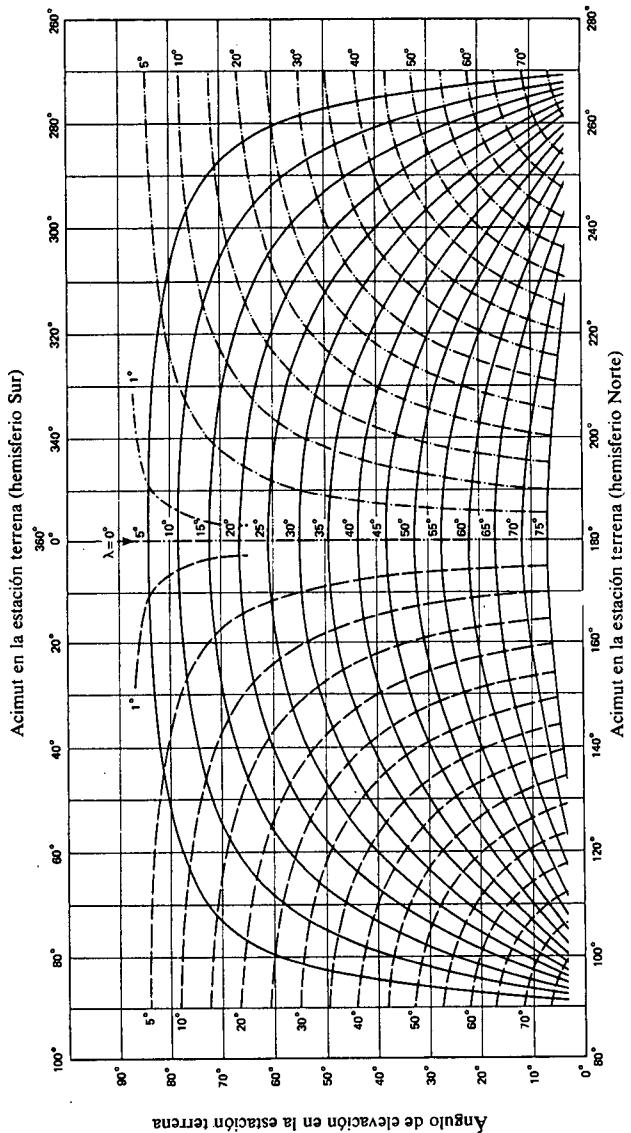


FIGURA 2
Arco que contiene las posiciones de los satélites geostacionarios

Arco de la órbita de los satélites geostacionarios visible desde la estación terrena ubicada en la latitud terrestre λ

Diferencia de longitud entre la estación terrena y el punto de la vertical del satélite:

Longitud del satélite al Este de la longitud de la estación terrena

Longitud del satélite al Oeste de la longitud de la estación terrena

Longitud del satélite igual a la longitud de la estación terrena

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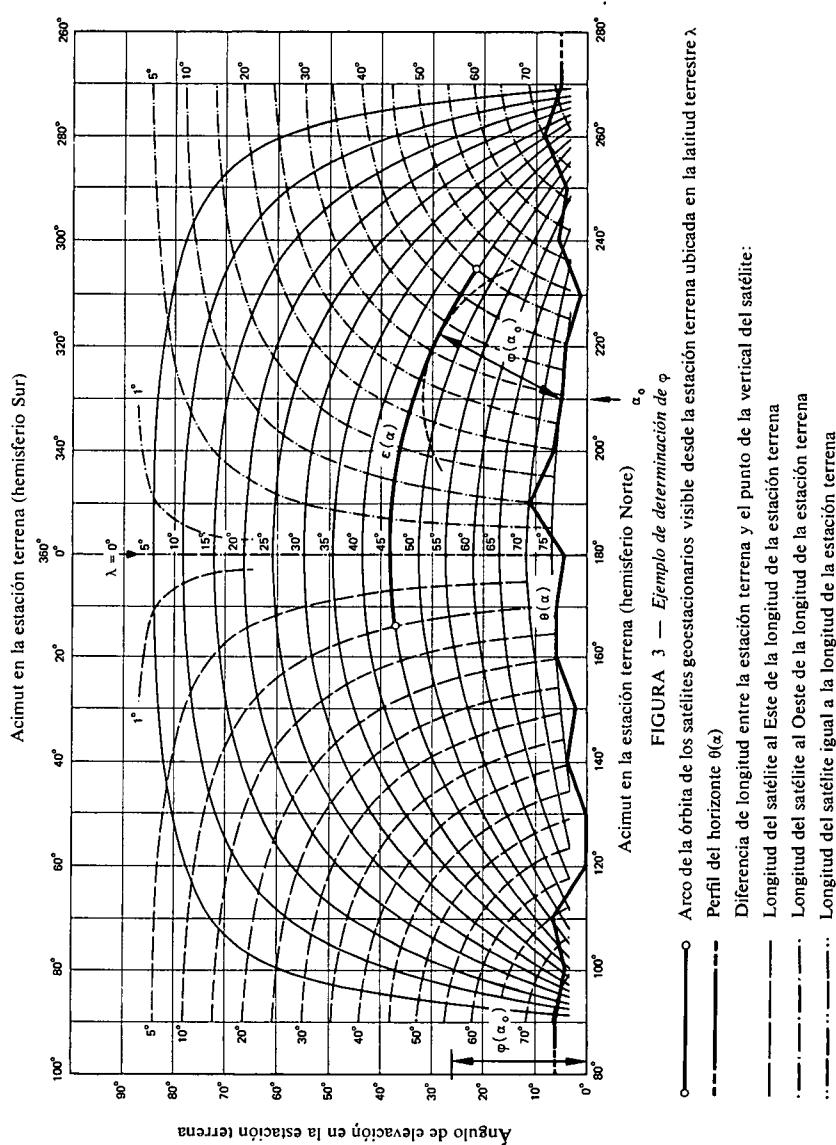


FIGURA 3 — Ejemplo de determinación de α_0

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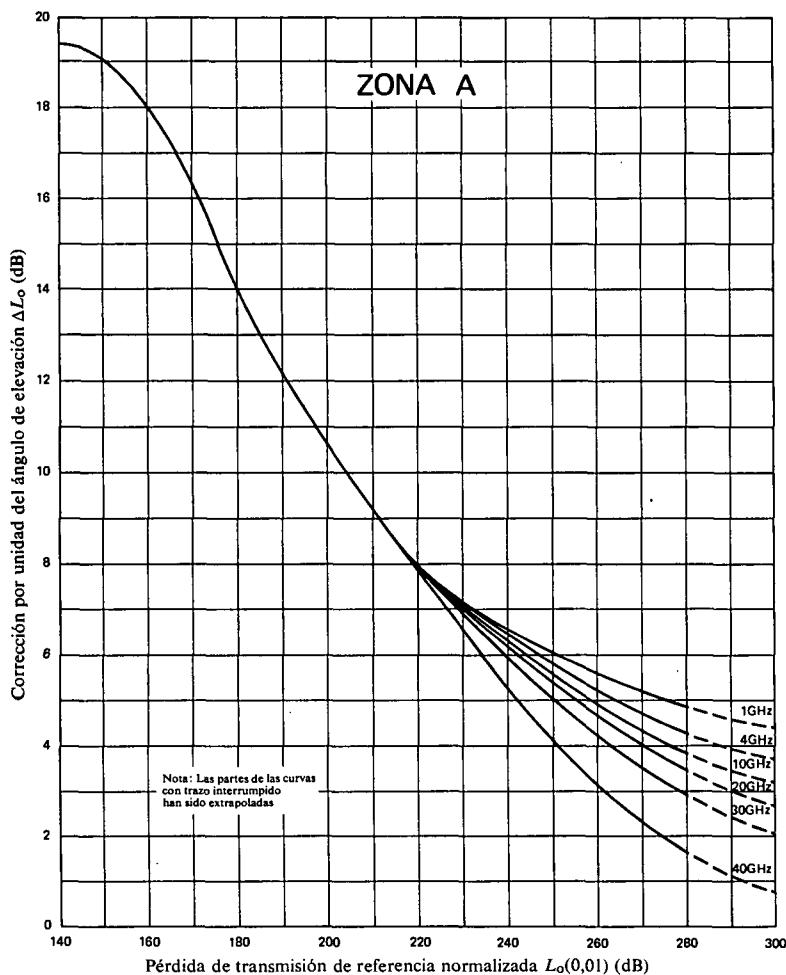


FIGURA 4

Corrección por unidad del ángulo de elevación en función de la pérdida de transmisión de referencia normalizada y de la frecuencia — Zona A

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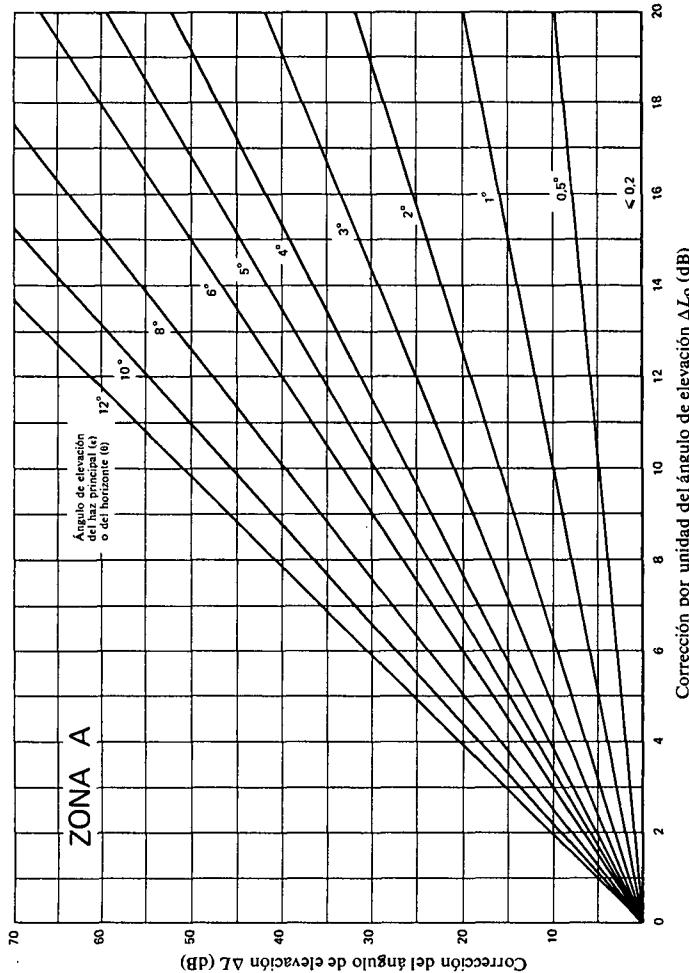


FIGURA 5
Corrección del ángulo de elevación — Zona A

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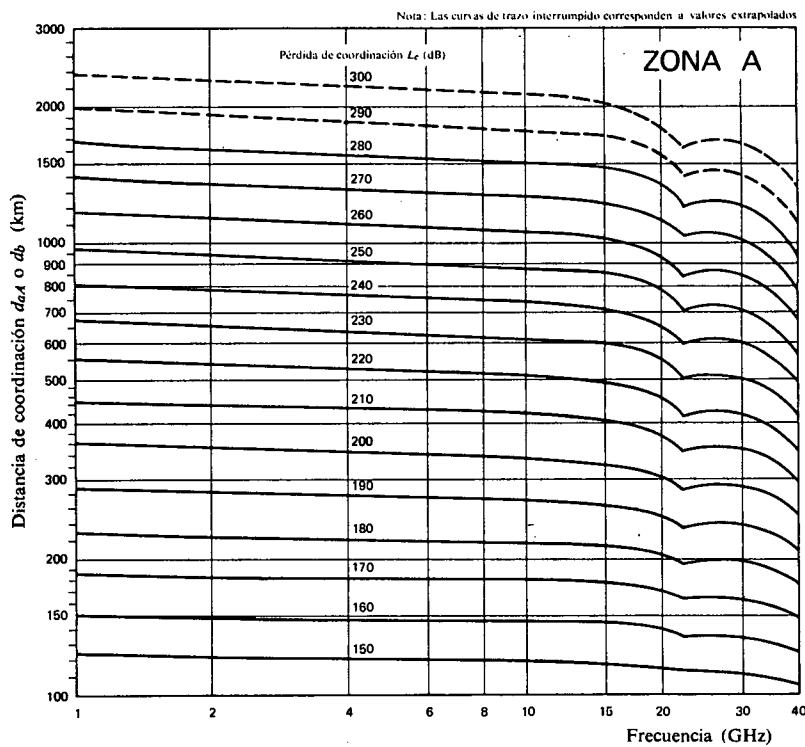


FIGURA 6

Distancia de coordinación d_{aA} o d_b en función de la frecuencia
y de la pérdida de coordinación — Zona A

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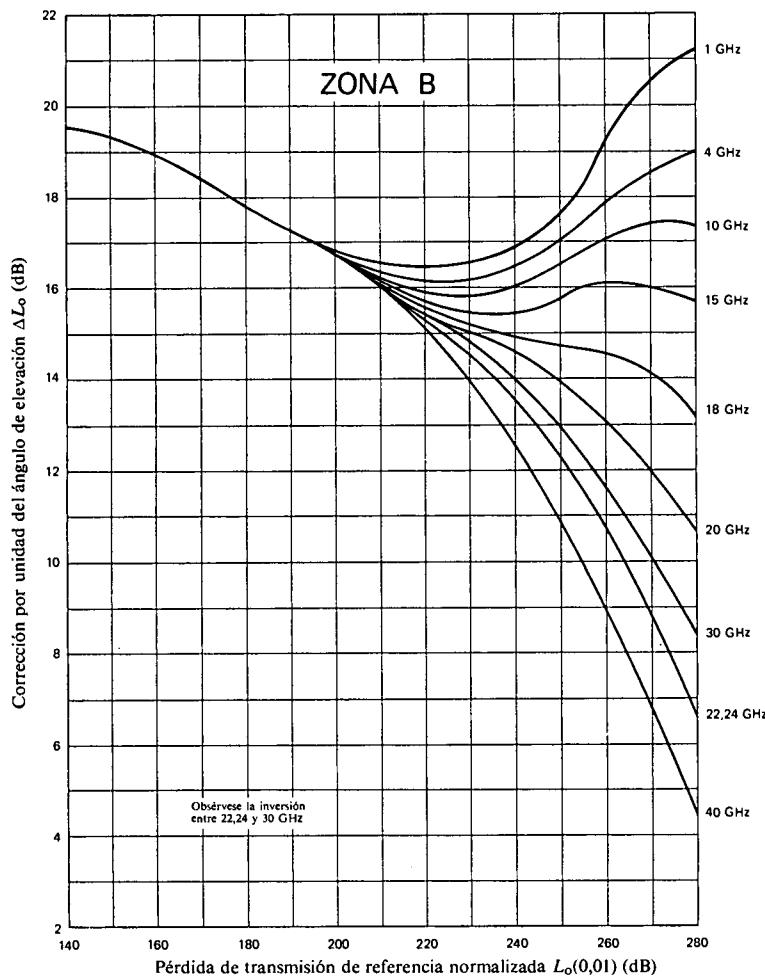


FIGURA 7

Corrección por unidad del ángulo de elevación en función de la pérdida de transmisión de referencia normalizada y de la frecuencia — Zona B

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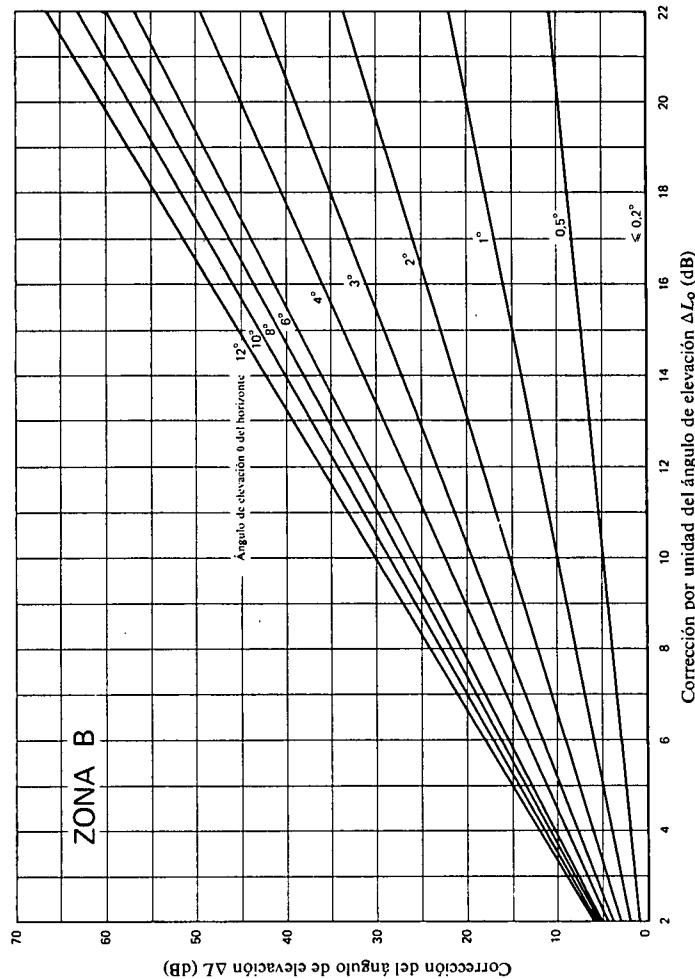


FIGURA 8
Corrección del ángulo de elevación — Zona B

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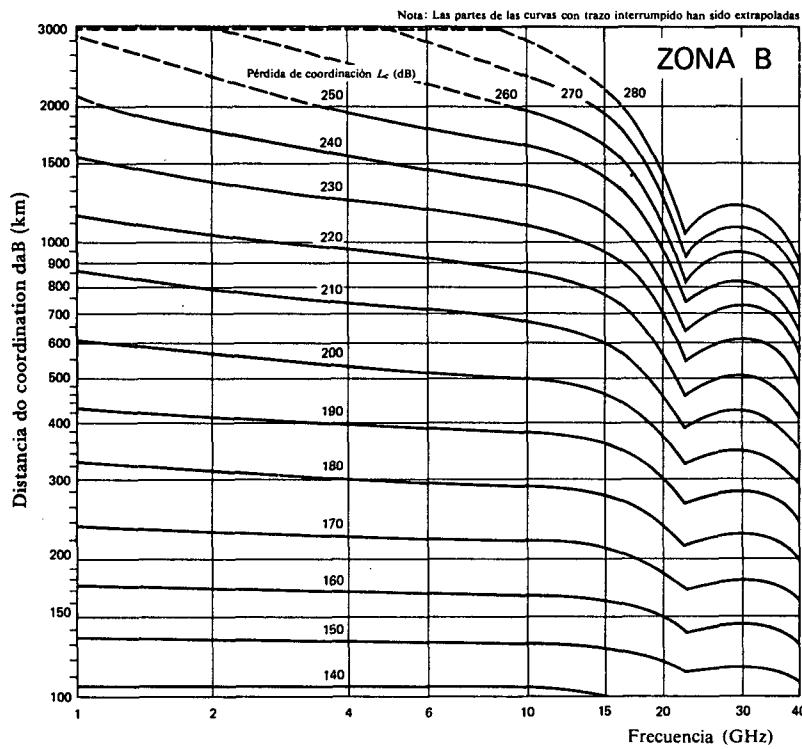


FIGURA 9

Distancia de coordinación d_{AB} en función de la frecuencia y de la pérdida de coordinación — Zona B

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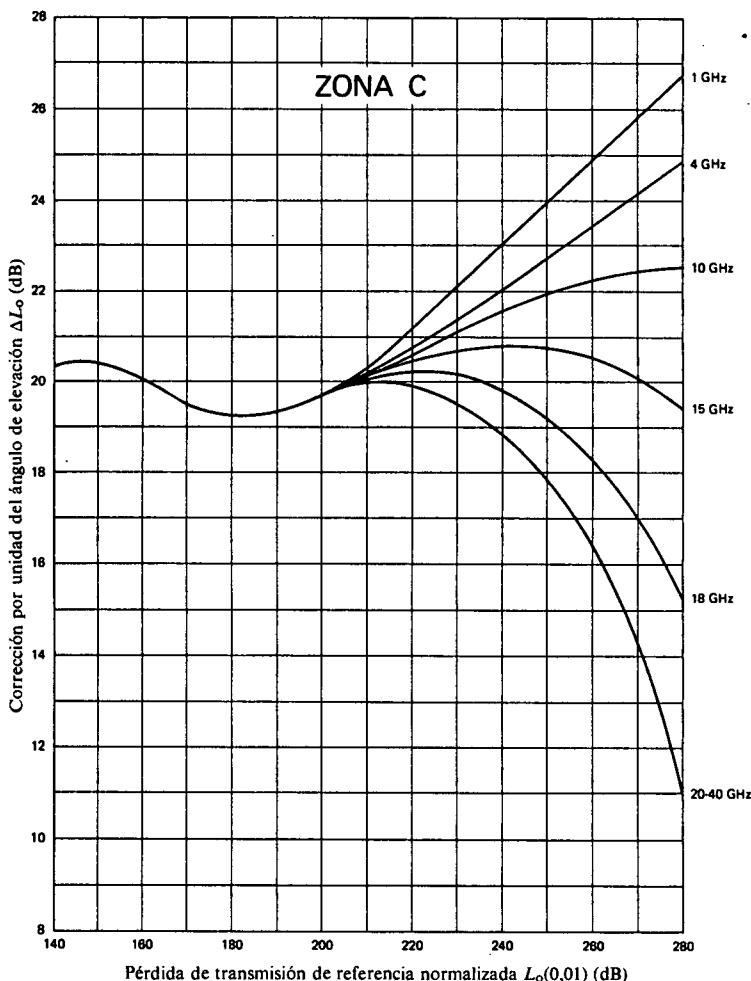


FIGURA 10

Corrección por unidad del ángulo de elevación en función de la pérdida de transmisión de referencia normalizada y de la frecuencia — Zona C

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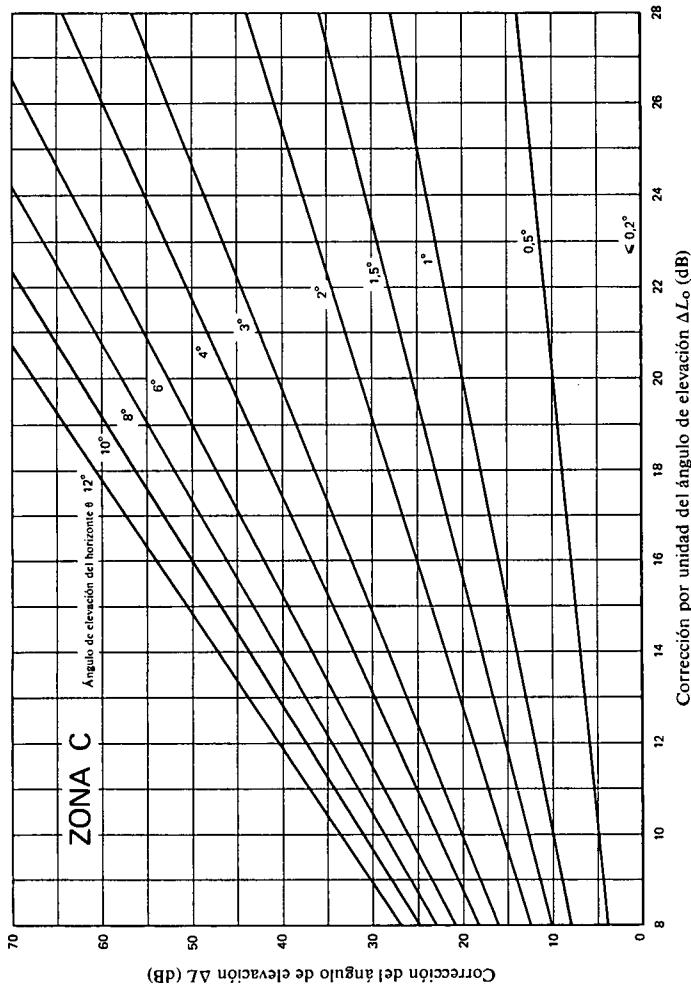


FIGURA 11
Corrección del ángulo de elevación — Zona C

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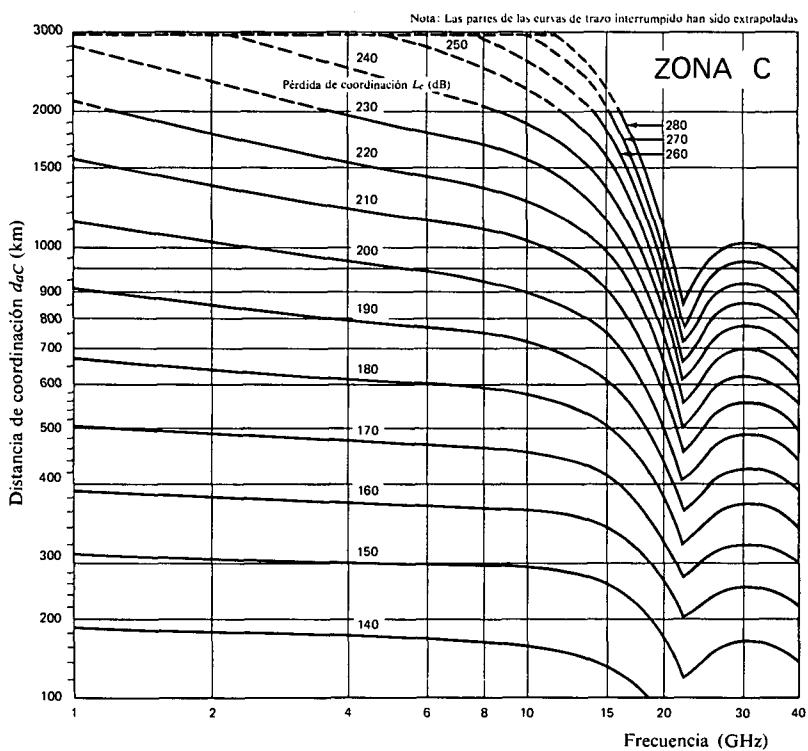


FIGURA 12

Distancia de coordinación d_{aC} en función de la frecuencia y de la pérdida de coordinación — Zona C

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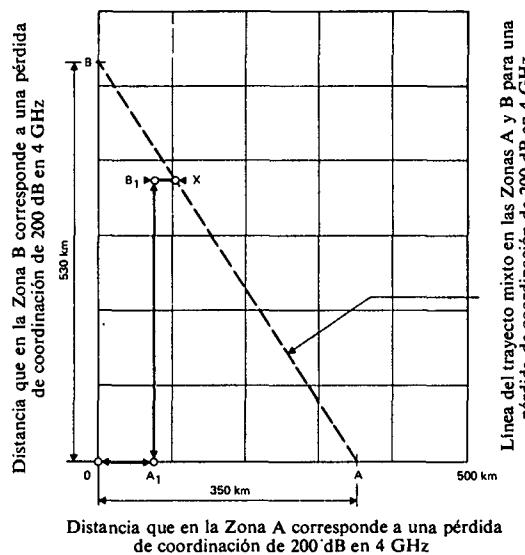


FIGURA 13a

Línea del trayecto mixto en las Zonas A y B para una pérdida de coordinación de 200 dB en 4 GHz

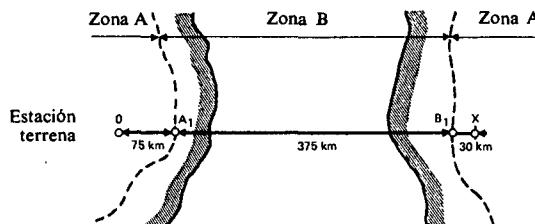


FIGURA 13b

FIGURA 13

Ejemplo de determinación de la distancia de coordinación para un trayecto mixto que comprende dos zonas

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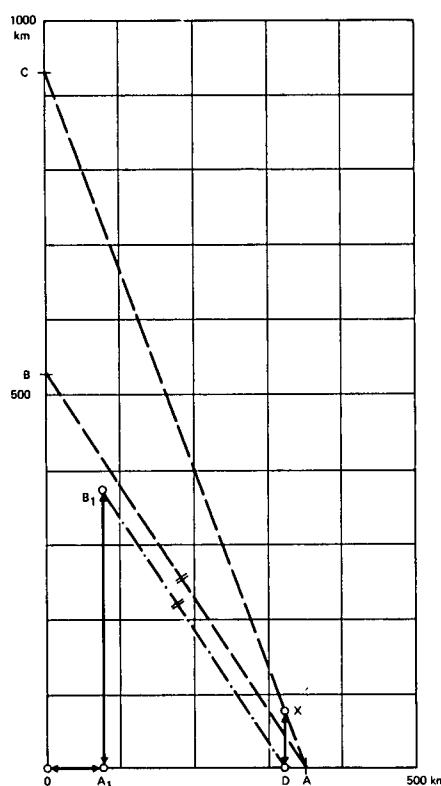


FIGURA 14b

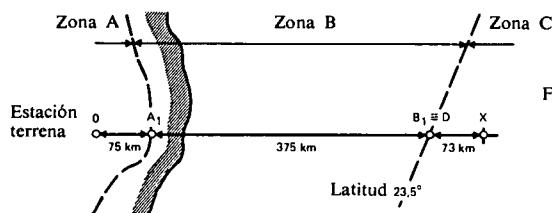


FIGURA 14a

FIGURA 14

Ejemplo de determinación de la distancia de coordinación para un trayecto mixto que comprende las tres zonas

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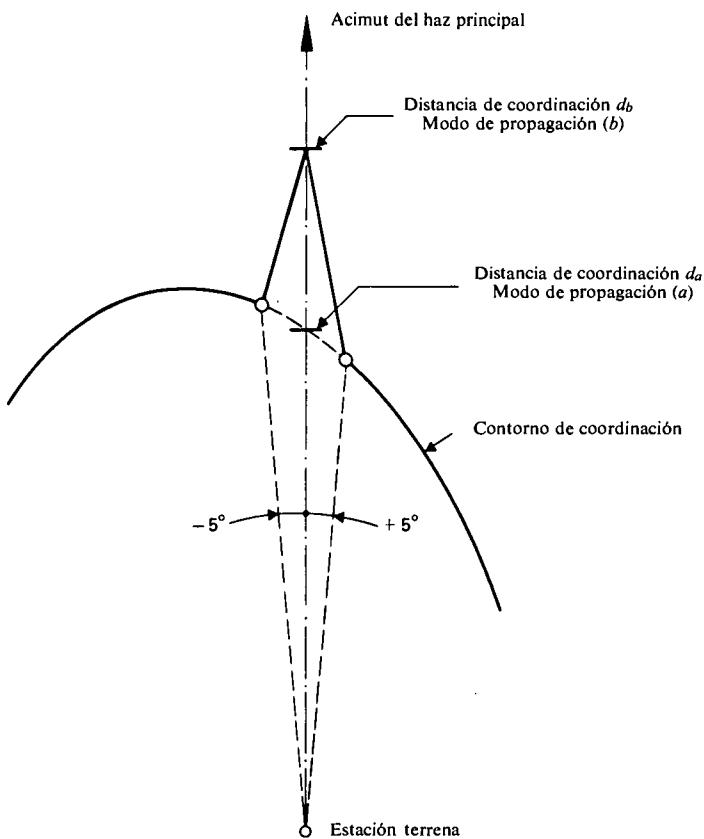
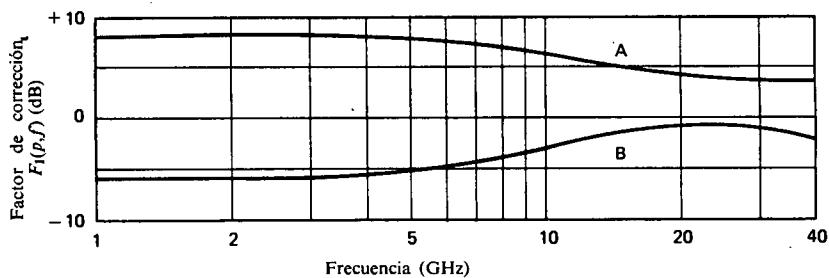


FIGURA 15

Ejemplo de determinación de la distancia de coordinación cuando el ángulo de elevación del haz principal de la estación terrena es inferior a 12°

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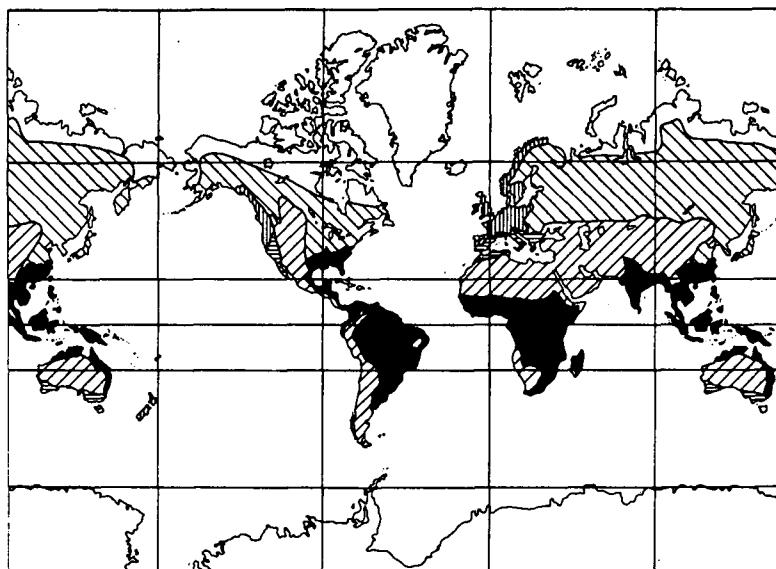


A: Corrección para el 0,1 % del tiempo
B: Corrección para el 0,001 % del tiempo } para todas las zonas hidrometeorológicas

FIGURA 16

Factor de corrección $F_1(p,f)$ para porcentajes de tiempo p diferentes de 0,01%, en función de la frecuencia — Modo de propagación (c)

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- Zona 1
- ▨ Zona 2
- ▨▨▨ Zona 3
- ▨▨▨▨ Zona 4
- ▨▨▨▨▨ Zona 5

FIGURA 17
Zonas hidrometeorológicas mundiales

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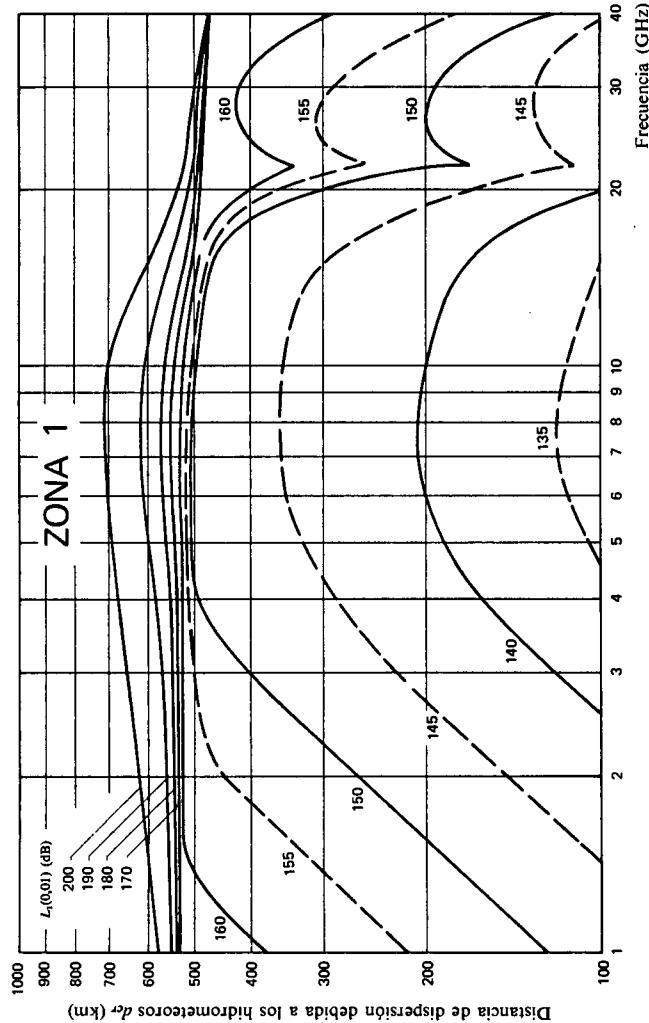


FIGURA 18

Distancia de dispersión debida a los hidrometeos en función de la frecuencia y de la pérdida de transmisión normalizada — Zona hidrometeorológica I (véase la figura 17)

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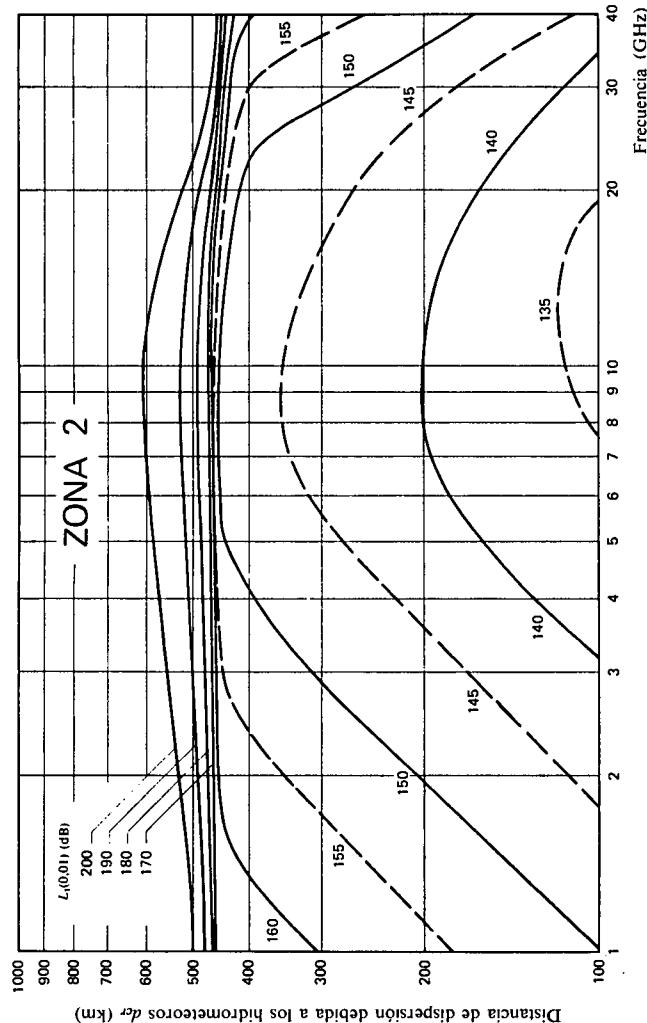


FIGURA 19

Distancia de dispersión debida a los hidrometeoros en función de la frecuencia y de la pérdida de transmisión normalizada — Zona hidrometeorológica 2 (véase la figura 17)

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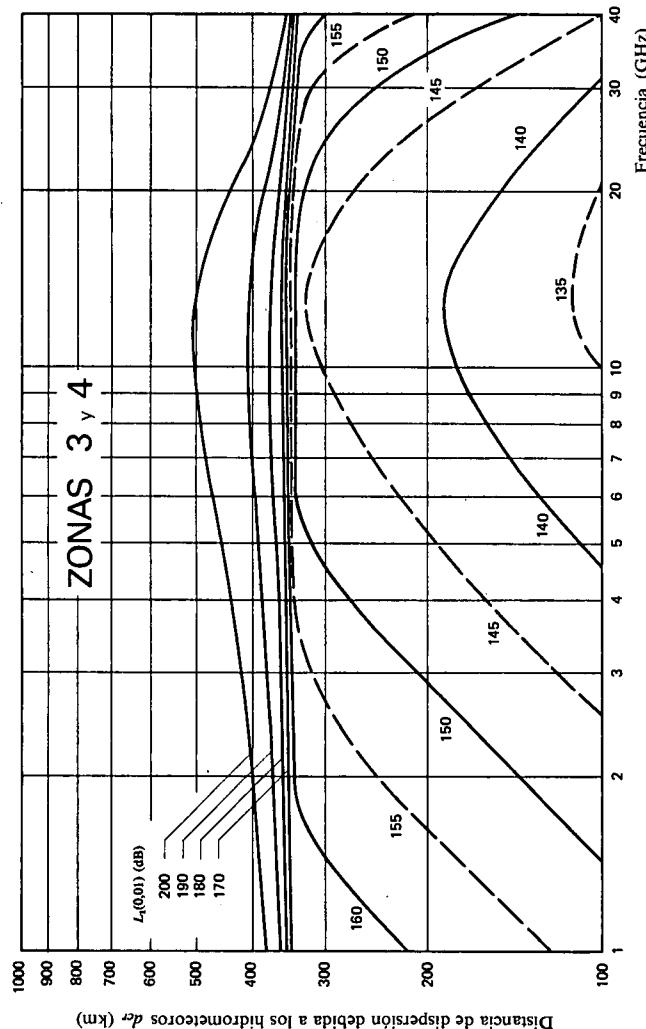


FIGURA 20

Distancia de dispersión debida a los hidrometeoros en función de la frecuencia y de la pérdida de transmisión normalizada — Zonas hidrometeorológicas 3 y 4 (véase la figura 17)

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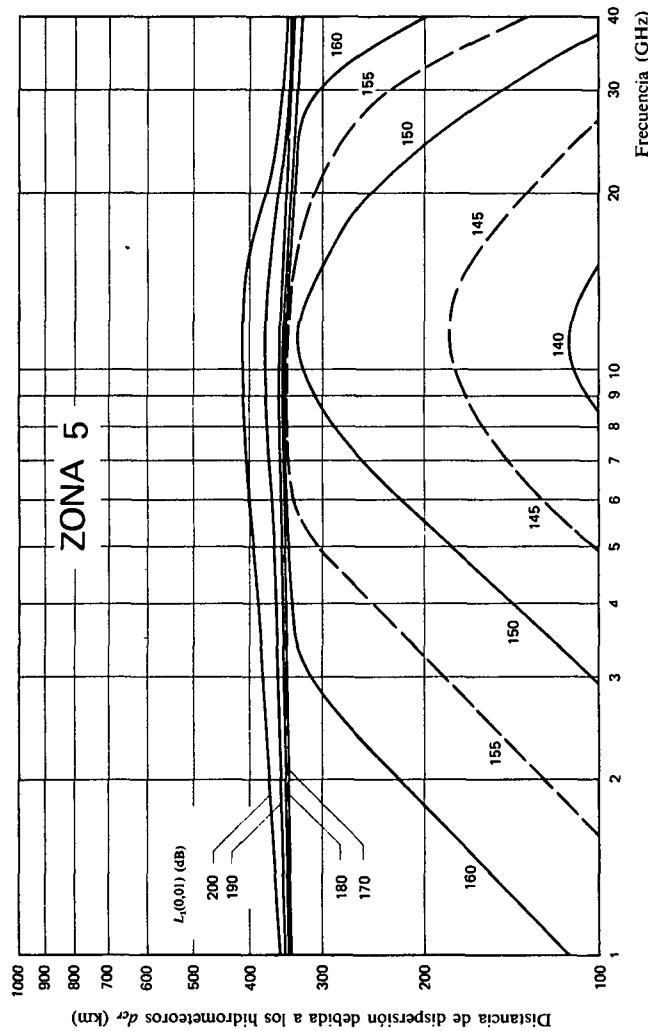


FIGURA 21

Distancia de dispersión debida a los hidrometeoros en función de la frecuencia y de la pérdida de transmisión normalizada — Zona hidrometeorológica 5 (véase la figura 17)

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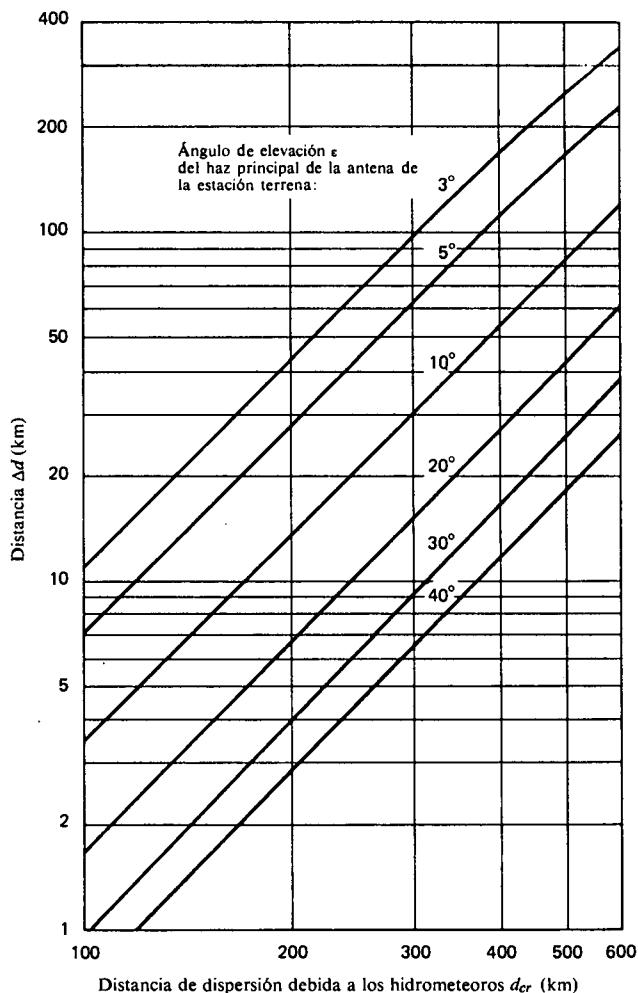
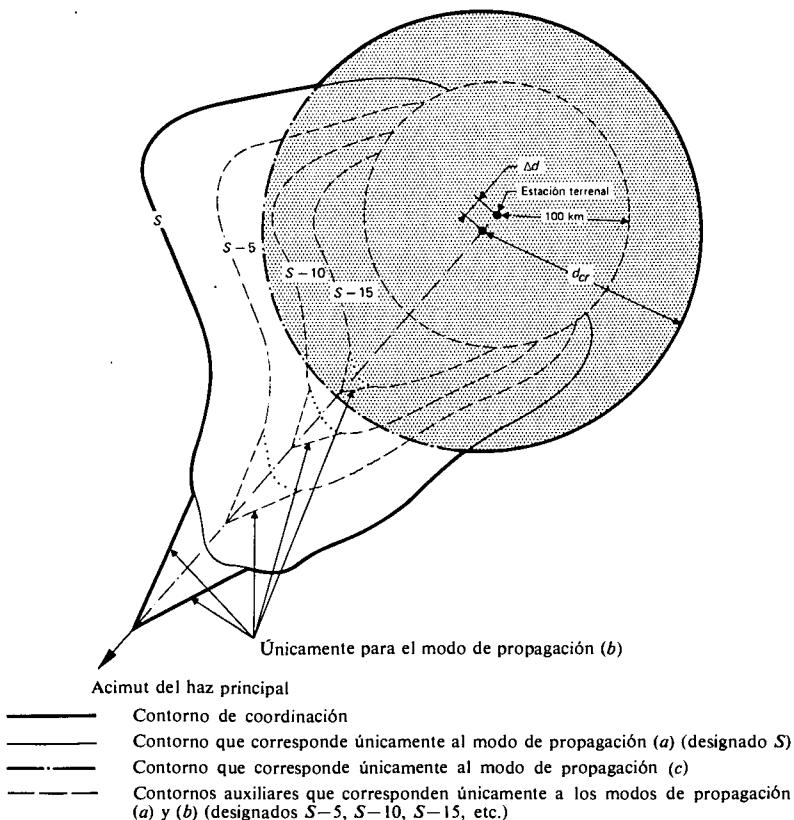


FIGURA 22

Distancia Δd en función de la distancia de dispersión debida a los hidrometeoros d_{cr} y del ángulo de elevación ϵ del haz principal de la antena de la estación terrena

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Si al utilizar los contornos auxiliares se demuestra que, desde el punto de vista de los mecanismos de propagación sobre un arco de círculo máximo, se puede eliminar una estación terrenal:

- i) en el estudio no se considerará dicha estación terrenal si ésta se encuentra fuera de la zona sombreada (dispersión por los hidrometeoros),
- ii) si dicha estación terrenal está situada dentro de la zona sombreada (modo de dispersión por los hidrometeoros), deberá seguir siendo considerada, pero únicamente para el modo de propagación por dispersión causada por los hidrometeoros.

FIGURA 23
Ejemplo de contornos para una estación terrena transmisora

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ANEXO A
AL APÉNDICE 28**Determinación de la distancia de coordinación en las bandas de frecuencias atribuidas**

1. El artículo 9A del Reglamento de Radiocomunicaciones dispone que deben determinarse las distancias de coordinación sólo en las bandas de frecuencias específicas indicadas en el artículo 5 del dicho Reglamento y enumeradas en los Cuadros III y IV del presente anexo. Conviene combinar para cada una de estas bandas de frecuencias las características que dependen solamente de la frecuencia y de los tipos de los sistemas que utilizan la banda. El valor resultante de las características combinadas es entonces una constante determinada que corresponde a un tipo de estación terrena y a una banda de frecuencias específica.

Estación terrena transmisora

2. En las bandas atribuidas para la transmisión en las estaciones terrenas (Cuadro III) se utilizan las constantes C_1 y C_2 deducidas como se indica a continuación :

Para los modos de propagación (a) y (b):

$$\begin{aligned} C_1 &= G_r - P_r(p) - 20 \log_{10}(f/4) - F(p) \\ &= S - 20 \log_{10}(f/4) - F(p) \end{aligned}$$

Para el modo de propagación (c) :

$$C_2 = -P_r(p) - F_1(p, f) + \Delta G$$

Las pérdidas de transmisión de referencia normalizada $L_o(0,01)$ y la pérdida de transmisión normalizada $L_1(0,01)$ vienen dadas por :

$$\begin{aligned} L_o(0,01) &= P_{r'} + G_{r'} + C_1 \\ L_1(0,01) &= P_{r'} + C_2 \end{aligned}$$

Los valores de C_1 y C_2 correspondientes a las bandas atribuidas para la transmisión en las estaciones terrenas se indican en el Cuadro III, junto con la anchura de banda de referencia (B) que se utiliza en el cálculo de $P_{r'}$.

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Estación terrena receptora

3. En las bandas utilizadas para la recepción en las estaciones terrenas (Cuadro IV) se utilizan las constantes C_3 y C_4 que se deducen como se indica a continuación :

Para los modos de propagación (a) y (b):

$$C_3 = E - (10 \log_{10} kB + J - W) - F(p) - 20 \log_{10}(f/4)$$

Para el modo de propagación (c):

$$C_4 = P_r - (10 \log_{10} kB + J - W) - F_1(p,f) + \Delta G$$

La pérdida de transmisión de referencia normalizada $L_o(0,01)$ y la pérdida de transmisión normalizada $L_1(0,01)$ vienen dadas por:

$$L_o(0,01) = G_r + C_3 - 10 \log_{10} T_r - M(p)$$

$$L_1(0,01) = C_4 - 10 \log_{10} T_r - M(p)$$

Los valores de C_3 y C_4 correspondientes a las bandas atribuidas a la recepción en las estaciones terrenas se indican en el Cuadro IV.

Organigramas

4. El procedimiento para determinar la distancia de coordinación se ilustra mediante los organigramas 1 y 2 de este anexo. Los pasos necesarios para determinar las distancias de coordinación correspondientes a una estación terrena transmisora se indican en el organigrama 1, mientras que en el organigrama 2 se indican los correspondientes a una estación terrena receptora. Los símbolos utilizados en dichos organigramas son los definidos en el texto del apéndice 28.

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CUADRO III

Estación Terrena Transmisora — Véase el organigrama 1

Bandas de frecuencias atribuidas (GHz)	C_1 (dBW)	C_2 (dBW)	Anchura de banda de referencia B (Hz)
1,427 - 1,429	178	127	4×10^3
2,655 - 2,690	196	150	4×10^3
4,400 - 4,700	191	150	4×10^3
5,850 - 6,425	175	136	4×10^3
7,900 - 7,975 8,025 - 8,400 }	175	138	4×10^3
10,95 - 11,20	172	137	4×10^3
12,50 - 12,75	171	137	4×10^3
14,40 - 14,50	170	137	4×10^3
27,5 - 29,5	142	112	1×10^6

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CUADRO IV

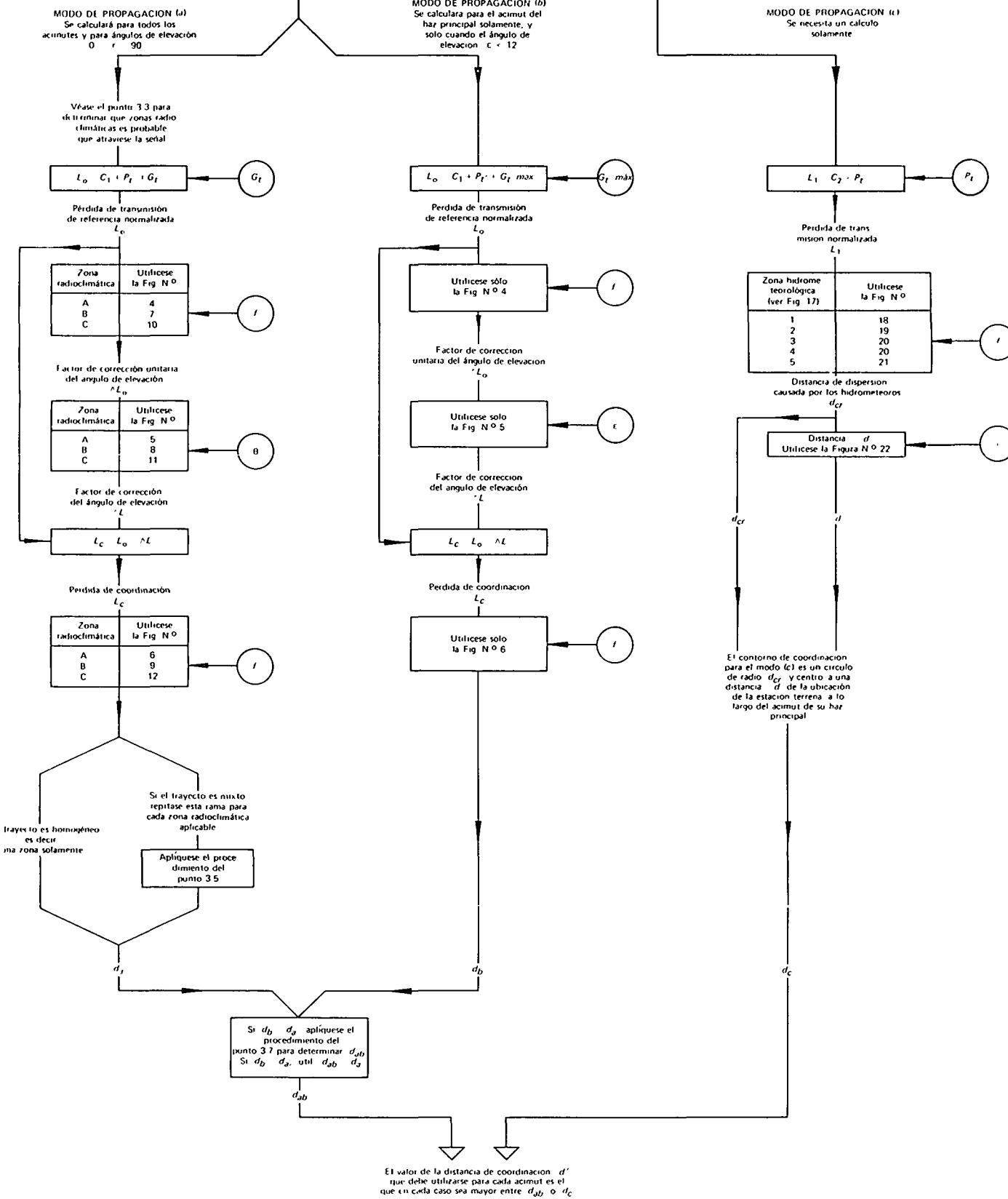
Estación terrena receptora — Véase el organigrama 2

Bandas de frecuencias atribuidas (GHz)	Designación del servicio de radiocomunicación espacial	Tipo de la señal moduladora ⁽¹⁾	C_3 (dBW)	C_4 (dBW)
1,525 - 1,535	Operaciones espaciales (telemedida)			
1,670 - 1,690	Meteorología por satélite			
1,700 - 1,710 2,290 - 2,300	Investigación espacial	Espacio cercano Espacio lejano; vehículos tripulados		
2,500 - 2,535	Fijo por satélite	A	277	231
3,400 - 4,200	Fijo por satélite	A	236	194
		N	234	188
7,300 - 7,750	Fijo por satélite	A	230	194
		N	228	186
8,025 - 8,400	Exploración de la Tierra por satélite			
8,400 - 8,500	Investigación espacial	Espacio cercano Espacio lejano		
10,95 - 11,20 11,45 - 11,70	Fijo por satélite	A	225	184
		N	220	176
11,70 - 12,20 12,50 - 12,75	Fijo por satélite	A	224	184
		N	219	176
17,7 - 19,7	Fijo por satélite	N	196	154
21,2 - 22,0	Exploración de la Tierra por satélite			

⁽¹⁾ A = Modulación analógica; N = Modulación numérica.

DEFINICION DE SIMBOLOS

Símbolo	Descripción	Referencia en Apéndice 28
P_t	Potencia del transmisor (kW) en la banda B	3.1
$G_t \text{ máx}$	Ganancia de la antena en la dirección del haz principal (dB)	3.1
G_t	Ganancia de la antena en la dirección pertinente (dB)	3.1 y 3.2
θ	Ángulo de elevación del haz principal (θ)	3.2
θ_0	Ángulo de elevación del horizonte (θ_0)	3.2
f	Frecuencia (GHz)	3.1

ORGANIGRAMA 1
ORGANIGRAMA PARA DETERMINAR EL CONTORNO DE COORDINACION PARA UNA ESTACION TERRENA TRANSMISORA

ORGANIGRAMA 2
ORGANIGRAMA PARA DETERMINAR EL CONTORNO DE COORDINACIÓN PARA UNA ESTACIÓN TERRENA RECEPTOR

DEFINICIÓN DE SÍMBOLOS

Símbolo	Descripción	Referencia en Apéndice 28
$M_o(p_0)$	Margen de interferencia largo plazo/corto plazo	2, nota 2
T_f	Temperatura de ruido del sistema de recepción (K)	2
G_f	Ganancia de la antena en la dirección pertinente (dB)	3.1 y 3.2
$G_f \text{ máx}$	Ganancia de la antena en la dirección del haz principal (dB)	3.1
θ	Ángulo de elevación del haz principal ($^{\circ}$)	3.2
θ_h	Ángulo de elevación del horizonte ($^{\circ}$)	3.2
f	Frecuencia (GHz)	3.1

MODO DE PROPAGACIÓN (a)
Se calculará para todos los acimuts y para ángulos de elevación $0 < \theta < 90$

Véase el punto 3.3 para determinar que zonas radioclimáticas es probable que atraviese la señal.

$$L_o = C_3 M_o(p_0) + 10 \log_{10} T_f + G_f$$

Pérdida de transmisión de referencia normalizada L_o

Zona radioclimática	Utilícese la Fig N°
A	4
B	7
C	10

Factor de corrección unitaria del ángulo de elevación L_o

Zona radioclimática	Utilícese la Fig N°
A	5
B	8
C	11

Factor de corrección del ángulo de elevación L

Zona radioclimática	Utilícese la Fig N°
A	6
B	9
C	12

Pérdida de coordinación $L_c = L_o + L$

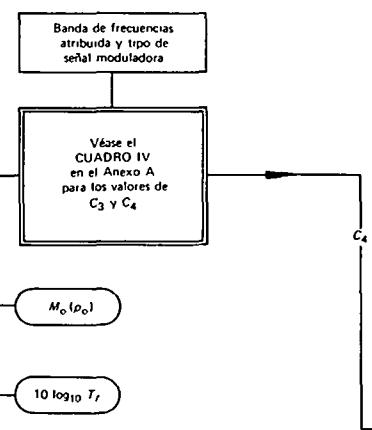
Zona radioclimática	Utilícese la Fig N°
A	6
B	9
C	12

Si el trayecto es mixto, repítase esta rama para cada zona radioclimática aplicable

Aplicarse el procedimiento del punto 3.5

Si el trayecto es homogéneo, es decir una zona solamente

d_a



MODO DE PROPAGACIÓN (b)
Se calculará para el acimut del haz principal solamente, y sólo cuando el ángulo de elevación $\theta < 12$

$$L_o = C_3 M_o(p_0) + 10 \log_{10} T_f + G_f \text{ máx}$$

Pérdida de transmisión de referencia normalizada L_o

Zona hidrometeorológica (ver Fig 17)	Utilícese la Fig N°
1	18
2	19
3	20
4	20
5	21

MODO DE PROPAGACIÓN (c)
Se necesita un cálculo solamente

$$L_1 = C_4 M_o(p_0)$$

$$L_1 = L_0 + C_4 M_o(p_0) + 10 \log_{10} T_f$$

Pérdida de transmisión normalizada L_1

Zona hidrometeorológica (ver Fig 17)	Utilícese la Fig N°
1	18
2	19
3	20
4	20
5	21

Distancia de dispersión causada por los hidrometeoros d_{cr}

$$d_{cr} = d \text{ Utilícese la Figura N° 22}$$

El contorno de coordinación para el modo (c) es un círculo de radio d_{cr} y centro a una distancia d de la ubicación de la estación terrena a lo largo del acimut de su haz principal

Pérdida de coordinación $L_c = L_o + L$

Utilícese sólo la Fig N° 6

Utilícese sólo la Fig N° 5

Factor de corrección del ángulo de elevación L

Utilícese sólo la Fig N° 4

Factor de corrección unitaria del ángulo de elevación L_o

Utilícese la Fig N° 0

Perdida de transmisión de referencia normalizada L_o

Utilícese la Fig N° 0

Perdida de transmisión de referencia normalizada L_o

Utilícese la Fig N° 0

Perdida de transmisión de referencia normalizada L_o

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Perdida de transmisión de referencia normalizada L_o

Utilícese la Fig N° 0

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ANEXO B AL APÉNDICE 28

Determinación y utilización de los contornos auxiliares**1. Introducción**

Para la propagación a lo largo del círculo máximo (modos (a) y (b)), los contornos auxiliares son muy valiosos para eliminar del estudio ciertas estaciones terrenales, existentes o proyectadas, que estén comprendidas dentro de la zona de coordinación, sin tener que recurrir a cálculos precisos y complicados. La tarea de la administración que explota la estación terrena y de las administraciones interesadas se simplifica, por consiguiente, durante las negociaciones subsiguientes si se suministran estos contornos auxiliares.

2. Determinación de los contornos auxiliares

Pueden determinarse dos tipos de contorno, según que la estación terrena considerada sea transmisora o receptora.

2.1 Estación terrena transmisora

Los contornos se determinan de la misma forma que el contorno de coordinación correspondiente para los modos de propagación (a) y (b) pero utilizando valores del factor de sensibilidad a las interferencias S (en dBW) de la estación terrenal 5, 10, 15, 20 dB, etc. inferiores al que corresponda al contorno de coordinación (indicado en el Cuadro I del apéndice 28).

2.2 Estación terrena receptora

Los contornos se determinan de la misma manera que el contorno de coordinación correspondiente para los modos de propagación (a) y (b) pero utilizando valores de la p.i.r.e. E (en dBW) de la estación terrenal 5, 10, 15, 20 dB, etc. inferiores al que corresponda al contorno de coordinación (indicado en el Cuadro II del apéndice 28).

3. Utilización de los contornos auxiliares

En un mismo gráfico se trazan, para una banda compartida determinada, los contornos auxiliares, el contorno de coordinación para la

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propagación a lo largo del círculo máximo (modos (a) y (b)), y el contorno de coordinación para la dispersión debida a los hidrometeoros (modo (c)). En la figura 23 del apéndice 28 se da un ejemplo para el caso de una estación terrena transmisora.

Para cada una de las estaciones terrenales situadas en la zona de coordinación puede aplicarse un procedimiento en dos etapas, una relativa al fenómeno de propagación a lo largo del círculo máximo y la otra a la dispersión debida a los hidrometeoros.

3.1 Caso de propagación a lo largo del círculo máximo (modos (a) y (b))

Si una estación terrenal transmisora está fuera de la zona de coordinación correspondiente a los modos (a) y (b), no se la tiene en cuenta en lo que concierne a los modos (a) y (b).

Se determina, para cada estación terrenal transmisora situada en la zona de coordinación correspondiente a los modos (a) y (b), el valor de la p.i.r.e. en dirección de la estación terrena. Si este valor es inferior al que corresponde al contorno más próximo que limita una zona fuera de la cual se encuentra la estación, puede considerarse que esta estación sólo causa un nivel admisible de interferencia y eliminarse entonces en lo que concierne a los modos (a) y (b).

Para cada estación terrenal de recepción, puede utilizarse el mismo método análogo sustituyendo la p.i.r.e. por el factor de sensibilidad a las interferencias.

3.2 Eliminación de una estación terrenal y fenómeno de dispersión debida a los hidrometeoros (modo (c))

Las estaciones terrenales eliminadas de toda consideración respecto a los modos de propagación (a) y (b) por el procedimiento anterior deben, sin embargo, seguir siendo consideradas respecto al modo de propagación (c) cuando están situadas dentro de la zona de coordinación de dispersión debida a los hidrometeoros.

ANEXO 19**Adición de un nuevo apéndice (apéndice 29) al Reglamento de Radiocomunicaciones**

A continuación del nuevo apéndice 28 del Reglamento de Radiocomunicaciones agréguese el nuevo apéndice siguiente:

APÉNDICE 29**Método de cálculo para evaluar el grado de interferencia entre redes de satélite geoestacionario que comparten las mismas bandas de frecuencias****1. Introducción**

El método de cálculo de la interferencia se basa en el principio de que la temperatura de ruido del sistema interferido aumenta con el nivel de interferencia. Por consiguiente, puede aplicarse con independencia de las características de modulación de las redes de satélite y de las frecuencias específicas utilizadas.

Con este método se calcula, para un determinado enlace por satélite, el incremento aparente de la temperatura de ruido equivalente (⁽¹⁾) resultante de la interferencia originada por un sistema dado, y se compara este valor con el incremento preestablecido de la temperatura de ruido (véase la sección 3).

2. Cálculo del incremento de la temperatura de ruido en el enlace por satélite interferido

Sean A y A' los enlaces por satélite (⁽²⁾) de las dos redes de satélite consideradas. Las letras con apóstrofo indican los parámetros del enlace por satélite A'. Las letras sin apóstrofo designan los parámetros del enlace por satélite A.

A continuación se definen los símbolos que representan los parámetros considerados (para el enlace por satélite A):

ΔT_s = incremento de la temperatura de ruido de recepción del satélite S causado por la interferencia en el receptor de este satélite (K);

(¹) Véase el número 103A.

(²) Véase el número 84AFC.

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ΔT_e = incremento de la temperatura de ruido de recepción de la estación terrena e_r causado por la interferencia en el receptor de dicha estación (K);

p_s = densidad máxima de potencia por Hz suministrada a la antena transmisora del satélite S (media correspondiente a la banda más desfavorable de 4 kHz cuando la frecuencia de la portadora es inferior a 15 GHz o a la banda de 1 MHz más desfavorable cuando la frecuencia de la portadora es superior a 15 GHz) (W/Hz);

$g_3(\eta_e)$ = ganancia de la antena transmisora del satélite S en la dirección de la estación terrena receptora e'_r en el enlace por satélite A' (relación numérica de potencias)

Nota: El producto p_s por $g_3(\eta_e)$ es la p.i.r.e. máxima por Hz del satélite S en la dirección de la estación terrena receptora e'_r en el enlace por satélite A';

p_e = densidad máxima de potencia por Hz suministrada a la antena de la estación terrena transmisora e_r (media correspondiente a la banda más desfavorable de 4 kHz cuando la frecuencia de la portadora es inferior a 15 GHz o a la banda de 1 MHz más desfavorable cuando la frecuencia de la portadora es superior a 15 GHz) (W/Hz);

$g_2(\delta_e)$ = ganancia de la antena receptora del satélite S en la dirección de la estación terrena transmisora e'_r (relación numérica de potencias);

$g_1(\theta)$ = ganancia de la antena transmisora de la estación terrena e_r en la dirección del satélite S' (relación numérica de potencias);

$g_4(\theta)$ = ganancia de la antena receptora de la estación terrena e_r en la dirección del satélite S' (relación numérica de potencias);

k = constante de Boltzmann (J/K);

l_d = pérdida de transmisión en el espacio libre correspondiente al trayecto descendente (relación numérica de potencias)(*);

l_u = pérdida de transmisión en el espacio libre correspondiente al trayecto ascendente (relación numérica de potencias)(*);

(*) Para simplificar el cálculo, se supone que:

- la pérdida de transmisión de referencia en los trayectos descendentes es la misma cualesquiera que sean el satélite y la estación terrena considerados;
- la pérdida de transmisión de referencia en los trayectos ascendentes es la misma cualesquiera que sean la estación terrena y el satélite considerados;

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- γ = ganancia de transmisión del enlace por satélite desde la salida de la antena receptora de la estación espacial S hasta la salida de la antena receptora de la estación terrena e_R (relación numérica de potencias, generalmente inferior a 1);
- θ = separación angular geocéntrica entre dos satélites (grados) (*).

Los parámetros ΔT_s y ΔT_e vienen dados por las ecuaciones:

$$\Delta T_s = \frac{p'_e g'_1(\theta) g_2(\delta_e)}{k l_u} \quad (1)$$

$$\Delta T_e = \frac{p'_s g'_3(\eta_e) g_4(\theta)}{k l_d} \quad (2)$$

El símbolo ΔT se utilizará para designar el incremento aparente de la temperatura de ruido equivalente correspondiente al enlace por satélite completo en la entrada del receptor de la estación terrena receptora e_R , provocado por la interferencia causada por el enlace A'.

Este incremento de la temperatura de ruido resulta de la interferencia recibida por el receptor del satélite y por el de la estación terrena del enlace A, pudiendo, por consiguiente, expresarse como sigue:

$$\Delta T = \gamma \Delta T_s + \Delta T_e \quad (3)$$

por consiguiente,

$$\Delta T = \gamma \frac{p'_e g'_1(\theta) g_2(\delta_e)}{k l_u} + \frac{p'_s g'_3(\eta_e) g_4(\theta)}{k l_d} \quad (4)$$

La ecuación (4) combina las interferencias correspondientes a los trayectos ascendente y descendente. Si se efectúa un cambio de modulación en el satélite o si las frecuencias de transferencia del satélite deseado y del interferente son distintas, puede ser necesario analizar separadamente los trayectos ascendente y descendente empleando las ecuaciones (1) y (2).

(*) Para simplificar el cálculo, se supone que la separación angular topocéntrica entre los dos satélites, vista desde cualquier estación terrena, es idéntica a la separación angular geocéntrica entre los dos satélites.

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En las ecuaciones precedentes, las ganancias $g'_1(\theta)$ y $g'_4(\theta)$ son las de las estaciones terrenas consideradas. Si no se dispone de información más precisa, se puede utilizar un diagrama de radiación de referencia adecuado para expresar la ganancia $g'_1(\theta)$ y $g'_4(\theta)$ en una dirección que forme un ángulo θ con la dirección de radiación máxima. En este caso, en que no se dispone de datos reales precisos, se utilizará el diagrama de radiación de referencia que tiene por expresión $(32 - 25 \log_{10}\theta)$ para las antenas de estaciones terrenas en las que la relación *diámetro/longitud de onda* excede de 100.

De forma análoga, se calculará el incremento $\Delta T'$ de la temperatura de ruido equivalente del enlace por satélite completo en la entrada del receptor de la estación terrena receptora e'_r provocado por la interferencia causada por el enlace por satélite A, utilizando las ecuaciones:

$$\Delta T'_{e'} = \frac{p_e g_1(\theta) g'_2(\delta_e)}{k l_u} \quad (5)$$

$$\Delta T'_{e'} = \frac{p_s g_3(\eta_e) g'_4(\theta)}{k l_d} \quad (6)$$

$$\Delta T' = \gamma' \frac{p_e g_1(\theta) g'_2(\delta_e)}{k l_u} + \frac{p_s g_3(\eta_e) g'_4(\theta)}{k l_d} \quad (7)$$

En el caso de dos satélites de acceso múltiple, deberá efectuarse este cálculo para cada uno de los enlaces por satélite establecidos mediante uno de los satélites con relación a cada uno de los enlaces por satélite establecidos por medio del otro.

3. Comparación entre el valor calculado y el valor preestablecido del incremento porcentual de la temperatura de ruido equivalente del enlace por satélite

Los valores calculados de ΔT y $\Delta T'$ deberán compararse con los preestablecidos, que son iguales al 2% de las temperaturas de ruido equivalentes del enlace correspondiente:

- si el valor calculado de ΔT es inferior al preestablecido, el nivel de interferencia causado por el enlace por satélite A' en el enlace por satélite A

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será admisible, independientemente de las características de modulación de ambos enlaces por satélite y de las frecuencias específicas utilizadas;

— si el valor calculado de ΔT es superior al preestablecido, habrá que efectuar un cálculo más detallado aplicando los métodos y técnicas establecidos en las Recomendaciones e Informes pertinentes del C.C.I.R.

La comparación entre el valor calculado y el valor preestablecido de $\Delta T'$, se efectuará de la misma manera.

Puede verse, como ejemplo de este método, que en el caso de un enlace por satélite cuyas características de funcionamiento estén de conformidad con las actuales Recomendaciones del C.C.I.R., que utilice telefonía con modulación de frecuencia y tenga en un canal telefónico un ruido total de 10 000 pW0p, incluidos 1 000 pW0p de ruido de interferencia producidos por sistemas de relevadores radioeléctricos terrenales y 1 000 pW0p de ruido de interferencia causados por otros enlaces por satélite, un aumento del 2% de la temperatura de ruido equivalente correspondería a 160 pW0p de ruido debido a la interferencia.

En el apéndice 1B al Reglamento de Radiocomunicaciones se da la lista de las características esenciales que deben suministrarse para cada red. En el anexo al presente apéndice, se ilustra con un ejemplo el cálculo de la interferencia entre dos enlaces por satélite geoestacionario.

4. Determinación de los enlaces por satélite que hay que tomar en consideración para calcular el incremento de la temperatura equivalente de ruido a partir de los datos suministrados por la publicación anticipada de una red de satélite

Debe determinarse el mayor incremento de temperatura de ruido equivalente causado en cualquier enlace de las otras redes de satélite existentes o en proyecto, debido a interferencias producidas por la red de satélite propuesta.

Para cada antena receptora del satélite de la red interferida, habrá que determinar la ubicación de la estación terrena transmisora de la red de satélite interferente que sea más desfavorable, superponiendo al mapa terrestre de contornos de ganancia de la antena receptora de la estación espacial, las zonas de servicio «Tierra-espacio» de la red interferente. La ubicación más desfavorable para la estación terrena transmisora es aquélla que se encuentra en la dirección de máxima ganancia de la antena de recepción del satélite de la red interferida.

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Asimismo, se determinará de manera análoga para cada zona de servicio «espacio-Tierra» de la red interferida, la ubicación más desfavorable de la estación terrena receptora de la red interferida. La ubicación más desfavorable de estación terrena receptora es aquélla que se encuentra en la dirección de máxima ganancia de la antena transmisora del satélite de la red interferente.

Si el satélite de la red interferida está dotado de simples repetidores-convertidores de frecuencia, estas determinaciones de ubicación deben hacerse por pares, es decir: por una parte, para la antena receptora del satélite asociada a un determinado repetidor y por otra parte, para la zona de servicio «espacio-Tierra» correspondiente a la antena transmisora del satélite asociada a ese repetidor.

El método de cálculo precedente permite determinar también el mayor incremento de la temperatura de ruido equivalente provocado en cualquier enlace de la red por satélite en proyecto, como consecuencia de interferencias producidas por cualquier otra red de satélite.

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ANEXO AL APÉNDICE 29

**Ejemplo de cálculo de interferencia entre dos enlaces por
satélite geoestacionario que comparten
la misma banda de frecuencias**

A. Generalidades

Para mayor sencillez, se consideran en este ejemplo dos redes de satélite idénticas con una separación angular geocéntrica entre los satélites de $\theta = 6^\circ$. Para esta separación angular, el diagrama de radiación de referencia de la antena de la estación terrena ($32 - 25 \log_{10}\theta$) da una ganancia de 12,5 dB en la dirección del satélite de la otra red.

Los cálculos se han desarrollado en decibelios, lo que significa que las multiplicaciones y divisiones numéricas se traducen en sumas y restas de decibelios, respectivamente. En cada etapa del cálculo se han introducido, en forma sucesiva, los factores que contribuyen a la interferencia en un orden que corresponde con el sentido de la propagación. Las tres primeras etapas del cálculo definen los parámetros de cada enlace y las etapas 4.^a, 5.^a y 6.^a desarrollan los cálculos de la interferencia.

Para determinar la temperatura de ruido equivalente de un enlace es necesario conocer la relación entre el ruido interno total del enlace y el ruido térmico del trayecto descendente. El cómputo de ruido, para este ejemplo, se supone así:

Cómputo del ruido

Ruido interno 8 000 pW _{0p}	Ruido térmico (trayecto descendente) Ruido térmico (trayecto ascendente) Ruido de intermodulación	5 000 pW _{0p}
		1 000 pW _{0p}
		2 000 pW _{0p}
Ruido externo 2 000 pW _{0p}	Ruido interferente originado por enlaces que utilizan otros satélites	1 000 pW _{0p}
	Ruido interferente originado por los sistemas terrenales	1 000 pW _{0p}
	Ruido total	10 000 pW _{0p}

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Debe hacerse notar que, como ambos satélites emplean haces de cobertura mundial, no se consigue prácticamente ninguna discriminación mediante la antena entre las señales deseadas y las no deseadas, lo que constituye el caso más desfavorable.

B Parámetros del sistema

	Símbolo	Enlace A o A'	Unidad
1. ^a etapa <i>Trayecto ascendente en 6 175 MHz</i> Densidad máxima de potencia por Hz suministrada a la antena de la estación terrena transmisora en la banda de 4 kHz más desfavorable Ganancia de la antena de la estación terrena Atenuación de propagación en el espacio libre para 38 500 km en 6 175 MHz Ganancia de la antena del satélite (empleando haz de cobertura mundial) Nivel de la señal en la entrada del receptor del satélite $p_e + g_1 - l_u + g_2$	p_e g_1 l_u g_2	-37 62,5 200 15,5	dBW/Hz dB dB dB
2. ^a etapa <i>Trayecto descendente en 3 950 MHz</i> Densidad máxima de potencia por Hz suministrada a la antena del satélite en la banda de 4 kHz más desfavorable Ganancia de la antena transmisora del satélite Atenuación de propagación en el espacio libre para 38 500 km en 3 950 MHz Ganancia de la antena receptora de la estación terrena Nivel de la señal en la entrada del receptor de la estación terrena $p_s + g_3 - l_d + g_4$	p_s g_3 l_d g_4	-57 15,5 196 58,5	dBW/Hz dB dB dB
3. ^a etapa <i>Cálculos del enlace completo</i> Ganancia de transmisión entre la entrada del receptor del satélite y la del receptor de la estación terrena 159 dB - 179 dB	γ	-179 -20	dBW/Hz dB

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	Símbolo	Enlace A o A'	Unidad
Temperatura de ruido de la estación terrena (para G/T = 40,7 dB)		60	K
Ruido térmico del trayecto descendente (véase el cálculo del ruido)		5 000	pW0p
Ruido interno total del enlace (véase el cálculo del ruido)		8 000	pW0p
Temperatura de ruido equivalente del enlace	T	96	K
$\frac{8\,000}{5\,000} \times 60$			

C. Cálculo de la interferencia

4. ^a etapa <i>Interferencia en el trayecto ascendente</i>			
Densidad de potencia de la estación terrena interferente (como en la 1. ^a etapa)	p'_e	-37	dBW/Hz
Ganancia de la antena de la estación terrena interferente en la dirección del satélite interferido (6° fuera del haz)	$g'_1(\theta)$	12,5	dB
Atenuación de propagación en el espacio libre para 38 500 km en 6 175 MHz (véase la 1. ^a etapa)	l_u	200	dB
Ganancia de la antena del satélite en la dirección de la estación terrena interferente	$g_2(\delta_{e'})$	15,5	dB
Constante de Boltzmann: $1,38 \times 10^{-23} \text{ J/K}$	k	-228,6	dBW/K
Aumento de la temperatura de ruido del receptor del satélite $p'_e + g'_1(\theta) - l_u + g_2(\delta_{e'}) - k$ (en unidades logarítmicas)		19,6	
Aumento de la temperatura de ruido del receptor del satélite	ΔT_s	91	K
5. ^a etapa <i>Interferencia en el trayecto descendente</i>			
Densidad de potencia del transmisor del satélite interferente (como en la 2. ^a etapa)	p'_s	-57	dBW/Hz

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	Símbolo	Enlace A o A'	Unidad
Ganancia de la antena del satélite interferente en la dirección de la estación terrena interferida	$g_3(\eta_e)$	15,5	dB
Atenuación de propagación en el espacio libre para 38 500 km en 3 950 MHz (véase la 2. ^a etapa)	l_d	196	dB
Ganancia de la antena de la estación terrena en la dirección del satélite interferente (6° fuera del haz)	$g_4(0)$	12,5	dB
Constante de Boltzmann: $1,38 \times 10^{-23} \text{ J/K}$	k	-228,6	dBW/K
Aumento de la temperatura de ruido del receptor de la estación terrena $p_s' + g_3(\eta_e) - l_d + g_4(0) - k$ (en unidades logarítmicas)		3,6	
Aumento de la temperatura de ruido del receptor de la estación terrena	ΔT_e	2,29	K
6.^a etapa Interferencia total del enlace			
Aumento de la temperatura de ruido del receptor del satélite (deducido de la 4. ^a etapa)	ΔT_s	91	K
Valor numérico de γ (deducido de la 3. ^a etapa)	γ	0,01	número
Aumento de la temperatura de ruido del receptor de la estación terrena (deducido de la 5. ^a etapa)	ΔT_e	2,29	K
Aumento de la temperatura de ruido equivalente del enlace	ΔT	3,2	K
$\gamma\Delta T_s + \Delta T_e = 0,01 \times 91 + 2,29$			
Porcentaje del aumento $\frac{3,2}{96} \times 100\%$	$(\Delta T/T) \times 100\%$	3,33	%
Aumento del ruido del enlace debido a la interferencia $(3,33/100) \times 8\,000 \text{ pW0p}$		266	pW0p

D. Conclusiones

El aumento de la temperatura de ruido equivalente del enlace por satélite para el ejemplo expuesto es del 3,33 %. Como tal valor rebasa el valor predeterminado de 2%, la magnitud del ruido introducido no puede considerarse como admisible, siendo necesaria, por consiguiente, la

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coordinación entre las dos redes. Conviene, por consiguiente, efectuar cálculos más precisos, utilizando, especialmente, los diagramas reales de las antenas de las estaciones terrenas, la separación angular topocéntrica de los satélites y los valores exactos de las atenuaciones básicas de transmisión. En caso necesario, se tendrán en cuenta factores adicionales como la discriminación de polarización, entrelazado de frecuencias y distribución espectral del ruido interferente, todos los cuales reducen la interferencia calculada.

En este ejemplo, puede demostrarse que una separación mayor entre los satélites, de 7,4°, hubiera originado solamente un aumento del 2% en la temperatura de ruido equivalente del enlace y, por consiguiente, no sería necesaria la coordinación en este caso.

PROTOCOLO FINAL

En el acto de firmar las Actas finales de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) los delegados que suscriben toman nota de las declaraciones siguientes formuladas por ciertas delegaciones signatarias:

GENERAL

La Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) ha decidido que se incluya en el Protocolo final como parte de las Actas finales de la Conferencia la siguiente declaración de la India:

« En la India, se utiliza también la banda 845-935 MHz en la experimentación de radiodifusión de televisión por satélite con modulación de frecuencia empleando la dispersión de energía, previo acuerdo con las administraciones que tienen servicios que funcionan de conformidad con el Cuadro de distribución de bandas de frecuencias y que pueden resultar afectados.

Para la protección de los servicios terrenales de televisión, se aplicará el límite de la densidad de flujo de potencia fijado en el número 332A del Reglamento de Radiocomunicaciones, y para la protección de los servicios fijo y móvil que funcionan en esta banda, los límites establecidos en los números 470NI y 470NK. »

REPÚBLICA FEDERAL DEL CAMERÚN

La Delegación de la República Federal del Camerún en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), dado que, por una parte, no puede en la situación actual de su desarrollo, formular observaciones pertinentes a las proposiciones de atribución de bandas de frecuencias comprendidas entre 40 y 275 GHz y que, por otra parte, desea vivamente fomentar el progreso de la tecnología,

Firma las Actas finales de la presente Conferencia, reservando, sin embargo, para su Gobierno el derecho de adoptar cualquier medida que estime oportuna para salvaguardar sus intereses, de ser necesario, y para

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proteger su red de telecomunicaciones caso de que algún Miembro o Miembro asociado no respete las disposiciones del Reglamento de Radiocomunicaciones tal como se ha revisado y completado.

REPÚBLICA CENTROAFRICANA

La Delegación de la República Centroafricana en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) firma las Actas finales de la presente Conferencia, reservando para el Gobierno de la República Centroafricana el derecho de adoptar las medidas que considere oportunas para proteger sus intereses, en el caso de que algún Miembro o Miembro asociado deje de cumplir las disposiciones de la presente Conferencia o si los actos resultantes de las reservas formuladas por otros países causaran perjuicio a sus servicios de telecomunicaciones.

CEILÁN

La Delegación de Ceilán reserva para su Gobierno el derecho de adoptar cuantas medidas considere oportunas para proteger sus intereses, caso de que algún Miembro deje de cumplir las decisiones de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), o de que las reservas de otros países perjudiquen a sus servicios de telecomunicaciones.

CHILE

La Delegación de Chile declara que reserva el derecho de la República de Chile de adoptar en colaboración con la Unión Internacional de Telecomunicaciones, las medidas que sean procedentes para salvaguardar la soberanía y los intereses de la República de Chile en el caso de que algún Miembro o Miembro asociado no cumpla en parte o en su totalidad las disposiciones del Reglamento de Radiocomunicaciones, revisión de Ginebra (1971), el Convenio de Montreux (1965) o si las reservas hechas por otros países afectan directa o indirectamente los intereses y/o sistemas de telecomunicaciones de la República de Chile.

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REPÚBLICA DEMOCRÁTICA DEL CONGO

La Delegación de la República Democrática del Congo en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) reserva para su Gobierno el derecho de adoptar, en colaboración con la Unión Internacional de Telecomunicaciones, todas las medidas que juzgue necesarias para salvaguardar sus intereses si algún Miembro o Miembro asociado dejara de respetar las disposiciones del Reglamento de Radiocomunicaciones revisado o si las reservas formuladas por otros países comprometieran el funcionamiento de los servicios de telecomunicaciones de la República Democrática del Congo.

REPÚBLICA DE LA COSTA DE MARFIL

La Delegación de la Costa de Marfil declara que reserva para su Gobierno en virtud de los poderes que le han sido conferidos, el derecho de adoptar en colaboración con la Unión Internacional de Telecomunicaciones, cuantas medidas estime oportunas para salvaguardar sus intereses si algún Miembro o Miembro asociado dejara de cumplir en una forma u otra lo establecido en la revisión del Reglamento de Radiocomunicaciones (Ginebra, 1959) elaborada por la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) o si las reservas formuladas por otros países comprometieran el buen funcionamiento de sus servicios de telecomunicaciones.

REPÚBLICA DE INDONESIA

La Delegación de Indonesia tiene la firme creencia de que sólo mediante una estrecha cooperación internacional, sobre la base más amplia posible, podrá realizarse el enorme potencial de las telecomunicaciones por satélite.

Como Indonesia es un archipiélago de gran superficie terrestre y marítima, tiene puestas grandes esperanzas en la expansión de las telecomunicaciones por satélite, que le ayudará a resolver los ingentes problemas que le plantean las telecomunicaciones.

La gran importancia que revisten las telecomunicaciones por satélite para contribuir a difundir la educación, la información y otros servicios públicos entre la población en lugares muy alejados de las capitales está siendo reconocida plenamente por los países en desarrollo.

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Ahora bien, es muy necesario que estos países participen por completo en las discusiones y decisiones importantes relativas al futuro de los sistemas de satélites. Es preciso que estén continuamente informados acerca de su ulterior progreso y desarrollo.

Por otra parte, los países en desarrollo no deben tener la sensación de que dependen de la buena voluntad de un grupo reducido para poder disfrutar de los progresos de esta tecnología. La utilización de los sistemas de satélites no debiera limitarse a unos cuantos países ricos; por consiguiente, habrá que idear medidas de asistencia para que incluso los más pobres de los países en desarrollo aprovechen el progreso de los sistemas de telecomunicaciones por satélite.

Para que los adelantos de esta tecnología sean beneficiosos para la humanidad en general y representen una contribución importante al éxito del Segundo Decenio para el Desarrollo, es necesario prestar más atención a los intereses de los países en desarrollo.

Indonesia agradece a la U.I.T. y al P.N.U.D. la asistencia que le han prestado hasta ahora para mejorar su sistema de telecomunicaciones. No obstante, existen proyectos que todavía deben terminarse como son: la red regional de telecomunicaciones del Sudeste de Asia, proyectos de enseñanza, proyectos de telecomunicación en el Irán Occidental, dentro del marco de los fondos para el desarrollo del Irán Occidental, y otros para los cuales es necesario seguir recibiendo asistencia. Abrigamos, además, la sincera esperanza de que se conceda a Indonesia la asistencia técnica necesaria para que pueda desarrollar su propio sistema nacional de telecomunicaciones por satélite.

IRÁN

El Gobierno imperial del Irán se reserva el derecho de tomar cuantas medidas estima necesarias para proteger y utilizar sus servicios que funcionen actualmente o que entren en funcionamiento en lo futuro, en el caso de éstos se vean afectados por los servicios de otros países.

También se reserva el derecho de no aceptar los procedimientos de registro en la I.F.R.B. para las frecuencias utilizadas actualmente o en lo futuro para sus equipos y en su territorio.

La Delegación del Irán se reserva, pues, el derecho de que su país pueda tomar las medidas necesarias para responder a sus necesidades en materia de telecomunicaciones y tomar todas las medidas necesarias para proteger

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sus servicios actuales y futuros sin prever restricción alguna para los equipos utilizados o destinados a ser utilizados en lo futuro en todas las bandas de frecuencias.

JAMAICA

La Delegación de Jamaica reserva para su Gobierno el derecho de adoptar las medidas que considere necesarias para proteger sus intereses en el caso de que otros Miembros dejen de alguna manera de cumplir las disposiciones de la Conferencia Administrativa Mundial de Radiocomunicaciones Espaciales (Ginebra, 1971) y que, al hacerlo comprometan los servicios de telecomunicaciones de Jamaica.

REPÚBLICA ISLÁMICA DE MAURITANIA

La Delegación de la República Islámica de Mauritania en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), al firmar las Actas finales de la presente Conferencia, reserva para su Gobierno el derecho de adoptar, en colaboración con la Unión Internacional de Telecomunicaciones (U.I.T.), todas las medidas que juzgue necesarias para:

- salvaguardar sus intereses, en caso necesario, y
- proteger, en todas las bandas de frecuencias consideradas, su red de telecomunicaciones actual, en proyecto o futura en el caso de que algún Miembro o Miembro asociado no respetara, en una forma u otra, las disposiciones revisadas y completadas del Reglamento de Radiocomunicaciones o en el de que las reservas formuladas por otros países comprometieran el funcionamiento normal.

REPÚBLICA DEL NÍGER

La Delegación de la República del Níger reserva para su Gobierno el derecho de adoptar las medidas que pueda considerar oportunas y adecuadas para proteger sus intereses, en el caso de que otro país deje de cumplir las disposiciones que figuran en las Actas finales de esta Conferencia, o de que las reservas formuladas por otros países causaran perjuicio a los servicios de telecomunicaciones del Níger.

PROTOCOLO FINAL

PAKISTÁN

Al firmar las Actas finales de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), la Delegación de Pakistán reserva para su Gobierno el derecho de adherir a todas o a parte de las disposiciones del Reglamento de Radiocomunicaciones revisado (Ginebra, 1959).

La Delegación de Pakistán declara asimismo que reserva para su Gobierno el derecho de aceptar las consecuencias que pueda tener la no adhesión de cualquier otro país Miembro de la Unión a las disposiciones de dicho Reglamento de Radiocomunicaciones revisado.

REPÚBLICA RUANDESA

La Delegación de la República Ruandesa firma las Actas Finales de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), pero reserva para su Gobierno el derecho de adoptar todas las medidas que juzgue necesarias para salvaguardar sus intereses si algún Miembro o Miembro asociado no observara en una u otra forma las estipulaciones de la revisión del Reglamento de Radiocomunicaciones (Ginebra, 1959) efectuada por la presente Conferencia o si las reservas formuladas por otros países comprometieran el buen funcionamiento de los servicios de telecomunicaciones de la República Ruandesa.

REPÚBLICA DEL SENEGAL

La Delegación de la República del Senegal en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971) firma las Actas finales de la presente Conferencia, pero reserva para su Gobierno el derecho de tomar todas las medidas que juzgue útiles para salvaguardar sus intereses en la utilización de las bandas de frecuencias superiores a 40 GHz y todas las medidas necesarias en el caso de que algunos Miembros dejen de cumplir, en una u otra forma, las decisiones de la presente Conferencia o en el caso de que actos derivados de las reservas formuladas por otros Miembros comprometan el buen funcionamiento de los servicios de telecomunicaciones de la República del Senegal.

PROTOCOLO FINAL**REPÚBLICA DE SINGAPUR**

Al firmar las Actas finales de la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales (Ginebra, 1971), la Delegación de la República de Singapur reserva para su Gobierno el derecho de adoptar cuantas medidas considere necesarias para proteger sus intereses en el caso de que otro país no cumpla lo dispuesto en las Actas finales de esta Conferencia o formule reservas que comprometan el buen funcionamiento de los servicios de telecomunicaciones de la República de Singapur.

REPÚBLICA DE VENEZUELA

La Delegación de la República de Venezuela en la Conferencia Administrativa Mundial de Telecomunicaciones Espaciales, celebrada en Ginebra en el año de 1971, hace saber que firma las Actas finales de dicha Conferencia con la constancia expresa que lo hace reservando para su Gobierno el derecho de adoptar o no las conclusiones de esta Conferencia; y a la vez de tomar cualquier medida que estime oportuna para salvaguardar sus intereses, y para proteger sus redes de telecomunicaciones en caso de que algún Miembro o Miembro asociado no respete las disposiciones del Reglamento de Radiocomunicaciones tal como ha sido revisado y completado en la fecha antes mencionada.

(Siguen las firmas)

(Las firmas que siguen después del Protocolo final son las mismas que las que figuran en las páginas 5 - 36 del presente volumen.)

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