United Nations A/AC.105/PV.395



General Assembly

Official Records

COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

395th Meeting
Tuesday, 7 June 199

Tuesday, 7 June 1994, 3 p.m. Vienna

Chairman: Mr. Hohenfellner (Austria)

The meeting was called to order at 3 p.m.

Organization of work

The Chairman: Before calling on the first speaker, I would remind representatives that according to the timetable we adopted vesterday, we will continue and conclude our general debate tomorrow. We will then take up the next item on our agenda: item 4, "Ways and means of maintaining outer space for peaceful purposes". therefore urge all delegations wishing to speak on this item to inscribe their names on the list of speakers as soon as possible. While keeping this item open for representatives wishing to speak on this matter, if time permits, it is my intention to also move into consideration of agenda item 5, "Report of the Scientific and Technical Subcommittee on the work of its thirty-first session", and agenda item 7, "Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space". Following past practice, these items will be considered jointly in order to save time.

General exchange of views (continued)

Mr. Halff (Netherlands): At the outset, I should like to express my satisfaction at seeing you, Sir, in the Chair once again. I am sure that this will guarantee an efficient and useful session.

It was once said that the work of the Committee on the Peaceful Uses of Outer Space had a unique character: unlike other United Nations bodies, the Committee did not restrict itself to current affairs, nor did it merely codify actual practices; it went beyond current events in the field of space exploration and exploitation. The Committee's treaty-drafting practice, for instance, was anticipatory. It looked forward to possible developments in the field of outer space and by setting up a legal framework tried to facilitate them.

States and groups of States nowadays primarily seem to be seeking to protect national or group interests. By doing so, they not only slow down the Committee's regulatory activities but also restrict the scope of those activities. The loudly hailed nuclear-power-source (NPS) Principles are a good example of this. Twelve years of discussion resulted only in a number of principles principles that, moreover, were strictly limited in application to the use of nuclear power sources devoted to the generation of electric power, not to possible future nuclear propulsion.

In saying this, I am not implying that we should start changing those Principles now. They are a delicately balanced representation of what States and groups of States have been willing to agree upon. What is important now is to make the Principles do their job in practice and to show their value, limited as it may be. But equally important for us is to keep a close eye on further developments in the field of nuclear power sources so that the relevant principles can be adopted in time if developments require it - if possible, in a forward-looking away.

Another example of the changed character of the way in which the Committee deals with items on its agenda is the question of the definition and delimitation of outer space and other space activities. As the representative of Spain pointed out this morning, that item appeared on the agenda

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of the Committee - at that time still an Ad Hoc Committee - as early as 1959. In 1984 it was made a priority subject, and a special Working Group was established. Various solutions have been put forward, but none has proved altogether satisfactory from a technical, scientific, legal or political point of view. After 35 years of discussion, we should have the courage to choose either a functional approach or a spatial approach to the question of the definition and delimitation of outer space - to cut the Gordian knot or decide to let things rest for the time being.

In spite of those two examples of how the character of work in the Committee has changed, I am not yet ready to agree with what was said by the co-Director of the International Institute of Air and Space Law of Leiden University, Mrs. Zwaan, in her book, "Space Law, Views of the future", that the Committee has turned into a sort of international debating society in which States engage in eternal discussions on minor issues. I am not ready to do that because the issue of space debris, placed on the agenda of the Scientific and Technical Subcommittee last year, is not a minor issue. It is an important and highly urgent matter that needs prompt attention and a speedy solution.

As members of this Committee will undoubtedly recall, the Netherlands has on previous occasions urged the Committee to deal with this problem as a matter of utmost priority. My delegation is firmly convinced that the importance of the issue of space debris and its consequences for the Earth and space environments alike justifies not only listing space debris as a separate item on the Committee's agenda but also setting a timeframe for the Scientific and Technical Subcommittee to round off its in-depth study of the problem and setting a target date for a thorough report by the Subcommittee. If the Committee were prepared to tackle this problem in the same energetic manner and with the same foresight as it used to do with problems in the past, we might see the beginning of a solution to the space debris problem before the beginning of the next millennium.

The sheer importance of the problem of space debris is underlined by one of the findings of the Office of Technology Assessment of the United States Congress and is reflected in the background paper "Orbiting debris, a space environmental problem": if space users fail to act soon to reduce their contribution to debris in space, orbital debris could severely restrict the use of some orbits within a decade or two.

If the benefits of space activity are to be reaped in future, coordinated action on the part of the international community is called for. The debris problem can be resolved only by a coordinated effort on the part of the global scientific, technical and legislative community.

Mr. Fulda (Germany): Mr. Chairman, the German delegation is looking forward to another session of the Committee on the Peaceful Uses of Outer Space under your distinguished and excellent leadership. We welcome the fact that the Committee is now holding its sessions in Vienna, a city so well-known for its traditional hospitality. Let me also take this opportunity to thank the staff of the Office for Outer Space Affairs and its head, Mr. Jasentuliyana, for the work done through last year.

It is a good tradition to use the general exchange of views to recall the most significant events of last year's space activities. Among the German space activities, the accomplishments in the area of earth observation have been particularly noteworthy, with the operation, during the D2 mission on board space shuttle Columbia, in May 1993, of the optoelectronic multispectral scanner camera MOMS 02, and, during the flight of space shuttle Endeavor, in April 1994, of the SIR-C/X-SAR radar system, developed jointly by Germany, Italy and the United States of America. Both instruments provide quantum leaps in their respective earth-observation technologies. My delegation will be pleased to provide detailed information on the results at the next session of the Scientific and Technical Subcommittee.

Looking to the future, it is a pleasure for me to announce that the German Space Agency DARA, which has taken over the annual 1994 chairmanship of the Committee for Earth Observation Satellites (CEOS), is currently preparing the plenary meeting of CEOS, which will take place in Berlin from 26 to 28 September. During this meeting a special event will be hosted to celebrate the tenth anniversary of CEOS in order to stress the importance of this remarkably successful and efficient international cooperation.

The last sessions of the Scientific and Technical Subcommittee and the Legal Subcommittee showed that the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, which were debated so long in this Committee as well as in both Subcommittees, have stood the test of practical application, as no detailed discussion of revision was necessary.

My delegation welcomes the fact that the Scientific and Technical Subcommittee has begun to address space debris as a separate agenda item. The question of space debris is a problem of ever-growing importance, endangering the future not only of manned space-faring but - in the long run - of space-faring altogether. I should like to elaborate on this issue under agenda item 5.

The German delegation takes it that one of the Secretary- General's motives for having the Office for Outer Space Affairs moved to Vienna was to make the work of the United Nations institutions even more efficient. We believe that more flexibility should be introduced to make full use of the available conference facilities. The sessions of this Committee and its Subcommittees, particularly the Legal Subcommittee, could be shortened. This year, in fact, the Legal Subcommittee ended its deliberations after two weeks - counting working days only - of discussion. The main Committee, therefore, should thoroughly discuss its working methods and, in the light of our conclusions, leave it to the various bodies to implement this principle of flexibility.

The German delegation wishes to express its hope that this session of the Committee on the Peaceful Uses of Outer Space will again prove to be efficient and fruitful for the benefit of all mankind.

Mr. Wiryosumarto (Indonesia): I would like at the outset, on behalf of my delegation, to express both our pleasure and satisfaction at seeing you, Sir, preside over this thirty-seventh session of the Committee on the Peaceful Uses of Outer Space. I have every confidence that, under your wise and able guidance, this year's session will be run efficiently and crowned with success, as were the previous ones. My delegation reiterates that it will continue to cooperate with you and other members of the Bureau, as well as the Office for Outer Space Affairs, in order to bring this session to a successful conclusion.

Since this session is being convened for the first time in its new home in Vienna, allow me on behalf of my delegation to join previous speakers in expressing our deep appreciation and gratitude to the Government of Austria for the facilities extended to the Committee.

My delegation sincerely appreciates the contributions that have been made by the Chairmen of the Scientific and Technical Subcommittee and of the Legal Subcommittee. Their dedicated efforts will undoubtedly result in greater achievements at this session. My delegation would also like to express its appreciation of the comprehensive statements given by you, Sir, and by the Director of the Office for Outer Space Affairs yesterday.

In the rapidly expanding field of space science and technology, international cooperation is undeniably an imperative necessity in assuring the availability of information and knowledge, including greater access to the benefits of outer space activities for developing countries. It can be said that today no nation can ignore the great potential of new discoveries and the expansion of knowledge in this realm for furthering their national development, especially in the spheres of social and economic advances. The international community has indeed expressed its concern over the need to promote international cooperation in the peaceful uses of outer space, taking into consideration the needs of developing countries.

At this juncture, my delegation would like to reiterate Indonesia's basic position that outer space should be used entirely for peaceful purposes and for the improvement of the welfare of mankind. In this connection, my delegation would like to reassert that all space activities should be conducted in such a way as to prevent any harm to the national interests of other nations. In this light, we fully share the hope expressed in your statement yesterday that this Committee can make substantive progress in promoting international cooperation in space activities so that outer space is explored and exploited for truly peaceful purposes and for the benefit and in the interests of all humanity. We urge the Committee, therefore, to pay attention to the promotion of regional cooperation in the application of outer space technology based on the common interest of Member States.

It is a commonly held view that the peaceful uses of outer space are inseparable from the non-peaceful uses, and that therefore promoting and strengthening the peaceful uses requires effective measures to prevent an extension of the arms race into outer space. In this regard, my delegation is of the view that every nation involved in space activities should have an exceptionally high degree of awareness of the evolution of our environment. It is of paramount importance that in every space programme and activity attention be given to protecting and sustaining the space environment, particularly those elements which affect the Earth's environment.

Indonesia firmly believes that this Committee should continue its discussion of the problem of the geostationary orbit (GSO), not only because the matter touches on technical issues but also because it is closely related to legal and political concerns. To date, as we are all aware, discussions of the definition and delimitation of outer space and the geostationary orbit have not resulted in any significant progress. There is still a difference of views on the need to delimit airspace and outer space, despite the

very real features of State sovereignty, territorial integrity and security that are inherent to the legal regime of airspace.

However, as you mentioned in your statement, Mr. Chairman, the exchange of views that took place on the basis of the working paper entitled "Geostationary satellite orbit" (A/AC.105/C.2/L.192), which was introduced at the 1993 session of the Working Group, was quite productive and provides a good basis for the Group's future work. The delimitation of airspace and outer space is, furthermore, clearly necessary for determining the limitations of international space law. There may not yet be agreed upon scientific criteria for establishing the specific altitude at which airspace ends; but if no agreement is sought, then I am afraid that unilateral decisions may be taken. This would surely create unnecessary confusion and would undermine our era of enhanced international cooperation.

I would like to reiterate our concern with regard to the question of the character and utilization of the GSO. We are concerned about the use of GSO space - a limited natural resource -and about near-earth orbital space, which is becoming increasingly overcrowded with satellite systems. Many Member States have recognized the need for rationality and equity in the guiding principles on the utilization of the GSO. It is our firm belief that the utilization of the GSO is of fundamental importance to the advancement of the national development goals of developing countries. We would like to express our confidence that the Committee on the Peaceful Uses of Outer Space will continue discussing the ways and means of addressing these concerns. Sustained endeavours in formulating a viable legal framework would strengthen international cooperation and close the gap between space law and progressive technological development.

In the field of remote sensing, which is particularly important to developing countries, my delegation shares the concern over the increasing commercialization of data acquired through remote sensing activities, which should be made cost-effective so as to enable developing countries to benefit from this advanced technology, and should be disseminated to them so that they may use such data to address their social and economic needs. We also believe that it is important to maintain international efforts to ensure continuity, compatibility and complementarity of remote sensing systems. Of equal importance is the need to promote cooperation through regular meetings between satellite and ground station operators and users.

We would like to reaffirm our support for the convening of the third UNISPACE conference, in accordance with General Assembly resolution 48/39, in one of the developing countries in the near future. delegation is of the view that this conference would consider how international cooperation in the field of remote sensing, weather and climate observations and environmental monitoring could be strengthened to promote the use of such systems by all States and to ensure adequate financial resources to maintain and improve those systems. Such a conference would be a valuable forum to address the concerns of many States regarding the need to ensure continuity in space systems, particularly those related to meteorology and remote sensing. In this respect, my delegation would like to express its appreciation to the Secretariat for its commendable work in preparing document A/AC.105/575 on matters related to the possible holding of a third United Nations conference on the exploration and peaceful uses of outer space.

In accordance with resolution 49/5 of the forty-ninth Ministerial Meeting of the Economic and Social Commission for Asia and the Pacific (ESCAP), we plan to participate actively in and contribute to the next ESCAP Ministerial Meeting, to be convened in Beijing this September. We would like to pursue a commitment between ESCAP member countries to establish regional cooperation in the application of space science and technology for sustainable national development.

In the context of the increasing cooperation the international community continues to develop, the spin-off benefits of space technology are quickly becoming important factors for enhancing the quality of human society. Significant benefits have been achieved in the fields of medicine, industrial safety, manufacturing and construction, as well as in the areas of environmental protection and agriculture - and even in art preservation. It is a well-established fact that spin-off benefits are important to the world at large. For this reason Indonesia appeals for continued international cooperation in developing these benefits in order to assure that all countries - particularly those with the greatest social and economic needs - will have access to them.

It is our fervent hope that the Committee on the Peaceful Uses of Outer Space will play an increasingly strong role in forging links between developing and developed countries, as well as among the developing countries themselves. We are also convinced that this cooperation will make it possible to have access to space science and technology.

Mr. Jahedi (Islamic Republic of Iran): May I take this opportunity, to join the other representatives in congratulating you, Sir, on your assumption of the chairmanship of the Committee on the Peaceful Uses of Outer Space.

This is the first session of the Committee to be held after its relocation to Vienna. My delegation is confident that, under your guidance and with your diplomatic acumen, it will be able to make considerable progress and achieve the same successful results. Furthermore, I would also like to extend my deepest appreciation and gratitude to Mr. Jasentuliyana, Mr. Abiodun and the staff of the Office for Outer Space Affairs for their impeccable performance during the past year.

The Islamic Republic of Iran strongly advocates the peaceful uses of outer space and - consistent with the recommendations of UNISPACE 82, concerning the development of indigenous capabilities, and with General Assembly resolution 45/72 of 11 December 1990 - Iran has conveyed to the United Nations Office of Outer Space Affairs its readiness to host a centre for space science and technology education. In order to fulfil the requirements for establishing such a centre, the President of the Islamic Republic of Iran has approved the allocation of \$1.5 million per year for the next four years.

Additionally, an experienced teaching staff from the Iranian Remote Sensing Centre and three major Iranian universities has been selected to meet the requirements of the centre. Furthermore, a number of governmental institutions, such as the National Cartographic Centre, the Meteorological Organization and the Geological Survey of Iran, will provide their professional expertise and facilities to enhance the academic standard of the planned centre. Several countries in the region - Azerbaijan, Jordan, Kazakhstan and Pakistan - have declared their willingness to cooperate with us in conducting training courses and in undertaking joint projects. There was a United Nations evaluation mission last summer in Tehran to assess the indigenous capability and infrastructure. We are waiting for the official announcement by the Office for Outer Space Affairs of its final decision.

The tenth intergovernmental consultative committee meeting of the directors of national remote sensing centres in the region of the Economic and Social Commission for Asia and the Pacific (ESCAP) was held in Tehran, from 22 to 26 May 1994. Thirty-six people from 16 countries members of ESCAP and a number of international organizations and institutions took part. The meeting took

note of the decision being made to establish one of the regional centres in Iran for servicing the ESCAP countries and requested the ESCAP secretariat to inform the Office for Outer Space Affairs about its concern with progress, and also requested the Office to take an early and appropriate decision on the matter of the regional space science and technology education centre in Iran.

Pursuant to the resolution of the Scientific and Technical Subcommittee at its thirty-first session, in 1994, my delegation would like to express its support for convening a third United Nations Conference on the Exploration and Peaceful Uses of Outer Space conference in a developing country. It is hoped that our discussions on this issue will lead to a positive and concrete proposal to be reported to the General Assembly at its forty-ninth session.

I would like briefly to mention some of the significant space activities of the Islamic Republic of Iran. The fourteenth Asian Conference on Remote Sensing was held in Tehran from 12 to 17 October 1993. The Conference was attended by 474 participants from Asian countries. Moreover, three national seminars were conducted in various provinces in Iran, with the purpose of familiarizing and sensitizing the potential user community.

To strengthen the national mechanism for space technology applications, a newly established board of Ministers is coordinating and harmonizing Iran's national space activity. In this regard, the Government is in the process of establishing a national space technology and application organization, to be called the Iran Space Administration.

Furthermore, to play an active role in the regional Space Applications Programme for Development, Iran will participate seriously in the ministerial-level conference for Asia and the Pacific to be held in Beijing in September 1994.

Iran is considering covering one-half of the annual cost of operating the secretariat of the Asia-Pacific Satellite Communication Conference, proposed at the United Nations Workshop on Space Communication for Development, held in Seoul, Republic of Korea, in November 1992.

The Islamic Republic of Iran has recently provided adequate policy support and necessary infrastructure for the development of institutional facilities with the involvement of private-sector associations, *inter alia* in the field of relevant space technology industries. We are willing to enable the United Nations to play an essential role in

transferring the appropriate experiences and financial support for catalysing the process of implementing spacetechnology privatization, which has recently started in Iran.

We have undertaken the task of reactivating and upgrading our satellite ground receiving station. It is planned to increase the capability of the receiving station to include direct reception of SPOT-3, Landsat, IRS and possibly other Earth-resource sensing satellites.

The major ongoing applications, pilot projects and training programmes being conducted at our centre include six short-term remote sensing courses for scientists from several governmental organizations; preparation of land-use maps of the entire country on a scale of 1:100,000; collection and processing of remotely sensed data, with the participation of the National Cartographic Centre, in order to prepare a national atlas; a study of forested areas and renewable resources in northern Iran; a survey of salt deposits in central Iran; and a preliminary study, in conjunction with our Ministry of Mines and Metals, of bauxite and alumina deposits. In addition to the provincial remote sensing centre established over a year ago, two new provincial centres have also been established.

In conclusion, my delegation once more underlines the need for genuinely peaceful uses of outer space, and for international cooperation in this field.

The Chairman: I call now on the representative of the International Law Association.

Mr. Böckstiegel: It is a special privilege and pleasure, Sir, to have the opportunity to make this statement on behalf of the International Law Association (ILA) under your most efficient chairmanship. Let me also express our appreciation for the excellent work and cooperation of Mr. Jasentuliyana and the Office for Outer Space Affairs.

For the benefit particularly of representatives and observers who have not attended the sessions of this Committee in recent years, permit me to recall very briefly some basic information regarding the ILA. The ILA was founded as long ago as 1873 and has ever since been a non-governmental international organization of academics and practitioners in the field of international law. It has national branches in all parts of the world, with its headquarters in London. Its work is presented and formalized at biannual conferences held in various places worldwide. The last conference was held in Cairo, and the next will be in Buenos Aires in August this year. Between these conferences, work is mainly carried out by

Committees established for the various fields of public and private international law.

One of these Committees is the ILA Space Law Committee, which I have the honour to chair. Its Rapporteur is Professor Williams of Argentina, and its members are distinguished specialists in the field of space law, many of them well known to members of this Committee and its Legal Subcommittee.

For further information on the ILA and its work regarding space law, reference may be made to the recent United Nations publication "Space Activities of the United Nations and International Organizations" (A/AC.105/521) and to the ILA conference reports, which are published after every ILA conference in book form.

As the work of the ILA Space Law Committee in recent years has focused on the protection of the space and Earth environment in relation to space activities, and particularly on the issue of space debris, let me first of all note with pleasure and satisfaction the progress that has been made in COPUOS in dealing with these subjects.

You yourself, Mr. Chairman, have taken a leadership role in this context when, in your statement at the beginning of last year's session of the Committee, you highlighted these issues and concluded

"that the time has come for this body to fulfill its responsibility to the international community by beginning formal discussions on what steps should be taken to address this growing problem" (A/AC.105/PV.379, p. 21).

The ILA could not agree more with that conclusion.

Thereafter, the Secretariat issued a further report on "National Research on Space Debris" (A/AC.105/565). But a particular milestone is marked by the fact that, as members are aware, at its session in February and March of this year, the Scientific and Technical Subcommittee for the first time had space debris on its agenda and discussed this topic at considerable length. From the report on that session (A/AC.105/571), several important agreed solutions deserve attention: the satisfaction of having the subject of space debris as a separate agenda item; the fact that Member States should pay more attention to the possible collision of orbiting space objects with space debris; the importance of having a firm scientific and technical basis for future action on the complex attributes of space debris; the fact that the next meeting of the Technical

Subcommittee should develop a continuing, deliberate and specific multi-year plan for its work on that agenda item; and that relevant international organizations should be invited to present relevant research to that Subcommittee.

In the context of that last conclusion, the International Law Association will certainly try to assist in any way it can with the work on this topic. But we also note that, at the last session of the Technical Subcommittee, some delegations were of the view that the Legal Subcommittee should be informed of the discussions on that agenda item, while others felt that that would not be appropriate. The ILA certainly feels that, at the very least, information on that agenda item should be exchanged between the two Subcommittees of the Committee on the Peaceful Uses of Outer Space, because any discussion in the Legal Subcommittee obviously needs to be based on the scientific and technical information available in the Technical Subcommittee. And vice versa: if, at least in the long run, progress should be achieved in this area, the option of an international instrument has to be taken into account at an early stage in the Technical Subcommittee, and the specific expertise of the Legal Subcommittee obviously can contribute important considerations to this.

Let me now briefly present a progress report on the work of the International Law Association in the area of space debris. Starting with a decision at the ILA Conference in Seoul in 1986, the ILA Space Law Committee has been doing research, exchanging information and views, and finally preparing drafts regarding the protection of the environment from damage caused by space activities, particularly space debris. In doing so, the legal experts in the ILA Space Law Committee have had the benefit of support from three scientific consultants: Professor Lubos Perek of the Czech Republic, who is present in this room; Professor Dieter Rex of Germany; and Professor Ricciardi of Argentina.

Specific events included the following: a regional ILA seminar in Buenos Aires in December 1987; an international colloquium at the Institute of Air and Space Law in Cologne in May 1988, with emphasis on interdisciplinary sides of the question and which resulted in a book; discussions and a further mandate at the ILA Conference in Warsaw in 1988; a meeting in Asunción del Paraguay in October 1988; a report to the 1990 ILA Conference in Australia that resulted in a discussion and mandate to the Space Law Committee to start work on the elaboration of relevant principles; and, after the preparation of three drafts, a report to the 1992 Cairo Conference of the ILA that

resulted in a mandate to prepare a final text of a draft international instrument.

After this long and extensive preparation, three drafts have been elaborated, circulated and discussed at various stages by the ILA Space Law Committee over the last two years, and the final text was just completed last week. It bears the title "International Instrument on the Protection of the Environment from Damage Caused by Space Debris" and will be submitted, with an extensive commentary by the Rapporteur, to the 66th Conference of the International Law Association, in Buenos Aires in August of this year. Major provisions in this final text deal with definitions (Article 1), scope of application (Article 2), the general obligation to cooperate (Article 3), obligations to prevent, inform, consult, and negotiate in good faith (Article compatibility with other agreements (Article responsibility and liability (Articles 6-8); dispute settlement (Article 9), and then the usual provisions on formalities of an international instrument.

After the Buenos Aires Conference, the ILA will make the text available to the Committee and to its two Subcommittees. Those representatives and observers who are interested in seeing the final text and report as submitted to the Buenos Aires Conference could perhaps let me have their address, and we will be happy to send them a copy once it has been printed.

The Chairman: The next speaker is the representative of the Association of Space Explorers, Mr. Prunariu.

Mr. Prunariu: Allow me to congratulate you on your presiding over the thirty-seventh session of the United Nations Committee on the Peaceful Uses of Outer Space, which I consider to be a great honour for us. The activities of this Committee, carried out in your country, represent a recognition of the important role of Austria in promoting the principles of the United Nations Charter and, in particular, peaceful space activities.

I have the great honour to represent, as a Romanian astronaut, the Association of Space Explorers at this session of the Committee. The acceptance of our Association, with observer status, in this United Nations Committee means the recognition of its activities to promote on an international level space exploration and use for the benefit of all humankind. It also represents the identification of most of the activities carried out by the Association with the United Nations objectives in the field of outer space.

The Association of Space Explorers expresses its recognition to Mr. Nandasiri Jasentuliyana for the efficient work done with respect to the acceptance of our Association, with observer status, in the United Nations Committee on the Peaceful Uses of Outer Space.

Allow me to make a brief presentation on behalf of the Association I have the honour to represent.

The Association of Space Explorers (ASE), founded in 1985, is an independent non-profit professional and educational organization consisting of more than 250 individuals from 26 nations who have flown in space. ASE's mission is to provide a forum for professional dialogue among individuals who have flown in space; promote space science and exploration for the benefit of all; and enhance education, foster environmental awareness, and encourage international cooperation.

Each year since 1985, ASE has convened its annual Planetary Congress to serve as a forum where members interact professionally and develop ASE programmes. The week-long event generates communication on issues of common interest to the international space community, government agencies and the public. Members share news from their national space programmes, invite outside speakers to make addresses on selected topics, discuss the Congress theme and present the ASE Planetary Award to a person who has made an outstanding contribution related to that theme. Past recipients of the award include Jacques Yves Cousteau, Oleg Gazenko and Gerard O'Neill, Thomas Paine, Boris Raushenbakh, Yash Pal, Hendrick van de Hulst, Hans Dietrich Genscher, Isaac Asimov and Hermann Bondi.

As the only professional association for astronauts, ASE supports the advancement of space exploration by providing opportunities for communication among space professionals at the international level. The Association has worked closely with other international professional space organizations to expand and invigorate international dialogue on such issues as space safety, and rescue and human performance, often resulting in published proceedings and papers. ASE regularly sponsors international discussions among astronauts on space flight operations. Other projects, such as the publication of books, calendars and trading cards, help garner public support for human space exploration.

With respect to education, ASE seeks to stimulate and inspire continual and higher learning by all people. To do this, ASE shares its members' knowledge and experience

with the general public and, in particular, with its youth. ASE members believe that increased understanding of ecological and technological issues will help us make wise choices for our environment and for the future direction of space exploration. ASE includes among its educational activities annual international member lecture tours, sponsorship of space-related film, drama and video productions, cooperation in the publication of space-related books, calendars and trading cards, and collaboration with the Challenger Center's educational programme.

ASE considers it important to provide its members with opportunities to communicate their unique perspective of Earth to help stimulate humanity's sense of responsibility for the future of our planet. ASE programmes seek to expand the important role space plays in monitoring the impact of human activity on the Earth, since the environmental knowledge gained from space is useful to the resolution of many ecological challenges. Among ASE's premier activities in the area of environmental education have been the publication of the international bestseller The Home Planet in hard and soft cover, participation in the United Nations Earth Day and Mission to Planet Earth ceremonies, lead partnership in the "Arbor Project" international forest conservation effort, and sponsorship of environmental films and videos.

ASE maintains a commitment to fostering international cooperation in space exploration. Since space exploration is a technology-intensive and financially expensive activity, ASE members understand that when many countries jointly invest their resources and ingenuity in common undertakings, all stand to benefit. Chief among ASE's activities in this area are professional exchanges and facilities, visits among astronauts of different national space programmes, sponsorship of international dialogue on space rescue, and a series of high-level invitational discussions in Washington which have resulted in several papers on new opportunities for space cooperation in the changing global political environment.

ASE is committed to continuing its work to improve the quality and effectiveness of the human enterprise in space. Global developments suggest that international cooperation in these enterprises is poised to deepen and expand. ASE will continue to contribute both leadership and vision as humanity moves outward towards the stars.

I hope that this first participation of the Association of Space Explorers in the thirty-seventh session of the United Nations Committee on the Peaceful Uses of Outer Space represents the beginning of a close cooperation in promoting and developing the international dialogue, in improving certain specific aspects of the exploration and peaceful use of outer space, the experience of the professionals forming our Association being very important in this respect.

Mr. Arets (European Space Agency (ESA)) (interpretation from French): Allow me first to express the pleasure of the European Space Agency (ESA) at seeing you, Sir, once again this year presiding over the work of this Committee.

Over the past 12 months, the economic crisis and geopolitical developments have not favoured the financing of space programmes. On the other hand, it was these same factors that helped to make Governments more aware than in the past of the need to develop international cooperation. The most obvious symbol of this development is certainly the invitation addressed to Russia by the partners in the international space station programme to join their efforts to develop a programme that would be based no longer on competition but on effectiveness, optimum use of existing means and international cooperation.

Since 1991, the European ministers responsible for ESA activities had been emphasizing the growing importance of this international cooperation on a global scale, particularly to the realization of European space programmes. Indeed, at present, practically no space programme undertaken by the Agency can be evaluated solely at the European level. European launchers are competing on the world market with other launchers. Most of the Agency's scientific projects are achieved in cooperation with the United States, Russia and Japan; more recently, cooperation has been undertaken with China. By definition, satellite telecommunications have global implications, and Earth monitoring by satellite, both for the creation of systems and for their use, has been the subject of major collaboration among other operators of space systems and user communities.

I should like to draw the Committee's attention to a few elements essential to the Agency programme, the development of international cooperation, and relations between the Agency and the United Nations.

Since this Committee last met, Agency programmes have developed significantly. The development of the Ariane V launcher programme has continued in satisfactorily, despite the uncertainties inherent in the development of such a programme. The first launch is scheduled for late 1995 or early 1996. As to the Ariane IV

programme, which is already operational, the next launch should occur by the end of this session of the Committee.

The manned flight programmes have been radically reworked to take into account economic constraints, the prospects for cooperation with Russia, and the changes that have taken place in the international space station programme. A phase of redefining the activities of ESA in this area is underway. The results will be submitted to the competent European ministers in the course of the second half of 1995. It will then be up to them to decide upon the Agency programme for the years to come.

In the field of telecommunications, the Agency has undertaken a programme of data-relay satellites (DRS). ARTEMIS, the first experimental model of such a satellite, will be launched in 1996.

A programme called ARTES will enable the Agency to develop a large number of new technologies and to become involved in such programmes as navigational satellites, mobile telecommunications, small satellites, etc.

In the field of earth observation, the ENVISAT programme is now financed, as well as the second generation of the METEOSAT programme. The two satellites will be launched before the end of the century. The programme of the polar orbit meteorological satellite (METOP) is currently being put together and the decision to finance it is scheduled for 1995.

The Agency's scientific programme has now hit cruising speed after having increased, in real terms, by 5 per cent per year for a nine-year period. The programme has been developed within the context of the Horizon 2000 plan, which was drawn up 10 years ago. A plan for the beginning of the next century is now being developed.

It should be restated that the scientific programme remains the cornerstone of the European Space Agency (ESA) and that the successes of this programme have played an important role in the Agency's development.

As I have said, international cooperation is becoming an increasingly central element in the Agency's activities.

I should like, first and foremost, to describe the expansion of the ESA family. After 1 January 1995, Finland will become the fourteenth member of the Agency. After that date, all States members of the Agency except Switzerland will be members of the European Union. The cooperation agreement with Canada, which has allowed that

country to participate in several of the Agency's Earth observation and telecommunications programmes, is to be renewed in 1995.

Cooperation agreements have been concluded with several Central and Eastern European countries. The latest of these was concluded with Poland at the beginning of this year. Next month, a similar cooperation agreement will be signed with Greece during a visit of the Director-General of the Agency to Athens.

A cooperation agreement will also be concluded with Russia in the near future. Its objective is to establish the framework of the ongoing joint projects, which will allow a decision to be taken in 1995 as to what kinds of long-term cooperation can be undertaken between the Russian Space Agency and the European Space Agency. This cooperation should be mutually beneficial and should strengthen the bonds between all the countries of Europe.

The States members of the European Space Agency have reaffirmed their desire to participate in the programme of the International Space Station.

A re-examination of the ways and means of this participation was made necessary by the changes made to this programme, both for reasons inherent to it and for external reasons.

The Agency intends to pursue this cooperation with the United States, Japan and Canada, and has high hopes for the prospect of cooperation with Russia on this programme.

The annual meeting between Japan and ESA, at the Agency's headquarters in Paris this week, provides an opportunity to review the cooperation in various fields between the two parties, both of which will undoubtedly note with satisfaction the growing number of sectors in which cooperation is taking place as a result of an increasingly systematic exchange of information.

Following the visit of the competent Chinese Minister to the Director-General of the Agency, contacts between China and the Agency have increased. Next September, the Agency will participate in the Ministerial Meeting in Beijing for the development of space applications in Asia and the Pacific. Along with China and the United Nations, the Agency is organizing a course on the applications of remote sensing by radar, which will take place in Beijing in September 1994. The Agency is also preparing a European industrial mission to China, which will promote the development of cooperation.

A similar industrial mission took place successfully in India in November 1993 and has been followed by a meeting between the Agency and the Indian Space Research Organization (ISRO) which made possible the study of certain mutually beneficial forms of cooperation, in the context of the cooperation between ESA and ISRO which was renewed on that occasion for a period of 10 years.

In Buenos Aires, last month, the Agency and the Argentine National Commission on Space Activities (CONAE) held the second Euro-Latin American Space Days. The event met with a great deal of success both in Europe and in numerous Latin American countries. The next event of this kind is planned to be held in Mexico.

To end my discussion of international cooperation, I would like to emphasize that the European Ministers have expressed their concern to ensure that the Agency's products - particularly the information from Earthobservation satellites - are contributing to the socioeconomic well-being of the developing countries. Working Group on this question was formed within ESA and will be issuing practical proposals towards the end of this year. This Group is taking its inspiration in particular from the experience of the United Nations agencies, and from the recommendations of the Committee on Earth Observation Satellites (CEOS), which was previously mentioned by the representative of Germany, and from the Space Agency Forum (SAF), as well as from the work undertaken in this field within the European Union. All of its proposals will be based on the need to ensure the best possible synergy between the Agency and the European Commission in Brussels.

Moreover, the Agency, on behalf of its member States, is cooperating very closely with the space applications programmes of the United Nations agencies: notably, with the Space Division by co-organizing or participating in most of the activities undertaken by the Division. Here, I would cite the Symposium for Developing Countries, organized jointly with the United Nations and the International Astronautical Federation (IAF) in Jerusalem at the beginning of October, to which the Agency is contributing funds as well as speakers. The Agency is also working with the Food and Agriculture Organization (FAO), the United Nations Environment Programme (UNEP) and other United Nations agencies.

In conclusion, the European Space Agency - itself the result of the political will of 13, and soon 14, countries of Western Europe to work together in the field of outer space - is particularly sensitive to the interest in expanding this cooperation beyond its member States, both to countries which themselves have important space programmes and to those which have not yet reached that level of development, but can draw significant benefits from the use of space programmes for their socio-economic development.

The meeting rose at 4.15 p.m.