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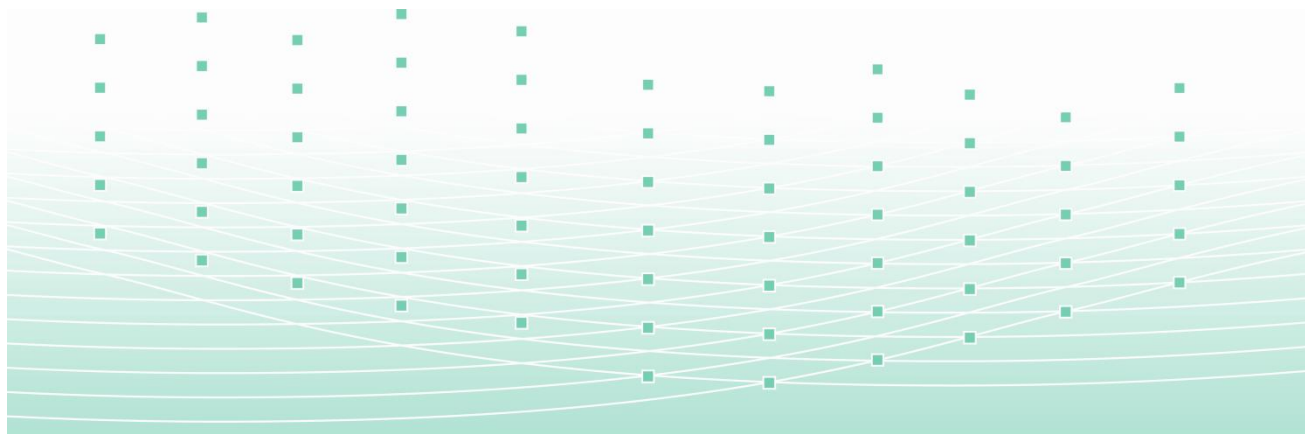
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Swiss National Frequency Allocation Plan and Specific Assignments

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1 Introduction

The National Frequency Allocation Plan (NFAP) serves as a binding basis for the organisational units of the Federal Administration responsible for frequency assignment so that they can fulfil their responsibilities in relation to frequency assignment. Frequency allocation in the NFAP includes the allocation of the frequency spectrum to the various radio services categories in accordance with the Radio Regulations (CC 0.784.403.1) of the International Telecommunication Union (ITU).

The processes and mechanisms relevant to the preparation of the NFAP are presented and explained in the following chapter.

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2 Principles of spectrum management

2.1 National level

As radio frequencies are a **limited resource** (comparable with finite land reserves), efficient use of this resource is indispensable for the functioning of modern communication societies. The Telecommunications Act therefore includes a direct mandate for the body responsible for frequency management (OFCOM) to take appropriate measures in order to ensure efficient and interference-free use (see. Art. 25 para. 1 TCA, CC 784.10).

Frequency regulation is fundamentally concerned with marrying the various interests of frequency users and manufacturers within the aforementioned legal mandate.

In order for frequency regulation to be as target-oriented as possible, the sometimes conflicting interests of the various frequency users must be recorded as accurately as possible and weighed against each other. The requirements of industry and the associated civil uses are largely tabled via the international working groups of the CEPT and the ITU. The tabled requirements are then examined by individual project groups; the relevant bodies then draw up and adopt appropriate basic documentation. These jointly developed principles then serve to allow European-wide and internationally harmonised use of frequency resources. The activity of these working groups is usually limited to civil frequency use. Discussion of military requirements does not take place within the bodies in question. To record the needs of military and civil defence (based on Article 3 paragraph 3 of the Ordinance of 9 March 2007 on Frequency Management and Radiocommunication Licences [CC 784.102.1, FMRLO]), OFCOM convened a permanent working group. This group deals with the coordination of frequency use in bands which are currently subject to joint use according to the NFAP though which in future will also be subject to joint use.

The aforementioned activities are ultimately reflected in the NFAP, which as mentioned above, must be considered as a legal basis document for the assignment of individual frequency rights by the relevant authorities.

Article 3, paragraph 3 FMRLO describes the content design and the associated international orientation of the NFAP. The strategic orientation of Switzerland in relation to frequency allocation is, based on the aforementioned article, specifically linked to international developments. Participation in the relevant international working groups is therefore indispensable in order to influence and shape frequency use.

As radio signals propagate across international borders, **cross-border agreements** regarding frequency use are vital both between neighbouring countries and between economic interest blocks on a global scale. The use of all frequency resources is harmonised at the international level at the **ITU World Radiocommunication Conferences** in order to ensure efficient and interference-free use of the frequency spectrum. The respective decisions of the World Radiocommunication Conferences are stipulated in the Radio Regulations of 17 November 1995 (CC 0.784.403.1), specifically in Article 5 "Frequency allocations". The decisions of the World Radiocommunication Conferences and related harmonisation efforts at the global level (ITU) are ultimately expressed in European bodies, such as the CEPT, which develops technical implementation scenarios. National frequency allocation and the resulting frequency use is ultimately derived from and determined by this international harmonisation (cf. following section on harmonisation).

2.2 International level

OFCOM analyses the spectrum requirements for existing and planned radio services in Switzerland. This is necessary for efficient and equitable planning and coordination of frequencies in order to avoid interference. It is also necessary because OFCOM represents Switzerland in international bodies in the frequency sector, where it safeguards Swiss interests in order to promote them on an international (regional and global) level.

The Swiss strategy aims to regulate access to the frequency spectrum (for both commercial and non-commercial radio services) on a national and international level in a coordinated manner. It aims to ensure that Swiss rights are respected in accordance with international law. International bodies aim to harmonise the use of the spectrum by the various radio services. Any international decisions taken therefore play a part in national spectrum management.

The regional contact for harmonisation of the frequency spectrum in Europe is the European Conference of Postal and Telecommunications Administrations (CEPT). The CEPT Electronic Communications Committee (ECC) provides a framework within administrations (together with industry and the sector stakeholders) can develop provisions according to which the conditions for spectrum use can be harmonised with regard to market demand and technological developments. These activities specifically lead to consensus resolutions made by the member states: compliance is voluntary.

The International Telecommunication Union Radiocommunication Sector (ITU-R) allocates worldwide frequencies to radio services in accordance with the Radio Regulations (RR). The RR is an international agreement which regulates the use of frequency resources for all radio applications, as well as the orbital positions of geostationary and non-geostationary satellites. This agreement is binding for ITU member states. The RR are revised in the World Radiocommunication Conferences (WRC) to adapt the existing framework to spectrum requirements in order to refine existing applications or facilitate the introduction of new applications. The NFAP assumes and supplements the relevant provisions of the RR for Switzerland.

International planning and harmonisation work within the CEPT and the ITU results in “resolutions” and “recommendations”. The results of ITU World Conferences are set forth in “final acts”. With the adoption of the final acts by the Federal Council, Switzerland commits itself to comply with the new provisions of international law, which takes precedence over national law. The results of both ITU World Conferences and resolutions endorsed by Switzerland within the CEPT therefore periodically affect the NFAP.

Switzerland actively participates in the activities of the ECC and the work of the ITU-R. Particularly in a national context, OFCOM conducts its own investigations and submits the results to the various working groups. Swiss delegates also take part in debates during the respective meetings. The main aim is to safeguard Swiss interests in the reports and resolutions of the ECC and to defend the Swiss positions at the WRCs. The positions are developed and coordinated with all Swiss stakeholders in the frequency sector.

Within the European Union (EU), the European Commission is becoming increasingly involved in discussions on frequency management. The Commission's decisions are binding in all countries neighbouring Switzerland. Switzerland is not obliged to comply with EU spectrum regulations. In most cases, however, harmonisation of frequencies with neighbouring countries is necessary in order to meet the needs of the internal Swiss market.

3 Explanatory notes to the frequency allocation plan

Example:

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/ Mil	Notes	Strategy
880-915 MHz	MOBILE except aeronautical mobile 5.317A	880-915 MHz / 925-960 MHz: Digital cellular primary.	CIV	880-915 MHz (UL), paired with 925 - 960 MHz: Harmonised frequencies: Annex4 GSM: RIR0501-01, ERC/DEC/(97)02, ECC/REC/(05)08 IMT(terrestrial UMTS, LTE and WiMAX systems): RIR0501-26, HECC/DEC/(06)13, ECC/DEC/(08)02 UWB Applications, Annex 1	Continued intensive use for digital cellular networks (terrestrial GSM and IMT(UMTS, LTE and WiMax) Systems) in the FDD mode.

This table includes a number of columns with the following contents:

Column 1: Frequency Band

Indicates the frequency band referred to in that row of the table.

For a better overview, the whole spectrum is divided into three ranges:

- 8.3 kHz - 30 000 kHz
- 30 MHz - 10 000 MHz
- 10 GHz - 3 000 GHz

Column 2: National Allocation

Contains in each frequency band:

- The allocations of radiocommunication service(s) specified for Switzerland, based on ITU Radio Regulations and the European Common Allocation table. Names of services are based on the definitions in the ITU Radio Regulations.
- RR Art. 5 footnotes, relevant to Switzerland with hyperlinks to Appendix 3, RR Footnote Text.
- European-footnotes included in the ECA Table, relevant to Switzerland with hyperlinks to Appendix 3, European Common Allocation Table (ECA) Footnote Text. This are supporting explanatory notes and instructions for the assignment and use of frequencies for European (CEPT) administrations.

For explanations concerning the status of radiocommunication services, see the end of this chapter.

Column 3: Main Use

Contains the main application(s) of this frequency band or a part of it and indicate his (their) status of frequency use (not to confound with "primary" or "secondary" status of a radio service in the column " National Allocation")

If the use covers more than one frequency band or concerns only one part of the band, the frequency range is indicated.

Column 4: Civ/Mil

Indicates, whether the frequency range is allocated to the civil administration (CIV), the military administration (MIL), or both civil and military administrations (CIV/MIL).

In the case of frequencies allocated only to the civil administration (CIV), the civil authority assigns frequencies to civil users.

In the case of frequencies allocated only to the military administration (MIL), the military authority assigns frequencies to military users.

In the case of common allocated frequency bands (CIV/MIL), the following rule applies: the civilian authority assigns individual frequencies to civil users in arrangement with the competent military authority on the basis of the national frequency allocation and allotment plans.

Column 5: Notes

Contains various information concerning the use of the frequency range:

- Hyperlinks to Annex 2 "specific assignments"
- possible applications according to EFIS application list and hyperlinks to their corresponding technical interface regulations (RIR)
- relevant ERC/ECC/Recommendations and Decisions
- Comments etc.

Column 6: Strategy

Long-term planning

Explanations concerning the status of radiocommunication services:

Primary	<p>Where a band is indicated as allocated to more than one service and the name of the service is printed in "capitals" (example: FIXED) these are called "primary" services.</p> <p>Within a band, primary services shall have prior choice of frequencies.</p> <p>Where a band is indicated in a footnote of the table as allocated to a service "on a primary basis" in an area smaller than a Region, or in a particular country, this is a primary service only in that area or country.</p>
Secondary	<p>"Where a band is indicated as allocated to more than one service and the name of the service is printed in "normal characters" (example: Fixed) these are called "secondary services".</p> <p>Stations of a secondary service:</p> <ol style="list-style-type: none">shall not cause harmful interference to stations of primary services to which the frequencies are already assigned or to which stations may be assigned at a later date.cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date.can claim protection, however from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date. <p>Where a band is indicated in a footnote of the table as allocated to a service "on a secondary basis" in an area smaller than a Region, or in a particular country, this is a secondary service."</p>

4 Frequency Allocation plan

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
0 - 8.3 kHz	Not allocated 5.53 5.54	Inductive loop systems. Various applications.	CIV/MIL	2.275 kHz Avalanche victim search.	This frequency band is no longer available for new Avalanche victim search equipment.
8.3 - 9 kHz	METEOROLOGICAL AIDS 5.54A	Inductive loop systems. Various applications.	CIV/MIL		Future use by METEOROLOGICAL AIDS.
9 - 11.3 kHz	METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	Short range devices Inductive loop systems. Various applications.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz:	Future use by METEOROLOGICAL AIDS.
11.3 - 14 kHz	RADIONAVIGATION	Short range devices	CIV/MIL	Inductive applications: RIR1005-01, ERC/REC 70-03,	No major changes foreseen in use of these frequencies.
14 - 16 kHz	FIXED 5.56	Inductive loop systems. Various applications.	CIV/MIL	9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	
16 - 19.95 kHz		Paging.	CIV/MIL	On-site paging (16-40 kHz): RIR0506-11, RIR0506-12, RIR0506-13.	
19.95 - 20.05 kHz	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	Short range devices Inductive loop systems.	CIV/MIL		
20.05 - 40 kHz	FIXED		CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
40 - 70 kHz	FIXED	Short range devices Inductive loop systems. Various applications.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	No major changes foreseen in use of these frequencies. Be aware of interference caused by data transmission on high tension power lines in the frequency range of 40-148 kHz.
70 - 72 kHz	RADIONAVIGATION 5.60		CIV/MIL		
72 - 84 kHz	FIXED RADIONAVIGATION 5.60 STANDARD FREQUENCY AND TIME SIGNAL (75 kHz) 5.56		CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03 Standard Frequency and Time Signal: 75 kHz	
84 - 86 kHz	RADIONAVIGATION 5.60		CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	
86 - 90 kHz	FIXED RADIONAVIGATION 5.56		CIV/MIL		
90 - 110 kHz	RADIONAVIGATION 5.62 Fixed 5.64		CIV/MIL		
110 - 112 kHz	FIXED RADIONAVIGATION 5.64		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
112 - 115 kHz	RADIONAVIGATION 5.60	Short range devices Inductive loop systems. Various applications.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	No major changes foreseen in use of these frequencies. Be aware of interference caused by data transmission on high tension power lines in the frequency range of 40-148 kHz.
115 - 117.6 kHz	RADIONAVIGATION 5.60 Fixed 5.64		CIV/MIL		
117.6 - 126 kHz	FIXED 5.64 RADIONAVIGATION 5.60		CIV/MIL		
126 - 129 kHz	RADIONAVIGATION 5.60		CIV/MIL		
129 - 130 kHz	FIXED 5.64 RADIONAVIGATION 5.60		CIV/MIL		
130 - 135 kHz	FIXED 5.64	Short range devices	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	
135 - 135.7 kHz			CIV/MIL		
135.7 - 137.8 kHz	Amateur 5.67A 5.67B FIXED 5.64	Amateur. Short range devices	CIV/MIL	Amateur: RIR1101-01 Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
137.8 - 148.5 kHz	FIXED 5.64	Short range devices	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-148.5 kHz: Inductive applications: RIR1005-01, ERC/REC 70-03 9-315 kHz: Active medical implants: ULP-AMI RIR1006-01, ERC/REC 70-03	No major changes foreseen in use of these frequencies. Be aware of interference caused by data transmission on high tension power lines in the frequency range of 40-148 kHz.
148.5 - 255 kHz	BROADCASTING	Broadcasting primary. Short range devices.	CIV	Short range devices: Harmonised frequencies: Annex4 9-315 kHz: Active medical implants: ULP-AMI:	No major changes foreseen in use of these frequencies. Be aware of interference caused by data transmission on high tension power lines in the frequency range of 148 -300 kHz in particular in the bands 255-266 KHz, 280-282 kHz and 282-300 kHz.
255 - 283.5 kHz	BROADCASTING AERONAUTICAL RADIONAVIGATION	Broadcasting primary. Short range devices.	CIV	RIR1006-01, ERC/REC 70-03	
283.5 - 300 kHz	AERONAUTICAL RADIONAVIGATION	Short range devices.	CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1	
300 - 315 kHz		Aeronautical non-directional beacons (NDB) primary. Short range devices.	CIV/MIL	300 - 405 kHz: Aeronautical navigation Beacons (NDB, aeronautical): RIR0102-01, Frequency assignments by FOCA. NDB: See AIP.	No major changes foreseen in use of these frequencies.
315 - 325 kHz			CIV/MIL	Short range devices: Harmonised frequencies: Annex4 9-315 kHz: Active medical implants: ULP-AMI: RIR1006-01,	
325 - 405 kHz			CIV/MIL	315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03, 400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03 148.5 kHz - 5 MHz: Wideband SRD, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
405 - 415 kHz	RADIONAVIGATION 5.76	Short range devices.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4	No major changes foreseen in use of these frequencies. No major changes foreseen in use of these frequencies. Be aware of interference caused by data transmission on high tension power lines in the frequency range of 416-492 kHz.
415 - 435 kHz	AERONAUTICAL RADIONAVIGATION	Short range devices.	CIV/MIL	315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03, 400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03 148.5 kHz - 5 MHz: Wideband SRD, Annex 1	
435 - 472 kHz	Aeronautical radionavigation 5.82	Short range devices.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4	
472 - 479 kHz	Amateur 5.80A Aeronautical radionavigation 5.82	Amateur secondary. Short range devices.	CIV/MIL	315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03, 400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03 457 kHz: Detection of avalanche victims: RIR1003-01, ERC/REC 70-03 472 - 479 kHz: Amateur: RIR1101-24 148.5 kHz - 5 MHz: Wideband SRD, Annex 1	
479 - 495 kHz	Aeronautical radionavigation 5.82	Short range devices.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
495 - 505 kHz	MARITIME MOBILE	Short range devices.	CIV/MIL	<p>Short range devices: Harmonised frequencies: Annex4 315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03,</p> <p>400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03</p> <p>148.5 kHz - 5 MHz: Wideband SRD, Annex 1</p>	No major changes foreseen in use of these frequencies.
505 - 526.5 kHz	AERONAUTICAL RADIONAVIGATION	Aeronautical non-directional beacons (NDB) primary. Short range devices.	CIV/MIL	<p>505.0 - 526.5 kHz: Aeronautical navigation Beacons (NDB, aeronautical): RIR0102-01, Frequency assignments by FOCA. NDB: See AIP.</p> <p>Short range devices: Harmonised frequencies: Annex4 315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03,</p> <p>400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03</p> <p>148.5 kHz - 5 MHz: Wideband SRD, Annex 1</p>	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
526.5 - 1606.5 kHz	BROADCASTING	Broadcasting primary.	CIV	<p>531 kHz Beromünster. 558 kHz Monte Ceneri-Cima. 765 kHz Sottens. 1485 kHz Savièse. 1566 kHz Sarnen. AM sound analogue: RIR0201-11</p> <p>Short range devices: Harmonised frequencies: Annex4 315- 600 kHz: Active medical implants: ULP-AID: RIR1006-03,</p> <p>400 - 600 kHz: Inductive applications: RFID only: RIR1005-14, ERC/REC 70-03</p> <p>148.5 kHz - 5 MHz: Wideband SRD, Annex 1</p>	No major changes foreseen in use of these frequencies.
1606.5 - 1625 kHz	MARITIME MOBILE 5.90 LAND MOBILE 5.92		CIV/MIL	<p>148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4</p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
1625 - 1635 kHz	RADIOLOCATION		CIV/MIL		
1635 - 1800 kHz	MARITIME MOBILE 5.90 LAND MOBILE 5.92 5.96		CIV/MIL		
1800 - 1810 kHz	RADIOLOCATION		CIV/MIL		
1810 - 1850 kHz	AMATEUR 5.100 5.98 5.99	Amateur primary	CIV/MIL	<p>Amateur: RIR1101-02</p> <p>148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4</p>	
1850 - 2000 kHz	MOBILE except aeronautical mobile 5.92 5.96 5.103	Amateur secondary	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2000 - 2025 kHz	MOBILE except aeronautical mobile (R) 5.92 5.103		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC develop- ments in order to prevent EMC problems is still necessary and on- going.
2025 - 2045 kHz	FIXED MOBILE except aeronautical mobile (R) 5.92 5.103		CIV/MIL		
2045 - 2160 kHz	FIXED MARITIME MOBILE LAND MOBILE 5.92		CIV/MIL		
2160 - 2170 kHz	RADIOLOCATION		CIV/MIL		
2170 - 2173.5 kHz	MARITIME MOBILE		CIV/MIL		
2173.5 - 2190.5 kHz	MOBILE (distress and calling) 5.108 5.109 5.110 5.111		CIV/MIL	2182.0 kHz : international distress and calling frequency for radiotelephony. 2187.5 kHz: international distress frequency for digital selective calling. 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
2190.5 - 2194 kHz	MARITIME MOBILE		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
2194 - 2300 kHz	FIXED MOBILE except aeronautical mobile (R) 5.92 5.103		CIV/MIL		
2300 - 2498 kHz	FIXED MOBILE except aeronautical mobile (R) 5.103		CIV/MIL		
2498 - 2501 kHz	STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)		CIV/MIL		
2501 - 2502 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research	CIV/MIL			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2502 - 2625 kHz	FIXED MOBILE except aeronautical mobile (R) 5.92 5.103		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
2625 - 2650 kHz	MARITIME MOBILE MARITIME RADIONAVIGATION 5.92		CIV/MIL		
2650 - 2850 kHz	FIXED MOBILE except aeronautical mobile (R) 5.92 5.103		CIV/MIL		
2850 - 3025 kHz	AERONAUTICAL MOBILE (R) 5.111 5.115	Aeronautical mobile (R) primary.	CIV/MIL	3010 kHz Annex 2 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
3025 - 3155 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
3155 - 3200 kHz	FIXED MOBILE except aeronautical mobile (R) 5.116		CIV/MIL	Short range devices: Harmonised frequencies: Annex4 3155 - 3400 kHz:	
3200 - 3230 kHz	FIXED MOBILE except aeronautical mobile (R) 5.116		CIV/MIL	Inductive applications: RIR1005-10, ERC/REC 70-03	
3230 - 3400 kHz	FIXED MOBILE except aeronautical mobile 5.116	Various fixed services (e.g. Security, CICR) secondary.	CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1	
3400 - 3500 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
3500 - 3800 kHz	AMATEUR FIXED MOBILE except aeronautical mobile 5.92	Amateur	CIV/MIL	Amateur: RIR1101-02 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
3800 - 3900 kHz	FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	Various fixed services (e.g. Security, CICR) secondary.	CIV/MIL	3820 kHz Tests and development. 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
3900 - 3950 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going. Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
3950 - 4000 kHz	BROADCASTING	Broadcasting primary.	CIV		
4000 - 4063 kHz	FIXED MARITIME MOBILE 5.127	Various fixed services (e.g. Security) secondary.	CIV/MIL		
4063 - 4438 kHz	MARITIME MOBILE 5.79A 5.109 5.110 5.128 5.130 5.131 5.132	Maritime mobile primary. Various fixed services (e.g. Security) secondary.	CIV/MIL	4207.5 kHz Annex 2 4207.5 kHz: international distress frequency for digital selective calling. 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
4438 - 4488 kHz	FIXED MOBILE except aeronautical mobile (R) Radiolocation 5.132A 5.132B	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
4488 - 4650 kHz	FIXED MOBILE except aeronautical mobile (R)		CIV/MIL		
4650 - 4700 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL	4654 kHz Annex 2 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
4700 - 4750 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military.
4750 - 4850 kHz	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	4763 kHz Annex 2 148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
4850 - 4995 kHz	FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	148.5 kHz - 5 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
4995 - 5003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
5003 - 5005 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL		
5005 - 5060 kHz	FIXED		CIV/MIL		Predominantly used by military.
5060 - 5250 kHz	FIXED Mobile except aeronautical mobile		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
5250 - 5275 kHz	FIXED MOBILE except aeronautical mobile Radiolocation 5.132A 5.133A	Various fixed services (e.g. Security) secondary.	CIV/MIL		
5275 - 5450 kHz	FIXED MOBILE except aeronautical mobile		CIV/MIL		
5450 - 5480 kHz	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	5450.5 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
5480 - 5680 kHz	AERONAUTICAL MOBILE (R) 5.111 5.115	Various fixed services (e.g. Security) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
5680 - 5730 kHz	AERONAUTICAL MOBILE (OR) 5.111 5.115		CIV/MIL		Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
5730 - 5900 kHz	FIXED LAND MOBILE		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5900 - 5950 kHz	BROADCASTING 5.134 5.136	Broadcasting primary	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
5950 - 6200 kHz	BROADCASTING		CIV		
6200 - 6525 kHz	MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	Various fixed services (e.g. Security) secondary.	CIV/MIL	6312.0 kHz Annex 2 6312.0 kHz: international distress frequency for digital selective calling. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
6525 - 6685 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary	CIV/MIL	6643 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
6685 - 6765 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military.
6765 - 7000 kHz	FIXED MOBILE except aeronautical mobile (R) 5.138	Various fixed services (e.g. Security) secondary.	CIV/MIL	6765-6795 kHz: ISM Band, Short range devices: Inductive applications: Harmonised frequencies: Annex4 RIR1005-02, ERC/REC 70-03 Non-specific SRDs: RIR1008-01, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
7000 - 7100 kHz	AMATEUR AMATEUR-SATELLITE	Amateur / Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
7100 - 7200 kHz	AMATEUR 5.141A 5.141B	Amateur primary.	CIV	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
7200 - 7300 kHz	BROADCASTING		CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7300 - 7350 kHz	BROADCASTING 5.134 5.143 5.143B	Broadcasting primary	CIV	7345 kHz Tests and development. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
7350 - 7400 kHz	BROADCASTING 5.134 5.143 5.143B	Broadcasting primary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7400 - 7450 kHz	BROADCASTING 5.143B	Broadcasting primary.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 7400-8800 kHz: Inductive applications: RIR1005-03, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7450 - 8100 kHz	FIXED MOBILE except aeronautical mobile (R) 5.143E	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 7400-8800 kHz: Inductive applications: RIR1005-03, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
8100 - 8195 kHz	FIXED MARITIME MOBILE	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	Short range devices: Harmonised frequencies: Annex4 7400-8800 kHz: Inductive applications: RIR1005-03, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
8195 - 8815 kHz	MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111	Maritime mobile primary.	CIV/MIL	Maritime mobile: 8201-8809 kHz Annex 2 8414.5 kHz: international distress frequency for digital selective calling. Short range devices: Harmonised frequencies: Annex4 7400-8800 kHz: Inductive applications: RIR1005-03, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
8815 - 8965 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL	8936 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
8965 - 9040 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military.
9040 - 9305 kHz	FIXED	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
9305 - 9355 kHz	FIXED Radiolocation 5.145A 5.145B		CIV/MIL		
9355 - 9400 kHz	FIXED		CIV/MIL		
9400 - 9500 kHz	BROADCASTING 5.134 5.146	Broadcasting primary.	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
9500 - 9900 kHz	BROADCASTING 5.147		CIV		
9900 - 9995 kHz	FIXED	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL		Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
9995 - 10003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz) 5.111		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
10003 - 10005 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111		CIV/MIL		
10005 - 10100 kHz	AERONAUTICAL MOBILE (R) 5.111	Aeronautical mobile primary.	CIV/MIL	10069 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
10100 - 10150 kHz	FIXED Amateur	Amateur.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
10150 - 11175 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	11172 kHz Annex 2 Short range devices: Harmonised frequencies: Annex4 10200-11000 kHz: Inductive applications: RIR1005-11, ERC/REC 70-03 5 - 30 MHz: Wideband SRD, Annex 1	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
11175 - 11275 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
11275 - 11400 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL		
11400 - 11600 kHz	FIXED	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL		Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
11600 - 11650 kHz	BROADCASTING 5.134 5.146	Broadcasting primary.	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
11650 - 12050 kHz	BROADCASTING 5.147		CIV		
12050 - 12100 kHz	BROADCASTING 5.134 5.146		CIV		
12100 - 12230 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
12230 - 13200 kHz	MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime mobile primary.	CIV/MIL	12233-13205 kHz Annex 2 12577.0 kHz: international distress frequency for digital selective calling. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
13200 - 13260 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL	12233-13205 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
13260 - 13360 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
13360 - 13410 kHz	FIXED RADIO ASTRONOMY 5.149		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
13410 - 13450 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military.
13450 - 13550 kHz	FIXED Mobile except aeronautical mobile (R) Radiolocation 5.132A 5.149A		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
13550 - 13570 kHz	FIXED Mobile except aeronautical mobile (R) 5.150	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	13553-13567 kHz: ISM-Band: Short range devices: Harmonised frequencies: Annex4 Inductive applications: RIR1005-04, ERC/REC 70-03 Inductive applications for RFID: RIR1005-12, ERC/REC 70-03 Non-specific SRDs: RIR1008-02, ERC/REC 70-03 Higher power SRD: RIR1021-01 5 - 30 MHz: Wideband SRD, Annex 1	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
13570 - 13600 kHz	BROADCASTING 5.134 5.151	Broadcasting primary.	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
13600 - 13800 kHz	BROADCASTING		CIV		
13800 - 13870 kHz	BROADCASTING 5.134 5.151		CIV		
13870 - 14000 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	13990 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
14000 - 14250 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
14250 - 14350 kHz	AMATEUR	Amateur primary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14350 - 14990 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	14900 kHz Tests and development. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
14990 - 15005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) 5.111		CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15005 - 15010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL		
15010 - 15100 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15100 - 15600 kHz	BROADCASTING	Broadcasting primary.	CIV		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15600 - 15800 kHz	BROADCASTING 5.134 5.146		CIV		
15800 - 16100 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL		Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is further necessary.
16100 - 16200 kHz	FIXED Radiolocation 5.145A 5.145B		CIV/MIL		
16200 - 16360 kHz	FIXED		CIV/MIL		
16360 - 17410 kHz	MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime mobile primary.	CIV/MIL	16390-17407 kHz Annex 2 16804.5kHz: international distress frequency for digital selective calling. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
17410 - 17480 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
17480 - 17550 kHz	BROADCASTING 5.134 5.146	Broadcasting primary.	CIV		The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
17550 - 17900 kHz	BROADCASTING		CIV		
17900 - 17970 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL		
17970 - 18030 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL	18023 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
18030 - 18052 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	
18052 - 18068 kHz	FIXED Space research		CIV/MIL		
18068 - 18168 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
18168 - 18780 kHz	FIXED Mobile except aeronautical mobile	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	18230 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
18780 - 18900 kHz	MARITIME MOBILE	Maritime mobile primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	18804 / 19779 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
18900 - 19020 kHz	BROADCASTING 5.134 5.146	Broadcasting primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
19020 - 19680 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	19100 kHz Tests and development. 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is further necessary.
19680 - 19800 kHz	MARITIME MOBILE 5.132	Maritime mobile primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	18804 / 19779 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
19800 - 19990 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
19990 - 19995 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
19995 - 20010 kHz	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) 5.111		CIV/MIL		
20010 - 21000 kHz	FIXED Mobile	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL	20090 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
21000 - 21450 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.
21450 - 21850 kHz	BROADCASTING	Broadcasting primary.	CIV	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and on-going.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
21850 - 21870 kHz	FIXED	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
21870 - 21924 kHz	FIXED 5.155B		CIV/MIL		
21924 - 22000 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL		
22000 - 22855 kHz	MARITIME MOBILE 5.132	Maritime mobile primary.	CIV/MIL	22039-22831 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
22855 - 23000 kHz	FIXED	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
23000 - 23200 kHz	FIXED Mobile except aeronautical mobile (R)		CIV/MIL		
23200 - 23350 kHz	FIXED 5.156A AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL		
23350 - 24000 kHz	FIXED MOBILE except aeronautical mobile 5.157	Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL		
24000 - 24450 kHz	FIXED LAND MOBILE		CIV/MIL		
24450 - 24600 kHz	FIXED LAND MOBILE Radiolocation 5.132A 5.158		CIV/MIL		
24600 - 24890 kHz	FIXED LAND MOBILE		CIV/MIL		
24890 - 24990 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
24990 - 25005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25005 - 25010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL		
25010 - 25070 kHz	FIXED MOBILE except aeronautical mobile		CIV/MIL		Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25070 - 25210 kHz	MARITIME MOBILE	25110-25210 kHz Various fixed services (e.g. Security, Diplomatic, UNO) secondary. Maritime mobile primary.	CIV/MIL	25076 / 26151 kHz Annex 2 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25210 - 25550 kHz	FIXED MOBILE except aeronautical mobile	Mobile except aeronautical mobile primary. Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	Predominantly used by military. The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25550 - 25670 kHz	RADIO ASTRONOMY 5.149		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25670 - 26100 kHz	BROADCASTING	Broadcasting primary.	CIV		
26100 - 26175 kHz	MARITIME MOBILE 5.132	Maritime mobile primary.	CIV/MIL		
26175 - 26200 kHz	FIXED MOBILE except aeronautical mobile	Various fixed services secondary.	CIV/MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	26175 - 26550 kHz: Predominantly used by military.
26200 - 26350 kHz	FIXED MOBILE except aeronautical mobile Radiolocation 5.132A 5.133A		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
26350 - 27500 kHz	FIXED MOBILE except aeronautical mobile 5.150	<p>26550-26910 kHz Mobile primary (On-site paging).</p> <p>26960-27410 kHz CB radio primary.</p> <p>26990-27800 kHz SRD primary (Model control, Non-specific SRDs, Higher power SRDs, Inductive applications, Wireless Audio Applications).</p> <p>27420-28000 kHz PMR/PAMR primary.</p> <p>Various fixed services secondary.</p>	CIV/MIL	<p>26550-26910 kHz: On-site paging: RIR0506-21</p> <p>26965-27405 kHz Annex 2: CB radio (PR 27, AM/SSB CB): RIR1102-02, ECC/DEC/(11)03</p> <p>26957-27283 kHz: ISM-Band</p> <p>Short range devices: Harmonised frequencies: Annex4</p> <p>27095 kHz: Railway applications: RIR1002-02, ERC/REC 70-03</p> <p>26995-27195 kHz: Model control: RIR1007-01, Non-specific SRDs: RIR1008-38,</p> <p>26957-27283 kHz: Non-specific SRDs: RIR1008-03,</p> <p>Inductive applications: RIR1005-05, ERC/REC 70-03</p> <p>26995-27755 kHz: Higher power SRDs: RIR1021-02</p> <p>5 - 30 MHz: Wideband SRD, Annex 1</p> <p>27425-27925 kHz Annex 2: PMR/PAMR: RIR0507-31</p>	<p>26175 - 26550 kHz: Predominantly used by military.</p> <p>The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
27500 - 28000 kHz	METEOROLOGICAL AIDS FIXED LAND MOBILE	26990-27800 kHz SRD primary. 27500-28000 kHz Meteorological aids primary. 27420-28000 kHz PMR/PAMR primary. Various fixed services secondary.	CIV/MIL	26995 - 27755 kHz: Higher power SRDs: RIR1021-02 27425-27925 kHz Annex 2: PMR/PAMR: RIR0507-31, RIR0507-32, RIR0507-33, RIR0507-34, 27815-27875 kHz: Baby monitoring: RIR1013-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
28000 - 29700 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: RIR1101-02 5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
29700 kHz - 30 MHz	MOBILE		MIL	5 - 30 MHz: Wideband SRD, Annex 1 Harmonised frequencies: Annex4	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
30 - 30.005 MHz	MOBILE		MIL	30 MHz - 12.4 GHz UWB Applications, Annex 1	
30.005 - 30.01 MHz	MOBILE		MIL	UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
30.01 - 37.5 MHz	MOBILE	31.4-39.6 MHz Radio micro-phones. 34.995-35.225 MHz Flying Model control.	MIL	Short range devices: Harmonised frequencies: Annex4 30-37.5 MHz: Medical implants: RIR1006-04, 34.995-35.225 MHz: Flying Model control: RIR1007-02, ERC/DEC/(01)11, 31.4-39.6 MHz: Radio microphones: RIR1009-01, ERC/REC 70-03 UWB Applications, Annex 1 39.0-39.2 MHz: Meteor Burst Communications, NIB/NPB, ERC/REC 00-04	
37.5 - 38.25 MHz	MOBILE except aeronautical mobile Radio astronomy 5.149		MIL		
38.25 - 39 MHz	MOBILE		MIL		
39 - 39.5 MHz	MOBILE Radiolocation 5.132A 5.159		MIL		
39.5 - 39.986 MHz	MOBILE		MIL		
39.986 - 40.02 MHz	MOBILE Space research		MIL		
40.02 - 40.66 MHz	MOBILE		MIL		
40.66 - 40.7 MHz	MOBILE 5.150	40.66-40.99 MHz Short Range Devices.	MIL	Civil use: 40.66-40.70 MHz: ISM-Band, Short range devices Harmonised frequencies: Annex4 Non-specific SRDs: RIR1008-04, Model control: RIR1007-03, ERC/DEC/(01)12, ERC/REC 70-03 Higher power SRDs: RIR1021-03 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
40.7 - 40.98 MHz	MOBILE	40.71-40.99 MHz Short Range Devices secondary.	MIL	40.71-40.99 MHz: Short Range Devices: Model control (terrestrial): RIR1007-05 UWB Applications, Annex 1	
40.98 - 41.015 MHz	MOBILE Space research		MIL		
41.015 - 42 MHz	MOBILE		MIL	46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A). UWB Applications, Annex 1	No major changes foreseen in use of these frequencies. 46-68 MHz: Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.
42 - 42.5 MHz	MOBILE Radiolocation 5.132A 5.161B		MIL		
42.5 - 44 MHz	MOBILE		MIL		
44 - 46.4 MHz	MOBILE 5.162A		MIL		
46.4 - 47 MHz	MOBILE 5.162A		MIL		
47 - 50 MHz	LAND MOBILE 5.162A 5.164 EU3	Land mobile primary.	CIV/MIL	Military use. 46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A). UWB Applications, Annex 1	The Stockholm 1961 Agreement remains in force and should be respected. Predominantly used by military. Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.
50 - 52 MHz	Amateur LAND MOBILE 5.162A 5.164 EU3	Amateur secondary. Land mobile primary.	CIV/MIL	50-52 MHz Amateur: RIR1101-11 46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A). UWB Applications, Annex 1	The Stockholm 1961 Agreement remains in force and should be respected. Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
52 - 68 MHz	LAND MOBILE 5.162A 5.164 EU3	Land mobile primary.	CIV/MIL	Military use. 46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A). UWB Applications, Annex 1	The Stockholm 1961 Agreement remains in force and should be respected. Predominantly used by military. Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.
68 - 70.45 MHz	MOBILE	PMR primary.	CIV/MIL	PMR: 68-87.5 MHz PMR: Annex 2, PMR (analogue): RIR0507-01, PMR (digital): RIR0507-11 T/R 25-08 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
70.45 - 74.8 MHz	MOBILE except aeronautical mobile Radio astronomy 5.149		CIV/MIL	PMR: 68-87.5 MHz PMR: Annex 2, PMR (analogue): RIR0507-01, PMR (digital): RIR0507-11, T/R 25-08 72.250 MHz: Higher Power SRD RIR1021-08 UWB Applications, Annex 1	
74.8 - 75.2 MHz	AERONAUTICAL RADIONAVIGATION 5.180	Aeronautical radionavigation primary.	CIV/MIL	Marker beacons RIR0102-06 For more information see AIP. UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
75.2 - 87.5 MHz	MOBILE	PMR primary.	CIV/MIL	PMR: 68-87.5 MHz PMR: Annex 2, PMR (analogue): RIR0507-01, PMR (digital): RIR0507-11, T/R 25-08 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
87.5 - 108 MHz	BROADCASTING Land mobile 4.4	Broadcasting primary. Land mobile secondary.	CIV	Broadcasting (terrestrial): FM sound analog: RIR0201-30 SAP/SAB and ENG/OB: RIR0203-20 Short range devices: Harmonised frequencies: Annex4 Wireless audio applications RIR1013-19, ERC/REC 70-03 UWB Applications, Annex 1	
108 - 117.975 MHz	AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE (R) 5.197A	Aeronautical radionavigation primary.	CIV/MIL	Aeronautical navigation: VOR: RIR0102-02 ILS: RIR0102-04 Frequency assignments by FOCA. ILS, VOR: see AIP. UWB Applications, Annex 1	Planned for additional use for the transmission of radionavigation satellite differential correction signals by ground-based systems.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
117.975 - 121.45 MHz	AERONAUTICAL MOBILE (R) 5.200 EU5	Aeronautical Communication.	CIV/MIL	Aeronautical Communication: RIR0101-01, RIR0101-02, RIR0101-03, RIR0101-04 Frequency assignments by FOCA. Aer Com: see AIP.	No major changes foreseen in use of these frequencies.
121.45 - 121.55 MHz	AERONAUTICAL MOBILE (R) MOBILE-SATELLITE (Earth-to-space) 5.111 5.200		CIV/MIL		
121.55 - 137 MHz	AERONAUTICAL MOBILE (R) 5.200 EU5		CIV/MIL		
				121.500 MHz: Emergency Position Indication Radio Beacons: ELT: RIR0104-01, PLB: RIR0504-02, EPIRBs: RIR0601-16, RIR0601-20 UWB Applications, Annex 1	
137 - 137.025 MHz	METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) 5.208 5.208A 5.209 5.208B Space operation (space-to-Earth) Space research (space-to-Earth) 5.206 EU6	MSS secondary. Meteo primary.	CIV	137 - 138 MHz: Downlinks in the MSS. For corresponding uplink transmitter frequencies see: RIR0808-13 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
137.025 - 137.175 MHz	METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE Mobile-satellite (space-to-Earth) 5.208 5.208A 5.209 5.208B Space operation (space-to-Earth) Space research (space-to-Earth) 5.206 EU6		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
137.175 - 137.825 MHz	METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) 5.208 5.208A 5.209 5.208B Space operation (space-to-Earth) Space research (space-to-Earth) 5.206	MSS secondary. Meteo primary.	CIV	137 - 138 MHz: Downlinks in the MSS. For corresponding uplink transmitter frequencies see: RIR0808-13 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
137.825 - 138 MHz	METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE Mobile-satellite (space-to-Earth) 5.208 5.208A 5.209 5.208B Space operation (space-to-Earth) Space research (space-to-Earth) 5.206 EU6		CIV		
138 - 143.6 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE 5.211		MIL	UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
143.6 - 143.65 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE SPACE RESEARCH (space-to-Earth) 5.211		MIL		
143.65 - 144 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE 5.211		MIL		
144 - 146 MHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Civil use: Amateur: RIR1101-12 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
146 - 146.8 MHz	MOBILE		MIL	UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
146.8 - 147.6 MHz	MOBILE	PMR primary.	CIV	147.300-147.400 MHz Paging: Annex 2 RIR0506-02 PMR/PAMR: PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12 T/R 25-08 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
147.6 - 148 MHz	MOBILE EU7	147.9-148.2 / 152.5-152.8 MHz PAMR primary.	MIL	PAMR: Fixed - Wireless subscriber connection: 147.9-148.2 / 152.5-152.8 MHz RIR0507-09	
148 - 149.9 MHz	MOBILE-SATELLITE (Earth-to-space) 5.209 MOBILE 5.218 5.219 5.221 EU6 EU7		MIL	148.100-148.775 MHz: Animal Tracking: RIR1003-02 MSS Earth stations 148.0-150.05 MHz civil RIR0808-13	
149.9 - 150.05 MHz	RADIONAVIGATION-SATELLITE 5.224B MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A MOBILE 5.220 5.222 5.223 EU6		CIV/MIL	UWB Applications, Annex 1	
150.05 - 150.4 MHz	MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149		MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
150.4 - 151.4 MHz	MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	PMR primary	CIV	PMR: Mobile, paired with 155-156 MHz PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
151.4 - 153 MHz	MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 EU7	152.5-152.8 / 147.9-148.2 MHz PAMR primary.	MIL	PAMR: Fixed - Wireless subscriber connection: 152.5-152.8 / 147.9 - 148.2 MHz RIR0507-09 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
153 - 154 MHz	MOBILE except aeronautical mobile		MIL		
154 - 155 MHz	MOBILE except aeronautical mobile 5.225A		MIL		
155 - 156 MHz	MOBILE except aeronautical mobile 5.225A	PMR primary.	CIV	PMR: Mobile, paired with 150.4-151.4 MHz PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
156 - 156.4875 MHz	MOBILE except aeronautical mobile 5.226 5.225A	PMR primary.	CIV	156-174 MHz PMR: Annex 2 PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08 Inland waterway communications: RIR0603-10, 156-174 MHz PMR: Annex 2 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
156.4875 - 156.5375 MHz	MOBILE except aeronautical mobile MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227		CIV		
156.5375 - 156.5625 MHz	MOBILE except aeronautical mobile (R) MARITIME MOBILE (distress and calling via DSC) 5.226 5.227		CIV		
156.5625 - 156.7625 MHz	MOBILE except aeronautical mobile 5.226		CIV		
156.7625 - 156.7875 MHz	MOBILE except aeronautical mobile MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228		CIV		
156.7875 - 156.8125 MHz	MOBILE except aeronautical mobile MARITIME MOBILE (distress and calling) 5.111 5.226		CIV		
156.8125 - 156.8375 MHz	MOBILE except aeronautical mobile MARITIME MOBILE Mobile-satellite (Earth-to-space) 5.111 5.226 5.228		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
156.8375 - 157.45 MHz	MOBILE except aeronautical mobile 5.226	PMR primary.	CIV	156-174 MHz PMR: Annex 2 PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08 Maritime communications AIS: ERC/DEC/(99)17 RIR0603-01 Inland waterway communications: RIR0603-10, 156-174 MHz PMR: Annex 2 161.300 MHz Emergency services: RIR0504-01 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
157.45 - 160.6 MHz	MOBILE except aeronautical mobile		CIV		
160.6 - 160.975 MHz	MOBILE except aeronautical mobile 5.226		CIV		
160.975 - 161.475 MHz	MOBILE except aeronautical mobile		CIV		
161.475 - 161.9625 MHz	MOBILE except aeronautical mobile 5.226		CIV		
161.9625 - 161.9875 MHz	MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B		CIV		
161.9875 - 162.0125 MHz	MOBILE except aeronautical mobile 5.226		CIV		
162.0125 - 162.0375 MHz	MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.228F 5.226 5.228A 5.228B		CIV		
162.0375 - 162.05 MHz	MOBILE except aeronautical mobile 5.226		CIV		
162.05 - 165.2 MHz	MOBILE except aeronautical mobile	PMR primary.	CIV	156-174 MHz PMR: Annex 2 PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08 UWB Applications, Annex 1	
165.2 - 169.4 MHz	MOBILE except aeronautical mobile		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
169.4 - 169.825 MHz	MOBILE except aeronautical mobile	169.400 - 169.600 MHz: SRDs and paging. 169.6125 - 169.8125 MHz: Paging and tracking and tracing systems primary.	CIV	<p>169.400 - 169.825 MHz: Harmonised frequencies: Annex 4 regulated by: ECC/DEC/(05)02, ERC/REC 70-03</p> <p>169.400-169.7875 MHz: Paging: Annex 2 RIR0506-01, ECC/DEC/(05)02</p> <p>Short range devices: 169.400-169.475 MHz: Aids for hearing impaired (500 mW): RIR1009-14, Meter reading (500 mW, $\leq 10\%$ DC): RIR1003-03, Non-specific SRDs (500 mW, $\leq 1\%$ DC): RIR1008-32,</p> <p>169.400 - 169.4875 MHz: Non-specific SRDs (10 mW, $\leq 0.1\%$ DC): RIR1008-33,</p> <p>169.4875 - 169.5875 MHz: Aids for hearing impaired (500 mW): RIR1009-15, Non-specific SRDs (10 mW, $\leq 0.001\%$ DC): RIR1008-34,</p> <p>169.5875 - 169.8125 MHz: Non-specific SRDs (10 mW, $\leq 0.1\%$ DC): RIR1008-35, ERC/REC 70-03, ECC/DEC/(05)02</p> <p>169.6125 - 169.6375 MHz and 169.7125 - 169.7625 MHz and 169.7875 - 169.8125 MHz: Asset tracking and tracing: Annex 2 RIR1003-05, ECC/DEC/(05)02,</p> <p>UWB Applications, Annex 1</p>	<p>169.4-169.600 MHz: According to ECC/DEC/(05)02 no new assignments to paging systems.</p> <p>Short Range Devices including Aids for hearing impaired, Social alarms, Meter reading and Asset tracking and tracing applications have to accept interference from Paging services.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
169.825 - 174 MHz	MOBILE except aeronautical mobile	PMR primary.	CIV	<p>156-174 MHz PMR: Annex 2 PMR (analogue): RIR0507-02, PMR (digital): RIR0507-12, T/R 25-08</p> <p>Alarms: 170.500 MHz: 1 mW RIR1001-01</p> <p>Higher power SRDs: 173.100-173.350 MHz: 500 mW RIR1021-04</p> <p>173.100 MHz: 2.5 W RIR1021-09</p> <p>UWB Applications, Annex 1</p>	
174 - 216 MHz	BROADCASTING Land mobile 5.235	Broadcasting primary. Short range devices secondary.	CIV	<p>Broadcasting (terrestrial): Band III, channel 5 - 10: 174-230 MHz: Annex 2,</p> <p>DVB-T: RIR0201-70</p> <p>DVB-T Retransmitter: RIR0201-72</p> <p>T-DAB: RIR0201-31</p> <p>T-DAB Retransmitter: RIR0201-32</p> <p>T-DAB low power indoor repeater: RIR0201-35</p> <p>Short range devices: Radio Microphones: RIR1009-02, Personal hearing aids: RIR1009-12, ERC/REC 70-03</p> <p>Medical Telemetry: RIR1006-06</p> <p>UWB Applications, Annex 1</p>	<p>Terrestrial digital sound or television broadcasting or mobile multimedia services according to Geneva Plan 06 and Wiesbaden 1995 Special Arrangement, as revised in Constanta 2007.</p> <p>Twofold strategy: 1st priority: introduction of digital terrestrial sound broadcasting and mobile multimedia services based on systems like T-DAB, T-DAB+ or DMB.</p> <p>2nd priority: digital terrestrial television broadcasting based on the DVB-T standard.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
216 - 223 MHz	BROADCASTING Land mobile 5.235	Broadcasting primary. Short range devices secondary.	CIV	<p>Broadcasting (terrestrial): Band III, channel 11: 174-230 MHz: Annex 2,</p> <p>DVB-T: RIR0201-70</p> <p>DVB-T Retransmitter: RIR0201-72</p> <p>T-DAB: RIR0201-31</p> <p>T-DAB Retransmitter: RIR0201-32</p> <p>T-DAB low power indoor repeater: RIR0201-35</p> <p>Short range devices: Radio Microphones: RIR1009-02, Personal hearing aids: RIR1009-12, ERC/REC 70-03</p> <p>UWB Applications, Annex 1</p>	<p>Terrestrial digital sound or television broadcasting or mobile multimedia services according to Geneva Plan 06 and Wiesbaden 1995 Special Arrangement, as revised in Constanta 2007.</p> <p>Twofold strategy: 1st priority: introduction of digital terrestrial sound broadcasting and mobile multimedia services based on systems like T-DAB, T-DAB+ or DMB.</p> <p>2nd priority: digital terrestrial television broadcasting based on the DVB-T standard.</p>
223 - 230 MHz	BROADCASTING	Broadcasting primary. T-DAB primary.	CIV	<p>Broadcasting (terrestrial): Band III, channel 12: 174-230 MHz: Annex 2,</p> <p>T-DAB: RIR0201-31</p> <p>T-DAB Retransmitter: RIR0201-32</p> <p>T-DAB low power indoor repeater: RIR0201-35</p> <p>UWB Applications, Annex 1</p>	<p>Terrestrial digital sound broadcasting (T-DAB, T-DAB+, DMB etc.) or mobile multimedia services according to Geneva Plan 06 and Wiesbaden 1995 Special Arrangement, as revised in Constanta 2007.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
230 - 235 MHz	MOBILE		MIL	230-231.5 MHz: Below 231.5 MHz only for local or regional use. The use of that band by frequency hopping systems should be avoided.	No major changes foreseen in use of these frequencies.
235 - 240 MHz	MOBILE 5.254		MIL		
240 - 242.95 MHz	MOBILE 5.254		MIL	UWB Applications, Annex 1	
242.95 - 243.05 MHz	AERONAUTICAL MOBILE 5.111 5.254 5.256		MIL	243.0 MHz: Search and rescue, Emergency Position Indication Radio Beacons: ELT: RIR0104-01, PLB: RIR0504-02, EPIRBs: RIR0601-16, RIR0601-20 See AIP. UWB Applications, Annex 1	
243.05 - 267 MHz	MOBILE 5.254		MIL	UWB Applications, Annex 1	
267 - 272 MHz	MOBILE 5.254 5.257		MIL		
272 - 273 MHz	MOBILE 5.254		MIL		
273 - 312 MHz	MOBILE 5.254		MIL		
312 - 315 MHz	MOBILE 5.254 5.255		MIL		
315 - 322 MHz	MOBILE 5.254		MIL		
322 - 328.6 MHz	MOBILE RADIO ASTRONOMY 5.149		MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
328.6 - 335.4 MHz	AERONAUTICAL RADIONAVIGATION 5.258	ILS primary.	CIV/MIL	Aeronautical navigation: ILS: RIR0102-04 Frequency assignments by FOCA. ILS: see AIP. UWB Applications, Annex 1	No change.
335.4 - 380 MHz	MOBILE 5.254		MIL	UWB Applications, Annex 1	No changes foreseen in use of these frequencies.
380 - 385 MHz	MOBILE 5.254	PMR/PAMR primary	MIL	Digital Land Mobile System for Emergency Services: RIR0507-16, ERC/DEC/(01)19, ECC/DEC/(06)05 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	Emergency Services CH and FL.
385 - 387 MHz	MOBILE 5.254		MIL	380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05	No changes foreseen in use of these frequencies.
387 - 390 MHz	MOBILE 5.254 5.255		MIL	UWB Applications, Annex 1	No changes foreseen in use of these frequencies.
390 - 395 MHz	MOBILE 5.254	PMR/PAMR primary	MIL	Digital Land Mobile System for Emergency Services: RIR0507-16, ERC/DEC/(01)19, ECC/DEC/(06)05 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	Emergency Services CH and FL.
395 - 399.9 MHz	MOBILE 5.254		MIL	380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
399.9 - 400.05 MHz	MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260 5.220		CIV/MIL	MSS Earth stations RIR0808-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
400.05 - 400.15 MHz	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261		CIV/MIL	380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	
400.15 - 401 MHz	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.209 5.208B SPACE OPERATION (space-to-Earth) SPACE RESEARCH (space-to-Earth) 5.263 5.264	Various meteorological aids and meteorological-satellite applications primary.	CIV/MIL	Meteorology: Sondes: RIR0702-01, RIR0702-02 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	Future use of this band by MSS and MET-Satellite services will probably effectively exclude the use of this band by MET AIDS. Protection of other band 401-406 MHz should be ensured for MET AIDS.
401 - 402 MHz	EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (Earth-to-space)	Various meteorological aids and meteorological-satellite applications primary. ULP-AMI secondary.	CIV/MIL	Meteorology: Sondes: RIR0702-01, RIR0702-02 Harmonised frequencies: Annex4 Ultra Low Power Active Medical Implant communication systems (ULP-AMI): RIR1006-07, ERC/DEC/(01)17 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
402 - 403 MHz	EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (Earth-to-space)	Various meteorological aids and meteorological-satellite applications primary. ULP-AMI secondary.	CIV/MIL	<p>Meteorology: Sondes: RIR0702-01, RIR0702-02</p> <p>Harmonised frequencies: Annex4 Ultra Low Power Active Medical Implant communication systems (ULP-AMI): 402-405 MHz: RIR1006-02, ERC/DEC/(01)17</p> <p>380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05</p> <p>UWB Applications, Annex 1</p>	
403 - 406 MHz	METEOROLOGICAL AIDS	Various meteorological aids primary. ULP-AMI secondary.	CIV/MIL	<p>Meteorology: Sondes: RIR0702-01, RIR0702-02</p> <p>Harmonised frequencies: Annex4 Ultra Low Power Active Medical Implant communication systems (ULP-AMI): 402-405 MHz: RIR1006-02,</p> <p>405-406 MHz: RIR1006-08, ERC/DEC/(01)17</p> <p>380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05</p> <p>UWB Applications, Annex 1</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
406 - 406.1 MHz	MOBILE-SATELLITE (Earth-to-space) 5.266 5.267	Satellite emergency position-indicating radio beacons primary.	CIV/MIL	Search and rescue, Emergency Position Indication Radio Beacons: ELT: RIR0104-01, PLB: RIR0504-02, EPIRBs: RIR0601-16 See AIP. 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	Ensure protection of satellite EPIRBs use.
406.1 - 410 MHz	LAND MOBILE RADIO ASTRONOMY 5.149	PMR primary.	CIV	PMR: Railways, Various private multiple use networks PMR (analogue): RIR0507-03, PMR (digital): RIR0507-13, T/R 25-08 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
410 - 418 MHz	MOBILE except aeronautical mobile	PMR/PAMR primary.	CIV	PMR/PAMR: 410-428 MHz: Annex 2 PMR (analogue): RIR0507-03, PMR (digital): RIR0507-13, T/R 25-08 Trunking radio: TETRAPOL: RIR0507-17, ECC/DEC/(06)06, T/R 25-08 Continued on the following page.	The frequencies for the digital technology are available.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
410 - 418 MHz	MOBILE except aeronautical mobile	PMR/PAMR primary.	CIV	Continuation from the preceeding page: PMR/PAMR: 410-428 MHz: Annex 2 Trunking radio: TETRA: RIR0507-20, ECC/DEC/(06)06, T/R 25-08 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	The frequencies for the digital technology are available.
418 - 420 MHz			MIL	380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes foreseen in use of these frequencies.
420 - 428 MHz	MOBILE except aeronautical mobile Radiolocation	PMR/PAMR primary.	CIV	PMR/PAMR: 410-428 MHz: Annex 2 PMR (analogue): RIR0507-03, PMR (digital): RIR0507-13, T/R 25-08 Trunking radio: TETRAPOL: RIR0507-17, ECC/DEC/(06)06, T/R 25-08 TETRA: RIR0507-20, ECC/DEC/(06)06, T/R 25-08 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	The frequencies for the digital technology are available.
428 - 430 MHz			MIL	380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
430 - 432 MHz	AMATEUR Land mobile 5.276	Amateur	CIV/MIL	Civil use: Amateur: RIR1101-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
432 - 433.05 MHz	AMATEUR Land mobile 5.276 Earth exploration-satellite (active) 5.279A	Amateur primary.	CIV/MIL	Civil use: Amateur: RIR1101-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
433.05 - 434.79 MHz	AMATEUR Land mobile 5.138 5.280 5.276 Earth exploration-satellite (active) 5.279A	SRD primary. Amateur secondary. 433.25-434.50 MHz: Higher power short range devices.	CIV/MIL	Civil use: 433.05-434.79 MHz: ISM-Band, Short range devices: Harmonised frequencies: Annex4 Non-specific SRDs: 10 mW, < 10% Duty Cycle: RIR1008-05, 1 mW, ≤ 100 % Duty Cycle: RIR1008-18, 434.04-434.79 MHz: Non-specific SRDs: 10 mW, ≤ 100 % Duty Cycle: RIR1008-19, ERC/REC 70-03 Higher power SRDs: 433.25-434.50 MHz: ≤ 0.5 W, ≤ 1% Duty Cycle RIR1021-05, 433.65-434.20 MHz: ≤ 2.5 W, ≤ 1% Duty Cycle RIR1021-06. Amateur: RIR1101-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
434.79 - 438 MHz	AMATEUR AMATEUR-SATELLITE 5.276 5.282 Earth exploration-satellite (active) 5.279A	434.79-438 MHz Amateur primary. 435-438 MHz Amateur Satellite secondary.	CIV/MIL	Civil use: Amateur: RIR1101-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
438 - 440 MHz	AMATEUR 5.276	438.0-439.5375 MHz: Amateur primary. 439.5375-439.5625 MHz: Civil defence primary. 439.5625-439.6375 MHz: Amateur primary. 439.6375-439.6625 MHz: Civil defence primary. 439.6625-440.0 MHz: Amateur primary.	CIV/MIL	439.550-439.650 MHz: Annex 2 Amateur: RIR1101-13 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No major changes foreseen in use of these frequencies.
440 - 450 MHz	MOBILE except aeronautical mobile EU31	446.0-446.1 MHz PMR 446 446.1-446.2 MHz Digital PMR 446 449.8-449.9 MHz On site Paging.	CIV/MIL	Civil use: PMR: PMR (analogue): RIR0507-04, PMR (digital): RIR0507-14 446.0 - 446.2 MHz: Harmonised frequencies: Annex4 PMR 446 analog and digital: Annex 2, RIR0507-35, ERC/DEC/(15)05 Paging: RIR0506-03 449.8 - 449.9 MHz: On site Paging: RIR0506-22 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes of allocation currently planned.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
450 - 460 MHz	MOBILE 5.287 EU31	PMR primary.	CIV	PMR: 450-470 MHz: Annex 2 PMR (analogue): RIR0507-04, PMR (digital): RIR0507-14, T/R 25-08 PMR Railways: RIR0507-05, T/R 25-08 Paging: RIR0506-03 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes of allocation currently planned.
460 - 470 MHz	MOBILE 5.287 5.289 EU31	PMR primary.	CIV	PMR: 450-470 MHz: Annex 2 PMR (analogue): RIR0507-04, PMR (digital): RIR0507-14, T/R 25-08 PMR Railways: RIR0507-05, T/R 25-08 Paging: RIR0506-03 380 - 470 MHz: Tuning range for PPDR: ECC/DEC/(08)05 UWB Applications, Annex 1	No changes of allocation currently planned.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
470 - 608 MHz	BROADCASTING Mobile 5.291A 5.296	Broadcasting primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): Band IV, channel 21 - 34: 470-582 MHz: Annex 2,</p> <p>Lower part of band V, channel 35 - 59: 582-782 MHz: Annex 2,</p> <p>DVB-T: RIR0201-71</p> <p>DVB-T Retransmitter: RIR0201-72</p> <p>470-518 MHz: Land mobile applications, inside shielded rooms only: RIR0507-08</p> <p>Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): RIR1009-10, ERC/REC 70-03,</p> <p>477-782 MHz (max. 250 mW): RIR1009-11</p> <p>Wireless audio applications: 477-782 MHz: RIR1013-20</p> <p>UWB Applications, Annex 1</p>	<p>Terrestrial digital television broadcasting (DVB-T) or mobile multimedia services (as DVB-H) according to Geneva Plan 06.</p> <p>470-494 MHz: Wind profilers: Geographical sharing with wind profiler radars (RR 5.291A).</p>
608 - 614 MHz	BROADCASTING Radio astronomy Mobile 5.149 5.296 5.306	Radio astronomy secondary. Land mobile secondary.	CIV	<p>Land mobile applications: Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): RIR1009-10, ERC/REC 70-03,</p> <p>UWB Applications, Annex 1</p>	<p>No assignments of broadcast transmitters. Protection of radio astronomy service from harmful interference must be ensured (see RR 5.149). Therefore Radio microphones and in ear monitoring systems may not be operated in the vicinity of CH-5722 Bleien.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
614 - 790 MHz	BROADCASTING Mobile 5.296 5.311A 5.312A	Broadcasting primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): Lower part of band V, channel 35 - 59: 582-782 MHz: Annex 2,</p> <p>DVB-T: RIR0201-71</p> <p>DVB-T Retransmitter: RIR0201-72</p> <p>Land mobile: Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): RIR1009-10,</p> <p>477-782 MHz (max. 250 mW): RIR1009-11,</p> <p>786-789 MHz (max. 12 mW): RIR1009-17, ERC/REC 70-03</p> <p>Wireless audio applications: 477-782 MHz: RIR1013-20</p> <p>694-790 MHz: MFCN ECC/DEC/(15)01</p> <p>UWB Applications, Annex 1</p>	<p>Terrestrial digital television broadcasting (DVB-T) or mobile multimedia services (as DVB-H) according to Geneva Plan 06.</p> <p>694 - 790 MHz: Future use for MFCN. Current Broadcasting and Land mobile services will be reallocated to 470 - 694 MHz. Future use of part of the band for PPDR and other applications under study in CEPT.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
790 - 862 MHz	BROADCASTING MOBILE except aeronautical mobile 5.316 5.316B 5.317A	791-821 MHz / 832-862 MHz: Mobile primary.	CIV	<p>791-821 MHz (DL) paired with 832-862 MHz: MFCN (IMT): RIR0501-19,</p> <p>832-862 MHz (UL) paired with 791-821 MHz: MFCN (IMT): RIR0501-20, ECC/DEC/(09)03, ECC/REC/(11)04</p> <p>Land mobile: Radio microphones and in-ear monitor systems: 823-826 MHz (max. 20 / 100 mW e.i.r.p.): RIR1009-18,</p> <p>826-832 MHz (max. 100 mW e.i.r.p.): RIR1009-13, ERC/REC 70-03</p> <p>UWB Applications, Annex 1</p>	
862 - 870 MHz	MOBILE	863 - 870 MHz SRD primary: Band A: 863-865 MHz. Band C: 865-868 MHz. Band B: 868-870 MHz.	CIV	<p>SRD A: 863-865 MHz Harmonised frequencies: Annex4 Wireless audio applications: RIR1013-01,</p> <p>Radio microphones: RIR1009-05,</p> <p>864.8-865.0 MHz: Wireless audio applications: RIR1013-17,</p> <p>SRD C: 865-868 MHz Harmonised frequencies: Annex4 RFID: 865.6-867.6 MHz: 2 W, RIR1011-07, ERC/REC 70-03</p> <p>866.885-866.915 MHz: Detection of avalanche victims: RIR1003-06</p>	863 - 870 MHz: Within CEPT harmonised band for short range devices (SRD).

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
862 - 870 MHz	MOBILE	863 - 870 MHz SRD primary: Band A: 863-865 MHz. Band C: 865-868 MHz. Band B: 868-870 MHz.	CIV	<p>Continuation from the preceeding page:</p> <p>SRD B: 868-870 MHz Harmonised frequencies: Annex4 Non-specific SRDs: 868.0-868.6 MHz: 25 mW, ≤ 1 % Duty Cycle, RIR1008-06,</p> <p>868.7-869.2 MHz: 25 mW, ≤ 0.1 % Duty Cycle, RIR1008-07,</p> <p>869.40-869.65 MHz: 500 mW, ≤ 10 % Duty Cycle, 25 kHz BW, RIR1008-09,</p> <p>869.7-870.0 MHz: 25 mW, ≤ 1 % Duty Cycle, RIR1008-27,</p> <p>869.7-870.0 MHz: 5 mW, ≤ 100 % Duty Cycle, RIR1008-10,</p> <p>Alarms: 868.6-868.7 MHz: 10 mW, ≤ 1 % Duty Cycle, RIR1001-02,</p> <p>869.25-869.3 MHz: 10 mW, ≤ 0.1 % Duty Cycle, RIR1001-03,</p> <p>869.3-869.4 MHz: 10 mW, ≤ 1 % Duty Cycle, RIR1001-06,</p> <p>869.65-869.70 MHz: 25 mW, ≤ 10 % Duty Cycle, RIR1001-04,</p> <p>Social alarms: 869.2-869.25 MHz: 10 mW, ≤ 0.1 % Duty Cycle, RIR1001-05,</p> <p>Continued on the following page.</p>	863 - 870 MHz: Within CEPT harmonised band for short range devices (SRD).

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
862 - 870 MHz	MOBILE	863 - 870 MHz SRD primary: Band A: 863-865 MHz. Band C: 865-868 MHz. Band B: 868-870 MHz.	CIV	<p>Continuation from the preceeding page:</p> <p>SRD A, B, C: 863-870 MHz Harmonised frequencies: Annex4 Non-specific SRDs: Modulation: FHSS: 863-870 MHz: FHSS, 25 mW, ≤ 0.1 % Duty Cycle, RIR1008-20,</p> <p>865.0-868.0 MHz: FHSS 25 mW, ≤ 1 % Duty Cycle, RIR1008-21,</p> <p>Modulation: Wide band DSSS and other non FHSS: 863-870 MHz: wide band non FHSS, 25 mW, ≤ 0.1 % Duty Cycle, RIR1008-22,</p> <p>865-870 MHz: Wide band non FHSS, 25 mW, ≤ 0.1 % Duty Cycle, RIR1008-24,</p> <p>865-868 MHz: Wide band non FHSS, BW max 0.6 MHz, 25 mW, ≤ 1 % Duty Cycle, RIR1008-25,</p> <p>865-868 MHz: Wide band non FHSS, BW 0.2 - 3 MHz, 10 mW, ≤ 1 % Duty Cycle, RIR1008-28,</p> <p>Modulation: Narrow/wide band: 863-870 MHz: Narrow/wide band, BW max 0.6 MHz, 25 mW, ≤ 0.1 % Duty Cycle, RIR1008-29,</p> <p>865-868 MHz: Narrow/wide band, BW max 0.3 MHz, 25 mW, ≤ 1 % Duty Cycle, RIR1008-30,</p> <p>Reference for SRDs in band A, B and C: ERC/REC 70-03</p> <p>UWB Applications, Annex 1</p>	863 - 870 MHz: Within CEPT harmonised band for short range devices (SRD).

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
870 - 876 MHz	MOBILE	870 - 873 MHz: SRD primary. 873 - 876 MHz / 918 - 921 MHz: GSM-R extension band primary.	CIV	<p>870 - 873 MHz: SRD Tracking, tracing and data acquisition: RIR1003-07: 500 mW, $\leq 2.5\%$ DC, RIR1003-08: 500 mW, $\leq 10\%$ DC, network relay points.</p> <p>Non-specific SRDs: RIR1008-42: 25 mW, $\leq 1\%$ DC, BW max. 600 kHz</p> <p>Transport and Traffic Telematic TTT: RIR1012-09: 500 mW, $\leq 0.1\%$ DC, vehicle to vehicle applications, RIR1012-10: 100 mW, $\leq 0.1\%$ DC, in vehicle applications, Reference for SRD: ERC/REC 70-03</p> <p>873 - 876 MHz (UL) paired with 918-921 MHz: GSM-R extension band: RIR0501-16, ECC/DEC/(04)06</p> <p>GSM-R Repeater: RIR0501-18</p> <p>UWB Applications, Annex 1</p>	870 - 873 MHz: SRD use. 873 - 876 MHz: Railway use.
876 - 880 MHz	MOBILE	GSM-R primary.	CIV	<p>876-880 MHz (UL) paired with 921-925 MHz Harmonised frequencies: Annex4 GSM-R: RIR0501-16,</p> <p>GSM-R Repeater: RIR0501-18, ECC/DEC/(02)05</p> <p>UWB Applications, Annex 1</p>	No changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
880 - 915 MHz	MOBILE except aeronautical mobile 5.317A	880 - 915 MHz / 925 - 960 MHz: Digital cellular primary.	CIV	880-915 MHz (UL) paired with 925-960 MHz Harmonised frequencies: Annex4 GSM: RIR0501-01, GSM-Repeater: RIR0501-05, ERC/DEC/(97)02, ECC/REC/(05)08, IMT: RIR0501-26, ECC/DEC/(06)13, ECC/REC/(08)02. UWB Applications, Annex 1	Continued intensive use for digital cellular networks (GSM and IMTsystems) in the FDD mode.
915 - 921 MHz	LAND MOBILE	915 - 918 MHz: SRD primary. 918 - 921 MHz / 873 - 876 MHz: GSM-R extension band primary.	CIV	915 - 918 MHz: Non-specific SRDs: RIR1008-39: 25 mW, 0.1% DC, BW max. 200 kHz 915.2 - 918 MHz: Non-specific SRDs: RIR1008-40: 25 mW, 1% DC, BW max. 600 kHz 916.1 - 916.5 MHz and 917.3 - 917.7 MHz: Non-specific SRDs: RIR1008-41: 100 mW, 1% DC, BW max. 400 kHz, Indoor Digital Assistive Listening Device Systems: RIR1009-19: 10 mW, 25% DC, BW max. 400 kHz, RFID: RIR1011-08: 4 W, BW max. 400 kHz, Reference for SRD: ERC/REC 70-03 918-921 MHz (DL) paired with 873-876 MHz: GSM-R extension band: RIR0501-17, ECC/DEC/(04)06 GSM-Repeater: RIR0501-18 UWB Applications, Annex 1	915 - 918 MHz: SRD use. 918 - 921 MHz: Railway use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
921 - 925 MHz	LAND MOBILE	GSM-R primary.	CIV	<p>921-925 MHz (DL) paired with 876-880 MHz Harmonised frequencies: Annex4 GSM-R: RIR0501-17,</p> <p>GSM-R Repeater: RIR0501-18, ECC/DEC/(02)05, ECC/REC/(05)08.</p> <p>UWB Applications, Annex 1</p>	No changes foreseen in use of these frequencies.
925 - 960 MHz	MOBILE except aeronautical mobile 5.317A	925 - 960 MHz / 880 - 915 MHz: Digital cellular primary.	CIV	<p>925-960 MHz (DL) paired with 880 - 915 MHz Harmonised frequencies: Annex4 GSM: RIR0501-03,</p> <p>GSM onboard vessels: RIR0501-14,</p> <p>GSM-Repeater: RIR0501-05, ERC/DEC/(97)02, ECC/REC/(05)08,</p> <p>IMT: RIR0501-27, ECC/DEC/(06)13, ECC/REC/(08)02.</p> <p>UWB Applications, Annex 1</p>	Continued intensive use for digital cellular networks (GSM and IMTsystems) in the FDD mode.
960 - 1164 MHz	AERONAUTICAL RADIONAVIGATION 5.328 AERONAUTICAL MOBILE (R) 5.327A	Aer Nav equipment primary.	CIV/MIL	<p>Aeronautical surveillance: SSR: RIR0103-05, RIR0103-06</p> <p>Aeronautical navigation: RIR0102-03 DME Frequency assignments by FOCA. DME: see AIP.</p> <p>UWB Applications, Annex 1</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1164 - 1215 MHz	AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.328A	Aer Nav equipment primary. RNSS primary.	CIV/MIL	Aeronautical navigation: RIR0102-03 DME Frequency assignments by FOCA. DME: see AIP. GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 UWB Applications, Annex 1	Monitor international developments. Implementation of RNSS (GALI-LEO) in progress.
1215 - 1240 MHz	RADIONAVIGATION 5.331 RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A EARTH EXPLORATION-SATELLITE (active) 5.332 SPACE RESEARCH (active)	RNSS primary.	CIV/MIL	GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 UWB Applications, Annex 1	Monitor international developments.
1240 - 1260 MHz	RADIONAVIGATION 5.331 RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) 5.332 Amateur	RNSS primary. Amateur secondary.	CIV/MIL	GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 Amateur: RIR1101-14 UWB Applications, Annex 1	Monitor international developments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1260 - 1270 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur Amateur-satellite 5.282 5.331 5.335A	RNSS primary. Amateur secondary. Amateur Satellite secondary.	CIV/MIL	GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 Amateur: RIR1101-14 UWB Applications, Annex 1	Monitor international developments. Implementation of RNSS (GALI-LEO) in progress.
1270 - 1300 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.331 5.335A	RNSS primary. Amateur secondary.	CIV/MIL	GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 1270-1295 MHz: Wind profilers RIR0705-01 Resolution 217. Amateur: RIR1101-14 UWB Applications, Annex 1	Monitor international developments. Implementation of RNSS (GALI-LEO) in progress. Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.
1300 - 1350 MHz	AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (Earth-to-space) 5.149 5.337A	Aeronautical radionavigation primary Radiolocation secondary	CIV/MIL	Aeronautical surveillance: Primary radar: RIR0103-01 UWB Applications, Annex 1	Monitor international developments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1350 - 1375 MHz	FIXED RADIOLOCATION MOBILE 5.149 5.339 5.338A	Fixed primary.	CIV	1350-1375 MHz paired with 1492-1517 MHz: Fixed: Point-to-Point: RIR0302-01, T/R 13-01 Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	Protection of EESS according to ECC/DEC/(11)01.
1375 - 1389.5 MHz			MIL	Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	
1389.5 - 1400 MHz		Fixed primary.	CIV	1389.5-1400 MHz paired with 1441.5-1452 MHz: Fixed: Point-to-Point: RIR0302-02, T/R 13-01 Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	
1400 - 1427 MHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	All emissions are prohibited.	CIV/MIL	UWB Applications, Annex 1	No changes planned. Protection of EESS according to ECC/DEC/(11)01.
1427 - 1429 MHz	SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile 5.341 5.338A		MIL	Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	Use of the band by other applications (IMT) under study in CEPT.
1429 - 1441.5 MHz	FIXED MOBILE except aeronautical mobile 5.341 5.338A		MIL	Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	Use of the band by other applications (IMT) under study in CEPT.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1441.5 - 1452 MHz	FIXED MOBILE except aeronautical mobile 5.341 5.338A	Fixed primary.	CIV	1441.5-1452 MHz paired with 1389.5-1400 MHz: Fixed: Point-to-Point: RIR0302-02, T/R 13-01 Protection of EESS according to ECC/DEC/(11)01. UWB Applications, Annex 1	Old fixed links with 49 MHz duplex have to be reassigned. Use of the band by other applications (IMT) under study in CEPT.
1452 - 1492 MHz	BROADCASTING BROADCASTING-SATELLITE 5.345 5.208B Fixed MOBILE except aeronautical mobile 5.341	MFCN SDL planned.	CIV/MIL	MFCN SDL: RIR0501-24, ECC/DEC/(13)03. UWB Applications, Annex 1	1452.0-1479.5 MHz: according to Wiesbaden 1995 / revised Maas-tricht 2002 special agreement / revised in Constanta in 2007. Old fixed links with 49 MHz duplex have to be reassigned.
1492 - 1517 MHz	FIXED MOBILE except aeronautical mobile 5.341	Fixed primary.	CIV	1492-1517 MHz paired with 1350-1375 MHz: Fixed: Point-to-Point: RIR0302-01, T/R 13-01 UWB Applications, Annex 1	Old fixed links with 49 MHz duplex have to be reassigned. Use of the band by other applications (IMT) under study in CEPT. Possible new tuning range for radio microphones according to ERC/REC 70-03 Annex 10 band j.
1517 - 1518 MHz	FIXED MOBILE except aeronautical mobile 5.341		CIV/MIL	UWB Applications, Annex 1	Use of the band by other applications (IMT) under study in CEPT. Possible new tuning range for radio microphones according to ERC/REC 70-03 Annex 10 band j.
1518 - 1525 MHz	FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.351A 5.341	Fixed primary. MSS (S/E) secondary.	CIV/MIL	Fixed: Point-to-Point unidirectional analogue links: RIR0302-03, T/R 13-01 Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 UWB Applications, Annex 1	Old fixed links with 49 MHz duplex have to be reassigned.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1525 - 1530 MHz	SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.354	MSS primary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	Possible expansion of MSS. No new fixed link assignments in this band.
1530 - 1533 MHz	SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.341 5.351 5.354	MSS primary.	CIV	Harmonised frequencies: Annex4 MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	Priority to GMDSS (space-to Earth) Distress and safety communications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1533 - 1535 MHz	SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.353A Earth exploration-satellite Mobile except aeronautical mobile 5.341 5.351 5.354	MSS primary.	CIV	Harmonised frequencies: Annex4 MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	Priority to GMDSS (space-to Earth) Distress and safety communications.
1535 - 1544 MHz	MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.353A 5.354	MSS primary.	CIV	Harmonised frequencies: Annex4 MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	Priority to GMDSS (space-to Earth) Distress and safety communications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1544 - 1545 MHz	MOBILE-SATELLITE (space-to-Earth) 5.208B 5.341 5.354 5.356	MSS primary for distress and safety communications.	CIV/MIL	COSPAS-SARSAT Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 SAR-Downlink (GALILEO, L6 band) UWB Applications, Annex 1	
1545 - 1555 MHz	MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.354 5.357 5.357A	MSS primary.	CIV/MIL	Civil use: MSS Earth stations Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, UWB Applications, Annex 1	Priority to AMS(R)S
1555 - 1559 MHz	MOBILE-SATELLITE (space-to-Earth) 5.208B 5.351A 5.341 5.351 5.354	MSS primary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1559 - 1610 MHz	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.329A 5.328B 5.208B 5.341	Radionavigation-satellite (Nav Sat) primary.	CIV/MIL	Satellite navigation systems: GPS, GLONASS, GALILEO. GNSS Repeaters: RIR0809-01, ECC/REC/(10)02 UWB Applications, Annex 1	Monitor international developments. Implementation of RNSS (GALILEO) in progress.
1610 - 1610.6 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.364 5.366 5.367 5.368 5.371 5.372	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations S-PCS: RIR0808-05, RIR0808-06, ECC/DEC/(09)02 UWB Applications, Annex 1	
1610.6 - 1613.8 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations S-PCS: RIR0808-05, RIR0808-06, ECC/DEC/(09)02 UWB Applications, Annex 1	
1613.8 - 1626.5 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (Earth-to-space) 5.208B 5.351A Mobile-satellite (space-to-Earth) 5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations S-PCS: RIR0808-05, RIR0808-06, ECC/DEC/(09)02 Non-voice transmit-only mobile satellite terminals: RIR0808-08, ECC/DEC/(09)04 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1626.5 - 1631.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.354 5.353A	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations INMARSAT: RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.
1631.5 - 1636.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354 5.374	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations: INMARSAT: RIR0808-02, 1631.5 MHz - 1634.5 MHz: RIR0808-01, 1626.5-1645.5 MHz: Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1636.5 - 1645.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations INMARSAT: RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 Maritime GMDSS INMARSAT: RIR0601-05, RIR0601-06 UWB Applications, Annex 1	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.
1645.5 - 1646.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.341 5.354 5.375	MSS primary.	CIV/MIL	Maritime GMDSS INMARSAT: RIR0601-05 UWB Applications, Annex 1	
1646.5 - 1656.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.354 5.357A 5.376	MSS primary.	CIV/MIL	MSS Earth stations INMARSAT: RIR0808-02 Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07 ECC/DEC/(04)09 UWB Applications, Annex 1	MSS: Priority to AMS(R)S.
1656.5 - 1660 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.354 5.374	MSS primary.	CIV/MIL	Harmonised frequencies: Annex4 MSS Earth stations INMARSAT: RIR0808-01, RIR0808-02, Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1660 - 1660.5 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.149 5.341 5.351 5.354 5.376A	MSS primary.	CIV/MIL	MSS Earth stations INMARSAT: RIR0808-01, RIR0808-02 Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 UWB Applications, Annex 1	Protection of radio astronomy service from undue interference from Mobile Satellite service.
1660.5 - 1668 MHz	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A		CIV/MIL	UWB Applications, Annex 1	Protection of radio astronomy service should be ensured.
1668 - 1668.4 MHz	MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A 5.379D		CIV/MIL	UWB Applications, Annex 1	Protection of radio astronomy service should be ensured.
1668.4 - 1670 MHz	FIXED METEOROLOGICAL AIDS MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY Mobile except aeronautical mobile 5.149 5.341 5.379D 5.379E		CIV/MIL	UWB Applications, Annex 1	Protection of radio astronomy service should be ensured.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1670 - 1675 MHz	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B Fixed 5.341 5.379D 5.379E 5.380A	Meteorological satellite primary. Mobile primary. MSS (E/S).	CIV/MIL	MSS Earth stations: Land Mobile Earth Stations (LMESs): RIR0808-17, S-PCS: RIR0808-07, ECC/DEC/(04)09 UWB Applications, Annex 1	
1675 - 1690 MHz	METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341	Meteorological aids / Meteorological satellite primary.	CIV/MIL	1675 - 1683 MHz: Meteorology: Sondes: RIR0702-03, RIR0702-04 UWB Applications, Annex 1	
1690 - 1700 MHz	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 5.341 5.289	Meteorological aids / Meteorological satellite primary.	CIV/MIL	UWB Applications, Annex 1	
1700 - 1710 MHz	FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) Mobile except aeronautical mobile 5.341 5.289		CIV	UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1710 - 1785 MHz	MOBILE 5.384A 5.149 5.341 5.385	Digital cellular primary.	CIV	1710-1785 MHz (UL) paired with 1805-1880 MHz: Harmonised frequencies: Annex4 GSM: RIR0501-02, GSM-Repeater: RIR0501-06, ERC/DEC/(95)03, ECC/REC/(05)08, ECC/DEC/(06)07, IMT: RIR0501-21, ECC/DEC/(06)13, ECC/REC/(08)02. UWB Applications, Annex 1	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.
1785 - 1800 MHz	MOBILE 5.384A	Mobile primary.	CIV	Short range devices: 1785-1800 MHz: Radio microphones: RIR1009-09, 1795-1800 MHz: Wireless audio/multimedia applications: RIR1013-18, ERC/REC 70-03 UWB Applications, Annex 1	This band is identified for IMT in the RRs (5.384A), but within CEPT this band is not planned for the harmonised introduction of IMT.
1800 - 1805 MHz	MOBILE 5.384A	Mobile primary.	CIV	1800 - 1804.8 MHz: Short range devices: Radio microphones: RIR1009-09, ERC/REC 70-03 UWB Applications, Annex 1	This band is identified for IMT in the RRs (5.384A), but within CEPT this band is not planned for the harmonised introduction of IMT.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1805 - 1855 MHz	MOBILE 5.384A	Digital cellular primary.	CIV	Civil use: 1805-1880 MHz (DL) paired with 1710-1785 MHz: Harmonised frequencies: Annex4 GSM: RIR0501-04, GSM onboard vessels: RIR0501-15, GSM-Repeater: RIR0501-06, Airborne GSM/LTE: RIR0501-10, ERC/DEC/(95)03, ECC/REC/(05)08, ECC/DEC/(06)07, IMT: RIR0501-22, ECC/DEC/(06)13, ECC/REC/(08)02. UWB Applications, Annex 1	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.
1855 - 1880 MHz			CIV/MIL		
1880 - 1885 MHz	MOBILE 5.384A EU33	Mobile primary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 DECT: RIR0503-01, ERC/DEC/(94)03 UWB Applications, Annex 1	Continued intensive use of DECT frequencies.
1885 - 1900 MHz	MOBILE 5.388A 5.388 EU33	Mobile primary.	CIV/MIL		
1900 - 1980 MHz	MOBILE 5.388A 5.388	1900 - 1920 MHz: IMT (TDD) primary. 1920 - 1980 MHz: MFCN primary.	CIV/MIL	Civil use: 1900 - 1920 MHz: IMT (TDD) until end of 2016. 1920 - 1980 MHz paired with 2110 - 2170 MHz: MFCN including terrestrial IMT (FDD Uplink): FDD- Terminal: RIR0501-07, Repeater: RIR0501-09, ECC/DEC/(06)01, ERC/REC 01-01 UWB Applications, Annex 1	1900 - 1920 MHz: New ECC/DEC/(15)02 for broad-band DA2GC will be implemented by 1.1.2017. 1920 - 1980 MHz: continued intensive use for digital cellular public mobile networks (IMT systems) in the FDD mode.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1980 - 2010 MHz	MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A	MSS primary. SAP/SAB and ENG/OB secondary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 MSS Earth stations: IMT-2000 Sat component: RIR0808-10, MSS including Complementary Ground Component (CGC): ECC/DEC/(06)09, ECC/DEC/(06)10 SAP/SAB and ENG/OB (temporary): Cordless cameras: RIR0203-11, ERC/REC 25-10 UWB Applications, Annex 1	Temporary SAB/SAP and ENG/OB until MSS is active.
2010 - 2025 MHz	MOBILE 5.388A 5.388		CIV/MIL	Civil use: 2010-2025 MHz: under study. ECC/DEC/(06)01, ERC/REC 01-01 SAP/SAB and ENG/OB (temporary): Cordless cameras: RIR0203-11, ERC/REC 25-10 UWB Applications, Annex 1	2010-2025 MHz: under study in CEPT. Temporary SAB/SAP and ENG/OB until other services are active.
2025 - 2110 MHz	FIXED MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) 5.392	Defence systems. SAP/SAB and ENG/OB.	MIL	SAP/SAB and ENG/OB (temporary): Cordless cameras: RIR0203-11, ERC/REC 25-10 UWB Applications, Annex 1	SAP/SAB and ENG/OB (temporary) cordless cameras: Co-ordination with military required.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2110 - 2120 MHz	MOBILE 5.388A SPACE RESEARCH (deep space) (Earth-to-space) 5.388	MFCN primary.	CIV/MIL	Civil use: 2110 - 2170 MHz paired with 1920 - 1980 MHz: MFCN including terrestrial IMT (FDD Down-link): RIR0501-08, Repeater: RIR0501-09, ECC/DEC/(06)01, ERC/REC 01-01 Airborne UMTS: RIR0501-10, ECC/DEC/(06)07 UWB Applications, Annex 1	2110 - 2170 MHz: continued intensive use for digital cellular public mobile networks (IMT systems) in the FDD mode.
2120 - 2155 MHz 2155 - 2170 MHz	FIXED MOBILE 5.388A 5.388	MFCN primary.	CIV/MIL CIV	Civil use: 2110 - 2170 MHz paired with 1920 - 1980 MHz: MFCN including terrestrial IMT (FDD Down-link): RIR0501-08, Repeater: RIR0501-09, ECC/DEC/(06)01, ERC/REC 01-01 Airborne UMTS: RIR0501-10, ECC/DEC/(06)07 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2170 - 2200 MHz	FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A 5.388 5.389A	MSS primary. SAP/SAB and ENG/OB secondary.	CIV	Harmonised frequencies: Annex4 IMT-2000 Sat component: Downlinks (S/E) in the MSS. For corresponding uplink transmitter frequencies see: RIR0808-10, MSS including Complementary Ground Component (CGC) ECC/DEC/(06)09, ECC/DEC/(06)10, ECC/REC/(10)01 SAP/SAB and ENG/OB: Cordless cameras: RIR0203-11, ERC/REC 25-10 UWB Applications, Annex 1	Temporary SAB/SAP and ENG/OB until MSS is active.
2200 - 2290 MHz	SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392	Defence systems. SAP/SAB and ENG/OB.	MIL	SAP/SAB and ENG/OB (temporary): Cordless cameras: RIR0203-11, ERC/REC 25-10 UWB Applications, Annex 1	SAP/SAB and ENG/OB (temporary) cordless cameras: Co-ordination with military required.
2290 - 2300 MHz	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	Mobile primary.	CIV	SAP/SAB and ENG/OB: Cordless cameras: RIR0203-11, RIR0203-16, RIR0203-17, RIR0203-18, ERC/REC 25-10 UWB Applications, Annex 1	SAP/SAB and ENG/OB: Cordless cameras. Fixed: No new assignments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2300 - 2400 MHz	FIXED MOBILE Amateur Radiolocation	Mobile primary. SAP/SAB and ENG/OB: Cordless cameras. 2302 - 2322 MHz: Aeronautical telemetry (mil) primary. Amateur secondary.	CIV	2302-2322 MHz: Aeronautical telemetry systems (mil), ERC/REC 62-02 SAP/SAB and ENG/OB: Cordless cameras: RIR0203-11, RIR0203-16, RIR0203-17, RIR0203-18, ERC/REC 25-10 2300 - 2450 MHz: Amateur: RIR1101-15 UWB Applications, Annex 1	SAP/SAB and ENG/OB: Cordless cameras. Fixed: No new assignments.
2400 - 2450 MHz	FIXED MOBILE Amateur Amateur-satellite 5.150 5.282	SRD primary. Amateur secondary. Amateur-Satellite secondary.	CIV	2400-2500 MHz: ISM-Band. 2400-2483.5 MHz: Harmonised frequencies: Annex4 Short range devices: Non-specific SRDs: RIR1008-11, Wideband data transmission systems: RIR1010-01, Radiodetermination applications: RIR1004-01, ERC/DEC/(01)08, ERC/REC 70-03 DECT: RIR0503-04 2446-2454 MHz: Short Range Devices: RFID: RIR1011-01, ERC/REC 70-03 2300-2450 MHz: Amateur: RIR1101-15 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2450 - 2483.5 MHz	FIXED MOBILE 5.150	SRD primary.	CIV	<p>2400-2500 MHz: ISM-Band.</p> <p>2400-2483.5 MHz: Harmonised frequencies: Annex4 Short Range Devices: Non-specific SRDs: RIR1008-11, Wideband data transmission systems: RIR1010-01, Radiodetermination applications: RIR1004-01, ERC/DEC/(01)08, ERC/REC 70-03</p> <p>DECT: RIR0503-04</p> <p>2446-2454 MHz: Short Range Devices: RFID: RIR1011-01, ERC/REC 70-03</p> <p>UWB Applications, Annex 1</p>	
2483.5 - 2500 MHz	FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIODETERMINATION-SATELLITE (space-to-Earth) 5.398 5.150 5.402	Mobile primary. MSS primary.	CIV	<p>2400-2500 MHz: ISM-Band.</p> <p>Harmonised frequencies: Annex4 Downlinks (S/E) in the MSS. For corresponding uplink transmitter frequencies see: RIR0808-05, ECC/DEC/(09)02</p> <p>Short Range Devices: Active medical implants: LP-AMI: RIR1006-09, ERC/REC/(70)03</p> <p>Medical Body Area Network Systems MBANS: 1 mW within healthcare facilities: RIR1006-10, 10 mW, within patient's home: RIR1006-11, ERC/REC/(70)03</p> <p>UWB Applications, Annex 1</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2500 - 2520 MHz	Fixed MOBILE except aeronautical mobile 5.384A	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: User Equipment: RIR0501-11, Repeater: RIR0501-13, ECC/DEC/(05)05, ECC/REC/(11)05, ERC/REC 01-01 UWB Applications, Annex 1	2500 - 2690 MHz: continued intensive use for digital cellular networks (IMT systems) in the FDD mode.
2520 - 2655 MHz	FIXED MOBILE except aeronautical mobile 5.384A 5.339 5.418B 5.418C	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: User Equipment: RIR0501-11, Base station: RIR0501-12, Repeater: RIR0501-13, 2570 - 2620 MHz unpaired: RIR0501-25, ECC/DEC/(05)05, ECC/REC/(11)05, ERC/REC 01-01 UWB Applications, Annex 1	
2655 - 2670 MHz	FIXED MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive) 5.149 5.208B	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: Base station: RIR0501-12, Repeater: RIR0501-13, ECC/DEC/(05)05, ECC/REC/(11)05, ERC/REC 01-01 UWB Applications, Annex 1	
2670 - 2690 MHz	Fixed MOBILE except aeronautical mobile 5.384A Radio astronomy 5.149	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: Base station: RIR0501-12, Repeater: RIR0501-13, ECC/DEC/(05)05, ECC/REC/(11)05, ERC/REC 01-01 UWB Applications, Annex 1	
2690 - 2700 MHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV	UWB Applications, Annex 1	No changes planned in medium term.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2700 - 2900 MHz	AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.423	Aeronautical surveillance Primary radar Radiolocation (military)	CIV/MIL	Aeronautical surveillance: Primary radar: RIR0103-02 UWB Applications, Annex 1	
2900 - 3100 MHz	Radiolocation 5.424A RADIONAVIGATION 5.426 5.425 5.427	Radiolocation (military)	CIV/MIL	Radar UWB Applications, Annex 1	
3100 - 3300 MHz	RADIOLOCATION Earth exploration-satellite (active) Space research (active) 5.149	Radiolocation (military)	CIV/MIL	Radar UWB Applications, Annex 1	
3300 - 3400 MHz	RADIOLOCATION 5.149	Radiolocation (military)	CIV/MIL	Radar UWB Applications, Annex 1	
3400 - 3410 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE	Radiolocation (military)	CIV	For military use. UWB Applications, Annex 1	
3410 - 3500 MHz	5.430A	Fixed primary. Mobile primary. FSS primary.	CIV	Fixed Point-to-Multipoint (BWA, FWA) including nomadic / mobile applications: RIR0301-01, RIR0301-03, ECC/DEC/(07)02, ECC/REC/(04)05, ERC/REC 14-03 MFCN: RIR0501-23, ECC/DEC/(11)06 SAP/SAB and ENG/OB. Cordless cameras: RIR0203-11, ERC/REC 25-10 Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: RIR0806-15 UWB Applications, Annex 1	SAP/SAB and ENG/OB: Temporary use possible as long as not all frequencies are used for Point-to-Multipoint (BWA, FWA) including nomadic / mobile and MFCN (IMT) applications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
3500 - 3600 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 5.430A	Fixed primary. Mobile primary. FSS primary.	CIV	<p>Fixed Point-to-Multipoint (BWA, FWA) including nomadic / mobile applications: RIR0301-01, RIR0301-03, ECC/DEC/(07)02, ECC/REC/(04)05, ERC/REC 14-03</p> <p>MFCN: RIR0501-23, ECC/DEC/(11)06</p> <p>SAP/SAB and ENG/OB. Cordless cameras: RIR0203-11, ERC/REC 25-10</p> <p>Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: RIR0806-15</p> <p>UWB Applications, Annex 1</p>	SAP/SAB and ENG/OB: Temporary use possible as long as not all frequencies are used for Point-to-Multipoint (BWA, FWA) including nomadic / mobile and MFCN (IMT) applications.
3600 - 3800 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE	Fixed primary. Mobile primary. FSS primary.	CIV	<p>BWA: RIR0301-04, ECC/DEC/(07)02, ECC/REC/(04)05</p> <p>MFCN: RIR0501-23, ECC/DEC/(11)06</p> <p>SAP/SAB and ENG/OB. Cordless cameras: RIR0203-11, ERC/REC 25-10</p> <p>Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: RIR0806-15</p> <p>UWB Applications, Annex 1</p>	<p>Extension band for BWA and MFCN (IMT).</p> <p>Fixed (MFCN) / FSS: Co-ordination required.</p> <p>Temporary use for SAP/SAB and ENG/OB applications as long as not all frequencies are used for Point-to-Multipoint (BWA, FWA) including nomadic / mobile, fixed satellite and MFCN (IMT) applications and they shall not constrain the use and deployment of stations of the fixed, mobile and fixed satellite service.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
3800 - 4200 MHz	FIXED FIXED-SATELLITE (space-to-Earth)	FSS primary. 3800-4200 MHz Fixed primary.	CIV	Fixed Point-to-Point: RIR0302-05, ERC/REC 12-08 Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: RIR0806-15 UWB Applications, Annex 1	Fixed / FSS: Co-primary use with the terms of sufficient geographical separation. Fixed: No new assignments.
4200 - 4400 MHz	AERONAUTICAL RADIONAVIGATION 5.438 5.440	Aeronautical navigation	CIV/MIL	Aeronautical navigation: Altimeters UWB Applications, Annex 1	Protection of critical safety systems.
4400 - 4500 MHz	FIXED MOBILE		MIL	UWB Applications, Annex 1	
4500 - 4800 MHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE	FSS primary.	MIL		
4800 - 4990 MHz	FIXED MOBILE except aeronautical mobile Radio astronomy 5.149 5.339		MIL		
4990 - 5000 MHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149		MIL		
5000 - 5010 MHz	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space) Radio astronomy Space research (passive)		CIV/MIL	5000-5010 MHz (up) / 5010-5030 MHz (down): Possible use by RNSS (e.g. Galileo). UWB Applications, Annex 1	Monitor international developments

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5010 - 5030 MHz	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B Radio astronomy Space research (passive)		CIV/MIL	5000-5010 MHz (up) / 5010-5030 MHz (down): Possible use by RNSS (e.g. Galileo). UWB Applications, Annex 1	Monitor international developments
5030 - 5091 MHz	AERONAUTICAL MOBILE (R) 5.443C AERONAUTICAL MOBILE-SATELLITE (R) 5.443D AERONAUTICAL RADIONAVIGATION 5.444		CIV/MIL	UWB Applications, Annex 1	
5091 - 5150 MHz	AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION 5.444 5.444A		CIV/MIL	UWB Applications, Annex 1	Use for Aeronautical telemetry according 5.444B planned.
5150 - 5250 MHz	FIXED-SATELLITE (Earth-to-space) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B 5.446 5.446C 5.447B 5.447C	FSS primary. SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5150 - 5250 MHz: BBDR: RIR0504-03, ECC/REC 08-04 5150 - 5350 MHz: Harmonised frequencies: Annex4 Short range devices: Wide band data transmission systems: RIR1010-05, ECC/DEC/(04)08 UWB Applications, Annex 1	Preferred band for the deployment of BBDR radio applications. Wide band data transmission systems for indoor use only. Use for Aeronautical telemetry according to 5.446C planned.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5250 - 5255 MHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D MOBILE except aeronautical mobile 5.446A 5.447F 5.448A	SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 5150 - 5350 MHz: Harmonised frequencies: Annex4 Wide band data transmission systems: RIR1010-05, ECC/DEC/(04)08 UWB Applications, Annex 1	Wide band data transmission systems for indoor use only.
5255 - 5350 MHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) MOBILE except aeronautical mobile 5.446A 5.447F 5.448A	SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 5150 - 5350 MHz: Harmonised frequencies: Annex4 Wide band data transmission systems: RIR1010-05, ECC/DEC/(04)08 UWB Applications, Annex 1	Wide band data transmission systems for indoor use only.
5350 - 5450 MHz	AERONAUTICAL RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B RADIOLOCATION 5.448D SPACE RESEARCH (active) 5.448C Fixed	Radiolocation primary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 UWB Applications, Annex 1	Predominantly used by military. 5420 - 5478 MHz: Ground based weather radars in CH.
5450 - 5460 MHz	AERONAUTICAL RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B RADIOLOCATION 5.448D SPACE RESEARCH (active) 5.448C	Radiolocation primary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5460 - 5470 MHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION 5.448D RADIONAVIGATION 5.449 SPACE RESEARCH (active) 5.448B	Radiolocation primary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 UWB Applications, Annex 1	Predominantly used by military. 5420 - 5478 MHz: Ground based weather radars in CH.
5470 - 5570 MHz	EARTH EXPLORATION-SATELLITE (active) MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B SPACE RESEARCH (active) 5.448B	Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 5470-5725 MHz: Harmonised frequencies: Annex4 Wide band data transmission systems: RIR1010-04, ECC/DEC/(04)08 UWB Applications, Annex 1	Wide band data transmission systems for indoor and outdoor use.
5570 - 5650 MHz	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B 5.452	Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 5470-5725 MHz: Harmonised frequencies: Annex4 Wide band data transmission systems: RIR1010-04, ECC/DEC/(04)08 UWB Applications, Annex 1	Wide band data transmission systems for indoor and outdoor use. 5600 - 5650 MHz: Preferred band for ground based weather radar in Europe.
5650 - 5725 MHz	MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION Amateur Amateur-satellite (Earth-to-space) 5.282 EU17 EU23	Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary. Amateur secondary. 5650-5670 MHz: Amateur-Satellite secondary.	MIL	5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01 5470-5725 MHz: Harmonised frequencies: Annex4 Wide band data transmission systems: RIR1010-04, ECC/DEC/(04)08 Amateur: RIR1101-16 UWB Applications, Annex 1	Wide band data transmission systems for indoor and outdoor use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5725 - 5830 MHz	FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Mobile Fixed 5.150	5725 - 5795 MHz and 5815 - 5875 MHz: BFWA. SRD. 5795 - 5815 MHz: TTT. Amateur secondary.	MIL	<p>5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01</p> <p>5725-5875 MHz: ISM-Band,</p> <p>Harmonised frequencies: Annex4 Short range devices: Non-Specific SRDs: RIR1008-12 ERC/REC 70-03</p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA: RIR0301-05, ECC/REC 06-04</p> <p>5795 - 5805 MHz: TTT: RIR1012-01</p> <p>5805 - 5815 MHz: TTT: RIR1012-06</p> <p>Amateur: RIR1101-16</p> <p>UWB Applications, Annex 1</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5830 - 5850 MHz	FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) Mobile Fixed 5.150	BFWA. SRD. Amateur secondary.	MIL	<p>5250 - 5850 MHz: Meteorology: Weather radar: RIR0703-01</p> <p>5725-5875 MHz: ISM-Band,</p> <p>Harmonised frequencies: Annex4 Short range devices: Non-Specific SRDs: RIR1008-12 ERC/REC 70-03</p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA: RIR0301-05, ECC/REC 06-04</p> <p>Amateur: RIR1101-16</p> <p>UWB Applications, Annex 1</p>	
5850 - 5925 MHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.150	5850 - 5875 MHz BFWA. 5850 - 5875 MHz SRD. FSS primary. ENG primary.	CIV	<p>5725 - 5875 MHz: ISM-Band,</p> <p>Harmonised frequencies: Annex4 Short range devices: Non-Specific SRDs: RIR1008-12 ERC/REC 70-03</p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA: RIR0301-05, ECC/REC/(06)04</p> <p>Continued on the following page.</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5850 - 5925 MHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.150	5850 - 5875 MHz BFWA. 5850 - 5875 MHz SRD. FSS primary. ENG primary.	CIV	<p>Continuation from the preceeding page:</p> <p>ITS: 5855 - 5875 MHz Non safety applications: RIR0510-02, 5875 - 5905 MHz: Road safety applications: RIR0510-01, 5905 - 5925 MHz: Extension band for non safety applications: RIR0510-03, ECC/DEC/(08)01, ECC/REC/(08)01</p> <p>5850 - 6650 MHz: FSS: VSAT: RIR0806-15</p> <p>SAP/SAB and ENG/OB: RIR0203-50</p> <p>UWB Applications, Annex 1</p>	
5925 - 6425 MHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.457A	Fixed primary. FSS primary.	CIV	<p>Fixed: RIR0302-06, ERC/REC 14-01</p> <p>5850-6650 MHz: FSS: VSAT: RIR0806-15</p> <p>UWB Applications, Annex 1</p>	Fixed / FSS: Co-primary with the terms of sufficient geographical separation.
6425 - 6700 MHz	FIXED FIXED-SATELLITE (Earth-to-space) Earth exploration-satellite (passive) 5.149 5.440 5.458	Fixed primary. FSS primary.	CIV	<p>Fixed: RIR0302-07, ERC/REC 14-02</p> <p>5850-6650 MHz: FSS: VSAT: RIR0806-15</p> <p>UWB Applications, Annex 1</p>	Old links have to be reassigned according to RIR0302-07.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
6700 - 7075 MHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.441 Earth exploration-satellite (passive) 5.458 5.458A 5.458B 5.458C	Fixed primary. 6725 - 7025 FSS planned.	CIV	Fixed: RIR0302-07, ERC/REC 14-02 UWB Applications, Annex 1	Old links have to be reassigned according to RIR0302-07.
7075 - 7145 MHz	FIXED Earth exploration-satellite (passive) 5.458	Fixed primary.	CIV	6425 - 7125 MHz: Fixed: RIR0302-07, ERC/REC 14-02 7125 - 7425 MHz: Fixed: RIR0302-08, ECC/REC 02-06 UWB Applications, Annex 1	Old links have to be reassigned according to RIR0302-07 or RIR0302-08.
7145 - 7235 MHz	FIXED MOBILE SPACE RESEARCH (Earth-to-space) 5.460 Space operation (Earth-to-space) 5.458 Earth exploration-satellite (Earth-to-space)	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: RIR0302-08, ECC/REC 02-06 UWB Applications, Annex 1	Old links have to be reassigned according to RIR0302-08.
7235 - 7250 MHz	FIXED Earth exploration-satellite (Earth-to-space) Space research (Earth-to-space) 5.458	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: RIR0302-08, ECC/REC 02-06 UWB Applications, Annex 1	Old links have to be reassigned according to RIR0302-08.
7250 - 7300 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 5.461	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: RIR0302-08, ECC/REC 02-06 UWB Applications, Annex 1	Old links have to be reassigned according to RIR0302-08.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
7300 - 7450 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.461	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: RIR0302-08 7425 - 7725 MHz: Fixed: RIR0302-10, ECC/REC 02-06 UWB Applications, Annex 1	7125 - 7425 MHz: Old links have to be reassigned according to RIR0302-08.
7450 - 7550 MHz	FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.461A	Fixed primary.	CIV	7425 - 7725 MHz: Fixed: RIR0302-10, ECC/REC 02-06 UWB Applications, Annex 1	
7550 - 7750 MHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	Fixed primary.	CIV	7425 - 7725 MHz: Fixed: RIR0302-10, ECC/REC 02-06 7725 - 7750 MHz: Mil use. UWB Applications, Annex 1	
7750 - 7900 MHz	FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B MOBILE except aeronautical mobile		MIL	UWB Applications, Annex 1	
7900 - 8025 MHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.461		MIL	UWB Applications, Annex 1	
8025 - 8175 MHz	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A		MIL	UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
8175 - 8215 MHz	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A		MIL	UWB Applications, Annex 1	
8215 - 8400 MHz	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) 5.462A 5.463		MIL	UWB Applications, Annex 1	
8400 - 8500 MHz	FIXED SPACE RESEARCH (space-to-Earth) 5.465 Radiolocation		MIL	UWB Applications, Annex 1	
8500 - 8550 MHz	RADIOLOCATION 5.469	Radiolocation primary.	MIL	UWB Applications, Annex 1	
8550 - 8650 MHz	RADIOLOCATION SPACE RESEARCH (active) EARTH EXPLORATION-SATELLITE (active) 5.469 5.469A	Radiolocation primary.	MIL		
8650 - 8750 MHz	RADIOLOCATION 5.469	Radiolocation primary.	MIL		
8750 - 8850 MHz	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470 Space research	Radiolocation primary.	CIV/MIL	UWB Applications, Annex 1	
8850 - 9000 MHz	RADIOLOCATION MARITIME RADIONAVIGATION 5.472 Space research	Radiolocation primary.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
9000 - 9200 MHz	AERONAUTICAL RADIONAVIGATION 5.337 5.473A RADIOLOCATION Space research	Aeronautical surveillance Primary radar Radiolocation (military)	CIV/MIL	Aeronautical surveillance: Primary radar: RIR0103-03 UWB Applications, Annex 1	Predominantly used by military.
9200 - 9300 MHz	RADIOLOCATION MARITIME RADIONAVIGATION 5.472 Space research 5.474	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9200 - 9500 MHz: Short Range Devices: Radiodetermination applications: RIR1004-02, ERC/REC 70-03 UWB Applications, Annex 1	
9300 - 9500 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.427 5.474 5.475 5.475A 5.475B 5.476A	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	Maritime navigation: RIR0604-01 RIR0604-02 RIR0604-03 RIR0604-04 Radiolocation: Bird migration radar: RIR1108-05 9200 - 9500 MHz: Short Range Devices: Radiodetermination applications: RIR1004-02, ERC/REC 70-03 UWB Applications, Annex 1	
9500 - 9800 MHz	RADIOLOCATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) 5.476A	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: RIR1004-03, ERC/REC 70-03 UWB Applications, Annex 1	
9800 - 9900 MHz	RADIOLOCATION Space research (active) Earth exploration-satellite (active) 5.478A 5.478B	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: RIR1004-03, ERC/REC 70-03 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
9900 MHz - 10 GHz	RADIOLOCATION 5.479	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: RIR1004-03, ERC/REC 70-03 UWB Applications, Annex 1	Predominantly used by military.
10 - 10.15 GHz	FIXED MOBILE RADIOLOCATION Amateur 5.479	Mobile primary. Fixed primary. Radiolocation primary. Amateur secondary.	CIV	10.00-10.68 GHz: SAP/SAB and ENG/OB: RIR0203-12, RIR0203-51, ERC/REC 25-10 Radiolocation: Long range radar (LRR): RIR1108-03 Short range radar (SRR): RIR1108-04 Amateur: RIR1101-17 UWB Applications, Annex 1	Preferred band for SAP/SAB and ENG/OB (Cordless cameras and SAP/SAB point to point video links) and radar for security applications (landslide monitoring and avalanche detection).
10.15 - 10.3 GHz	FIXED MOBILE RADIOLOCATION Amateur	Fixed primary. Amateur secondary.	CIV	10.15-10.30 GHz paired with 10.50-10.65 GHz: Fixed: RIR0302-11, ERC/REC 12-05	Old links with 65 MHz duplex have to be reassigned.
10.3 - 10.45 GHz	FIXED RADIOLOCATION Amateur Mobile		CIV	10.00-10.68 GHz: SAP/SAB and ENG/OB: RIR0203-12, RIR0203-51 Amateur: RIR1101-17 UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
10.45 - 10.5 GHz	FIXED RADIOLOCATION MOBILE Amateur Amateur-satellite EU17 EU23	Radiodetermination applications primary. Amateur / Amateur-Satellite secondary.	CIV	Short Range Devices: Radiodetermination applications: RIR1004-04 10.00-10.68 GHz: SAP/SAB and ENG/OB: RIR0203-12, RIR0203-51 Amateur: RIR1101-17 UWB Applications, Annex 1	See remarks to 10.5-10.6 GHz Radiodetermination applications.
10.5 - 10.55 GHz	FIXED MOBILE Radiolocation	Fixed primary. 10.5-10.6 GHz Radiodetermination applications secondary.	CIV	10.50-10.65 paired with 10.15-10.30 GHz: Fixed: RIR0302-11, ERC/REC 12-05, ECC/DEC/(10)01	Old FS links with 65 MHz duplex have to be reassigned. 10.5-10.6 GHz: Radiodetermination applications according to ERC/REC 70-03 instead of or in addition to 10.45-10.50 GHz. Monitor development in other CEPT countries.
10.55 - 10.6 GHz	FIXED MOBILE except aeronautical mobile Radiolocation		CIV	10.5 - 10.6 GHz: Short Range Devices: Radiodetermination applications: RIR1004-05, ERC/REC 70-03	
10.6 - 10.65 GHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) Radiolocation 5.149 5.482 5.482A		CIV	10.00-10.60 / 10.68 GHz: ENG/OB: RIR0203-12, RIR0203-51, ECC/DEC/(10)01	
10.65 - 10.68 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149 5.482 5.482A		CIV	UWB Applications, Annex 1	
10.68 - 10.7 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV	UWB Applications, Annex 1	No changes planned in medium term.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
10.7 - 11.7 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.441 5.484 Mobile except aeronautical mobile Mobile-satellite (space-to-Earth)	FSS primary. Fixed primary. AES Downlinks (S/E) in the FSS and MSS secondary.	CIV	Harmonised frequencies: Annex4 Downlinks (S/E) in the FSS for SNG / VSAT and SIT / SUT. For corresponding uplink transmitter frequencies see: RIR0806-01, RIR0806-05, RIR0806-06, RIR0806-16, RIR0806-17, RIR0806-18, ERC/DEC/(00)08 Fixed: RIR0302-12, ERC/REC 12-06, ERC/DEC/(00)08 Downlinks (S/E) in the MSS: Downlinks (S/E) for AES in the FSS and MSS: For corresponding uplink transmitter frequencies see: RIR0808-15, RIR0808-16, ECC/DEC/(05)11. UWB Applications, Annex 1	Fixed / FSS: Co-primary use with the terms of sufficient geographical separation. Old FS links in 40 MHz raster have to be reassigned.
11.7 - 12.5 GHz	BROADCASTING-SATELLITE 5.492 FIXED MOBILE except aeronautical mobile 5.487 5.487A	BSS primary.	CIV	BSS according to RR, see Appendix 30, 11.7-12.5 GHz: Annex 2, ERC/DEC/(00)08 30 MHz - 12.4 GHz UWB Applications, Annex 1	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
12.5 - 12.75 GHz	FIXED-SATELLITE (space-to-Earth) 5.484A	FSS primary.	CIV	Harmonised frequencies: Annex4 Downlinks (S/E) in the FSS for SNG / VSAT and SIT / SUT. For corresponding uplink transmitter frequencies see: RIR0806-01, RIR0806-05, RIR0806-06, RIR0806-16, RIR0806-17, RIR0806-18. Downlinks (S/E) in the MSS: Downlinks (S/E) for AES in the FSS and MSS: For corresponding uplink transmitter frequencies see: RIR0808-15, RIR0808-16 ECC/DEC/(05)11.	
12.75 - 13.25 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.441	FSS primary. Fixed primary.	CIV	FSS: SNG: RIR0806-01 Fixed: RIR0302-13, ERC/REC 12-02	Fixed / FSS: Co-primary use with the terms of sufficient geographical separation.
13.25 - 13.4 GHz	AERONAUTICAL RADIONAVIGATION 5.497 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) 5.498A		CIV/MIL		
13.4 - 13.75 GHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A 5.501B	Radiodetermination applications.	MIL	13.4-14.0 GHz: Short Range Devices: Radiodetermination applications: RIR1004-06, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
13.75 - 14 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A Earth exploration-satellite RADIOLOCATION Space research 5.502 5.503	FSS. Radiodetermination applications.	MIL	Civil use for FSS. FSS: VSAT: RIR0806-19. 13.4-14.0 GHz: Short Range Devices: Radiodetermination applications: RIR1004-06, ERC/REC 70-03	FSS: Before every frequency assignment in the FSS a CIV/MIL co-ordination is necessary.
14 - 14.25 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.457A 5.506B Mobile-satellite (Earth-to-space) 5.506A Space research 5.504A 5.504	FSS primary.	CIV	Harmonised frequencies: Annex4 FSS: SNG: RIR0806-01, VSAT: RIR0806-16, ERC/REC 13-03 VSAT / HEST: RIR0806-18, ECC/DEC/(06)03 MSS: RIR0808-15 Uplinks for AES in the MSS: RIR0808-16, ECC/DEC/(05)11	
14.25 - 14.3 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.457A 5.506B Mobile-satellite (Earth-to-space) 5.506A Space research 5.504A 5.504	FSS primary.	CIV	FSS: SNG: RIR0806-01, VSAT: RIR0806-16, ERC/REC 13-03 Uplinks for AES in the MSS: RIR0808-16, ECC/DEC/(05)11	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14.3 - 14.4 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.457A 5.506B Mobile-satellite (Earth-to-space) 5.506A 5.509A 5.504A	FSS primary.	CIV/MIL	FSS: SNG: RIR0806-01, VSAT: RIR0806-16, ERC/REC 13-03 Uplinks for AES in the MSS: RIR0808-16, ECC/DEC/(05)11	FSS: Before every frequency as- signment in the FSS a CIV/MIL co- ordination is necessary.
14.4 - 14.47 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.457A 5.506B Mobile-satellite (Earth-to-space) 5.506A 5.504A 5.504	FSS primary.	CIV/MIL	FSS: SNG: RIR0806-01, VSAT: RIR0806-16, ERC/REC 13-03 Uplinks for AES in the MSS: RIR0808-16, ECC/DEC/(05)11	
14.47 - 14.5 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.457A 5.506B Mobile-satellite (Earth-to-space) 5.506A 5.504B 5.504A 5.504 Radio astronomy 5.149	FSS primary.	CIV/MIL	FSS: SNG: RIR0806-01, VSAT: RIR0806-16, ERC/REC 13-03 Uplinks for AES in the MSS: RIR0808-16, ECC/DEC/(05)11	
14.5 - 14.62 GHz	FIXED MOBILE Radio astronomy	14.50-14.62 / 15.229-15.350 GHz: Fixed primary.	CIV	Fixed: RIR0302-14, ERC/REC 12-07	
14.62 - 14.8 GHz			MIL	15.229-15.230 GHz: civil use, according to ERC/REC 12-07.	
14.8 - 15.23 GHz	MIL				

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
15.23 - 15.35 GHz	FIXED MOBILE Radio astronomy 5.339	15.229-15.350 / 14.50-14.62 GHz: Fixed primary.	CIV	Fixed: RIR0302-14, ERC/REC 12-07 15.34 GHz: Experiments.	
15.35 - 15.4 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
15.4 - 15.43 GHz	RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D	Radar secondary.	CIV/MIL		
15.43 - 15.63 GHz	FIXED-SATELLITE (Earth-to-space) 5.511A RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511C	Radar secondary.	CIV/MIL		
15.63 - 15.7 GHz	RADIOLOCATION 5.511E 5.511F AERONAUTICAL RADIONAVIGATION 5.511D	Radar secondary.	CIV/MIL		
15.7 - 16.6 GHz	RADIOLOCATION	Radar secondary.	MIL	15.77-16.13 GHz Radar.	
16.6 - 17.1 GHz	RADIOLOCATION Space research (Earth-to-space)	Radar secondary.	MIL		
17.1 - 17.2 GHz	RADIOLOCATION Mobile	Radar secondary.	MIL	17.1 - 17.3 GHz: Harmonised frequencies: Annex4	
17.2 - 17.3 GHz	EARTH EXPLORATION-SATELLITE (active) MOBILE RADIOLOCATION SPACE RESEARCH (active) 5.513A	Radar secondary.	MIL	Short range devices: Radiotermination applications: GBSAR: RIR1004-14, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
17.3 - 17.7 GHz	FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.516 5.516A 5.516B Radiolocation	FSS primary. Radiolocation secondary.	CIV	FSS: BSS- Feeder links CH according to plan RR Appendix 30A. Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: HDFSS (S/E), ECC/DEC/(05)08, and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	
17.7 - 18.1 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.484A 5.516	Fixed primary. FSS primary.	CIV	Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07 FSS: BSS- Feeder link plan RR Appendix 30A, Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	Fixed: FS P-P links. FS has priority to FSS.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
18.1 - 18.3 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.484A 5.520 METEOROLOGICAL-SATELLITE (space-to-Earth) 5.519	Fixed primary.	CIV	Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07 Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	Fixed: FS P-P links. FS has priority to FSS.
18.3 - 18.4 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.484A 5.520 METEOROLOGICAL-SATELLITE (space-to-Earth)	Fixed primary.	CIV	Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07 Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	Fixed: FS P-P links. FS has priority to FSS.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
18.4 - 18.6 GHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.484A	Fixed primary.	CIV	<p>Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07</p> <p>Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04</p>	Fixed: FS P-P links. FS has priority to FSS.
18.6 - 18.8 GHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.522B EARTH EXPLORATION-SATELLITE (passive) 5.522A	Fixed primary. Earth Exploration Satellite co-primary.	CIV	<p>Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07</p> <p>Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04</p>	Fixed: FS P-P links. FS has priority to FSS. Limitation of FS and FSS emissions according to RR 5.522A.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
18.8 - 19.3 GHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.523A	Fixed primary.	CIV	Fixed: RIR0302-15, RIR0302-16, RIR0302-17, ERC/REC 12-03, ERC/DEC/(00)07	Fixed: FS P-P links. FS has priority to FSS.
19.3 - 19.7 GHz	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.523B 5.523C 5.523D 5.523E		CIV	Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	
19.7 - 20.1 GHz	FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B Mobile-satellite (space-to-Earth)	FSS primary. MSS (secondary) planned.	MIL	Civil use for FSS. HDFSS (S/E) ECC/DEC/(05)08, HEST (S/E): ECC/DEC/(06)03 For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11, RIR0806-17, RIR0806-18 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
20.1 - 20.2 GHz	FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B MOBILE-SATELLITE (space-to-Earth) 5.525 5.526 5.527 5.528	FSS primary. MSS (primary) planned.	MIL	Civil use for FSS. HDFSS (S/E) ECC/DEC/(05)08, HEST (S/E): ECC/DEC/(06)03 For corresponding uplink transmitter frequencies see: RIR0806-10, RIR0806-11, RIR0806-17, RIR0806-18 and: 17.3-20.2 GHz: GSO ESOMPs (S/E): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (S/E): RIR0806-21, ECC/DEC/(15)04	
20.2 - 21.2 GHz	FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)		MIL		
21.2 - 21.4 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	ENG/OB secondary.	CIV	ENG/OB: RIR0203-14	
21.4 - 22 GHz	FIXED BROADCASTING-SATELLITE 5.208B 5.530B 5.530C 5.530A 5.530D	Fixed primary. ENG/OB secondary.	CIV	Fixed: Various systems. ENG/OB: RIR0203-52 Harmonised frequencies: Annex4 SRD: Automotive SRR: RIR1012-05, ECC/DEC/(04)10	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
22 - 22.21 GHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149	22.0-22.6 GHz / 23.0-23.6 GHz Fixed primary.	CIV	Fixed: HDFS, P-P links: RIR0302-21, T/R 13-02,	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.
22.21 - 22.5 GHz	FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Earth exploration-satellite (passive) 5.532		CIV	Harmonised frequencies: Annex4 SRD: Automotive SRR: RIR1012-05, ECC/DEC/(04)10	
22.5 - 22.55 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)		CIV		
22.55 - 23.15 GHz	FIXED INTER-SATELLITE 5.338A MOBILE RADIO ASTRONOMY SPACE RESEARCH (Earth-to-space) 5.532A 5.149		CIV		
23.15 - 23.55 GHz	FIXED INTER-SATELLITE 5.338A MOBILE		CIV		
23.55 - 23.6 GHz	FIXED INTER-SATELLITE MOBILE		CIV		
23.6 - 24 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV	Harmonised frequencies: Annex4 SRD: Automotive SRR: RIR1012-05, ECC/DEC/(04)10	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
24 - 24.05 GHz	AMATEUR AMATEUR-SATELLITE 5.150	Amateur / Amateur-Satellite primary.	CIV/MIL	<p>24.00-24.25 GHz: ISM-Band.</p> <p>Amateur: RIR1101-18</p> <p>Harmonised frequencies: Annex4 Short range devices: Non-specific SRDs: RIR1008-13, ERC/REC 70-03</p> <p>Automotive SRR: RIR1012-05, ECC/DEC/(04)10</p> <p>24.00-24.25 GHz: Radiolocation (civil): RIR1108-01</p>	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.
24.05 - 24.25 GHz	RADIOLOCATION Amateur Earth exploration-satellite (active) Fixed Mobile 5.150	SRD primary. Amateur secondary.	CIV/MIL	<p>24.00-24.25 GHz: ISM Band.</p> <p>Harmonised frequencies: Annex4 Short range devices: Non-specific SRDs: RIR1008-13, ERC/REC 70-03</p> <p>Automotive SRR: RIR1012-05, ECC/DEC/(04)10</p> <p>WLAM RIR1012-08, ERC/REC 70-03</p> <p>Amateur: RIR1101-18</p> <p>24.00-24.25 GHz: Radiolocation (civil): RIR1108-01</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
24.25 - 24.45 GHz	FIXED MOBILE	ENG/OB primary.	CIV	ENG/OB: RIR0203-14, RIR0203-52	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles. The frequency range 24.25 - 26.65 GHz may only be used for new SRR systems until 1 July 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.
24.45 - 24.5 GHz	FIXED MOBILE		CIV	Harmonised frequencies: Annex4 SRD: Automotive SRR: RIR1012-05, RIR1012-07, ECC/DEC/(04)10 WLAM RIR1012-08, ERC/REC 70-03	
24.5 - 24.65 GHz	FIXED	Fixed primary.	CIV	24.549 - 25.445 GHz paired with 25.557 - 26.453 GHz:	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles. The frequency range 24.25 - 26.65 GHz may only be used for new SRR systems until 1 July 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.
24.65 - 24.75 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.532B	Fixed primary.	CIV	Fixed links Point-to-Point RIR0302-23, T/R 13-02.	
24.75 - 25.25 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.532B	Fixed primary.	CIV	Harmonised frequencies: Annex4 SRD:	
25.25 - 25.5 GHz	FIXED MOBILE INTER-SATELLITE 5.536	Fixed primary.	CIV	Automotive SRR: RIR1012-05, RIR1012-07, ECC/DEC/(04)10	
25.5 - 26.5 GHz	FIXED MOBILE INTER-SATELLITE 5.536 SPACE RESEARCH (space-to-Earth) 5.536C Earth exploration-satellite (space-to-Earth) 5.536A 5.536B	Fixed primary.	CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
26.5 - 27 GHz	FIXED MOBILE INTER-SATELLITE 5.536 SPACE RESEARCH (space-to-Earth) 5.536A Earth exploration-satellite (space-to-Earth) 5.536A 5.536B		MIL	Harmonised frequencies: Annex4 SRD: Automotive SRR: RIR1012-05, RIR1012-07, ECC/DEC/(04)10	The frequency range 21.65 - 26.65 GHz may only be used for new SRR systems until 1 July 2013. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles. The frequency range 24.25 - 26.65 GHz may only be used for new SRR systems until 1 July 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band to the end of lifetime of the vehicles.
27 - 27.5 GHz	FIXED MOBILE INTER-SATELLITE 5.536 Earth exploration-satellite (space-to-Earth)		MIL		
27.5 - 28.5 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.539 5.516B 5.538 5.540	27.5000-27.8285 GHz FSS primary. 27.8285-28.4445 GHz FS primary. 28.4445-28.9485 GHz FSS primary. 28.9485-29.4525 GHz FS primary. 29.4525-29.5000 GHz FSS primary.	CIV	Fixed (HDFS) and FSS: ECC/DEC/(05)01: 27.5000-27.8285 GHz FSS, RIR0806-05, RIR0806-10, GSO ESOMPs (E/S): RIR0806-20, ECC/DEC/(13)01, NGSO ESOMPs (E/S): RIR0806-21, ECC/DEC/(15)04	
28.5 - 29.1 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.523A 5.539 5.516B Earth exploration-satellite (Earth-to-space) 5.540 5.541		CIV	27.8285-27.9405 GHz FS, 27.9405-28.4445 GHz FS, RIR0302-24, T/R 13-02 28.4445-28.9485 GHz FSS, RIR0806-05, RIR0806-10, GSO ESOMPs (E/S): RIR0806-20, ECC/DEC/(13)01, NGSO ESOMPs (E/S): RIR0806-21, ECC/DEC/(15)04 Continued on the following page.	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
28.5 - 29.1 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.523A 5.539 5.516B Earth exploration-satellite (Earth-to-space) 5.540 5.541	27.5000-27.8285 GHz FSS primary. 27.8285-28.4445 GHz FS primary. 28.4445-28.9485 GHz FSS primary. 28.9485-29.4525 GHz FS primary. 29.4525-29.5000 GHz FSS primary.	CIV	Continuation from the preceeding page: Fixed (HDFS) and FSS: ECC/DEC/(05)01: 28.9485-29.4525 GHz FS, RIR0302-24, T/R 13-02 29.4525-29.5000 GHz FSS, RIR0806-05, RIR0806-10, GSO ESOMPs (E/S): RIR0806-20, ECC/DEC/(13)01, NGSO ESOMPs (E/S): RIR0806-21, ECC/DEC/(15)04	
29.1 - 29.5 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.523C 5.523E 5.535A 5.539 5.541A 5.516B Earth exploration-satellite (Earth-to-space) 5.541 5.540		CIV		
29.5 - 29.9 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.539 5.516B Earth exploration-satellite (Earth-to-space) 5.541 Mobile-satellite (Earth-to-space) 5.540	FSS primary. MSS (secondary) planned.	CIV/MIL	Civil use for FSS. HDFSS (E/S) ECC/DEC/(05)08: RIR0806-06, RIR0806-11 SIT/SUT and HEST: RIR0806-17, ECC/DEC/(06)03 GSO ESOMPs (E/S): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (E/S): RIR0806-21, ECC/DEC/(15)04	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
29.9 - 30 GHz	FIXED-SATELLITE (Earth-to-space) 5.484A 5.539 5.516B MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.540 5.525 5.526 5.527 5.538 5.543	FSS primary. MSS (primary) planned.	CIV/MIL	Civil use for FSS. HDFSS (E/S) ECC/DEC/(05)08: RIR0806-06, RIR0806-11 SIT/SUT and HEST: RIR0806-17, ECC/DEC/(06)03 GSO ESOMPs (E/S): RIR0806-20, ECC/DEC/(13)01 NGSO ESOMPs (E/S): RIR0806-21, ECC/DEC/(15)04	
30 - 31 GHz	FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 5.338A		CIV/MIL		If fixed satellite service will be planned ECC/DEC/(10)02 should be considered.
31 - 31.3 GHz	FIXED MOBILE 5.149 5.338A		CIV/MIL	For civil use.	Available for HAPS. If fixed links will be planned, ECC/REC 02-02 should be considered.
31.3 - 31.5 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
31.5 - 31.8 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
31.8 - 32 GHz	FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (space-to-Earth) 5.547 5.548	Fixed primary. Radionavigation secondary.	CIV/MIL	Civil use for Fixed: 31.8 - 32.571 GHz paired with 32.627 - 33.4 GHz HDFS, P-P links: RIR0302-31, ERC/REC 01-02	
32 - 32.3 GHz	FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (space-to-Earth) 5.547 5.548		CIV/MIL		
32.3 - 33 GHz	FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547 5.548		CIV/MIL		
33 - 33.4 GHz	FIXED 5.547A RADIONAVIGATION INTER-SATELLITE 5.547		CIV/MIL		
33.4 - 34.2 GHz	RADIOLOCATION	Radiolocation primary.	CIV/MIL		
34.2 - 34.7 GHz	RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)	Radiolocation primary.	CIV/MIL	34.2-34.5 GHz: Radiolocation (civil) RIR1108-02	
34.7 - 35.2 GHz	RADIOLOCATION Space research	Radiolocation primary.	CIV/MIL		
35.2 - 35.5 GHz	METEOROLOGICAL AIDS RADIOLOCATION	Radiolocation secondary.	CIV/MIL		
35.5 - 36 GHz	EARTH EXPLORATION-SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) 5.549A	Radiolocation secondary.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
36 - 37 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) Radio astronomy 5.149 5.550A		MIL		
37 - 37.5 GHz	FIXED SPACE RESEARCH (space-to-Earth) 5.547	Fixed primary.	CIV	Fixed: 37.0 - 38.178 GHz paired with 38.318 - 39.5 GHz HDFS, P-P links: RIR0302-32, T/R 12-01, ERC/DEC/(00)02	
37.5 - 38 GHz	FIXED FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547		CIV		
38 - 39.5 GHz	FIXED FIXED-SATELLITE (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547		CIV		
39.5 - 40 GHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.516B MOBILE MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547		CIV/MIL		FSS according to ERC/DEC/(00)02
40 - 40.5 GHz	FIXED FIXED-SATELLITE (space-to-Earth) 5.516B MOBILE MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth)		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
40.5 - 41 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE 5.547	MWS primary.	CIV	MWS: RIR0201-80, ERC/DEC/(99)15, ECC/REC/(01)04 BSS: ECC/DEC/(02)04	
41 - 42 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE 5.547	Fixed primary.	CIV	Fixed: HDFS, P-P links: RIR0302-48, ERC/DEC/(99)15, ECC/REC/(01)04 BSS: ECC/DEC/(02)04	
42 - 42.5 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE 5.547 5.551H 5.551I	MWS primary.	CIV	MWS: RIR0201-80, ERC/DEC/(99)15, ECC/REC/(01)04 BSS: ECC/DEC/(02)04	
42.5 - 43.5 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.547	Fixed primary.	CIV/MIL	Civil use for Fixed: HDFS, P-P links: RIR0302-48, ERC/DEC/(99)15, ECC/REC/(01)04	
43.5 - 45.5 GHz	MOBILE 5.553 MOBILE-SATELLITE Fixed-satellite 5.554		CIV/MIL		
45.5 - 47 GHz	MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554		CIV/MIL		
47 - 47.2 GHz	AMATEUR AMATEUR-SATELLITE	Amateur / Amateur-Satellite pri- mary.	CIV/MIL	Civil use: Amateur: RIR1101-19	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
47.2 - 47.5 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.552A	SAP/SAB and ENG/OB secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15	High Altitude Platform Stations (HAPS) in the bands: 47.2-47.5 GHz / 47.9-48.2 GHz.
47.5 - 47.9 GHz	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.552 5.516B 5.554A MOBILE	SAP/SAB and ENG/OB secondary. FSS secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15 HDFSS (E/S) ECC/DEC/(05)08	
47.9 - 48.2 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.552A	SAP/SAB and ENG/OB secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15	High Altitude Platform Stations (HAPS) in the bands: 47.2-47.5 GHz / 47.9-48.2 GHz.
48.2 - 48.54 GHz	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.552 5.516B 5.554A 5.555B MOBILE	SAP/SAB and ENG/OB secondary. FSS secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15 HDFSS (E/S) ECC/DEC/(05)08	If fixed links will be planned in the band 48.5 - 50.2 GHz ERC/REC 12-11 should be considered.
48.54 - 49.44 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE RADIO ASTRONOMY 5.149 5.340 5.555	SAP/SAB and ENG/OB secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
49.44 - 50.2 GHz	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.552 5.516B 5.554A 5.555B 5.338A MOBILE	SAP/SAB and ENG/OB secondary. FSS secondary.	CIV/MIL	Civil use: 47.2 - 50.2 GHz: SAP/SAB and ENG/OB: cordless cameras and portable video links. RIR0203-15 HDFSS (E/S) ECC/DEC/(05)08	If fixed links will be planned in the band 48.5 - 50.2 GHz ERC/REC 12-11 should be considered.
50.2 - 50.4 GHz	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
50.4 - 51.4 GHz	FIXED FIXED-SATELLITE (Earth-to-space) 5.338A Mobile-satellite (Earth-to-space)		CIV/MIL		
51.4 - 52.6 GHz	FIXED 5.338A MOBILE RADIO ASTRONOMY 5.547 5.556	Fixed primary.	CIV	Fixed: HDFS, P-P links: RIR0302-41, ERC/REC 12-11	Fixed P-P links only.
52.6 - 54.25 GHz	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	All emissions are prohibited.	CIV		
54.25 - 55.78 GHz	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)		CIV/MIL		
55.78 - 56.9 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A SPACE RESEARCH (passive) 5.547 5.558	Fixed primary.	CIV/MIL	Civil use: Fixed: HDFS, P-P links: RIR0302-42, ERC/REC 12-12 Passive applications.	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
56.9 - 57 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.558A	Fixed primary.	CIV/MIL	Civil use: Fixed: HDFS, P-P links: RIR0302-42, ERC/REC 12-12 Passive applications.	
57 - 58 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	Fixed primary.	CIV/MIL	Civil use: Fixed: RIR0302-43, ECC/REC/(09)01 Passive applications. Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31, 57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	Fixed TDD P-P links: No new Assignments.
58 - 58.2 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	Fixed secondary.	CIV/MIL	Civil use: Fixed: RIR0302-47 ECC/REC/(09)01 Passive applications. Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31, 57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
58.2 - 59 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED RADIO ASTRONOMY SPACE RESEARCH (passive) 5.547 5.556 EU19	Fixed secondary.	CIV/MIL	Civil use: Fixed: RIR0302-47 ECC/REC/(09)01 Passive applications. Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31, 57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	
59 - 59.3 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	Fixed secondary.	CIV/MIL	Civil use: Fixed: RIR0302-47 ECC/REC/(09)01 Passive applications. Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31, 57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
59.3 - 62 GHz	FIXED INTER-SATELLITE RADIOLOCATION 5.559 MOBILE 5.558 5.138	61.0-61.5 GHz SRD secondary. Fixed secondary.	CIV/MIL	<p>Civil use: Fixed: RIR0302-47 ECC/REC/(09)01</p> <p>61.0-61.5 GHz: ISM Band:</p> <p>Harmonised frequencies: Annex 4 Short range devices: 61.0-61.5 GHz: Non-specific SRDs: RIR1008-14,</p> <p>57-64 GHz: Non-specific SRDs: RIR1008-31,</p> <p>57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03</p>	
62 - 63 GHz	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	Fixed secondary.	CIV/MIL	<p>Civil use: Fixed: RIR0302-47 ECC/REC/(09)01</p> <p>Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31,</p> <p>57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
63 - 64 GHz	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	ITS.	CIV/MIL	Civil use: ITS: RIR0510-04 ECC/DEC/(09)01 Harmonised frequencies: Annex 4 Short range devices: 57-64 GHz: Non-specific SRDs: RIR1008-31, 57-66 GHz: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	
64 - 65 GHz	FIXED INTER-SATELLITE MOBILE except aeronautical mobile 5.547 5.556	Fixed secondary.	CIV	Fixed links: RIR0302-45, ECC/REC/(05)02 57-66 GHz: Harmonised frequencies: Annex4 Short range devices: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	64 - 66 GHz: Fixed links Point-to-Point.
65 - 66 GHz	EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547	Fixed secondary.	CIV	Fixed links: RIR0302-45, ECC/REC/(05)02 57-66 GHz: Harmonised frequencies: Annex4 Short range devices: Wideband data transmission systems: RIR1010-07, ERC/REC 70-03	64 - 66 GHz: Fixed links Point-to-Point.
66 - 71 GHz	INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
71 - 74 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	Fixed primary.	CIV/MIL	Civil use: 71 - 76 GHz / 81 - 86 GHz: Fixed links: RIR0302-46, ECC/REC/(05)07	71 - 76 GHz: Fixed links Point-to-Point: digital links paired with 81 - 86 GHz.
74 - 75.5 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561	Fixed primary.	CIV/MIL		
75.5 - 76 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.559A 5.561	Fixed primary.	CIV/MIL		
76 - 77.5 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	Amateur / Amateur-Satellite secondary. 76.00 - 77.00 GHz TTT secondary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 Short range devices: 76 - 77 GHz: TTT: RIR1012-03, Railway applications: RIR1002-06, ERC/REC 70-03 77-81 GHz: Automotive SRR: RIR1012-04, ECC/DEC/(04)03 Amateur: RIR1101-20	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
77.5 - 78 GHz	AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth) 5.149	Amateur / Amateur-Satellite primary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 77-81 GHz: Short range devices: Automotive SRR: RIR1012-04, ECC/DEC/(04)03 Amateur: RIR1101-20	
78 - 79 GHz	RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560	Amateur / Amateur-Satellite secondary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 77-81 GHz: Short range devices: Automotive SRR: RIR1012-04, ECC/DEC/(04)03 Amateur: RIR1101-20	
79 - 81 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	Amateur / Amateur-Satellite secondary.	CIV/MIL	Civil use: Harmonised frequencies: Annex4 77-81 GHz: Short range devices: Automotive SRR: RIR1012-04, ECC/DEC/(04)03 Amateur: RIR1101-20	
81 - 84 GHz	FIXED 5.338A FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) 5.149 5.561A	Fixed primary. 81 - 81.5 GHz Amateur / Amateur-Satellite secondary (RR 5.561A).	CIV/MIL	Civil use: 81 - 86 GHz / 71 - 76 GHz: Fixed links: RIR0302-46, ECC/REC/(05)07 81 - 81.5 GHz Amateur: RIR1101-20	81 - 86 GHz: Fixed links Point-to-Point: digital links paired with 71 - 76 GHz.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
84 - 86 GHz	FIXED 5.338A FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149	Fixed primary.	CIV/MIL	Civil use: 81 - 86 GHz / 71 - 76 GHz: Fixed links: RIR0302-46, ECC/REC/(05)07	81 - 86 GHz: Fixed links Point-to-Point: digital links paired with 71 - 76 GHz.
86 - 92 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
92 - 94 GHz	FIXED 5.338A MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	Fixed primary planned.	CIV/MIL	Fixed planned.	92 - 94.0 and 94.1 - 95 GHz: Fixed (Point to Point) according to ECC/REC/(14)01 planned.
94 - 94.1 GHz	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy 5.562 5.562A		CIV/MIL		
94.1 - 95 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	Fixed primary planned.	CIV/MIL	Fixed planned.	92 - 94.0 and 94.1 - 95 GHz: Fixed (Point to Point) according to ECC/REC/(14)01 planned.
95 - 100 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	Planned according to National Allocation.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
100 - 102 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	All emissions are prohibited.	CIV		
102 - 105 GHz	FIXED MOBILE RADIO ASTRONOMY 5.149 5.341		CIV/MIL		
105 - 109.5 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341		CIV/MIL		
109.5 - 111.8 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	All emissions are prohibited.	CIV/MIL		
111.8 - 114.25 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341		CIV/MIL		
114.25 - 116 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	All emissions are prohibited.	CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
116 - 119.98 GHz	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.341		CIV		
119.98 - 120.02 GHz	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.341		CIV		
120.02 - 122.25 GHz	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138	EESS primary. 122.0-123.0 GHz SRD secondary.	CIV	122.0-123.0 GHz: ISM Band Short Range Devices: Non-specific SRDs: 122.00-122.25 GHz: RIR1008-36, ERC/REC 70-03	
122.25 - 123 GHz	FIXED INTER-SATELLITE MOBILE 5.558 Amateur 5.138	Amateur secondary. SRD secondary.	CIV/MIL	122.0-123.0 GHz: ISM Band Short Range Devices: Non-specific SRDs: RIR1008-15, ERC/REC 70-03 Amateur: RIR1101-21	
123 - 126 GHz	FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.554		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
126 - 130 GHz	FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.149 5.554		CIV/MIL		
130 - 134 GHz	EARTH EXPLORATION-SATELLITE (active) 5.562E FIXED INTER-SATELLITE MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A		CIV/MIL		
134 - 136 GHz	AMATEUR AMATEUR-SATELLITE Radio astronomy		CIV/MIL	Amateur: RIR1101-22	
136 - 141 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.149		CIV/MIL	Amateur: RIR1101-22	
141 - 148.5 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149		CIV/MIL		
148.5 - 151.5 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
151.5 - 155.5 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
155.5 - 158.5 GHz	EARTH EXPLORATION-SATELLITE (passive) 5.562F FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562G		CIV/MIL		
158.5 - 164 GHz	FIXED FIXED-SATELLITE MOBILE MOBILE-SATELLITE (space-to-Earth)		CIV/MIL		
164 - 167 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
167 - 168 GHz	FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558		CIV/MIL		
168 - 170 GHz	FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 5.149		CIV/MIL		
170 - 174.5 GHz	FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 5.149		CIV/MIL		
174.5 - 174.8 GHz	FIXED INTER-SATELLITE MOBILE 5.558		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
174.8 - 182 GHz	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)		CIV/MIL		
182 - 185 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
185 - 190 GHz	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)		CIV		
190 - 191.8 GHz	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
191.8 - 200 GHz	FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554		CIV/MIL		
200 - 202 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	All emissions are prohibited.	CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
202 - 209 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	All emissions are prohibited.	CIV		
209 - 217 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149 5.341		CIV/MIL		
217 - 226 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341		CIV/MIL		
226 - 231.5 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	All emissions are prohibited.	CIV		
231.5 - 232 GHz	FIXED MOBILE Radiolocation		CIV/MIL		
232 - 235 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation		CIV/MIL		
235 - 238 GHz	EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (passive) 5.563A 5.563B		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
238 - 240 GHz	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE		CIV/MIL		
240 - 241 GHz	FIXED MOBILE RADIOLOCATION		CIV/MIL		
241 - 248 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.138 5.149	Amateur / Amateur-Satellite. Short Range Devices.	CIV/MIL	244-246 GHz: ISM band: Short Range Devices: Non-specific SRDs: RIR1008-16, ERC/REC 70-03 241-250 GHz Amateur: RIR1101-23	
248 - 250 GHz	AMATEUR AMATEUR-SATELLITE Radio astronomy 5.149	Amateur / Amateur-Satellite pri- mary.	CIV/MIL	Amateur: RIR1101-23	
250 - 252 GHz	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	All emissions are prohibited.	CIV		
252 - 265 GHz	FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
265 - 275 GHz	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149 5.563A		CIV/MIL		
275 - 3000 GHz	Not allocated 5.565	Not allocated.	CIV/MIL	Not allocated.	

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5 Annexes and Appendices

Annex 1: List of frequency bands for UWB and Wideband SRD applications

Ultra Wide Band (UWB) technology means technology for short-range radiocommunication, involving the intentional generation and transmission of radio-frequency energy that spreads over a very large frequency range, which may overlap several frequency bands allocated to radiocommunication services. Short Range Devices (SRD) using UWB technology can be used for communications, measurement, location, imaging, surveillance and medical systems.

Devices using UWB technology and Short Range Devices (SRD) operate on a non-interference and non-protected basis.

Frequency Range / Main operating frequency bands:	Applications	ECC Decision / Recommendations	Technical interface regulations
148.5 – 5 000 kHz	Inductive applications	ERC/REC 70 -03	RIR1005-09
984 – 7 484 kHz	Eurobalise 4 234 kHz	ERC/REC 70 -03	RIR1002-04
516 – 8 516 kHz	Euroloop 4 516 kHz		RIR1002-03
5 000 – 30 000 kHz	Inductive applications	ERC/REC 70 -03	RIR1005-13
7 300 – 23 000 kHz	Euroloop 13 547 kHz	ERC/REC 70 -03	RIR1002-05
12 500 – 20 000 kHz	ULP active animal implantable devices (ULP-AID)	ERC/REC 70 -03	RIR1006-05
30 MHz – 12.4 GHz	GPR/WPR (Ground- and Wall Probing Radar imaging systems using Ultra-Wideband (UWB) technology).	ECC/DEC/(06)08	RIR1023-04
2 200 – 8 000 MHz	BMA (Building Material Analysis and classification applications and specific Material Sensing devices using Ultra-Wideband (UWB) technology)	ECC/DEC/(07)01	RIR1023-05
1 600 MHz - 10.6 GHz Main bands: 3 100 – 4 800 MHz 6 000 – 8 500 MHz 8 500 – 9 000 MHz	Communication applications. (Communications applications using mitigation techniques as Low Duty Cycle (LDC) or Detect And Avoid (DAA) combined with Transmit power Control (TPC).	ECC/DEC/(06)04	RIR1023-01
1 600 MHz - 10.6 GHz Main bands: 4 200 – 4 800 MHz 6 000 – 8 500 MHz	Communication applications. (UWB equipment restricted to indoor use)	ECC/DEC/(06)04	RIR1023-02
1 600 MHz - 10.6 GHz Main bands: 4 200 – 4 800 MHz 6 000 – 8 500 MHz	Communication applications. (Installed in automotive and railway vehicles)	ECC/DEC/(06)04	RIR1023-03
6 000 – 8 500 MHz	Devices using UWB technology onboard aircraft operating in the frequency band from 6 GHz to 8.5 GHz.	ECC/DEC/(12)03	RIR1023-06
21.65 – 26.65 GHz	24 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)10	RIR1012-05
24.25 – 26.65 GHz	24 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)10	RIR1012-07
76 – 77 GHz	76 GHz Vehicle and infrastructure radar		RIR1012-03

Frequency Range / Main operating frequency bands:	Applications	ECC Decision / Recommendations	Technical interface regulations
77 – 81 GHz	79 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)03	RIR1012-04
4 500 – 7000 MHz	Tank level probing radar (TLPR)	ERC/REC 70-03	RIR1004-09
8 500 – 10 600 MHz	Tank level probing radar (TLPR)	ERC/REC 70-03	RIR1004-10
24.05 – 27.00 GHz	Tank level probing radar (TLPR)	ERC/REC 70-03	RIR1004-11
57.00 – 64.00 GHz	Tank level probing radar (TLPR)	ERC/REC 70-03	RIR1004-12
75.00 – 85.00 GHz	Tank level probing radar (TLPR)	ERC/REC 70-03	RIR1004-13
6 000 – 8 500 MHz	Level probing radar (LPR)	ECC/DEC/(11)02	RIR1004-15
24.05 – 26.5 GHz	Level probing radar (LPR)	ECC/DEC/(11)02	RIR1004-16
57 – 64 GHz	Level probing radar (LPR)	ECC/DEC/(11)02	RIR1004-17
75 – 85 GHz	Level probing radar (LPR)	ECC/DEC/(11)02	RIR1004-18

Annex 2: List of specific assignments

Frequency - Range	TX Fix	TX Mobile	Applications
3010 kHz	3010.0	3010.0	Automatic DTS-Mail and voice
4086 - 4426 kHz	4207.5	4207.5	International distress frequency for DSC
	4215.5	4178.0	Automatic Radiotelex (Sitor)
	4378.0	4086.0	Maritime Duplex
	4420.0	4128.0	Maritime Duplex
	4426.0	4134.0	Maritime Duplex
4654 kHz	4654.0	4654.0	Aeronautical Simplex
4763 kHz	4763.0	4763.0	Automatic DTS-Mail and voice
5450.5 kHz	5450.5	5450.5	Automatic DTS-Mail and voice
6312.0 kHz	6312.0	6312.0	International distress frequency for DSC
6643 kHz	6643.0	6643.0	Aeronautical Simplex
8201 - 8809 kHz	8414.5	8414.5	International distress frequency for DSC
	8420.5	8380.5	Automatic Radiotelex (Sitor)
	8425.5	8385.5	Automatic Radiotelex (Sitor)
	8710.0	On request	Maritime Duplex
	8725.0	8201.0	Maritime Duplex
	8782.0	8258.0	Maritime Duplex
	8788.0	8264.0	Maritime Duplex
	8809.0	8285.0	Maritime Duplex
8936 kHz	8936.0	8936.0	Aeronautical Simplex
10069 kHz	10069.0	10069.0	Aeronautical Simplex
11172 kHz	11172.0	11172.0	Automatic DTS-Mail and voice
12233 - 13205 kHz	12577.0	12577.0	International distress frequency for DSC
	12588.0	12485.5	Automatic Radiotelex (Sitor)
	12600.5	12498.0	Automatic Radiotelex (Sitor)
	13080.0	12233.0	Maritime Duplex
	13104.0	12257.0	Maritime Duplex
	13155.0	12308.0	Maritime Duplex
	13164.0	12317.0	Maritime Duplex
	13185.0	12338.0	Maritime Duplex
	13205.0	13205.0	Aeronautical Simplex
13990 kHz	13990.0	13990.0	Automatic DTS-Mail and voice
16390 - 17407 kHz	16804.0	16804.0	International distress frequency for DSC
	16814.5	16691.0	Automatic Radiotelex (Sitor)
	16830.0	16707.0	Automatic Radiotelex (Sitor)
	17272.0	16390.0	Maritime Duplex
	17284.0	16402.0	Maritime Duplex
	17305.0	16423.0	Maritime Duplex
	17332.0	16450.0	Maritime Duplex
	17407.0	16525.0	Maritime Duplex
18023 kHz	18023.0	18023.0	Aeronautical Simplex
18230 kHz	18230.0	18230.0	Automatic DTS-Mail and voice

Frequency - Range	TX Fix	TX Mobile	Applications
18804 / 19779 kHz	19779.0	18804.0	Maritime Duplex
20090 kHz	20090.0	20090.0	Automatic DTS-Mail and voice
22039 - 22831 kHz	22381.5	22289.5	Automatic Radiotelex (Sitor)
	22401.0	22309.0	Automatic Radiotelex (Sitor)
	22735.0	22039.0	Maritime Duplex
	22753.0	22057.0	Maritime Duplex
	22789.0	22093.0	Maritime Duplex
	22831.0	22135.0	Maritime Duplex
25076 / 26151 kHz	26151.0	25076.0	Maritime Duplex

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
26965 - 27405 kHz	26965	26975	26985	27005	27015	CB radio
	27025	27035	27055	27065	27075	CB radio
	27085	27105	27115	27125	27135	CB radio
	27155	27165	27175	27185	27205	CB radio
	27215	27225	27235	27245	27255	CB radio
	27265	27275	27285	27295	27305	CB radio
	27315	27325	27335	27345	27355	CB radio
	27365	27375	27385	27395	27405	CB radio
27425 - 27925 kHz						Professional radio
	27425	27435	27445	27465	27475	Private companies
	27485	27905				Private companies
	27805	27885				Public police services
	27845	27925				Firebrigades
	27455					Rescue services
68 - 87.5 MHz						PMR
	68.350 - 74.800	paired with	78.150 - 86.050			Simplex Relays
	68.025					Tests and development
	69.725					Tests and development
	71.325	to	74.800			Various private services
	74.800	to	75.200			Aeronautical Marker beacons
	75.200 - 76.250	paired with	78.150 - 86.050			Simplex Relays
	75.200	to	86.350			Various private services
	79.525					Presentation of radio equipment
	80.475	to	87.500			Civil defence
	82.475	82.700	83.500			Temporary use at sport events
147.300 - 147.400 MHz	147.300	147.325	147.375	147.400		Paging
156 - 174 MHz						PMR
	156.000	to	157.425			Railways, Mountain Railways
	156.800					Rescue on lakes

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
156 - 174 MHz						PMR
	156.900	paired with	161.500	channel	Nr. 18	Rhine service
	156.975	paired with	161.575	channel	Nr. 79	Rhine service
	157.100	paired with	161.700	channel	Nr. 22	Rhine service
	157.200	paired with	161.800	channel	Nr. 24	Rhine service
	157.250	paired with	161.850	channel	Nr. 25	Rhine service
	157.300	paired with	161.900	channel	Nr. 26	Rhine service
	157.350	paired with	161.950	channel	Nr. 27	Rhine service
	157.450 - 159.100	paired with	162.050 - 163.700			Security
	158.075 (channel Nr. 1)	158.325 (channel Nr. 2)	158.400 (channel Nr. 3)	170.55 (channel Nr. 10)	170.900 (channel Nr. 11)	Fire-brigade service
	158.625 (channel Nr. 5)					Rescue coordination / Fire-brigade service
	158.675 (channel Nr. 7)	158.775 (channel Nr. 4)	158.950 (channel Nr. 6)	160.200 (channel Nr. 8)		Fire-brigade service
	158.825	and	158.700			Securo 1+ 2 (Ambulance)
	159.100 - 159.650	paired with	163.700 - 164.250			Energy
	159.200					Rescue
	159.450					Skilifts
	159.650	to	160.075			Various private services
	159.675	and	159.850			Heli 1 and 2
	160.075	to	162.050			Railways, Mountain Railways
	160.575					Temporary use at events
	161.300					Emergency
	161.975	162.025	<u>NIB/NPB</u>			Automatic Identification and Surveillance System (AIS) Maritime AIS equipment shall not be operated on Swiss territory with the exception on the Rhine, between Rheinfelden and Kembs!
	163.325	164.800				Medical
	163.600	163.700	164.450	171.325	173.725	Security purposes
	164.250	to	165.225			Various private services
	164.550					Postcars
	165.175					Presentation of equipment
	166.600 - 167.225	paired with	171.200 - 171.875			Road service
	167.275	to	169.400			Various private services
	167.500					Paging
	168.925	to	169.400			Railways, Mountain Railways

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
156 - 174 MHz						PMR
	169.425					Paging
	169.500	169.650	169.675	169.700	169.775	Paging
	169.625	169.725	169.750	169.800		Asset tracking and tracing
	171.875	to	173.975			Various private services
174 - 230 MHz						Broadcasting band III
	174	to	181			Channel 5
	181	to	188			Channel 6
	↓	↓	↓			↓
	216	to	223			Channel 11
	223	to	230			Channel 12
410 - 428 MHz						MOBILE
	410.125 - 411.025	paired with	420.125 - 421.025			Railways
	411.025 - 413.125	paired with	421.025 - 423.125			Mobile
	413.125 - 413.250	paired with	423.125 - 423.250			Railways
	413.250 - 413.575	paired with	423.250 - 423.575			Mobile
	413.575 - 413.900	paired with	423.575 - 423.900			Railways
	413.900 - 414.825	paired with	423.900 - 424.825			Mobile
	414.000 - 418.000	paired with	424.000 - 428.000			Various private services
	414.825 - 415.000	paired with	424.825 - 425.000			Railways
	415.000 - 415.575	paired with	425.000 - 425.575			Mobile
	415.575 - 415.900	paired with	425.575 - 425.900			Railways
	415.900 - 418.000	paired with	425.900 - 428.000			Mobile
	420.000					Acknowledge channel for Trunking networks
439.550 - 439.650 MHz	439.550	439.650				Civil defence
446.0 - 446.1 MHz	446.00625	446.01875	446.03125	446.04375	446.05625	PMR 446; Professional Mobile Radio
	446.06875	446.08125	446.09375			
446.1 - 446.2 MHz						Digital PMR 446; Digital Professional Mobile Radio
	446.103125	446.109375	to	446.190625	446.196875	6.25 kHz raster
	446.10625	446.11875	to	446.10625	446.11875	12.5 kHz raster

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
450 - 470 MHz						PMR
	450.000	to	451.650			Various private services
	451.150					Temporary use at events
	451.650 - 452.500	paired with	461.650 - 462.500			Security
	452.025	452.425	456.550	461.875	462.175	Security purposes
			462.200	468.975	469.825	Security purposes
	457.350					Protection of human (alarms)
	452.500	to	456.625			Various private services
	456.625 - 457.600	paired with	466.625 - 467.600			Security
	457.600 - 458.100	paired with	467.600 - 468.100			Railways
	458.100	to	461.650			Various private services
	461.150					Presentation of radio equipment
	462.425					Medical
	462.500	to	466.625			Various private services
	466.075					Paging
	468.100	to	470.000			Various private services
470 - 582 MHz						Broadcasting band IV
	470	to	478			channel 21
	478	to	486			channel 22
	⇓	⇓	⇓			⇓
	574	to	582			channel 34
582 – 782 MHz						Broadcasting band V
	582	to	590			channel 35
	590	to	598			channel 36
	598	to	606			channel 37
	606	to	614			channel 38
	⇓	⇓	⇓			⇓
	774	to	782	-	-	channel 59
11746.66 - 12091.90 MHz						BSS channels according to RR Apendix 30 at orbital position – 18.8°
Channel Nr.	2	4	6	8	10	
	11746.66	11785.02	11823.38	11861.74	11900.10	
Channel Nr.	12	14	16	18	20	
	11938.46	11976.82	12015.18	12053.54	12091.90	

Annex 3: List of technical interface regulations

Generality

Technical interface regulations (RIR) define the requirements for the frequency use by radiocommunication equipment in the frequency range up to 3000 GHz.

RIR include the technical parameters, the frequency bands as well as the licensing regime (in Switzerland) respectively the obligation for individual frequency assignment (in Liechtenstein).

RIR indicate the technical standards which, when they are fulfilled, pose a presumption of conformity to the essential requirements.

The fulfilling of the essential requirements constitutes one of the conditions for offering and placing on the market of radiocommunication equipment in Switzerland and in the Principality of Liechtenstein.

Legal base

The technical interface regulations are based on art. 25 and 31 of the telecommunications law [FMG; SR 784.10], on art. 3 of the decree on frequency management and radiocommunications licenses [FKV; SR 784.102.1], the decree of OFCOM on frequency management and radiocommunications licenses [VFKV; SR 784.102.11] as well as on art. 3 of the decree on telecommunication equipment [FAV; SR 784.101.2]. The technical interface regulations are published in annex 2 of the decree of OFCOM on telecommunication equipment [VFAV; SR 784.101.21].

The technical interface regulations (RIR) can be obtained from the undermentioned addresses*) and are referred in this document with hyperlinks to the homepage <http://www.bakom.admin.ch>.

At present the following technical interface regulations are published:

Aeronautical	Aeronautical communications	RIR0101
	Aeronautical navigation	RIR0102
	Aeronautical surveillance	RIR0103
	Aeronautical emergency	RIR0104
Broadcasting	Broadcasting (terrestrial)	RIR0201
	SAP/SAB and ENG/OB	RIR0203
Fixed links	Point-to-Multipoint	RIR0301
	Point-to-Point	RIR0302
Land mobile	Digital cellular	RIR0501
	Cordless telephones	RIR0503
	Emergency services	RIR0504
	Paging	RIR0506
	PMR/PAMR	RIR0507
	ITS	RIR0510
Maritime	GMDSS	RIR0601
	Maritime communications	RIR0603
	Maritime navigation	RIR0604
Meteorology	Sondes	RIR0702
	Weather radar	RIR0703
	Wind profiler	RIR0705

Satellite systems (civil)	FSS Earth stations	RIR0806
	MSS Earth stations	RIR0808
	Radionavigation-satellite systems (RNSS)	RIR0809
Short range devices	Alarms	RIR1001
	Railway applications	RIR1002
	Tracking, tracing and data acquisition	RIR1003
	Radiodetermination applications	RIR1004
	Inductive applications	RIR1005
	Wireless applications in healthcare	RIR1006
	Model control	RIR1007
	Non-specific SRDs	RIR1008
	Radio microphones and ALD	RIR1009
	Wideband data transmission systems	RIR1010
	RFID	RIR1011
	TTT	RIR1012
	Wireless audio applications	RIR1013
	Telecommand, telemetry and data transmission with higher power	RIR1021
	UWB applications	RIR1023
Other	Amateur	RIR1101
	CB radio	RIR1102
	Radiolocation (civil)	RIR1108
Draft	Draft for future RIR	RIR9999

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<http://www.bakom.ch>: → Home → Topics → Frequencies & antennas → National Frequency Allocation Plan → Technical interface regulations:
<http://www.bakom.admin.ch/themen/frequenzen/01753/01754/index.html?lang=en>

Annex 4: Harmonised frequency ranges

Indicative list of harmonised frequency ranges and applications in Switzerland and the Principality of Liechtenstein and in Europe.

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub-classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
9 – 315 kHz	SRD / Active medical implants	RIR1006-01	-	81 (2014_12_subcl_1) (2013/752/EU)
9 – 20.05 kHz	SRD / Inductive applications	RIR1005-01	-	36 (2014_12_subcl_1) (2013/752/EU)
20.05 – 135 kHz	SRD / Inductive applications	RIR1005-01	-	36, 37, 39, 40a-e, 41, 42a-b (2014_12_subcl_1) (2013/752/EU)
135 – 140 kHz	SRD / Inductive applications	RIR1005-01	-	106 (2014_12_subcl_1) (2013/752/EU)
140 – 148.5 kHz	SRD / Inductive applications	RIR1005-01	-	73 (2014_12_subcl_1) (2013/752/EU)
148.5 – 5000 kHz	SRD / Inductive applications	RIR1005-09	-	74 (2014_12_subcl_1) (2013/752/EU)
315 – 600 kHz	SRD / Ultra Low Power Animal Implantable Devices (ULP-AID)	RIR1006-03	-	85 (2014_12_subcl_1) (2013/752/EU)
400 – 600 kHz	SRD / Inductive applications	RIR1005-14	-	75 (2014_12_subcl_1) (2013/752/EU)
457 kHz	SRD / Detection of avalanche victims	RIR1003-01	-	49 (2014_12_subcl_1)
984-7484 kHz	Transport and Traffic Telematics, for Eurobalise only	RIR1002-04	-	109 (2014_12_subcl_1) (2013/752/EU)
3155 – 3400 kHz	SRD / Inductive applications	RIR1005-10	-	76 (2014_12_subcl_1) (2013/752/EU)
5000 – 30000 kHz	SRD / Inductive applications	RIR1005-13	-	77 (2014_12_subcl_1) (2013/752/EU)
6765 – 6795 kHz	SRD / Inductive applications	RIR1005-02	-	114 (2014_12_subcl_1) (2013/752/EU)
6765 – 6795 kHz	SRD / Non Specific Short Range Devices	RIR1008-01	-	44 (2014_12_subcl_1) (2013/752/EU)
7 300 – 23 000 kHz	Transport and Traffic Telematics , for Euroloop only	RIR1002-05	-	110 (2014_12_subcl_1) (2013/752/EU)
7400 – 8800 kHz	SRD / Inductive applications	RIR1005-03	-	45 (2014_12_subcl_1)
10200 – 11000 kHz	SRD / Inductive applications	RIR1005-11	-	78 (2014_12_subcl_1) (2013/752/EU)
12500 – 20000 kHz	SRD / Ultra Low Power Animal Implantable Devices (ULP-AID)	RIR1006-05	-	H04 (2014_12_subcl_2) (2013/752/EU)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub- classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
13.553 – 13.567 MHz	SRD / Inductive applications	RIR1005-04	-	116 (2014_12_subcl_1) (2013/752/EU)
13.553 – 13.567 MHz	SRD / Inductive applications	RIR1005-12	-	79 (2014_12_subcl_1) (2013/752/EU)
13.553 – 13.567 MHz	SRD / Non Specific Short Range Devices	RIR1008-02	-	24 (2014_12_subcl_1) (2013/752/EU)
26.957 – 27.283 MHz	SRD / Inductive applications	RIR1005-05	-	25 (2014_12_subcl_1) (2013/752/EU)
26.957 – 27.283 MHz	SRD / Non Specific Short Range Devices	RIR1008-03	-	25 (2014_12_subcl_1) (2013/752/EU)
26.990 – 27.000 MHz	SRD / Model control	RIR1007-01	-	94 (2014_12_subcl_1) (2013/752/EU)
26.990 – 27.000 MHz	SRD / Non Specific Short Range Devices	RIR1008-38	-	118 (2014_12_subcl_1) (2013/752/EU)
27.040 – 27.050 MHz	SRD / Model control	RIR1007-01	-	95 (2014_12_subcl_1) (2013/752/EU)
27.040 – 27.050 MHz	SRD / Non Specific Short Range Devices	RIR1008-38	-	119 (2014_12_subcl_1) (2013/752/EU)
27.090 – 27.100 MHz	SRD / Model control	RIR1007-01	-	96 (2014_12_subcl_1) (2013/752/EU)
27.090 – 27.100 MHz	SRD / Non Specific Short Range Devices	RIR1008-38	-	120 (2014_12_subcl_1) (2013/752/EU)
27.140 – 27.150 MHz	SRD / Model control	RIR1007-01	-	97 (2014_12_subcl_1)(2013/752/EU)
27.140 – 27.150 MHz	SRD / Non Specific Short Range Devices	RIR1008-38	-	121 (2014_12_subcl_1) (2013/752/EU)
27.190 – 27.200 MHz	SRD / Model control	RIR1007-01	-	98 (2014_12_subcl_1) (2013/752/EU)
27.190 – 27.200 MHz	SRD / Non Specific Short Range Devices	RIR1008-38	-	122 (2014_12_subcl_1) (2013/752/EU)
30 – 37.5 MHz	SRD / Medical implants	RIR1006-04	-	82 (2014_12_subcl_1) (2013/752/EU)
40.660 – 40.700 MHz	SRD / Non Specific Short Range Devices	RIR1008-04	-	19 (2014_12_subcl_1) (2013/752/EU)
87.5 – 108 MHz	SRD / Wireless audio application	RIR1013-19	-	86 (2014_12_subcl_1) (2013/752/EU)
169.4 – 169.475 MHz	SRD / Public hearing aids	RIR1009-14	-	68 (2014_12_subcl_1) (2013/752/EU)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub-classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
169.4 – 169.475 MHz	SRD / Meter reading systems	RIR1003-03	-	123 (2014_12_subcl_1) (2013/752/EU)
169.4 – 169.475 MHz	SRD / Non Specific Short Range Devices	RIR1008-32	-	80 (2014_12_subcl_1) (2013/752/EU)
169.4 – 169.4875 MHz	SRD / Non Specific Short Range Devices	RIR1008-33	-	128 (2014_12_subcl_1) (2013/752/EU)
169.4875 – 169.5875 MHz	SRD / Public hearing aids	RIR1009-15	-	64 (2014_12_subcl_1) (2013/752/EU)
169.4875 – 169.5875 MHz	SRD / Non Specific Short Range Devices	RIR1008-34	-	124 (2014_12_subcl_1) (2013/752/EU)
169.5875 - 169.8125 MHz	SRD / Non Specific Short Range Devices	RIR1008-35	-	129 (2014_12_subcl_1) (2013/752/EU)
401 – 402 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	RIR1006-07	-	83 (2014_12_subcl_1) (2013/752/EU)
402 – 405 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	RIR1006-02	-	47 (2014_12_subcl_1) (2013/752/EU)
405 – 406 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	RIR1006-08	-	84 (2014_12_subcl_1) (2013/752/EU)
433.05 – 434.04 MHz	SRD / Non Specific Short Range Devices	RIR1008-18	-	61 (2014_12_subcl_1) (2013/752/EU)
433.05 – 434.04 MHz	SRD / Non Specific Short Range Devices	RIR1008-05	-	20 (2014_12_subcl_1) (2013/752/EU)
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	RIR1008-18	-	63 (2014_12_subcl_1) (2013/752/EU)
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	RIR1008-05	-	20, 125 (2014_12_subcl_1) (2013/752/EU)
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	RIR1008-19	-	65 (2014_12_subcl_1) (2013/752/EU)
446.0 – 446.2 MHz	Land mobile / PMR446 analog and digital	RIR0507-35		51 (2014_12_subcl_1) 99 (2014_12_subcl_1)
863 – 865 MHz	SRD / Radio Microphones	RIR1009-05	-	48 (2014_12_subcl_1) (2013/752/EU)
863 – 865 MHz	SRD / Wireless Audio applications	RIR1013-01	-	48 (2014_12_subcl_1) (2013/752/EU)
863 – 870 MHz	SRD / Non Specific Short Range Devices / FHSS	RIR1008-20	-	(2013/752/EU)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub- classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
863 – 870 MHz	SRD / Non Specific Short Range Devices / Wide band DSSS and other non FHSS	RIR1008-22	-	66 (2014_12_subcl_1) (2013/752/EU)
863 – 870 MHz	SRD / Non Specific Short Range Devices / Narrow / wide band, BW max. 0.6 MHz	RIR1008-29	-	66 (2014_12_subcl_1) (2013/752/EU)
865 – 868 MHz	SRD / Non Specific Short Range Devices / FHSS	RIR1008-21	-	67 (2014_12_subcl_1) (2013/752/EU)
865 – 868 MHz	SRD / Non Specific Short Range Devices / non FHSS, BW max. 0.6 MHz	RIR1008-25	-	67 (2014_12_subcl_1) (2013/752/EU)
865 – 868 MHz	SRD / Non Specific Short Range Devices / non FHSS, BW 0.2 – 3 MHz	RIR1008-28	-	67 (2014_12_subcl_1) (2013/752/EU)
865 – 868 MHz	SRD / Non Specific Short Range Devices / Narrow / wide band: BW max. 0.3 MHz	RIR1008-30	-	67 (2014_12_subcl_1) (2013/752/EU)
865 – 868 MHz	SRD / Radio Frequency Identification (RFID) Devices	RIR1011-07	-	56 (2014_12_subcl_1) (RFID in 865-868 MHz band: 2006/804/EC)
865 – 870 MHz	SRD / Non Specific Short Range Devices / Wide band non FHSS	RIR1008-24	-	67 (2014_12_subcl_1) (2013/752/EU)
868.0 – 868.6 MHz	SRD / Non Specific Short Range Devices	RIR1008-06	-	28 (2014_12_subcl_1) (2013/752/EU)
868.6 – 868.7 MHz	SRD / Alarms	RIR1001-02	-	32 (2014_12_subcl_1) (2013/752/EU)
868.7 – 869.2 MHz	SRD / Non Specific Short Range Devices	RIR1008-07	-	29 (2014_12_subcl_1) (2013/752/EU)
869.2 – 869.25 MHz	SRD / Social Alarms	RIR1001-05	-	35 (2014_12_subcl_1) (2013/752/EU)
869.25 – 869.3 MHz	SRD / Alarms	RIR1001-03	-	33 (2014_12_subcl_1) (2013/752/EU)
869.300 – 869.400 MHz	SRD / Alarms	RIR1001-06	-	72 (2014_12_subcl_1) (2013/752/EU)
869.4 – 869.65 MHz	SRD / Non Specific Short Range Devices	RIR1008-09	-	30 (2014_12_subcl_1) (2013/752/EU)
869.4 – 869.65 MHz	SRD / Non Specific Short Range Devices	RIR1008-29	-	130 (2014_12_subcl_1) (2013/752/EU)
869.65 – 869.7 MHz	SRD / Alarms	RIR1001-04	-	34 (2014_12_subcl_1) (2013/752/EU)
869.7 – 870 MHz	SRD / Non Specific Short Range Devices	RIR1008-27	-	69 (2014_12_subcl_1) (2013/752/EU)
869.7 – 870 MHz	SRD / Non Specific Short Range Devices	RIR1008-10	-	31 (2014_12_subcl_1) (2013/752/EU)
876 – 880 / 921 – 925 MHz	Land mobile / GSM-R	RIR0501-16	-	9a (2014_12_subcl_1)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub-classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
880 – 915 / 925 – 960 MHz	Land mobile / GSM	RIR0501-01	-	9a (2014_12_subcl_1) (2011/251/EU) (2009/766/EC)
1525.0 – 1544.0 MHz	Satellite systems / Land Mobile Earth Stations	RIR0808-01	-	11 (2014_12_subcl_1)
1525.0 – 1544.0 MHz	Satellite systems / Land Mobile Satellite Service	RIR0808-07	-	16 (2014_12_subcl_1)
1555.0 – 1559.0 MHz	Satellite systems / Land Mobile Earth Stations	RIR0808-01	-	11 (2014_12_subcl_1)
1555.0 – 1559.0 MHz	Satellite systems / Land Mobile Satellite Service	RIR0808-07	-	16 (2014_12_subcl_1)
1610 – 1613.5 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	RIR0808-06	Frequency range	14 (2014_12_subcl_1)
1613.8 – 1626.5 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	RIR0808-06	Frequency range	14 (2014_12_subcl_1)
1626.5 – 1645.5 MHz	Satellite systems / Land Mobile Satellite Service	RIR0808-07	Frequency range	16 (2014_12_subcl_1)
1631.5 – 1634.5 MHz	Satellite systems / Land Mobile Earth Stations	RIR0808-01	Frequency range	11 (2014_12_subcl_1)
1656.5 – 1660.5 MHz	Satellite systems / Land Mobile Satellite Service	RIR0808-02	Frequency range	16 (2014_12_subcl_1)
1656.5 – 1660.5 MHz	Satellite systems / Land Mobile Earth Stations	RIR0808-01	Frequency range	11 (2014_12_subcl_1)
1710 – 1785 / 1805 – 1880 MHz	Land mobile / GSM	RIR0501-02	Frequency range	9a (2014_12_subcl_1) (2011/251/EU) (2009/766/EC)
1880 – 1900 MHz	Land mobile / DECT	RIR0503-01	-	18 (2014_12_subcl_1)
1880 – 19 00 MHz	Land mobile / DECT	RIR0503-01	-	H10 (2014_subcl_2)
1980 – 2010 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	RIR0808-10	-	15 (2014_12_subcl_1)
2170 – 2200 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	RIR0808-10	-	15 (2014_12_subcl_1)
2400 – 2483.5 MHz	SRD / Non Specific Short Range Devices	RIR1008-11	-	21 (2014_12_subcl_1) (2013/752/EU)
2400 – 2483.5 MHz	SRD / Wideband Data Transmission Systems	RIR1010-01	-	22 (2014_12_subcl_1) (2013/752/EU)
2400 – 2483.5 MHz	SRD / Radio determination applications	RIR1004-01	-	26 (2014_12_subcl_1) (2013/752/EU)
2446 – 2454 MHz	SRD / Radio Frequency Identification (RFID)	RIR1011-01	-	100 (2014_12_subcl_1) (2013/752/EU)
2483.5 – 2500 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	RIR0808-05	-	14 (2014_12_subcl_1)
2483.5 – 2500 MHz	SRD / Active medical implants (not for peripheral master units)	RIR1006-09	-	117 (2014_12_subcl_1)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub- classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
2483.5 – 2500 MHz	SRD / Active medical implants (peripheral master units)	RIR1006-09	-	H09 (2014_subcl_2)
2500 – 2570 MHz	Land mobile / IMT User Equipment	RIR0501-11	-	EC Decision 2008/477/EC
2620 – 2690 MHz	Land mobile / IMT Base Station	RIR0501-12	-	EC Decision 2008/477/EC
4500 – 7000 MHz	SRD / Tank level probing radar (TLPR)	RIR1004-09	-	89 (2014_12_subcl_1) (2013/752/EU)
5150 – 5350 MHz	Wideband Data Transmission Systems	RIR1010-05	-	H01 (2014_subcl_2) (2005/513/EC) (2007/90/EC)
5470 – 5725 MHz	Wideband Data Transmission Systems	RIR1010-04	-	54 (2014_12_subcl_1) (2005/513/EC)
5725 – 5875 MHz	SRD / Non Specific Short Range Devices	RIR1008-12	-	43 (2014_12_subcl_1) (2013/752/EU)
5795 – 5805 MHz	Transport and Traffic Telematics. For Road Toll Systems only.	RIR1012-01	-	H05 (2014_12_subcl_2) (2013/752/EU)
5875 – 5905 MHz	Intelligent Transport Systems (ITS)	RIR0501-01	-	(2008/671/EC)
6000 – 8500 MHz	SRD / Level probing radar (LPR)	RIR1004-15	-	H06 (2014_12_subcl_2) (2013/752/EU)
8500 – 10600 MHz	SRD / Tank level probing radar (TLPR)	RIR1004-10	-	90 (2014_12_subcl_1) (2013/752/EU)
10.7 – 11.7 GHz	Satellite systems / Land Mobile Earth Stations	RIR0808-15	-	12 (2014_12_subcl_1)
12.5 – 12.75 GHz	Satellite systems / Land Mobile Earth Stations	RIR0808-15	-	12 (2014_12_subcl_1)
14.0 – 14.25 GHz	Satellite systems / Land Mobile Earth Stations	RIR0808-15	-	12 (2014_12_subcl_1)
17.1 – 17.3 GHz	SRD / Radio determination applications	RIR1004-14	-	88 (2014_12_subcl_1) (2013/752/EU)
21.65 – 26.65 GHz	SRD / Automotive short-range radar 24 GHz	RIR1012-05	-	52 (2014_12_subcl_1) (2005/50/EC) (2011/485/EU)
24.00 – 24.25 GHz	SRD / Non Specific Short Range Devices	RIR1008-13	Frequency range TX Power	101, 102, 103, 104 (2014_12_subcl_1) (2013/752/EU)
24.05 – 26.5 GHz	SRD / Level probing radar (LPR)	RIR1004-16	-	H07 (2014_12_subcl_2) (2013/752/EU)
24.05 – 27.00 GHz	SRD / Tank level probing radar (TLPR)	RIR1004-11	-	91 (2014_12_subcl_1) (2013/752/EU)
24.15 – 24.25 GHz	SRD / Movement Detection / Non Specific Short Range Devices	RIR1008-13	-	27 (2014_12_subcl_1) (2013/752/EU)

Frequency band	Application	Regulation in Switzerland and the Principality of Liechtenstein	Difference in the regulation (less restrictive conditions)	Harmonised regulation in Europe (sub- classes in accordance with the R&TTE Directive 1999/5/EC, see www.cept.org/ecc , R&TTE)
24.25 – 24.5 GHz	SRD / Automotive radar	RIR1012-08	-	111, 112, 113 (2014_12_subcl_1) (2014_subcl_2)
24.25 – 26.65 GHz	SRD / Automotive short-range radar 24 GHz	RIR1012-07	-	52b (2014_12_subcl_1) (2011/485/EU)
57 – 64 GHz	SRD / Tank level probing radar (TLPR)	RIR1004-12	-	92 (2014_12_subcl_1) (2013/752/EU)
57 – 66 GHz	SRD / Wideband Data Transmission Systems	RIR1010-07	-	H03 (2014_12_subcl_2) (2013/752/EU)
61.0 – 61.5 GHz	SRD / Non Specific Short Range Devices	RIR1008-14	-	71 (2014_12_subcl_1) (2013/752/EU)
63 – 64 GHz	Intelligent Transport Systems (ITS)	RIR0510-04	-	105 (2014_12_subcl_1)
75 – 85 GHz	SRD / Level probing radar (LPR)	RIR1004-18	-	H08 (2014_12_subcl_2) (2013/752/EU)
75 – 85 GHz	SRD / Tank level probing radar (TLPR)	RIR1004-13	-	93 (2014_12_subcl_1) (2013/752/EU)
76 – 77 GHz	SRD / Vehicle and infrastructure radar	RIR1012-03	-	50 (2014_12_subcl_1)
77 – 81 GHz	SRD / Vehicle and infrastructure radar	RIR1012-04	-	53 (2014_12_subcl_1) (2004/545/EC)
122 – 122.25-GHz	SRD / Non Specific Short Range Devices	RIR1008-36	TX- Power	(107) (2014_12_subcl_1) (2013/752/EU)
122.25 – 123-GHz	SRD / Non Specific Short Range Devices	RIR1008-15	-	107 (2014_12_subcl_1) (2013/752/EU)
1.6 – 10.6 GHz	SRD using ultra-wideband technology	RIR1023	-	H02 a-f (2014_12_subcl_2) (2009/343/EC) (2007/131/EC)

Appendix 1: Abbreviations

ACLR	Adjacent Channel Leakage Ratio
ACP	Adjacent Channel Power
ACRR	Adjacent Channel Rejection Ratio
ADS	Automatic Dependant Surveillance (Aeronautical)
Aer Mob (OR)	Aeronautical Radiocommunication
Aer Mob (R)	Aeronautical Mobile (off route)
Aer Nav	Aeronautical Radionavigation
AES	Aircraft Earth Stations
AF	Air Forces
AFA	Adaptive Frequency Agility
AGA	Air-Ground-Air
AIP	Aeronautical Information Publication (CH)
AIS	"Automatic Identification and Surveillance System" or "Universal shipborne Automatic Identification System"
ALD	Assistive Listening Devices
AM	Amplitude Modulation
AMS(R)S	Aeronautical Mobile-Satellite (Route) Service
ASDE	Airport Surface Detection Equipment
ATIS	Automatic Transmitter Identification System
ATPC	Automatic Transmit Power Control
BBDR	Broad Band Disaster Relief
BC	Broadcasting
BEM	Block Edge Mask
BFWA	Broadband Fixed Wireless Access
BMA	Building Material Analysis
BSS	Broadcasting Satellite Service
BTS	Base Transceiver Station
BWA	Broadband Wireless Access
CB	Citizen's Band
CDMA	Code Division Multiple Access
CEPT	European Conference of Postal and Telecommunications Administrations
CGC	Complementary Ground Component
CH	Switzerland
CICR	Comité International de la Croix Rouge
COM	Communication
COSPAS	Cosmicheskaya Sistyema Poiska Avariynich Sudow
CT	Cordless Telephone
DA2GC	Direct Air-to-Ground Communications
CW	Continous Waves
DAA	Detect and Avoid
DAB	Digital Audio Broadcasting
dB	decibel
dBd	antenna gain in decibels relative to a dipole antenna
dBi	antenna gain in decibels relative to an isotropic antenna
dBm	dB relative to the power of 1 mW
dBW	dB relative to the power of 1 W
DC	Duty Cycle
DEC	Decision
DECT	Digital Enhanced Cordless Telecommunications
D-GPS	Differential Global Positioning System

DL	Down Link (Base station to Mobile station)
DME	Distance Measuring Equipment
DMO	Direct Mode Operation (PMR)
DMR	Digital Mobile Radio
DRM	Digital Radio Mondiale
DRS	Digital Radio System
DSC	Digital Selective Calling
DSRR	Digital Short- Range Radio
DSSS	Direct Sequence Spread Spectrum
DVB-T	Digital Video Broadcasting - Terrestrial
DVB-H	Digital Video Broadcasting - Handheld
EAS	Electronic Article Surveillance
ECA	European Common Allocation
ECC	Electronic Communications Committee
ECC/DEC	Decision from the ECC
ECC/REC	Recommendation from the ECC
ECO	European Communications Office
EESS	Earth Exploration-Satellite Service
EFIS	ERO Frequency Information System
EIRP or e.i.r.p.	Equivalent Isotropically Radiated Power
ELT	Emergency Locator Transmitter
EMC	Electromagnetic Compatibility
EN	European Standard (Telecommunications series)
ENG/OB	Electronic News Gathering / Outside Broadcasting
EPIRBs	Emergency Position Indicating Radio Beacon
ERC	European Radiocommunications Committee
ERC/DEC	Decision from the ERC
ERC/REC	Recommendation from the ERC
ERMES	Enhanced Radio Messaging System
ERO	European Radiocommunications Office
ERP or e.r.p.	Effective Radiated Power
ERPEP	Effective Radiated Peak Envelope Power
ESV	Earth Stations on-board Vessels
ETSI	European Telecommunications Standards Institut
FB	Base station (in a mobile radio system)
FHSS	Frequency Hopping Spread Spectrum
FM	Frequency Modulation
FMCW	Frequency Modulated Continuous Wave
FOCA	Federal Office of Civil Aviation
FHSS	Frequency Hopping Spread Spectrum
FS	Fixed Service
FSS	Fixed-Satellite Service
FWA	Fixed Wireless Access
GALILEO	European Global Navigation Satellite System
GBAS	Ground Based Augmentation System
GBSAR	Ground Based Synthetic Aperture Radar
GBR	Ground Based Radar
GLONASS	Global Orbiting Navigation Satellite System (Globalnaya Navigatsionnaya Sputniko- vaya Sistema)
GMDSS	Global Maritime Distress and Safety System
GNSS	Global Navigation Satellite System
GNSS Pseudolites	Global Navigation Satellite System Pseudolites

GPR	Ground Probing Radar
GPS	Global Positioning System
GSM	Global System for Mobile Communications
GSM 1800	Global System for Mobile Communications at 1800 MHz
GSM 900	Global System for Mobile Communications at 900 MHz
GSMOBA	Global System for Mobile Communications On Board Aircraft
GSMOBV	Global System for Mobile Communications On Board Vessels
GSM-R	Global System for Mobile Communications on Railways
GSO ESOMPs	Earth Stations On Mobile Platforms (geostationary FSS systems)
HAPS	High Altitude Platform Station
HDFS	High Density applications in the Fixed Service
HEST	High EIRP Satellite Terminal
HIPERLAN	High Performance Radio Local Area Network
HRPD	High Rate Packet Data
ICAO	International Civil Aviation Organisation
IEEE	Institute of Electrical and Electronics Engineers
IFF	Identification Friend or Foe
ILS	Instrument Landing Systems
IMT	International Mobile Telecommunications
IMT-2000	International Mobile Telecommunications-2000
ISM	Industrial, Scientific and Medical Applications
ITS	Intelligent Transport Systems
ITU	International Telecommunication Union
JTIDS	Joint Tactical Information and Distribution System
LAN	Local Area Network
LBT	Listen Before Talk, Listen Before Transmit
Links	Radio Connections
LPD	Low Power Device
LPR	Level Probing Radar
LRR	Long Range Radar
LTE	Long Term Evolution
Mar Mob	Maritime Mobile
MAC	Medium Access Control
MFCN	Mobile/Fixed Communications Networks
MEDS	Medical Data Service Systems
MIDS	Multifunctional Information Distribution System
Misc. applic.	Miscellaneous applications
ML	Mobile station (in a mobile radio system)
MLS	Microwave Landing System
mmwFS	millimetre wave applications in the Fixed Service
MP-MP	Multipoint to Multipoint
MSI	Maritime Safety Information
MSS	Mobile-Satellite Service
MWS	Multimedia Wireless System
NAVTEX	Narrow-band direct-printing telegraphy system for transmission of navigational and meteorological warnings and urgent information to ships
NCU	Network Control Unit
NDB	Non Directional Radio Beacon
NGSO	Non Geostationary Satellite Orbit
NGSO ESOMPs	Land and Maritime Earth Stations On Mobile Platforms (ESOMPs) operating with Non-Geostationary FSS systems.
NIB	Non Interference Basis (in connection with frequency assignment)

NMT	Nordic Mobile Telephone
NPB	Non Protected Basis (in connection with frequency assignment)
NP2M	Narrowband Point to Multipoint system
OB	Outside Broadcasting
OBTS	On Board Transceiver Station
OFCOM	Federal Office of Communications
OFDM	Orthogonal Frequency Division Multiplexing
PAMR	Public Access Mobile Radio
PLB	Personal Locator Beacon
PLC	Powerline Communications
P-MP	Point to Multipoint
PMR	Private (Professional) Mobile Radio
PMSE	Programme Making and Special Events
POCSAG	Post Office Code Standard Advisory Group
PPDR	Public Protection and Disaster Relief
Primary	Where a band is indicated as allocated to more than one service and the name of the service is printed in "capitals" (example: FIXED) these are called "primary" services. Within a band, primary services shall have prior choice of frequencies. Where a band is indicated in a footnote of the Table as allocated to a service "on a primary basis" in an area smaller than a Region, or in a particular country, this is a primary service only in that area or country.
P-P	Point to Point
ppm	parts per million
PRF	Pulse Repetition Frequency
PSD	Power Spectral Density
R Tags	Radio Tags
R&TTE	Radio and Telecommunications Terminal Equipment
RA	Radio Astronomy
RAS	Radio Astronomy Service
RBW	Resolution Bandwidth
REC	Recommendation
REGA	Swiss Air-Rescue
RF	Radio frequency
RFID	Radio Frequency Identification
RIR	Radio Interface Regulation
RLAN	Radio Local Area Networks
RNSS	Radionavigation Satellite Service
RR	Radio Regulations
RR xxx	Radio Regulations, Note xxx (see NaFZ Annex 1)
RSBN	Radiolocation Systems for Short Range Navigation
RSU	Road Site Units
RTE	Radar Target Enhancer
RTPC	Remote Transmit Power Control
RX	Receiver (Receiving frequency)
SAB	Service Ancillary to Broadcasting
SAP	Service Ancillary to Programme making
SAR	Search and Rescue
SARSAT	Search and Rescue Satellite
SDL	Supplementary Down Link
S-DAB	Satellite Digital Audio Broadcasting
Secondary	"Where a band is indicated as allocated to more than one service and the name of the service is printed in "normal characters" (example: Fixed) these are called "secondary services".

Stations of a secondary service:

- shall not cause harmful interference to stations of primary services to which the frequencies are already assigned or to which stations may be assigned at a later date.
- cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date.
- can claim protection, however from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.

Where a band is indicated in a footnote of the table as allocated to a service "on a secondary basis" in an area smaller than a Region, or in a particular country, this is a secondary service."

SF-CW Radar	Stepped Frequency CW Radar
SIT/SUT	Satellite Interactive Terminal / Satellite User Terminal
SNG	Satellite News Gathering
SOLAS	Safety of Life at Sea
SPA	Self Provided Applications
S-PCS	Satellite Personal Communication System
SRD	Short Range Device
SRR	Short Range Radars
SS	Spread Spectrum
SSR	Secondary Surveillance Radar
TACAN	Tactical Air Navigation
TACS	Total Access Communications System
TAPS	TETRA Advanced Packet Service
T-DAB	Terrestrial Digital Audio Broadcasting
TETRA	Trans European Trunked Radio System, Terrestrial Trunked Radio
TETRAPOL	Digital PMR technology
TLPR	Tank Level Probing Radar
TRA-ECS	Terrestrial radio applications capable of providing electronic communications services
TTT	Transport and Traffic Telematics
TV	Television
TX	Transmitter (Transmitting frequency)
UAV	Unmanned Aerial Vehicle
UL	Up Link (Mobile station to Base station)
ULP-AID	Ultra Low Power Animal Implantable Devices
ULP-AMI	Ultra Low Power Active Medical Implants
ULP-MMI	Ultra Low Power Medical Membrane Implants
UMTS	Universal Mobile Telecommunication System
UNO	United Nations Organisation
UWB	Ultra Wide Band
VBW	Video BandWidth
VLBI	Very Long Baseline Interferometry
VOR	VHF Omnidirectional Radio Range
v-BS	Vessel Base Station
v-MS	Vessel Mobile Station
VSAT	Very Small Aperture Terminal
VSWR	Voltage Standing Wave Ratio
VTS	Vessel Traffic System (radar)
WAS	Wireless Access Systems
WAS/RLAN	Wireless Access Systems including Radio Local Area Networks
WB	Wide Band
WIA	Wireless Industrial Applications

WiMAX	Worldwide Interoperability for Microwave Access
WLAM	Wideband Low Activity Mode
WPR	Wall Probing Radar
WRC	World Radiocommunication Conference
WTO	World Trade Organization

Appendix 2: Relevant CEPT ERC or ECC Decisions and Recommendations

Note: The mere fact that a Decision or a Recommendation is listed in the column "Notes" does not mean that the document has been approved in Switzerland. The official publication of the CEPT Electronic Communications Committee (<http://www.cept.org/ecc>) contains information on the implementation status.

Decisions:

- [ECC/DEC/\(15\)05](#) on "The harmonised frequency range 446.0-446.2 MHz, technical characteristics, exemption from individual licensing and free carriage and use of analogue and digital PMR 446 applications". Approved 3 July 2015.
- [ECC/DEC/\(15\)04](#) on "The harmonised use, free circulation and exemption from individual licensing of Land and Maritime Earth Stations On Mobile Platforms (ESOMPs) operating with NGSO FSS satellite systems in the frequency ranges 17.3-20.2 GHz, 27.5-29.1 GHz and 29.5-30.5 GHz. Approved 3 July 2015.
- [ECC/DEC/\(15\)02](#) on "The harmonised use of broadband Direct Air-to-Ground Communications (DA2GC) systems in the frequency band 1900-1920 MHz". Approved 3 July 2015.
- [ECC/DEC/\(15\)01](#) on "Harmonised technical conditions for mobile/fixed communications networks (MFCN) in the band 694-790 MHz including a paired frequency arrangement (Frequency Division Duplex 2x30 MHz) and an optional unpaired frequency arrangement (Supplemental Downlink)". Approved 06 March 2015.
- [ECC/DEC/\(13\)03](#) on "The harmonised use of the frequency band 1452-1492 MHz for Mobile/Fixed Communications Networks Supplemental Downlink (MFCN SDL)". Approved 8 November 2013. Amended 3 July 2015.
- [ECC/DEC/\(13\)01](#) ECC Decision of 8 March 2013 on the use, free circulation, and exemption from individual licensing of Earth stations on mobile platforms (ESOMPs) in the frequency bands available for use by uncoordinated FSS Earth stations within the ranges 17.3-20.2 GHz and 27.5-30.0 GHz.
- [ECC/DEC/\(12\)04](#) ECC Decision of 2 November 2012 on the withdrawal of ECC Decision (02)01.
- [ECC/DEC/\(12\)03](#) ECC Decision of 2 November 2012 on the harmonised conditions for UWB applications onboard aircraft.
- [ECC/DEC/\(11\)06](#) ECC Decision of 09 December 2011 on harmonised frequency arrangements for mobile/fixed communications networks (MFCN) operating in the bands 3400-3600 MHz and 3600-3800 MHz.
- [ECC/DEC/\(11\)05](#) ECC Decision of 09 December 2011 on the withdrawal of ERC Decisions ERC/DEC/(01)02, ERC/DEC/(01)03, ERC/DEC/(01)07, ERC/DEC/(01)10, and ERC/DEC/(01)16.
- [ECC/DEC/\(11\)03](#) ECC Decision of 24 June 2011 on the harmonised use of frequencies for Citizens' Band (CB) radio equipment.
- [ECC/DEC/\(11\)02](#) ECC Decision of 11 March 2011 on industrial Level Probing Radars (LPR) operating in frequency bands 6 - 8.5 GHz, 24.05 - 26.5 GHz, 57 - 64 GHz and 75 - 85 GHz.
- [ECC/DEC/\(11\)01](#) ECC Decision of 11 March 2011 on the protection of the Earth exploration satellite service (passive) in the 1400 - 1427 MHz band.
- [ECC/DEC/\(10\)02](#) ECC Decision of 12 November 2010 on compatibility between the Fixed Satellite Service in the 30-31 GHz band and the Earth Exploration Satellite Service (passive) in the 31.3-31.5 GHz band.
- [ECC/DEC/\(10\)01](#) ECC Decision of 12 November 2010 on sharing conditions in the 10.6-10.68 GHz band between the fixed service, mobile service and Earth exploration satellite service (passive).
- [ECC/DEC/\(09\)04](#) ECC Decision of 30 October 2009 on exemption from individual licensing and the free circulation and use of transmit-only mobile satellite terminals operating in the Mobile-Satellite Service allocations in the 1613.8 - 1626.5 MHz band (ECC/DEC/(09)04).
- [ECC/DEC/\(09\)03](#) ECC Decision of 30 October 2009 on the harmonised conditions for Mobile/Fixed Communications Networks (MFCN) operating in the band 790-862 MHz.
- [ECC/DEC/\(09\)02](#) on the harmonisation of the bands 1610 - 1626.5 MHz and 2483.5 - 2500 MHz for use by systems in the Mobile Satellite Service. Approved 26 June 2009, amended 02 November 2012.
- [ECC/DEC/\(09\)01](#) ECC Decision of 13 March 2009 on the harmonised use of the 63-64 GHz frequency band for Intelligent Transport Systems (ITS).
- [ECC/DEC/\(08\)05](#) ECC Decision of 27 June 2008 on the harmonisation of frequency bands for the implementation of digital Public Protection and Disaster Relief (PPDR) radio applications in bands within the 380-470 MHz range

- [ECC/DEC/\(08\)01](#) The harmonised use of the 5875-5925 MHz frequency band for Intelligent Transport Systems (ITS). Approved 14 March 2008. Amended 3 July 2015.
- [ECC/DEC/\(07\)02](#) ECC Decision of 30 March 2007 on availability of frequency bands between 3400-3800 MHz for the harmonised implementation of Broadband Wireless Access systems (BWA).
- [ECC/DEC/\(07\)01](#) amended 26 June 2009: ECC Decision of 30 March 2007 on specific Material Sensing devices using Ultra-Wideband (UWB) technology.
- [ECC/DEC/\(06\)13](#) on the designation of the bands 880-915 MHz, 925-960 MHz, 1710-1785 MHz and 1805-1880 MHz for terrestrial UMTS, LTE and WiMAX systems. Approved 1 December 2006, amended 21 June 2013.
- [ECC/DEC/\(06\)10](#) ECC Decision of 1 December 2006 on transitional arrangements for the Fixed Service and tactical radio relay systems in the bands 1980 - 2010 MHz and 2170 - 2200 MHz in order to facilitate the harmonised introduction and development of systems in the Mobile Satellite Service including those supplemented by a Complementary Ground Component.
- [ECC/DEC/\(06\)09](#) ECC Decision of 1 December 2006 on the designation of the bands 1980-2010 MHz and 2170-2200 MHz for use by systems in the Mobile-Satellite Service including those supplemented by a Complementary Ground Component (CGC) amended 5 September 2007.
- [ECC/DEC/\(06\)08](#) ECC Decision of 1 December 2006 on the conditions for use of the radio spectrum by Ground- and Wall- Probing Radar (GPR/WPR) imaging systems.
- [ECC/DEC/\(06\)07](#) ECC Decision on the harmonised use of airborne GSM and LTE systems in the frequency bands 1710-1785 MHz and 1805-1880 MHz, and airborne UMTS systems in the frequency bands 1920-1980 MHz and 2110-2170 MHz, approved 1 December 2006, amended 13 March 2009, amended 14 March 2014.
- [ECC/DEC/\(06\)06](#) on the availability of frequency bands for the introduction of Narrow Band Digital Land Mobile PMR/PAMR in the 80 MHz, 160 MHz and 400 MHz bands. Approved 07 July 2006. Amended 08 November 2013.
- [ECC/DEC/\(06\)05](#) ECC Decision of 7 July 2006 on the harmonised frequency bands to be designated for Air-Ground-Air operation (AGA) of the Digital Land Mobile Systems for the Emergency Services.
- [ECC/DEC/\(06\)04](#) On the harmonised conditions for devices using Ultra-Wideband (UWB) technology in bands below 10.6 GHz. Approved 24 March 2006, amended 6 July 2007, amended 9 December 2011.
- [ECC/DEC/\(06\)03](#) ECC Decision of 24 March 2006 on Exemption from Individual Licensing of high e.i.r.p. satellite terminals (HEST) operating within the frequency bands 10.70 - 12.75 GHz or 19.70 - 20.20 GHz space-to-Earth and 14.00 -14.25 GHz or 29.50 - 30.00 GHz Earth-to-space. (ECC/DEC/(06)03)
- [ECC/DEC/\(06\)01](#) On the harmonised utilisation of the bands 1920-1980 MHz and 2110-2170 MHz for mobile/fixed communications networks (MFCN) including terrestrial IMT systems. Approved 24 March 2006, amended 02 November 2012.
- [ECC/DEC/\(05\)11](#) The free circulation and use of Aircraft Earth Stations (AES) in the frequency bands 14.0-14.5 GHz (Earth-to-space), 10.7-11.7 GHz (space-to-Earth) and 12.5-12.75 GHz (space-to-Earth). Approved 24 June 2005. Amended 6 March 2015.
- [ECC/DEC/\(05\)08](#) on the availability of frequency bands for high density applications in the Fixed-Satellite Service (space-to-Earth and Earth-to-space). Approved 24 June 2005. Amended 8 March 2013.
- [ECC/DEC/\(05\)05](#) Harmonised utilisation of spectrum for Mobile/Fixed Communications Networks (MFCN) operating within the band 2500-2690 MHz. Approved 18 March 2005. Amended 03 July 2015.
- [ECC/DEC/\(05\)02](#) ECC Decision of 18 March 2005 on a harmonised frequency plan for the use of the band 169.4 - 169.8125 MHz (ECC/DEC/(05)02). Amended 5 September 2007, amended 12 November 2010.
- [ECC/DEC/\(05\)01](#) on the use of the band 27.5-29.5 GHz by the Fixed Service and uncoordinated Earth stations of the Fixed-Satellite Service (Earth-to-space). Approved 18 March 2005, amended 8 March 2013.
- [ECC/DEC/\(04\)10](#) The frequency bands to be designated for the temporary introduction of Automotive Short Range Radars (SRR). Approved 12 November 2004. Amended Annex 1 July 2005. Amended 5 September 2007. Amended 1 June 2012. Corrected 6 March 2015.
- [ECC/DEC/\(04\)09](#) amended 26 June 2009: ECC Decision of 12 November 2004 on the designation of the bands 1518 - 1525 MHz and 1670 - 1675 MHz for the Mobile-Satellite Service
- [ECC/DEC/\(04\)08](#) ECC Decision of 9 July 2004, amended 12 November 2004, 5 September 2007, 30 October 2009 on the harmonised use of the 5 GHz frequency bands for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs)
- [ECC/DEC/\(04\)06](#) ECC Decision of 19 March 2004 on the availability of frequency bands for the introduction of Wide Band Digital Land Mobile PMR/PAMR in the 400 MHz and 800/900 MHz bands.

(ECC/DEC/(04)06) Approved 19 March 2004, amended the Annex-27 June 2008, amended 26 June 2009, amended 9 December 2011.

- [ECC/DEC/\(04\)03](#) The frequency band 77-81 GHz to be designated for the use of Automotive Short Range Radars. Approved 19 March 2004. Corrected 6 March 2015.
- [ECC/DEC/\(02\)05](#) ECC Decision on the designation and availability of frequency bands for railway purposes in the 876-880 MHz and 921-925 MHz bands. Approved 5 July 2002, amended 26 June 2009, amended 9 December 2011, amended 08 March 2013.
- [ECC/DEC/\(02\)04](#) ECC Decision of 15 March 2002 on the use of the band 40.5 – 42.5 GHz by terrestrial (fixed service/ broadcasting service) systems and uncoordinated Earth stations in the fixed satellite service and broadcasting-satellite service (space to Earth)
- [ERC/DEC/\(01\)19](#) ERC Decision of 12 March 2001 on harmonised frequency bands to be designated for the Direct Mode Operation (DMO) of the Digital Land Mobile Systems for the Emergency Services
- [ERC/DEC/\(01\)17](#) ERC Decision of 12 March 2001 on Harmonised frequencies, technical characteristics and exemption from individual licensing of Ultra Low Power Active Medical Implant communication systems (ULP-AMI) operating in the frequency band 401 – 406 MHz on a secondary basis. Approved 12 March 2001, Amended 9 December 2011.
- [ERC/DEC/\(01\)12](#) on harmonised frequencies, technical characteristics and exemption from individual licensing of Short Range Devices used for Model control operating in the frequencies 40.665, 40.675, 40.685 and 40.695 MHz
- [ERC/DEC/\(01\)11](#) on harmonised frequencies, technical characteristics and exemption from individual licensing of Short Range Devices used for Flying Model control operating in the frequency band 34.995-35.225 MHz
- [ERC/DEC/\(01\)08](#) on harmonised frequencies, technical characteristics and exemption from individual licensing of Short Range Devices used for Movement Detection and Alert operating in the frequency band 2'400- 2'483.5 MHz
- [ERC/DEC/\(00\)08](#) on the use of the band 10.7- 12.5 GHz by the fixed service and Earth stations of the broadcasting-satellite and fixed-satellite Service (space-to-Earth)
- [ERC/DEC/\(00\)07](#) on the shared use of the band 17.7- 19.7 GHz by the fixed service and Earth stations of the fixed-satellite service (space-to-Earth)
- [ERC/DEC/\(00\)02](#) on the use of the band 37.5- 40.5 GHz by the fixed service and Earth stations of the fixed - satellite service (space to Earth)
- [ERC/DEC/\(99\)17](#) on the Automatic Identification and Surveillance system (AIS) channels in the maritime VHF band
- [ERC/DEC/\(99\)15](#) of 1 June 1999 on the designation of the harmonised frequency band 40.5 to 43.5 GHz for the introduction of Multimedia Wireless Systems (MWS) and Point-to-Point (P-P) Fixed Wireless Systems, amended by ECC 5 March 2010.
- [ERC/DEC/\(97\)02](#) on the extended frequency bands to be used for the GSM Digital Pan-European Communication System
- [ERC/DEC/\(95\)03](#) on the frequency bands to be designated for the introduction of DCS 1800
- [ERC/DEC/\(94\)03](#) on the frequency band to be designated for the coordinated introduction of the Digital European Cordless Telecommunications system
- [ERC/DEC/\(94\)01](#) on the frequency bands to be designated for the coordinated introduction of the GSM digital pan-European communications system

Recommendations:

- [ECC/REC/\(14\)06](#): Implementation of Fixed Service Point-to-Point narrow channels (3.5 MHz, 1.75 MHz, 0.5 MHz, 0.25 MHz, 0.025 MHz) in the guard bands and center gaps of the lower 6 GHz (5925 to 6425 MHz) and upper 6 GHz (6425 to 7125 MHz) bands. Approved 19 September 2014. Amended May 2015.
- [ECC/REC/\(14\)01](#): Radio frequency channel arrangements for fixed service systems operating in the band 92-95 GHz, Approved 31 January 2014.
- [ECC/REC/\(11\)10](#): of October 2011 on location tracking application for emergency and disaster situations.
- [ECC/REC/\(11\)09](#): UWB Location Tracking Systems TYPE 2 (LT2). Approved 21 October 2011. Amended 22 May 2015.
- [ECC/REC/\(11\)08](#): of October 2011 on a Framework for authorisation regime of indoor global navigation satellite system (GNSS) pseudolites in the band 1559-1610 MHz.
- [ECC/REC/\(11\)06](#): Block Edge Mask Compliance Measurements for Base Stations. Approved October 2011. Approved Annex 3 - October 2013.
- [ECC/REC/\(11\)05](#): Frequency planning and frequency coordination for terrestrial systems for Mobile Fixed Communications Networks in the frequency band 2500-2690 MHz.
- [ECC/REC/\(11\)04](#): Frequency planning and frequency coordination for terrestrial systems for Mobile Fixed Communications Networks (MFCN) capable of providing electronic communications services in the frequency band 790-862 MHz.
- [ECC/REC/\(10\)02](#): A framework for authorisation regime of Global Navigation Satellite Systems (GNSS) repeaters.
- [ECC/REC/\(10\)01](#): Guidelines for compatibility between Complementary Ground Components (CGC) operating in the band 2170-2200 MHz and EESS/SOS/SRS earth stations operating in the band 2200-2290 MHz.
- [ECC/REC/\(09\)01](#): Use of the 57-64 GHz frequency band for point-to-point Fixed Wireless Systems
- [ECC/REC/\(08\)04](#): The identification of frequency bands for the implementation of Broad Band Disaster Relief (BBDR) radio applications in the 5 GHz frequency range.
- [ECC/REC/\(08\)02](#): Frequency planning and frequency coordination for GSM / UMTS / LTE / WiMAX Land Mobile systems operating within the 900 and 1800 MHz bands. 21 February 2008. Amended 27 April 2012.
- [ECC/REC/\(08\)01](#): Use of the band 5855-5875 MHz for Intelligent Transport Systems (ITS). Approved 21 February 2008. Amended 3 July 2015.
- [ECC/REC/\(06\)04](#): Use of the band 5725-5875 MHz for Broadband Fixed Wireless Access (BFWA).
- [ECC/REC/\(05\)08](#) on Frequency planning and frequency coordination for the GSM 900, GSM 1800, E-GSM and GSM-R Land Mobile Systems.
- [ECC/REC/\(05\)07](#): Radio frequency channel arrangements for Fixed Service Systems operating in the bands 71 - 76 GHz and 81 - 86 GHz (Revised Dublin 2009 and Lugano 2013).
- [ECC/REC/\(05\)02](#): Use of the 64-66 GHz frequency band for Fixed Service. Revised Dublin 2009.
- [ECC/REC 04-05](#) Guidelines for accommodation and assignment of Multipoint Fixed Wireless systems in frequency bands 3.4-3-6 GHz and 3.6-3-8 GHz.
- [ECC/REC 02-06](#) on channel arrangements for digital Fixed Service Systems operating in the frequency range 7125-8500 MHz (revised June 2007 and May 2011).
- [ECC/REC 02-02](#) Channel arrangements for digital fixed service systems (point-to-point and point-to-multipoint) operating in the frequency band 31 – 31.3 GHz. Revised, Rottach Egern, February 2010.
- [ECC/REC/\(01\)04](#) Recommended guidelines for the accommodation and assignment of Multimedia Wireless Systems (MWS) and Point-to-Point (P-P) Fixed Wireless Systems in the frequency band 40.5 - 43.5 GHz. Approved 10 October 2001. Amended 5 February 2010. Amended 13 May 2014.
- [ERC/REC 01-02](#) Preferred channel arrangement for digital fixed service systems operating in the frequency band 31.8- 33.4 GHz. Revised, Rottach Egern, February 2010.
- [ERC/REC 01-01](#) (revised Dublin 2003, Helsinki 2007) on BORDER COORDINATION OF UMTS.
- [ERC/REC 00-04](#) on harmonised frequencies and free circulation and use for meteor scatter applications
- [ERC/REC 70-03](#) relating to the use of Short Range Devices (SRD)
- [ERC/REC 62-02](#) Harmonised frequency band for Civil and Military Airborne Telemetry applications. Tromsø 1997.
- [ERC/REC 25-10](#) Frequency ranges for the use of temporary terrestrial audio and video SAP/SAB links (incl. ENG/OB). Edition of 11 February 2003.

- [ERC/REC 14-03](#) Harmonised radio frequency channel arrangements and block allocations for low and medium capacity systems in the band 3'400 MHz to 3'600 MHz. Turku 1996, Podebrady 1997.
- [ERC/REC 14-02](#) Radio frequency channel arrangements for medium and high capacity analogue or high capacity digital radio-relay systems operating in the band 6'425 MHz- 7'125 MHz
- [ERC/REC 14-01](#) Radio frequency channel arrangements for high capacity analogue and digital radio-relay systems operating in the band 5'925 MHz- 6'425 MHz. Approved Bonn 1995. Amended May 2015.
- [ERC/REC 13-03](#) The use of the band 14.0- 14.5 GHz for Very Small Aperture Terminals (VSAT) and Satellite News Gathering (SNG). The Hague 1996.
- [ERC/REC 12-12](#) Radio frequency channel arrangement for fixed service systems operating in the band 55.78- 57.0 GHz. Approved 29 October 1999. Amended 30 January 2015.
- [ERC/REC 12-11](#) Radio frequency channel arrangement for fixed service systems operating in the band 51.4- 52.6 GHz. Approved 29 October 1999. Amended 30 January 2015.
- [ERC/REC 12-08](#) Harmonised radio frequency channel arrangements and block allocations for medium and high capacity systems in the band 3'600 MHz to 4'200 GHz. Podebrady 1997, Saariselkä 1998.
- [ERC/REC 12-07](#) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 15.23 GHz to 15.35 GHz. Rome 1996.
- [ERC/REC 12-06](#) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 10.7 GHz to 11.7 GHz. Rome 1996, revised Rottach Egern, February 2010.
- [ERC/REC 12-05](#) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 10.0- 10.68 GHz. Rome 1996, revised June 2007.
- [ERC/REC 12-03](#) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 17.7 GHz to 19.7 GHz. Bonn 1994.
- [ERC/REC 12-02](#) Harmonised radio frequency channel arrangements for analogue and digital terrestrial fixed systems operating in the band 12.75 GHz to 13.25 GHz. Bonn 1994, revised June 2007.
- [T/R 25-08](#) Coordination of frequencies in the Land Mobile Service in the range 29.7 - 960 MHz. Lecce 1989, revised in Vienna 1999, revised in Utrecht 2005, revised in Brussels 2008.
- [T/R 13-02](#) Preferred channel arrangements for fixed service systems in the frequency range 22.0 - 29.5 GHz. Amended Tromsø, May 2010.
- [T/R 13-01](#) Preferred channel arrangements for fixed service systems operating in the frequency range 1 - 2.3 GHz. Montreux 1993, Revised Rottach-Egern, February 2010.
- [T/R 12-01](#) Preferred channel arrangements for fixed service systems operating in the frequency band 37.0 - 39.5 GHz. Helsinki 1991, revised Rottach-Egern, February 2010.

Appendix 3: Relevant Footnotes of Radio Regulations, Article 5 and relevant European-footnotes included in the European Common Allocation Table (ECA)

RR Foot-note No	RR Footnote Text
4.4	Administrations of the Member States shall not assign to a station any frequency in derogation of either the Table of Frequency Allocations in this Chapter or the other provisions of these Regulations, except on the express condition that such a station, when using such a frequency assignment, shall not cause harmful interference to, and shall not claim protection from harmful interference caused by, a station operating in accordance with the provisions of the Constitution, the Convention and these Regulations.
4.10	Member States recognize that the safety aspects of radionavigation and other safety services require special measures to ensure their freedom from harmful interference; it is necessary therefore to take this factor into account in the assignment and use of frequencies.
5.43	1) Where it is indicated in these Regulations that a service or stations in a service may operate in a specific frequency band subject to not causing harmful interference to another service or to another station in the same service, this means also that the service which is subject to not causing harmful interference cannot claim protection from harmful interference caused by the other service or other station in the same service. (WRC2000)
5.43A	1 <i>bis</i>) Where it is indicated in these Regulations that a service or stations in a service may operate in a specific frequency band subject to not claiming protection from another service or from another station in the same service, this means also that the service which is subject to not claiming protection shall not cause harmful interference to the their service or other station in the same service. (WRC2000)
5.53	Administrations authorizing the use of frequencies below 8.3 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 8.3 kHz are allocated.
5.54	Administrations conducting scientific research using frequencies below 8.3 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference.
5.54A	Use of the 8.3-11.3 kHz frequency band by stations in the meteorological aids service is limited to passive use only. In the band 9-11.3 kHz, meteorological aids stations shall not claim protection from stations of the radionavigation service submitted for notification to the Bureau prior to 1 January 2013. For sharing between stations of the meteorological aids service and stations in the radionavigation service submitted for notification after this date, the most recent version of Recommendation ITU R RS.1881 should be applied. (WRC-12)
5.56	The stations of services to which the bands 14-19.95 kHz and 20.05-70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, Bulgaria, the Russian Federation, Georgia, Kazakhstan, Mongolia, Kyrgyzstan, Slovakia, Tajikistan and Turkmenistan, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-07)
5.60	In the bands 70- 90 kHz (70- 86 kHz in Region 1) and 110- 130 kHz (112- 130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.
5.62	Administrations which operate stations in the radionavigation service in the band 90- 110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.
5.64	Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.
5.67A	Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. 5.67 . (WRC-07)

RR Foot-note No	RR Footnote Text
5.67B	The use of the band 135.7-137.8 kHz in Algeria, Egypt, Iran (Islamic Republic of), Iraq, Libyan Arab Jamahiriya, Lebanon, Syrian Arab Republic, Sudan and Tunisia is limited to the fixed and maritime mobile services. The amateur service shall not be used in the above-mentioned countries in the band 135.7-137.8 kHz, and this should be taken into account by the countries authorizing such use. (WRC-07)
5.76	The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405- 415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5- 413.5 kHz.
5.79A	When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4 209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution 339 (Rev.WRC-07)). (WRC-07)
5.80A	The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)
5.82	In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles 31 and 52 . In using the frequency band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. In using the frequency band 472-479 kHz for the amateur service, administrations shall ensure that no harmful interference is caused to the frequency 490 kHz. (WRC 12)
5.90	In the band 1'605- 1'705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.
5.92	Some countries of Region 1 use radiodetermination systems in the bands 1'606.5- 1'625 kHz, 1'635- 1'800 kHz, 1'850- 2'160 kHz, 2'194- 2'300 kHz, 2'502- 2'850 kHz and 3'500- 3'800 kHz, subject to agreement obtained under No. 9.21 . The radiated mean power of these stations shall not exceed 50 W.
5.96	In Germany, Armenia, Austria, Azerbaijan, Belarus, Denmark, Estonia, the Russian Federation, Finland, Georgia, Hungary, Ireland, Iceland, Israel, Kazakhstan, Latvia, Liechtenstein, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Rep., the United Kingdom, Sweden, Switzerland, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the bands 1'715- 1'800 kHz and 1'850- 2'000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W. (WRC-03)
5.98	<i>Alternative allocation:</i> in Angola, Armenia, Azerbaijan, Belarus, Belgium, Cameroon, Congo (Rep. of the), Denmark, Egypt, Eritrea, Spain, Ethiopia, the Russian Federation, Georgia, Greece, Italy, Kazakhstan, Lebanon, Lithuania, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1'810-1'830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)
5.99	<i>Additional allocation:</i> in Saudi Arabia, Austria, Iraq, Libya, Uzbekistan, Slovakia, Romania, Slovenia, Chad, and Togo, the band 1'810-1'830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)
5.100	In Region 1, the authorization to use the band 1'810- 1'830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. 5.98 and 5.99 to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. 5.98 and 5.99 .

RR Footnote No	RR Footnote Text
5.103	In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1'850-2'045 kHz, 2'194-2'498 kHz, 2'502-2'625 kHz and 2'50-2'850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.
5.108	The carrier frequency 2'182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2'173.5-2'190.5 kHz are prescribed in Articles 31 and 52 . (WRC-07)
5.109	The frequencies 2'187.5 kHz, 4'207.5 kHz, 6'312 kHz, 8'414.5 kHz, 12'577 kHz and 16'804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article 31 .
5.110	The frequencies 2'174.5 kHz, 4'177.5 kHz, 6'268 kHz, 8'376.5 kHz, 12'520 kHz and 16'695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article 31 .
5.111	The carrier frequencies 2'182 kHz, 3'023 kHz, 5'680 kHz, 8'364 kHz and the frequencies 121.5 MHz, 156.525 MHz, 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 conditions for the use of the frequencies are prescribed in Article 31. 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 ± 3 kHz about the frequency. (WRC-07)
5.115	The carrier (reference) frequencies 3'023 kHz and 5'680 kHz may also be used, in accordance with Article 31 by stations of the maritime mobile service engaged in coordinated search and rescue operations. (WRC-07)
5.116	Administrations are urged to authorize the use of the band 3'155- 3'195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3'155 kHz and 3'400 kHz to suit local needs. It should be noted that frequencies in the range 3'000 kHz to 4'000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.
5.127	The use of the band 4'000- 4'063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. 52.220 and Appendix 17).
5.128	Frequencies in the bands 4'063-4'123 kHz and 4'130-4'438 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W, on condition that harmful interference is not caused to the maritime mobile service. In addition, in Afghanistan, Argentina, Armenia, Azerbaijan, Belarus, Botswana, Burkina Faso, the Central African Rep., China, the Russian Federation, Georgia, India, Kazakhstan, Mali, Niger, Pakistan, Kyrgyzstan, Tajikistan, Chad, Turkmenistan and Ukraine, in the bands 4'063-4'123 kHz, 4'130-4'133 kHz and 4'408-4'438 kHz, stations in the fixed service, with a mean power not exceeding 1 kW, can be operated on condition that they are situated at least 600 km from the coast and that harmful interference is not caused to the maritime mobile service. (WRC-12)
5.130	The conditions for the use of the carrier frequencies 4'125 kHz and 6'215 kHz are prescribed in Articles 31 and 52 . (WRC-07)
5.131	The frequency 4'209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)
5.132	The frequencies 4'210 kHz, 6'314 kHz, 8'416.5 kHz, 12'579 kHz, 16'806.5 kHz, 19'680.5 kHz, 22'376 kHz and 26'100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix 17).
5.132A	Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution 612 (Rev. WRC 12) . (.WRC-12)
5.132B	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency band 4'438-4'488 kHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. (WRC 12)
5.133A	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency bands 5'250-5'275 kHz and 26'200-26'350 kHz are allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. . (WRC-12)
5.134	The use of the bands 5'900-5'950 kHz, 7'300-7'350 kHz, 9'400-9'500 kHz, 11'600-11'650 kHz, 12'050-12'100 kHz, 13'570-13'600 kHz, 13'800-13'870 kHz, 15'600-15'800 kHz, 17'480-17'550 kHz

RR Foot-note No	RR Footnote Text										
	and 18'900-19'020 kHz by the broadcasting service is subject to the application of the procedure of Article 12. Administrations are encouraged to use these bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of Resolution 517 (Rev.WRC-07). (WRC-07)										
5.136	<i>Additional allocation:</i> Frequencies in the band 5'900-5'950 kHz may be used by stations in the following services, communicating only within the boundary of the country in which they are located: fixed service (in all three Regions), land mobile service (in Region 1), mobile except aeronautical mobile (R) service (in Regions 2 and 3), on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)										
5.137	On condition that harmful interference is not caused to the maritime mobile service, the bands 6'200-6'213.5 kHz and 6'220.5- 6'525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.										
5.138	<p>The following bands:</p> <table border="1"> <tr> <td>6'765 - 6'795 kHz</td><td>(centre frequency 6'780 kHz),</td></tr> <tr> <td>433.05 - 434.79 MHz</td><td>(centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. 5.280,</td></tr> <tr> <td>61 - 61.5 GHz</td><td>(centre frequency 61.25 GHz),</td></tr> <tr> <td>122 - 123 GHz</td><td>centre frequency 122.5 GHz), and</td></tr> <tr> <td>244 - 246 GHz</td><td>(centre frequency 245 GHz)</td></tr> </table> <p>are designated for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorisation by the administration concerned, in agreement with other administrations whose radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest relevant ITU-R Recommendations.</p>	6'765 - 6'795 kHz	(centre frequency 6'780 kHz),	433.05 - 434.79 MHz	(centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. 5.280,	61 - 61.5 GHz	(centre frequency 61.25 GHz),	122 - 123 GHz	centre frequency 122.5 GHz), and	244 - 246 GHz	(centre frequency 245 GHz)
6'765 - 6'795 kHz	(centre frequency 6'780 kHz),										
433.05 - 434.79 MHz	(centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. 5.280,										
61 - 61.5 GHz	(centre frequency 61.25 GHz),										
122 - 123 GHz	centre frequency 122.5 GHz), and										
244 - 246 GHz	(centre frequency 245 GHz)										
5.141A	<i>Additional allocation:</i> in Uzbekistan and Kyrgyzstan, the bands 7'000-7'100 kHz and 7'100-7'200 kHz are also allocated to the fixed and land mobile services on a secondary basis. (WRC-03)										
5.141B	<i>Additional allocation:</i> after 29 March 2009, in Algeria, Saudi Arabia, Australia, Bahrain, Botswana, Brunei Darussalam, China, Comoros, Korea (Rep. of), Diego Garcia, Djibouti, Egypt, United Arab Emirates, Eritrea, Indonesia, Iran (Islamic Republic of), Japan, Jordan, Kuwait, Libya, Morocco, Mauritania, New Zealand, Oman, Papua New Guinea, Qatar, the Syrian Arab Republic, Singapore, Sudan, South Sudan, Tunisia, Viet Nam and Yemen, the band 7'100-7'200 kHz is also allocated to the fixed and the mobile, except aeronautical mobile (R), services on a primary basis. (WRC-12)										
5.143	<i>Additional allocation:</i> Frequencies in the band 7'300-7'350 kHz may be used by stations in the fixed service and in the land mobile service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)										
5.143B	In Region 1, the band 7'350- 7'450 kHz is allocated, until 29 March 2009, to the fixed service on a primary basis and to the land mobile service on a secondary basis. After 29 March 2009, on condition that harmful interference is not caused to the broadcasting service, frequencies in the band 7'350- 7'450 kHz may be used by stations in the fixed and land mobile services communicating only within the boundary of the country in which they are located, each station using a total radiated power that shall not exceed 24 dBW. (WRC-03)										
5.143E	Until 29 March 2009, the band 7'450- 8'100 kHz is allocated to the fixed service on a primary basis and to the land mobile service on a secondary basis. (WRC-03)										
5.145	The conditions for the use of the carrier frequencies 8'291 kHz, 12'290 kHz and 16'420 kHz are prescribed in Articles 31 and 52. (WRC-07)										
5.145A	Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed service. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution 612 (Rev.WRC-12). (WRC 12)										
5.145B	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency bands 9'305-9'355 kHz and 16'100-16'200 kHz are allocated to the fixed service on a primary basis. (WRC 12)										

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5.146	<i>Additional allocation:</i> Frequencies in the bands 9'400-9'500 kHz, 11'600-11'650 kHz, 12'050-12'100 kHz, 15'600-15'800 kHz, 17'480-17'550 kHz and 18'900-19'020 kHz may be used by stations in the fixed service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)	
5.147	On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9'775-9'900 kHz, 11'650-11'700 kHz and 11'975-12'050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.	
5.149	In making assignments to stations of other services to which the bands:	
	13'360- 13'410 kHz, 25'550- 25'670 kHz, 37.5- 38.25 MHz, 73- 74.6 MHz in Regions 1 and 3, 150.05- 153 MHz in Region 1, 322- 328.6 MHz, 406.1- 410 MHz, 608- 614 MHz in Regions 1 and 3, 1'330- 1'400 MHz, 1'610.6- 1'613.8 MHz, 1'660- 1'670 MHz, 1'718.8- 1'722.2 MHz, 2'655- 2'690 MHz, 3'260- 3'267 MHz, 3'332- 3'339 MHz, 3'345.8- 3'352.5 MHz, 4'825- 4'835 MHz, 4'950- 4'990 MHz, 4'990- 5'000 MHz, 6'650- 6'675.2 MHz, 10.6- 10.68 GHz, 14.47- 14.5 GHz, 22.01- 22.21 GHz, 22.21- 22.5 GHz, 22.81- 22.86 GHz, 23.07- 23.12 GHz,	31.2- 31.3 GHz, 31.5- 31.8 GHz in Regions 1 and 3, 36.43- 36.5 GHz, 42.5- 43.5 GHz, 42.77- 42.87 GHz, 43.07- 43.17 GHz, 43.37- 43.47 GHz, 48.94- 49.04 GHz, 76- 86 GHz, 92- 94 GHz, 94.1- 100 GHz, 102- 109.5 GHz, 111.8- 114.25 GHz, 128.33- 128.59 GHz, 129.23- 129.49 GHz, 130- 134 GHz, 136- 148.5 GHz, 151.5- 158.5 GHz, 168.59- 168.93 GHz, 171.11- 171.45 GHz, 172.31- 172.65 GHz, 173.52- 173.85 GHz, 195.75- 196.15 GHz, 209- 226 GHz, 241- 250 GHz, 252- 275 GHz
	are allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 4.5 and 4.6 and Article 29). (WRC 07)	
5.149A	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency band 13'450-13'550 kHz is allocated to the fixed service on a primary basis and to the mobile, except aeronautical mobile (R), service on a secondary basis. (.WRC-12)	
5.150	The following bands:	
	13'553- 13'567 kHz	(centre frequency 13'560 kHz),
	26'957- 27'283 kHz	(centre frequency 27'120 kHz),
	40.66- 40.70 MHz	(centre frequency 40.68 MHz),
	902- 928 MHz	in Region 2 (centre frequency 915 MHz),
	2'400- 2'500 MHz	(centre frequency 2'450 MHz),
	5'725- 5'875 MHz	(centre frequency 5'800 MHz), and
	24- 24.25 GHz	(centre frequency 24.125 GHz)
	are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. 15.13 .	

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5.151	<i>Additional allocation:</i> Frequencies in the bands 13'570-13'600 kHz and 13'800-13'870 kHz may be used by stations in the fixed service and in the mobile except aeronautical mobile (R) service, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies in these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)
5.155B	The band 21'870- 21'924 kHz is used by the fixed service for provision of services related to aircraft flight safety.
5.156A	The use of the band 23'200- 23'350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
5.157	The use of the band 23'350- 24'000 kHz by the maritime mobile service is limited to inter-ship radio-telegraphy.
5.158	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency band 24'450-24'600 kHz is allocated to the fixed and land mobile services on a primary basis. (WRC-12)
5.159	<i>Alternative allocation:</i> in Armenia, Austria, Belarus, Moldova, Uzbekistan and Kyrgyzstan, the frequency band 39-39.5 MHz is allocated to the fixed and mobile services on a primary basis. (WRC-12)
5.161B	<i>Alternative allocation:</i> in Albania, Germany, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Vatican, Croatia, Denmark, Spain, Estonia, Finland, France, Greece, Hungary, Ireland, Iceland, Italy, Latvia, The Former Yugoslav Rep. of Macedonia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Norway, Uzbekistan, Netherlands, Poland, Portugal, Kyrgyzstan, Slovakia, Czech Rep., Romania, United Kingdom, San Marino, Slovenia, Sweden, Switzerland, Turkey and Ukraine, the frequency band 42-42.5 MHz is allocated to the fixed and mobile services on a primary basis. (WRC-12)
5.162A	<i>Additional allocation:</i> in Germany, Austria, Belgium, Bosnia and Herzegovina, China, Vatican, Denmark, Spain, Estonia, the Russian Federation, Finland, France, Ireland, Iceland, Italy, Latvia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Lithuania, Luxembourg, Monaco, Montenegro, Norway, the Netherlands, Poland, Portugal, the Czech Rep., the United Kingdom, Serbia, Slovenia, Sweden and Switzerland the band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution 217 (WRC-97) . (WRC-12)
5.164	<i>Additional allocation:</i> in Albania, Algeria, Germany, Austria, Belgium, Bosnia and Herzegovina, Botswana, Bulgaria, Côte d'Ivoire, Denmark, Spain, Estonia, Finland, France, Gabon, Greece, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Montenegro, Nigeria, Norway, the Netherlands, Poland, Syrian Arab Republic, Slovakia, Czech Rep., Romania, the United Kingdom, Serbia, Slovenia, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia and Turkey, the band 47-68 MHz, in South Africa the band 47-50 MHz, and in Latvia the band 48.5-56.5 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band. (WRC-07) (WRC-12)
5.180	The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons. Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.
5.197A	<i>Additional allocation:</i> the band 108-117.975 MHz is also allocated on a primary basis to the aeronautical mobile (R) service, limited to systems operating in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution 413 (Rev.WRC-07) . The use of the band 108-112 MHz by the aeronautical mobile (R) service shall be limited to systems composed of ground-based transmitters and associated receivers that provide navigational information in support of air navigation functions in accordance with recognized international aeronautical standards. (WRC-07)
5.200	In the band 117.975-137 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the

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	conditions laid down in Article 31 for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)
5.206	Different category of service: in Armenia, Azerbaijan, Belarus, Bulgaria, Egypt, Finland, France, Georgia, Greece, Kazakhstan, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, the Syrian Arab Republic, Slovakia, the Czech Republic, Romania, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 137-138 MHz to the aeronautical mobile (OR) service is on a primary basis (see No. 5.33). (WRC-2000)
5.208	The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . (WRC-97)
5.208A	In making assignments to space stations in the mobile-satellite service in the bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from harmful interference from unwanted emissions. The threshold levels of interference detrimental to the radio astronomy service are shown in the relevant ITU-R Recommendation. (WRC-07)
5.208B	In the bands: 137-138MHz, 387-390MHz, 400.15-401MHz, 1 452-1 492MHz, 1 525-1 559MHz, 1559-1610MHz, 1 613.8-1 626.5MHz, 2 655-2 670MHz, 2 670-2 690MHz, 21.4-22 GHz, Resolution 739 (Rev.WRC-07) applies. (WRC-07)
5.209	The use of the bands 137- 138 MHz, 148- 150.05 MHz, 399.9- 400.05 MHz, 400.15- 401 MHz, 454-456 MHz and 459- 460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems. (WRC-97)
5.211	<i>Additional allocation:</i> in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Denmark, the United Arab Emirates, Spain, Finland, Greece, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Liechtenstein, Luxembourg, Mali, Malta, Montenegro, Norway, the Netherlands, Qatar, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia and Turkey, the band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis. (WRC-07) (WRC-12)
5.218	<i>Additional allocation:</i> the band 148- 149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. 9.21 . The bandwidth of any individual transmission shall not exceed ± 25 kHz.
5.219	The use of the band 148- 149.9 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148- 149.9 MHz.
5.220	The use of the bands 149.9- 150.05 MHz and 399.9- 400.05 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . The mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9- 150.05 MHz and 399.9- 400.05 MHz. (WRC-97)
5.221	Stations of the mobile-satellite service in the band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Croatia, Cuba, Denmark, Djibouti, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Ethiopia, the Russian Federation, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, the Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, Kyrgyzstan, Dem. People's Rep. of Korea, Slovakia, Romania, the United Kingdom, Senegal, Serbia, Sierra Leone, Singapore, Slovenia, Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Thailand, Togo,

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	Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Zambia, and Zimbabwe. (WRC-12)
5.222	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.
5.223	Recognising that the use of the band 149.9- 150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorise such use in application of No. 4.4 .
5.224A	The use of the bands 149.9- 150.05 MHz and 399.9- 400.05 MHz by the mobile-satellite service (Earth-to-space) is limited to the land mobile-satellite service (Earth-to-space) until 1 January 2015. (WRC-97)
5.224B	The allocation of the bands 149.9- 150.05 MHz and 399.9- 400.05 MHz to the radionavigation-satellite service shall be effective until 1 January 2015. (WRC-97)
5.225A	<i>Additional allocation:</i> in Algeria, Armenia, Azerbaijan, Belarus, China, the Russian Federation, France, Iran (Islamic Republic of), Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine and Viet Nam, the frequency band 154-156 MHz is also allocated to the radiolocation service on a primary basis. The usage of the frequency band 154-156 MHz by the radiolocation service shall be limited to space-object detection systems operating from terrestrial locations. The operation of stations in the radiolocation service in the frequency band 154-156 MHz shall be subject to agreement obtained under No. 9.21. For the identification of potentially affected administrations in Region 1, the instantaneous field-strength value of 12 dB(μ V/m) for 10% of the time produced at 10 m above ground level in the 25 kHz reference frequency band at the border of the territory of any other administration shall be used. For the identification of potentially affected administrations in Region 3, the interference-to-noise ratio (I/N) value of -6 dB (N = -161 dBW/4 kHz), or -10 dB for applications with greater protection requirements, such as public protection and disaster relief (PPDR (N = -161 dBW/4 kHz)), for 1% of the time produced at 60 m above ground level at the border of the territory of any other administration shall be used. In the frequency bands 156.7625-156.8375 MHz, 156.5125-156.5375 MHz, 161.9625-161.9875 MHz, 162.0125-162.0375 MHz, out-of-band e.i.r.p. of space surveillance radars shall not exceed -16 dBW. Frequency assignments to the radiolocation service under this allocation in Ukraine shall not be used without the agreement of Moldova. (WRC 12)
5.226	<p>The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875-156.5625 MHz are contained in Articles 31 and 52, and in Appendix 18.</p> <p>The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency and the band 156.7625- 156.8375 MHz are contained in Article 31 and Appendix 18.</p> <p>Continued on the following page.</p>
5.226	<p>Continuation from preceeding page:</p> <p>In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6- 160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles 31 and 52, and Appendix 18).</p> <p>Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.</p> <p>However, the frequencies 156.8 MHz and 156.525 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements. (WRC-07)</p>
5.227	<i>Additional allocation:</i> the bands 156.4875-156.5125 MHz and 156.5375-156.5625 MHz are also allocated to the fixed and land mobile services on a primary basis. The use of these bands by the fixed and land mobile services shall not cause harmful interference to nor claim protection from the maritime mobile VHF radiocommunication service. (WRC-07)
5.228	The use of the frequency bands 156.7625-156.7875 MHz and 156.8125-156.8375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system (AIS) emissions of long-range AIS broadcast messages (Message 27, see the most recent version of Recommendation ITU R M.1371). With the exception of AIS emissions, emissions in these frequency

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	bands by systems operating in the maritime mobile service for communications shall not exceed 1 W. (WRC 12)
5.228A	The frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz may be used by aircraft stations for the purpose of search and rescue operations and other safety-related communications. (WRC 12)
5.228B	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the fixed and land mobile services shall not cause harmful interference to, or claim protection from, the maritime mobile service. (WRC 12)
5.228F	The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system emissions from stations operating in the maritime mobile service. (WRC 12)
5.235	<i>Additional allocation:</i> in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Malta, Monaco, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland, the band 174- 223 MHz is also allocated to the land mobile service on a primary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.
5.254	The bands 235- 322 MHz and 335.4- 399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. 9.21 , on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations except for the additional allocation made in footnote No. 5.256A . (WRC-03)
5.255	The bands 312- 315 MHz (Earth-to-space) and 387- 390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under No. 9.11A .
5.256	The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)
5.257	The band 267- 272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreement obtained under No. 9.21 .
5.258	The use of the band 328.6- 335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).
5.260	Recognising that the use of the band 399.9- 400.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation satellite service, administrations are urged not to authorise such use in application of No. 4.4 .
5.261	Emissions shall be confined in a band of ± 25 kHz about the standard frequency 400.1 MHz.
5.263	The band 400.15- 401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
5.264	The use of the band 400.15- 401 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . The power flux-density limit indicated in Annex 1 of Appendix 5 shall apply until such time as a competent world radiocommunication conference revises it.
5.266	The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Article 31). (WRC-07)
5.267	Any emission capable of causing harmful interference to the authorised uses of the band 406- 406.1 MHz is prohibited.
5.276	<i>Additional allocation:</i> in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Djibouti, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Malaysia, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, Switzerland, Tanzania, Thailand, Togo, Turkey and Yemen, the band 430-440 MHz is also allocated to the fixed service on a primary basis and the bands 430-435 MHz and 438-440 MHz are also allocated to the mobile, except aeronautical mobile, service on a primary basis. (WRC-12)
5.279A	The use of this band by sensors in the Earth exploration-satellite service (active) shall be in accordance with Recommendation ITU-R SA.1260-1. Additionally, the Earth exploration-satellite service (active) in the band 432-438 MHz shall not cause harmful interference to the aeronautical radionavigation service in China. The provisions of this footnote in no way diminish the obligation of the Earth exploration-satellite service (active) to operate as a secondary service in accordance with Nos. 5.29 and 5.30 . (WRC-03)

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5.280	In Germany, Austria, Bosnia and Herzegovina, Croatia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Montenegro, Portugal, Serbia, Slovenia and Switzerland, the band 433.05- 434.79 MHz (centre frequency 433.92 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services of these countries operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No. 15.13 . (WRC-07)
5.282	In the bands 435- 438 MHz, 1'260- 1'270 MHz, 2'400- 2'450 MHz, 3'400- 3'410 MHz (in Regions 2 and 3 only) and 5'650- 5'670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. 5.43). Administrations authorising such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. 25.11 . The use of the bands 1'260- 1'270 MHz and 5'650- 5'670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.
5.287	In the maritime mobile service, the frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Where needed, equipment designed for 12.5 kHz channel spacing using also the additional frequencies 457.5375 MHz, 457.5625 MHz, 467.5375 MHz and 467.5625 MHz may be introduced for on-board communications. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174-2. (WRC-07)
5.289	Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460- 470 MHz and 1'690- 1'710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.
5.291A	<i>Additional allocation:</i> in Germany, Austria, Denmark, Estonia, Finland, Liechtenstein, Norway, Netherlands, the Czech Republic and Switzerland, the band 470- 494 MHz is also allocated to the radio-location service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution 217 (WRC-97) . (WRC-97)
5.296	<i>Additional allocation:</i> in Albania, Germany, Saudi Arabia, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Burkina Faso, Cameroon, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Djibouti, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Gabon, Ghana, Iraq, Ireland, Iceland, Israel, Italy, Jordan, Kuwait, Latvia, The Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Lithuania, Luxembourg, Mali, Malta, Morocco, Moldova, Monaco, Niger, Norway, Oman, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Slovakia, the Czech Republic, the United Kingdom, Sudan, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia and Turkey, the band 470-790 MHz, and in Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Zambia and Zimbabwe, the band 470-698 MHz are also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table in countries other than those listed in this footnote. (WRC 12)
5.306	<i>Additional allocation:</i> in Region 1, except in the African Broadcasting Area (see Nos. 5.10 to 5.13), and in Region 3, the band 608 - 614 MHz is also allocated to the radio astronomy service on a secondary basis.
5.311A	For the frequency band 620-790 MHz, see also Resolution 549 (WRC-07).
5.312A	In Region 1, the use of the band 694-790 MHz by the mobile, except aeronautical mobile, service is subject to the provisions of Resolution 232 (WRC 12) . See also Resolution 224 (Rev. WRC 12) . (WRC-12)
5.316	<i>Additional allocation:</i> in Germany, Saudi Arabia, Bosnia and Herzegovina, Burkina Faso, Cameroon, Côte d'Ivoire, Croatia, Denmark, Egypt, Finland, Greece, Israel, the Libyan Arab Jamahiriya, Jordan, Kenya, The Former Yugoslav Republic of Macedonia, Liechtenstein, Mali, Monaco, Montenegro, Norway, the Netherlands, Portugal, the United Kingdom, the Syrian Arab Republic, Serbia, Sweden and Switzerland, the band 790-830 MHz, and in these same countries and in Spain, France, Gabon and Malta, the band 830-862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band. This allocation is effective until 16 June 2015. (WRC-07)
5.316B	In Region 1, the allocation to the mobile, except aeronautical mobile, service on a primary basis in the frequency band 790-862 MHz shall come into effect from 17 June 2015 and shall be subject to agreement obtained under No. 9.21 with respect to the aeronautical radionavigation service in countries mentioned in No. 5.312 . For countries party to the GE06 Agreement, the use of stations of the

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	mobile service is also subject to the successful application of the procedures of that Agreement. Resolutions 224 (Rev. WRC-12) and 749 (Rev. WRC-12) shall apply, as appropriate. (WRC-12)
5.317A	Those parts of the band 698-960 MHz in Region 2 and the band 790-960 MHz in Regions 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) - see Resolutions 224 (Rev. WRC-12) and 749 (Rev. WRC-12) , as appropriate. This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-12)
5.327A	The use of the band 960-1 164 MHz by the aeronautical mobile (R) service is limited to systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution 417 (Rev. WRC-12) . (WRC-12)
5.328	The use of the band 960- 1'215 MHz by the aeronautical radionavigation service is reserved on a worldwide basis for the operation and development of airborne electronic aids to air navigation and any directly associated ground-based facilities. (WRC-2000)
5.328A	Stations in the radionavigation-satellite service in the band 1'164- 1'215 MHz shall operate in accordance with the provisions of Resolution 609 (WRC-03) and shall not claim protection from stations in the aeronautical radionavigation service in the band 960- 1'215 MHz. No. 5.43A does not apply. The provisions of No. 21.18 shall apply. (WRC-03)
5.328B	The use of the bands 1'164- 1'300 MHz, 1'559- 1' 610 MHz and 5'010- 5'030 MHz by systems and networks in the radionavigation-satellite service for which complete coordination or notification information, as appropriate, is received by the Radiocommunication Bureau after 1 January 2005 is subject to the application of the provisions of Nos. 9.12 , 9.12A and 9.13 . Resolution 610 (WRC-03) shall also apply; however, in the case of radionavigation-satellite service (space-to-space) networks and systems, Resolution 610 (WRC-03) shall only apply to transmitting space stations. In accordance with No. 5.329A , for systems and networks in the radionavigation-satellite service (space-to-space) in the bands 1'215-1'300 MHz and 1'559-1'610 MHz, the provisions of Nos. 9.7 , 9.12 , 9.12A and 9.13 shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)
5.329	Use of the radionavigation-satellite service in the band 1'215- 1'300 MHz shall be subject to the condition that no harmful interference is caused to, and no protection is claimed from, the radionavigation service authorized under No. 5.331 . Furthermore, the use of the radionavigation-satellite service in the band 1'215- 1'300 MHz shall be subject to the condition that no harmful interference is caused to the radiolocation service. No. 5.43 shall not apply in respect of the radiolocation service. Resolution 608 (WRC-03) shall apply. (WRC-03)
5.329A	Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1'215- 1'300 MHz and 1'559-1'610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on radionavigation-satellite service (space-to-Earth) systems or on other services operating in accordance with the Table of Frequency Allocations. (WRC-07)
5.331	<i>Additional allocation:</i> in Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Burkina Faso, Burundi, Cameroon, China, Korea (Rep. of), Croatia, Denmark, Egypt, the United Arab Emirates, Estonia, the Russian Federation, Finland, France, Ghana, Greece, Guinea, Equatorial Guinea, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Jordan, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Mauritania, Montenegro, Nigeria, Norway, Oman, Pakistan, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sudan, South Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Thailand, Togo, Turkey, Venezuela and Viet Nam, the band 1'215-1'300 MHz is also allocated to the radionavigation service on a primary basis. In Canada and the United States, the band 1'240-1'300 MHz is also allocated to the radionavigation service, and use of the radionavigation service shall be limited to the aeronautical radionavigation service. (WRC-12)
5.332	In the band 1'215- 1'260 MHz, active spaceborne sensors in the earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis. (WRC-2000)
5.335A	In the band 1'260- 1'300 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise

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	impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis. (WRC-2000)
5.337	The use of the bands 1'300- 1'350 MHz, 2'700- 2'900 MHz and 9'000- 9'200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.
5.337A	The use of the band 1'300- 1'350 MHz by earth stations in the radionavigation-satellite service and by stations in the radiolocation service shall not cause harmful interference to, nor constrain the operation and development of, the aeronautical-radionavigation service.
5.338A	In the bands 1'350-1'400 MHz, 1'427-1'452 MHz, 22.55-23.55 GHz, 30-31.3 GHz, 49.7-50.2 GHz, 50.4-50.9 GHz, 51.4-52.6 GHz, 81-86 GHz and 92-94 GHz, Resolution 750 (Rev. WRC-12) applies. (WRC-12)
5.339	The bands 1'370- 1'400 MHz, 2'640- 2'655 MHz, 4'950- 4'990 MHz and 15.20- 15.35 GHz are also allocated to the space research (passive) and earth exploration-satellite (passive) services on a secondary basis.
5.340	All emissions are prohibited in the following bands:
	1'400- 1'427 MHz,
	2'690- 2'700 MHz,
	10.68- 10.7GHz,
	15.35- 15.4 GHz,
	23.6- 24 GHz,
	31.3- 31.5 GHz,
	31.5- 31.8 GHz,
	48.94- 49.04 GHz,
	50.2- 50.4 GHz ² ,
	52.6- 54.25 GHz,
	86- 92 GHz,
	100- 102 GHz,
	109.5- 111.8 GHz,
	114.25- 116 GHz
	148.5- 151.5 GHz,
	164- 167 GHz,
	182- 185 GHz,
	190- 191.8 GHz,
	200- 209 GHz,
	226- 231.5 GHz,
	250- 252 GHz. (WRC-2003)
	----- ² 5.340.1 The allocation to the earth exploration-satellite service (passive) and the space research service (passive) in the band 50.2- 50.4 GHz should not impose undue constraints on the use of the adjacent bands by the primary allocated services in those bands. (WRC-97)
5.341	In the bands 1'400- 1'727 MHz, 101- 120 GHz and 197- 220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.
5.345	Use of the band 1'452- 1'492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92)* . * <i>Note by the Secretariat:</i> This Resolution was revised by WRC-03.
5.348	The use of the band 1'518- 1'525 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . In the band 1'518- 1'525 MHz stations in the mobile-satellite service shall not claim protection from the stations in the fixed service. No. 5.43A does not apply. (WRC-03)
5.348A	In the band 1'518- 1'525 MHz, the coordination threshold in terms of the power flux-density levels at the surface of the Earth in application of No. 9.11A for space stations in the mobile-satellite (space-to-Earth) service, with respect to the land mobile service use for specialized mobile radios or used in conjunction with public switched telecommunication networks (PSTN) operating within the territory of Japan, shall be - 150 dB(W/m ²) in any 4 kHz band for all angles of arrival, instead of those given in

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	Table 5-2 of Appendix 5. In the band 1'518- 1'525 MHz stations in the mobile-satellite service shall not claim protection from stations in the mobile service in the territory of Japan. No. 5.43A does not apply. (WRC-03)
5.348B	In the band 1'518- 1'525 MHz, stations in the mobile-satellite service shall not claim protection from aeronautical mobile telemetry stations in the mobile service in the territory of the United States (see Nos. 5.343 and 5.344) and in the countries listed in No. 5.342 . No. 5.43A does not apply. (WRC-03)
5.351	The bands 1'525- 1'544 MHz, 1'545- 1'559 MHz, 1'626.5- 1'645.5 MHz and 1'646.5- 1'660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorised by an administration to communicate via space stations using these bands.
5.351A	For the use of the bands 1'518-1'544 MHz, 1'545-1'559 MHz, 1'610-1'626.5 MHz, 1'626.5- 1'645.5 MHz, 1'646.5-1'660.5 MHz, 1'668-1'675 MHz, 1'980-2'010 MHz, 2'170-2'200 MHz, 2'483.5-2'500 MHz, 2'500-2'520 MHz and 2'670-2'690 MHz by the mobile-satellite service, see Resolutions 212 (Rev.WRC-07) and 225 (Rev.WRC-07) . (WRC-07)
5.353A	In applying the procedures of Section II of Article 9 to the mobile-satellite service in the bands 1'530-1'544 MHz and 1'626.5- 1'645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution 222 (WRC-2000) shall apply.) (WRC-2000)
5.354	The use of the bands 1'525- 1'559 MHz and 1'626.5- 1'660.5 MHz by the mobile-satellite services is subject to coordination under No. 9.11A .
5.356	The use of the band 1'544- 1'545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article 31).
5.357	Transmissions in the band 1'545- 1'555 MHz from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorised when such transmissions are used to extend or supplement the satellite-to-aircraft links.
5.357A	In applying the procedures of Section II of Article 9 to the mobile-satellite service in the bands 1'545-1'555 MHz and 1'646.5- 1'656.5 MHz, priority shall be given to accommodating the spectrum requirements of the aeronautical mobile-satellite (R) service providing transmission of messages with priority 1 to 6 in Article 44. Aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article 44 shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article 44. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution 222 (WRC-12) shall apply.) (WRC-12)
5.364	The use of the band 1'610- 1'626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under No. 9.11A . A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. 5.366 (to which No. 4.10 applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed -3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. 5.366 and stations in the fixed service operating in accordance with the provisions of No. 5.359 . Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. 5.366 .
5.365	The use of the band 1'613.8- 1'626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under No. 9.11A .
5.366	The band 1'610- 1'626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. 9.21 .
5.367	<i>Additional allocation:</i> the frequency band 1'610- 1'626.5 MHz is also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No. 9.21 . (WRC-12)

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5.368	With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. 4.10 do not apply in the band 1'610- 1'626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.
5.371	<i>Additional allocation:</i> in Region 1, the band 1'610- 1'626.5 MHz (Earth-to-space) is also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. 9.21 . (WRC-12)
5.372	Harmful interference shall not be caused to stations of the radio astronomy service using the band 1'610.6- 1'613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. 29.13 applies).
5.374	Mobile earth stations in the mobile-satellite service operating in the bands 1'631.5- 1'634.5 MHz and 1'656.5 - 1'660 MHz shall not cause harmful interference to the stations in the fixed service operating in the countries listed in No. 5.359 . (WRC-97)
5.375	The use of the band 1'645.5- 1'646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article 31).
5.376	Transmissions in the band 1'646.5- 1'656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorised when such transmissions are used to extend or supplement the aircraft-to-satellite links.
5.376A	Mobile earth stations operating in the band 1'660- 1'660.5 MHz shall not cause harmful interference to stations in the radio astronomy service. (WRC-97)
5.379A	Administrations are urged to give all practicable protection in the band 1'660.5- 1'668.4 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.
5.379B	The use of the band 1'668-1'675 MHz by the mobile-satellite service is subject to coordination under No. 9.11A . In the band 1'668-1'668.4 MHz, Resolution 904 (WRC-07) shall apply. (WRC-07)
5.379C	In order to protect the radio astronomy service in the band 1'668- 1'670 MHz, the aggregate power flux-density values produced by mobile earth stations in a network of the mobile-satellite service operating in this band shall not exceed - 181 dB(W/m ²) in 10 MHz and - 194 dB(W/m ²) in any 20 kHz at any radio astronomy station recorded in the Master International Frequency Register, for more than 2% of integration periods of 2'000 s. (WRC-03)
5.379D	For sharing of the band 1'668.4-1'675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution 744 (Rev.WRC-07) shall apply. (WRC-07)
5.379E	In the band 1'668.4- 1'675 MHz, stations in the mobile-satellite service shall not cause harmful interference to stations in the meteorological aids service in China, Iran (Islamic Republic of), Japan and Uzbekistan. In the band 1'668.4- 1'675 MHz, administrations are urged not to implement new systems in the meteorological aids service and are encouraged to migrate existing meteorological aids service operations to other bands as soon as practicable. (WRC-03)
5.380A	In the band 1'670-1'675 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, existing earth stations in the meteorological-satellite service notified before 1 January 2004. Any new assignment to these earth stations in this band shall also be protected from harmful interference from stations in the mobile-satellite service. (WRC-07)
5.384A	The bands, or portions of the bands, 1'710-1'885 MHz, 2'300-2'400 MHz and 2'500-2'690 MHz, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution 223 (Rev.WRC-07) . This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-07).
5.385	<i>Additional allocation:</i> the band 1'718.8- 1'722.2 MHz is also allocated to the radio astronomy service on a secondary basis for spectral line observations. (WRC-2000)
5.388	The bands 1'885- 2'025 MHz and 2'110- 2'200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications-2000 (IMT-2000). Such use does not preclude the use of these bands by other services to which they are allocated. The bands should be made available for IMT-2000 in accordance with Resolution 212 (Rev.WRC-97) . (See also Resolution 223 (WRC-2000)). (WRC-2000)
5.388A	In Regions 1 and 3, the bands 1'885- 1'980 MHz, 2'010- 2'025 MHz and 2'110- 2'170 MHz and, in Region 2, the bands 1'885- 1'980 MHz and 2'110- 2'160 MHz may be used by high altitude platform stations as base stations to provide International Mobile Telecommunications-2000 (IMT-2000), in accordance with Resolution 221 (Rev.WRC-03) . Their use by IMT-2000 applications using high altitude platform stations as base stations does not preclude the use of these bands by any station in the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-03)

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5.389A	The use of the bands 1'980-2'010 MHz and 2'170-2'200 MHz by the mobile-satellite service is subject to coordination under No. 9.11A and to the provisions of Resolution 716 (Rev.WRC-2000) . (WRC-07)
5.391	In making assignments to the mobile service in the bands 2'025- 2'110 MHz and 2'200- 2'290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-97)
5.392	Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2'025- 2'110 MHz and 2'200- 2'290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.
5.398	In respect of the radiodetermination-satellite service in the band 2'483.5- 2'500 MHz, the provisions of No. 4.10 do not apply.
5.402	The use of the band 2'483.5- 2'500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. 9.11A . Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2'483.5- 2'500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4'990- 5'000 MHz band allocated to the radio astronomy service worldwide.
5.418B	Use of the band 2'630- 2'655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. 5.418 , for which complete Appendix 4 coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. 9.12 . (WRC-03)
5.418C	Use of the band 2'630-2'655 MHz by geostationary-satellite networks for which complete Appendix 4 coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. 9.13 with respect to non-geostationary-satellite systems in the broadcastingsatellite service (sound), pursuant to No. 5.418 and No. 22.2 does not apply. (WRC-03)
5.423	In the band 2'700- 2'900 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of the aeronautical radionavigation service.
5.424A	In the band 2'900- 3'100 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the radionavigation service. (WRC-03)
5.425	In the band 2'900- 3'100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2'930- 2'950 MHz.
5.426	The use of the band 2'900- 3'100 MHz by the aeronautical radionavigation service is limited to ground-based radars.
5.427	In the bands 2'900- 3'100 MHz and 9'300- 9'500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. 4.9 .
5.430A	<i>Different category of service:</i> in Albania, Algeria, Germany, Andorra, Saudi Arabia, Austria, Azerbaijan, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Cameroon, Cyprus, Vatican, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Egypt, Spain, Estonia, Finland, France and French overseas departments and communities in Region 1, Gabon, Georgia, Greece, Guinea, Hungary, Ireland, Iceland, Israel, Italy, Jordan, Kuwait, Lesotho, Latvia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Lithuania, Malawi, Mali, Malta, Morocco, Mauritania, Moldova, Monaco, Mongolia, Montenegro, Mozambique, Namibia, Niger, Norway, Oman, Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Slovakia, Czech Rep., Romania, United Kingdom, San Marino, Senegal, Serbia, Sierra Leone, Slovenia, South Africa, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia, Turkey, Ukraine, Zambia and Zimbabwe, the band 3'400-3'600 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis subject to agreement obtained under No. 9.21 with other administrations and is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. 9.17 and 9.18 also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this band, it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed $-154.5 \text{ dB(W/(m}^2 \cdot 4 \text{ kHz))}$ for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has

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	so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the band 3 400-3 600 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). This allocation is effective from 17 November 2010. (WRC-12)
5.438	Use of the band 4'200- 4'400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the earth exploration-satellite and space research services may be authorised in this band on a secondary basis (no protection is provided by the radio altimeters).
5.440	The standard frequency and time signal-satellite service may be authorised 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, subject to agreement obtained under No. 9.21 .
5.441	The use of the bands 4'500- 4'800 MHz (space-to-Earth), 6'725- 7'025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix 30B . The use of the bands 10.7- 10.95 GHz (space-to-Earth), 11.2- 11.45 GHz (space-to-Earth) and 12.75- 13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix 30B . The use of the bands 10.7- 10.95 GHz (space-to Earth), 11.2- 11.45 GHz (space-to-Earth) and 12.75- 13.25 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite system in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.443AA	In the frequency bands 5'000-5'030 MHz and 5'091-5'150 MHz, the aeronautical mobile-satellite (R) service is subject to agreement obtained under No. 9.21 . The use of these bands by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
5.443B	In order not to cause harmful interference to the microwave landing system operating above 5'030 MHz, the aggregate power flux-density produced at the Earth's surface in the band 5'030 -5'150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the band 5'010- 5'030 MHz shall not exceed - 124.5 dB(W/m ²) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4'990 - 5'000 MHz, radionavigation-satellite service systems operating in the band 5'010- 5'030 MHz shall comply with the limits in the band 4'990- 5'000 MHz defined in Resolution 741 (Rev. WRC-12) . (WRC-12)
5.443C	The use of the frequency band 5'030-5'091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5'030-5'091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5'010-5'030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of -75 dBW/MHz in the frequency band 5'010-5'030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)
5.443D	In the frequency band 5'030-5'091 MHz, the aeronautical mobile-satellite (R) service is subject to coordination under No. 9.11A . The use of this frequency band by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
5.444	The frequency band 5'030-5'150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. In the frequency band 5'030-5'091 MHz, the requirements of this system shall have priority over other uses of this band. For the use of the frequency band 5'091-5'150 MHz, No. 5.444A and Resolution 114 (Rev.WRC-12) apply. (WRC-12)
5.444A	<i>Additional allocation:</i> the band 5'091-5'150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems in the mobile-satellite service and is subject to coordination under No. 9.11A .

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	<p>In the band 5'091-5'150 MHz, the following conditions also apply:</p> <ul style="list-style-type: none"> – prior to 1 January 2018, the use of the band 5'091-5'150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution 114 (Rev.WRC-03); – after 1 January 2016, no new assignments shall be made to earth stations providing feeder links of non-geostationary mobile-satellite systems; – after 1 January 2018, the fixed-satellite service will become secondary to the aeronautical radionavigation service. (WRC-07)
5.444B	<p>The use of the frequency band 5091-5150 MHz by the aeronautical mobile service is limited to:</p> <ul style="list-style-type: none"> – systems operating in the aeronautical mobile (R) service and in accordance with international aeronautical standards, limited to surface applications at airports. Such use shall be in accordance with Resolution 748 (Rev.WRC-12); – aeronautical telemetry transmissions from aircraft stations (see No. 1.83) in accordance with Resolution 418 (Rev.WRC-12). (WRC-12)
5.446	<p><i>Additional allocation:</i> in the countries listed in Nos. 5.369 and 5.400, the band 5'150- 5'216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. 9.21. In Region 2, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in Nos. 5.369 and 5.400, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1'610- 1'626.5 MHz and/or 2'483.5- 2'500 MHz. The total power flux-density at the Earth's surface shall in no case exceed -159 dB(W/m²) in any 4 kHz band for all angles of arrival. (WRC-12)</p>
5.446A	<p>The use of the bands 5'150-5'350 MHz and 5'470-5'725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution 229 (Rev. WRC-12). (WRC-12)</p>
5.446B	<p>In the band 5'150- 5'250 MHz, stations in the mobile service shall not claim protection from earth stations in the fixed-satellite service. No. 5.43A does not apply to the mobile service with respect to fixed-satellite service earth stations. (WRC-03)</p>
5.446C	<p><i>Additional allocation:</i> in Region 1 (except in Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Syrian Arab Republic, Sudan, South Sudan and Tunisia) and in Brazil, the band 5 150-5 250 MHz is also allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. 1.83), in accordance with Resolution 418 (Rev.WRC-12). These stations shall not claim protection from other stations operating in accordance with Article 5. No. 5.43A does not apply. (WRC-12)</p>
5.447A	<p>The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under No. 9.11A.</p>
5.447B	<p><i>Additional allocation:</i> the band 5'150- 5'216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. 9.11A. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5'150- 5'216 MHz shall in no case exceed -164 dB(W/m²) in any 4 kHz band for all angles of arrival.</p>
5.447C	<p>Administrations responsible for fixed-satellite service networks in the band 5'150- 5'250 MHz operated under Nos. 5.447A and 5.447B shall coordinate on an equal basis in accordance with No. 9.11A with administrations responsible for non-geostationary-satellite networks operated under No. 5.446 and brought into use prior to 17 November 1995. Satellite networks operated under No. 5.446 brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. 5.447A and 5.447B.</p>
5.447D	<p>The allocation of the band 5'250- 5'255 MHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)</p>
5.447F	<p>In the band 5'250- 5'350 MHz, stations in the mobile service shall not claim protection from the radio-location service, the Earth exploration-satellite service (active) and the space research service (active). These services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendations ITU-R M.1638 and ITU-R SA.1632. (WRC-03)</p>

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5.448A	The Earth exploration-satellite (active) and space research (active) services in the frequency band 5'250- 5'350 MHz shall not claim protection from the radiolocation service. No. 5.43A does not apply. (WRC-03)
5.448B	The Earth exploration-satellite service (active) operating in the band 5'350- 5'570 MHz and space research service (active) operating in the band 5'460- 5'570 MHz shall not cause harmful interference to the aeronautical radionavigation service in the band 5'350- 5'460 MHz, the radionavigation service in the band 5'460- 5'470 MHz and the maritime radionavigation service in the band 5'470- 5'570 MHz. (WRC-03)
5.448C	The space research service (active) operating in the band 5'350- 5'460 MHz shall not cause harmful interference to nor claim protection from other services to which this band is allocated. (WRC-03)
5.448D	In the frequency band 5'350- 5'470 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the aeronautical radionavigation service operating in accordance with No. 5.449 . (WRC-03)
5.449	The use of the band 5'350 - 5'470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
5.450A	In the band 5'470- 5'725 MHz, stations in the mobile service shall not claim protection from radiodetermination services. Radiodetermination services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendation ITU-R M.1638. (WRC-03)
5.450B	In the frequency band 5'470- 5'650 MHz, stations in the radiolocation service, except ground-based radars used for meteorological purposes in the band 5'600- 5'650 MHz, shall not cause harmful interference to, nor claim protection from, radar systems in the maritime radionavigation service. (WRC-03)
5.452	Between 5'600 MHz and 5'650 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of the maritime radionavigation service.
5.457A	In the bands 5'925- 6'425 MHz and 14- 14.5 GHz, earth stations located on board vessels may communicate with space stations of the fixed-satellite service. Such use shall be in accordance with Resolution 902 (WRC-03) . (WRC-03)
5.458	In the band 6'425- 7'075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7'075- 7'250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6'425- 7'025 MHz and 7'075- 7'250 MHz.
5.458A	In making assignments in the band 6'700- 7'075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6'650- 6'675.2 MHz from harmful interference from unwanted emissions.
5.458B	The space-to-Earth allocation to the fixed-satellite service in the band 6'700- 7'075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under No. 9.11A . The use of the band 6'700- 7'075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. 22.2 .
5.458C	Administrations making submissions in the band 7'025- 7'075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.
5.460	The use of the band 7'145- 7'190 MHz by the space research service (Earth-to-space) is restricted to deep space; no emissions to deep space shall be effected in the band 7'190- 7'235 MHz. Geostationary satellites in the space research service operating in the band 7'190- 7'235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. 5.43A does not apply. (WRC-03)
5.461	<i>Additional allocation:</i> the bands 7'250- 7'375 MHz (space-to-Earth) and 7'900- 8'025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. 9.21 .
5.461A	The use of the band 7'450- 7'550 MHz by the meteorological-satellite service (space-to-Earth) is limited to geostationary-satellite systems. Non-geostationary meteorological-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime. (WRC-97)

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5.461B	The use of the band 7'750- 7'900 MHz by the meteorological-satellite service (space-to-Earth) is limited to non-geostationary satellite systems. (WRC-12)
5.462A	In Regions 1 and 3 (except for Japan), in the band 8'025- 8'400 MHz, the Earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following values for angles of arrival (θ), without the consent of the affected administration:
	- 135 dB (W/m ²) in a 1 MHz band for $0^\circ \leq \theta < 5^\circ$
	- 135 + 0.5 ($\theta - 5$) dB (W/m ²) in a 1 MHz band for $5^\circ \leq \theta < 25^\circ$
	- 125 dB (W/m ²) in a 1 MHz band for $25^\circ \leq \theta \leq 90^\circ$
	(WRC-12)
5.463	Aircraft stations are not permitted to transmit in the band 8'025- 8'400 MHz.
5.465	In the space research service, the use of the band 8'400- 8'450 MHz is limited to deep space.
5.469	<i>Additional allocation:</i> in Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Hungary, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, the Czech Rep., Romania, Tajikistan, Turkmenistan and Ukraine, the band 8'500- 8'750 MHz is also allocated to the land mobile and radionavigation services on a primary basis. (WRC-03)
5.469A	In the band 8'550- 8'650 MHz, stations in the earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service. (WRC-97)
5.470	The use of the band 8'750- 8'850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8'800 MHz.
5.472	In the bands 8'850- 9'000 MHz and 9'200- 9'225 MHz, the maritime radionavigation service is limited to shore-based radars.
5.473A	In the band 9'000-9'200 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, systems identified in No. 5.337 operating in the aeronautical radionavigation service, or radar systems in the maritime radionavigation service operating in this band on a primary basis in the countries listed in No. 5.471 . (WRC-07)
5.474	In the band 9'200- 9'500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article 31).
5.475	The use of the band 9'300-9'500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9'300-9'320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. (WRC-07)
5.475A	The use of the band 9'300-9'500 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 300 MHz that cannot be fully accommodated within the 9'500-9'800 MHz band. (WRC-07)
5.475B	In the band 9'300-9'500 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, radars operating in the radionavigation service in conformity with the Radio Regulations. Ground-based radars used for meteorological purposes have priority over other radiolocation uses. (WRC-07)
5.476A	In the band 9'300-9'800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from, stations of the radionavigation and radiolocation services. (WRC-07)
5.478A	The use of the band 9'800-9'900 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 500 MHz that cannot be fully accommodated within the 9'300-9'800 MHz band.
5.478B	In the band 9'800- 9'900 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from stations of the fixed service to which this band is allocated on a secondary basis. (WRC-07)
5.479	The band 9'975- 10'025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.
5.482	In the band 10.6-10.68 GHz, the power delivered to the antenna of stations of the fixed and mobile, except aeronautical mobile, services shall not exceed -3 dBW. This limit may be exceeded, subject to agreement obtained under No. 9.21 . However, in Algeria, Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Egypt, United Arab Emirates, Georgia, India, Indonesia, Iran (Islamic Republic of), Iraq, Jordan, Libyan Arab Jamahiriya, Kazakhstan, Kuwait, Lebanon, Morocco, Mauritania,

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	Moldova, Nigeria, Oman, Uzbekistan, Pakistan, Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, Singapore, Tajikistan, Tunisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, service is not applicable. (WRC-07)
5.482A	For sharing of the band 10.6-10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution 751 (WRC-07) applies. (WRC-07)
5.484	In Region 1, the use of the band 10.7- 11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.
5.484A	The use of the bands 10.95- 11.2 GHz (space-to-Earth), 11.45- 11.7 GHz (space-to-Earth), 11.7- 12.2 GHz (space-to-Earth) in Region 2, 12.2- 12.75 GHz (space-to-Earth) in Region 3, 12.5- 12.75 GHz (space-to-Earth) in Region 1, 13.75- 14.5 GHz (Earth-to-space), 17.8- 18.6 GHz (space-to-Earth), 19.7- 20.2 GHz (space-to-Earth), 27.5- 28.6 GHz (Earth-to-space), 29.5- 30 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.487	In the band 11.7- 12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to, or claim protection from, broadcasting-satellite stations operating in accordance with the Regions 1 and 3 Plan in Appendix 30 . (WRC-03)
5.487A	<i>Additional allocation:</i> in Region 1, the band 11.7- 12.5 GHz, in Region 2, the band 12.2- 12.7 GHz and, in Region 3, the band 11.7- 12.2 GHz, are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to non-geostationary systems and subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the broadcasting-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-03)
5.492	Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix 30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate. (WRC 2000)
5.497	The use of the band 13.25- 13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
5.498A	The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25- 13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)
5.501A	The allocation of the band 13.4- 13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)
5.501B	In the band 13.4- 13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service. (WRC-97)
5.502	In the band 13.75- 14 GHz, an earth station of a geostationary fixed-satellite service network shall have a minimum antenna diameter of 1.2 m and an earth station of a non-geostationary fixed-satellite service system shall have a minimum antenna diameter of 4.5 m. In addition, the e.i.r.p., averaged over one second, radiated by a station in the radiolocation or radionavigation services shall not exceed 59 dBW for elevation angles above 2° and 65 dBW at lower angles. Before an administration brings into use an earth station in a geostationary-satellite network in the fixed-satellite service in this

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	<p>band with an antenna size smaller than 4.5 m, it shall ensure that the power flux-density produced by this earth station does not exceed:</p> <ul style="list-style-type: none"> - - 115 dB(W/(m² * 10 MHz)) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognized by the coastal state; - - 115 dB(W/(m² * 10 MHz)) for more than 1% of the time produced 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained. <p>For earth stations within the fixed-satellite service having an antenna diameter greater than or equal to 4.5 m, the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. (WRC-03)</p>
5.503	<p>In the band 13.75- 14 GHz, geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 shall operate on an equal basis with stations in the fixed-satellite service; after that date, new geostationary space stations in the space research service will operate on a secondary basis. Until those geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 cease to operate in this band:</p> <p>Continued on the following page.</p>
5.503	<p>Continuation from preceeding page:</p> <ul style="list-style-type: none"> - in the band 13.77-13.78 GHz, the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in geostationary-satellite orbit shall not exceed: <ul style="list-style-type: none"> i) 4.7D + 28 dB(W/40 kHz), where D is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 1.2 m and less than 4.5 m; ii) 49.2 + 20 log(D/4.5) dB(W/40 kHz), where D is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 4.5 m and less than 31.9 m; iii) 66.2 dB(W/40 kHz) for any fixed-satellite service earth station for antenna diameters (m) equal to or greater than 31.9 m; iv) 56.2 dB(W/4 kHz) for narrow-band (less than 40 kHz of necessary bandwidth) fixedsatellite service earth station emissions from any fixed-satellite service earth station having an antenna diameter of 4.5 m or greater; - the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in non-geostationary-satellite orbit shall not exceed 51 dBW in the 6 MHz band from 13.772 to 13.778 GHz. <p>Automatic power control may be used to increase the e.i.r.p. density in these frequency ranges to compensate for rain attenuation, to the extent that the power flux-density at the fixed-satellite service space station does not exceed the value resulting from use by an earth station of an e.i.r.p. meeting the above limits in clear-sky conditions. (WRC-03)</p>
5.504	<p>The use of the band 14- 14.3 GHz by the radionavigation service shall be such as to provide sufficient protection to space stations of the fixed-satellite service.</p>
5.504A	<p>In the band 14-14.5 GHz, aircraft earth stations in the secondary aeronautical mobile-satellite service may also communicate with space stations in the fixed-satellite service. The provisions of Nos. 5.29, 5.30 and 5.31 apply. (WRC-03)</p>
5.504B	<p>Aircraft earth stations operating in the aeronautical mobile-satellite service in the band 14- 14.5 GHz shall comply with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643, with respect to any radio astronomy station performing observations in the 14.47- 14.5 GHz band located on the territory of Spain, France, India, Italy, the United Kingdom and South Africa. (WRC-03)</p>
5.506A	<p>In the band 14-14.5 GHz, ship earth stations with an e.i.r.p. greater than 21 dBW shall operate under the same conditions as earth stations located on board vessels, as provided in Resolution 902 (WRC-03). This footnote shall not apply to ship earth stations for which the complete Appendix 4 information has been received by the Bureau prior to 5 July 2003. (WRC-03)</p>

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5.506B	Earth stations located on board vessels communicating with space stations in the fixed-satellite service may operate in the frequency band 14-14.5 GHz without the need for prior agreement from Cyprus, Greece and Malta, within the minimum distance given in Resolution 902 (WRC-03) from these countries. (WRC-03)
5.511A	The band 15.43- 15.63 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. Use of the band 15.43- 15.63 GHz by the fixed-satellite service (space-to-Earth and Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. 9.11A . The use of the frequency band 15.43- 15.63 GHz by the fixed-satellite service (space-to-Earth) is limited to feeder links of non-geostationary systems in the mobile-satellite service for which advance publication information has been received by the Bureau prior to 2 June 2000. In the space-to-Earth direction, the minimum earth station elevation angle above and gain towards the local horizontal plane and the minimum coordination distances to protect an earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. In order to protect the radio astronomy service in the band 15.35- 15.4 GHz, the aggregate power flux-density radiated in the 15.35- 15.4 GHz band by all the space stations within any feeder-link of a non-geostationary system in the mobile-satellite service (space-to-Earth) operating in the 15.43- 15.63 GHz band shall not exceed the level of -156 dB(W/m ²) in a 50 MHz bandwidth, into any radio astronomy observatory site for more than 2% of the time. (WRC-2000)
5.511C	Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. 4.10 applies) from harmful interference from feeder link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder link earth station shall be in accordance with Recommendation ITU-R S.1340. (WRC-97)
5.511D	Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4- 15.43 GHz and 15.63- 15.7 GHz in the space-to-Earth direction and 15.63- 15.65 GHz in the Earth-to-space direction. In the bands 15.4- 15.43 GHz and 15.65- 15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of - 146 dB(W/(m ² * MHz)) for any angle of arrival. In the band 15.63- 15.65 GHz, where an administration plans emissions from a non-geostationary space station that exceed - 146 dB(W/(m ² * MHz)) for any angle of arrival, it shall coordinate under No. 9.11A with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63- 15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. 4.10 applies). (WRC-97)
5.511E	In the frequency band 15.4-15.7 GHz, stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the aeronautical radionavigation service. (WRC-12)
5.511F	In order to protect the radio astronomy service in the frequency band 15.35-15.4 GHz, radiolocation stations operating in the frequency band 15.4-15.7 GHz shall not exceed the power flux-density level of -156 dB(W/m ²) in a 50 MHz bandwidth in the frequency band 15.35-15.4 GHz, at any radio astronomy observatory site for more than 2 per cent of the time. (WRC-12)
5.513A	Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis. (WRC-97)
5.516	The use of the band 17.3- 18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. The use of the band 17.3- 17.8 GHz in Region 2 by systems in the fixed-satellite service (Earth-to-space) is limited to geostationary satellites. For the use of the band 17.3- 17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2- 12.7 GHz, see Article 11 . The use of the bands 17.3- 18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8- 18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
5.516A	In the band 17.3- 17.7 GHz, earth stations of the fixed-satellite service (space-to-Earth) in Region 1 shall not claim protection from the broadcasting-satellite service feeder-link earth stations operating

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	under Appendix 30A , nor put any limitations or restrictions on the locations of the broadcasting-satellite service feeder-link earth stations anywhere within the service area of the feeder link. (WRC-03)
5.516B	<p>The following bands are identified for use by high-density applications in the fixed-satellite service:</p> <p>17.3- 17.7 GHz (space-to-Earth) in Region 1, 18.3- 19.3 GHz (space-to-Earth) in Region 2, 19.7- 20.2 GHz (space-to-Earth) in all Regions, 39.5- 40 GHz (space-to-Earth) in Region 1, 40- 40.5 GHz (space-to-Earth) in all Regions, 40.5- 42 GHz (space-to-Earth) in Region 2, 47.5- 47.9 GHz (space-to-Earth) in Region 1, 48.2- 48.54 GHz (space-to-Earth) in Region 1, 49.44- 50.2 GHz (space-to-Earth) in Region 1, and 27.5- 27.82 GHz (Earth-to-space) in Region 1, 28.35- 28.45 GHz (Earth-to-space) in Region 2,</p> <p>Continued on the following page.</p>
5.516B	<p>Continuation from preceeding page:</p> <p>28.45- 28.94 GHz (Earth-to-space) in all Regions, 28.94- 29.1 GHz (Earth-to-space) in Region 2 and 3, 29.25- 29.46 GHz (Earth-to-space) in Region 2, 29.46- 30 GHz (Earth-to-space) in all Regions, 48.2- 50.2 GHz (Earth-to-space) in Region 2.</p> <p>This identification does not preclude the use of these bands by other fixed-satellite service applications or by other services to which these bands are allocated on a co-primary basis and does not establish priority in these Regulations among users of the bands. Administrations should take this into account when considering regulatory provisions in relation to these bands. See Resolution 143 (WRC-03). (WRC-03)</p>
5.519	<i>Additional allocation:</i> the bands 18.0-18.3 GHz in Region 2 and 18.1-18.4 GHz in Regions 1 and 3 are also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Their use is limited to geostationary satellites. (WRC-07)
5.520	The use of the band 18.1- 18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of geostationary-satellite systems in the broadcasting-satellite service. (WRC-2000)
5.522A	The emissions of the fixed service and the fixed-satellite service in the band 18.6- 18.8 GHz are limited to the values given in Nos. 21.5A and 21.16.2 , respectively. (WRC-2000)
5.522B	The use of the band 18.6- 18.8 GHz by the fixed-satellite service is limited to geostationary systems and systems with an orbit of apogee greater than 20'000 km. (WRC-2000)
5.523A	The use of the bands 18.8- 19.3 GHz (space-to-Earth) and 28.6- 29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of No. 9.11A and No. 22.2 does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. 9.11A with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix 4 notification information is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)
5.523B	The use of the band 19.3- 19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. 9.11A , and No. 22.2 does not apply.
5.523C	No. 22.2 shall continue to apply in the bands 19.3- 19.6 GHz and 29.1- 29.4 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix 4 coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)
5.523D	The use of the band 19.3- 19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No. 9.11A , but not subject to the provisions of No. 22.2 . The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. 5.523C and 5.523E , is not subject to the provisions of No. 9.11A and shall continue to be subject to Articles 9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2 . (WRC-97)

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5.523E	No. 22.2 shall continue to apply in the bands 19.6- 19.7 GHz and 29.4- 29.5 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix 4 coordination information, or notification information, is considered as having been received by the Bureau by 21 November 1997. (WRC-97)
5.525	In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7- 20.2 GHz and 29.5- 30 GHz.
5.526	In the bands 19.7- 20.2 GHz and 29.5- 30 GHz in Region 2, and in the bands 20.1- 20.2 GHz and 29.9- 30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications.
5.527	In the bands 19.7- 20.2 GHz and 29.5- 30 GHz, the provisions of No. 4.10 do not apply with respect to the mobile-satellite service.
5.528	The allocation to the mobile-satellite service is intended for use by networks which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7- 20.1 GHz in Region 2 and in the band 20.1- 20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. 5.524 .
5.530A	Unless otherwise agreed between the administrations concerned, any station in the fixed or mobile services of an administration shall not produce a power flux-density in excess of $-120.4 \text{ dB(W/(m}^2 \cdot \text{MHz))}$ at 3 m above the ground of any point of the territory of any other administration in Regions 1 and 3 for more than 20% of the time. In conducting the calculations, administrations should use the most recent version of Recommendation ITU-R P.452 (see Recommendation ITU-R BO.1898). (WRC-12)
5.530B	In the band 21.4-22 GHz, in order to facilitate the development of the broadcasting-satellite service, administrations in Regions 1 and 3 are encouraged not to deploy stations in the mobile service and are encouraged to limit the deployment of stations in the fixed service to point-to-point links. (WRC-12)
5.530C	The use of the band 21.4-22 GHz is subject to the provisions of Resolution 755 (WRC-12) . (WRC-12)
5.530D	See Resolution 555 (WRC-12) . (WRC-12)
5.532	The use of the band 22.21- 22.5 GHz by the earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.
5.532A	The location of earth stations in the space research service shall maintain a separation distance of at least 54 km from the respective border(s) of neighbouring countries to protect the existing and future deployment of fixed and mobile services unless a shorter distance is otherwise agreed between the corresponding administrations. Nos. 9.17 and 9.18 do not apply. (WRC-12)
5.532B	Use of the band 24.65-25.25 GHz in Region 1 and the band 24.65-24.75 GHz in Region 3 by the fixed-satellite service (Earth-to-space) is limited to earth stations using a minimum antenna diameter of 4.5 m. (WRC-12).
5.535	In the band 24.75- 25.25 GHz, feeder links to stations of the broadcasting-satellite service shall have priority over other uses in the fixed-satellite service (Earth-to-space). Such other uses shall protect and shall not claim protection from existing and future operating feeder-link networks to such broadcasting satellite stations.
5.535A	The use of the band 29.1- 29.5 GHz (Earth-to-space) by the fixed-satellite service is limited to geostationary-satellite systems and feeder links to non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. 9.11A , but not subject to the provisions of No. 22.2 , except as indicated in Nos. 5.523C and 5.523E where such use is not subject to the provisions of No. 9.11A and shall continue to be subject to Articles 9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2 . (WRC-97)
5.536	Use of the 25.25- 27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.
5.536A	Administrations operating earth stations in the Earth exploration-satellite service or the space research service shall not claim protection from stations in the fixed and mobile services operated by other administrations. In addition, earth stations in the Earth exploration-satellite service or in the space research service should be operated taking into account the most recent version of Recommendations ITU-R SA.1862 (WRC-12)

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5.536B	In, Saudi Arabia, Austria, Belgium, Brazil, Bulgaria, China, Korea (Rep. of), Denmark, Egypt, United Arab Emirates, Estonia, Finland, Hungary, India, Iran (Islamic Republic of), Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the Czech Rep., Romania, the United Kingdom, Singapore, Sweden, Switzerland, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the Earth exploration-satellite service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. (WRC-12)
5.538	<i>Additional allocation:</i> the bands 27.500-27.501 GHz and 29.999-30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions intended for up-link power control. Such space-to-Earth transmissions shall not exceed an equivalent isotropically radiated power (e.i.r.p.) of +10 dBW in the direction of adjacent satellites on the geostationary-satellite orbit. (WRC-07)
5.539	The band 27.5- 30 GHz may be used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting-satellite service.
5.540	<i>Additional allocation:</i> the band 27.501- 29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.
5.541	In the band 28.5- 30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not to the primary collection of information by means of active or passive sensors.
5.541A	Feeder links of non-geostationary networks in the mobile-satellite service and geostationary networks in the fixed-satellite service operating in the band 29.1- 29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix 4 coordination information is considered as having been received by the Bureau after 17 May 1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix 4 information for coordination before this date are encouraged to utilize these techniques to the extent practicable. (WRC-2000)
5.543	The band 29.95- 30 GHz may be used for space-to-space links in the earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.
5.547	The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolution 75 (WRC-2000)). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5- 40 GHz and 40.5-42 GHz (see No. 5.516B), administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate. (WRC-07)
5.547A	Administrations should take practical measures to minimize the potential interference between stations in the fixed service and airborne stations in the radionavigation service in the 31.8- 33.4 GHz band, taking into account the operational needs of the airborne radar systems. (WRC-2000)
5.548	In designing systems for the inter-satellite and radionavigation services in the band 32- 33 GHz, and for the space research service (deep space) in the band 31.8- 32.3 GHz, administrations shall take all necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Recommendation 707).
5.549A	In the band 35.5- 36.0 GHz, the mean power flux-density at the Earth's surface, generated by any spaceborne sensor in the Earth exploration-satellite service (active) or space research service (active), for any angle greater than 0.8° from the beam centre shall not exceed - 73.3 dB(W/m ²) in this band. (WRC-03)
5.550A	For sharing of the band 36-37 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile services, Resolution 752 (WRC-07) shall apply. (WRC-07)

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5.551H	<p>The equivalent power flux-density (epfd) produced in the band 42.5-43.5 GHz by all space stations in any non-geostationary-satellite system in the fixed-satellite service (space-to-Earth), or in the broadcasting-satellite service (space-to-Earth) operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station for more than 2% of the time:</p> <ul style="list-style-type: none"> - 230 dB(W/m²) in 1 GHz and –246 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and - 209 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station. <p>These epfd values shall be evaluated using the methodology given in Recommendation ITU-R S.1586-1 and the reference antenna pattern and the maximum gain of an antenna in the radio astronomy service given in Recommendation ITU-R RA.1631 and shall apply over the whole sky and for elevation angles higher than the minimum operating angle Θ_{\min} of the radiotelescope (for which a default value of 5° should be adopted in the absence of notified information).</p> <p>These values shall apply at any radio astronomy station that either:</p> <ul style="list-style-type: none"> - was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or - was notified before the date of receipt of the complete Appendix 4 information for coordination or notification, as appropriate, for the space station to which the limits apply. <p>Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution 743 (WRC-03) shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-07)</p>
5.551I	<p>The power flux-density in the band 42.5-43.5 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth), or the broadcasting-satellite service (space-to-Earth) operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station:</p> <ul style="list-style-type: none"> - 137 dB(W/m²) in 1 GHz and –153 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and - 116 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station. <p>These values shall apply at the site of any radio astronomy station that either:</p> <p>was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or</p> <p>was notified before the date of receipt of the complete Appendix 4 information for coordination or notification, as appropriate, for the space station to which the limits apply.</p> <p>Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution 743 (WRC-03) shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-03)</p>
5.552	<p>The allocation of the spectrum for the fixed-satellite service in the bands 42.5- 43.5 GHz and 47.2- 50.2 GHz for Earth-to-space transmission is greater than that in the band 37.5- 39.5 GHz for space-to-Earth transmission in order to accommodate feeder links to broadcasting satellites. Administrations are urged to take all practicable steps to reserve the band 47.2- 49.2 GHz for feeder links for the broadcasting-satellite service operating in the band 40.5- 42.5 GHz.</p>
5.552A	<p>The allocation to the fixed service in the bands 47.2-47.5 GHz and 47.9-48.2 GHz is designated for use by high altitude platform stations. The use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz is subject to the provisions of Resolution 122 (Rev.WRC-07). (WRC-07)</p>
5.553	<p>In the bands 43.5- 47 GHz and 66- 71 GHz, stations in the land mobile service may be operated subject to not causing harmful interference to the space radiocommunication services to which these bands are allocated (see No. 5.43). (WRC-2000)</p>
5.554	<p>In the bands 43.5- 47 GHz, 66- 71 GHz, 95- 100 GHz, 123- 130 GHz, 191.8- 200 GHz and 252- 265 GHz, satellite links connecting land stations at specified fixed points are also authorized when used in conjunction with the mobile-satellite service or the radionavigation-satellite service. (WRC-2000)</p>

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5.554A	The use of the bands 47.5- 47.9 GHz, 48.2- 48.54 GHz and 49.44- 50.2 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary satellites. (WRC-03)
5.555	<i>Additional allocation:</i> the band 48.94- 49.04 GHz is also allocated to the radio astronomy service on a primary basis. (WRC-2000)
5.555B	The power flux-density in the band 48.94- 49.04 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth) operating in the bands 48.2- 48.54 GHz and 49.44- 50.2 GHz shall not exceed $-151.8 \text{ dB(W/m}^2\text{)}$ in any 500 kHz band at the site of any radio astronomy station. (WRC-03)
5.556	In the bands 51.4- 54.25 GHz, 58.2- 59 GHz and 64- 65 GHz, radio astronomy observations may be carried out under national arrangements. (WRC-2000)
5.556A	Use of the bands 54.25- 56.9 GHz, 57- 58.2 GHz and 59- 59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1'000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed $-147 \text{ dB(W/(m}^2 * 100 \text{ MHz))}$ for all angles of arrival. (WRC-97)
5.557A	In the band 55.78- 56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to -26 dB(W/MHz) . (WRC 2000)
5.558	In the bands 55.78- 58.2 GHz, 59- 64 GHz, 66- 71 GHz, 122.25- 123 GHz, 130- 134 GHz, 167- 174.8 GHz and 191.8- 200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. 5.43). (WRC 2000)
5.558A	Use of the band 56.9- 57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1'000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed $-147 \text{ dB(W/(m}^2 * 100 \text{ MHz))}$ for all angles of arrival. (WRC-97)
5.559	In the band 59- 64 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. 5.43). (WRC-2000)
5.559A	The band 75.5- 76 GHz is also allocated to the amateur and amateur-satellite services on a primary basis until the year 2006. (WRC-2000)
5.560	In the band 78- 79 GHz radars located on space stations may be operated on a primary basis in the earth exploration-satellite service and in the space research service.
5.561	In the band 74- 76 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the fixed-satellite service or stations of the broadcasting-satellite service operating in accordance with the decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service. (WRC-2000)
5.561A	The 81- 81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis. (WRC-2000)
5.562	The use of the band 94 - 94.1 GHz by the earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars. (WRC-97)
5.562A	In the bands 94- 94.1 GHz and 130- 134 GHz, transmissions from space stations of the Earth exploration-satellite service (active) that are directed into the main beam of a radio astronomy antenna have the potential to damage some radio astronomy receivers. Space agencies operating the transmitters and the radio astronomy stations concerned should mutually plan their operations so as to avoid such occurrences to the maximum extent possible. (WRC-2000)
5.562B	In the bands 105- 109.5 GHz, 111.8- 114.25 GHz, 155.5- 158.5 GHz and 217- 226 GHz, the use of this allocation is limited to space-based radio astronomy only. (WRC-2000)
5.562C	Use of the band 116- 122.25 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1'000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed $-148 \text{ dB(W/(m}^2 * \text{MHz))}$ for all angles of arrival. (WRC-2000)
5.562D	<i>Additional allocation:</i> In Korea (Rep. of), the bands 128- 130 GHz, 171- 171.6 GHz, 172.2- 172.8 GHz and 173.3- 174 GHz are also allocated to the radio astronomy service on a primary basis until 2015. (WRC-2000)
5.562E	The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5- 134 GHz. (WRC-2000)

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5.562F	In the band 155.5- 158.5 GHz, the allocation to the Earth exploration-satellite (passive) and space research (passive) services shall terminate on 1 January 2018. (WRC-2000)
5.562G	The date of entry into force of the allocation to the fixed and mobile services in the band 155.5- 158.5 GHz shall be 1 January 2018. (WRC-2000)
5.562H	Use of the bands 174.8- 182 GHz and 185- 190 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1'000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed - 144 dB(W/(m ² * MHz)) for all angles of arrival. (WRC 2000)
5.563A	In the bands 200- 209 GHz, 235- 238 GHz, 250- 252 GHz and 265- 275 GHz, ground-based passive atmospheric sensing is carried out to monitor atmospheric constituents. (WRC-2000)
5.563B	The band 237.9- 238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only. (WRC-2000)
5.565	<p>The following frequency bands in the range 275- 1'000 GHz are identified for use by administrations for passive service applications:</p> <ul style="list-style-type: none"> - radio astronomy service: 275- 323 GHz, 327- 371 GHz, 388- 424 GHz, 426- 442 GHz, 453-510 GHz, 623- 711 GHz, 795- 909 GHz and 926- 945 GHz; - Earth exploration-satellite service (passive) and space research service (passive): 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz. <p>The use of the range 275-1'000 GHz by the passive services does not preclude use of this range by active services. Administrations wishing to make frequencies in the 275-1'000 GHz range available for active service applications are urged to take all practicable steps to protect these passive services from harmful interference until the date when the Table of Frequency Allocations is established in the above-mentioned 275-1'000 GHz frequency range.</p> <p>All frequencies in the range 1'000-3'000 GHz may be used by both active and passive services. (WRC 12)</p>
9.11A	e) for a station for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to this provision, the provisions of Nos. 9.12 to 9.16 are applicable; (WRC-2000)
9.12	f) for a station in a satellite network using a non-geostationary-satellite orbit, for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to this provision or to No. 9.11A , in respect of any other satellite network using a non-geostationary-satellite orbit, with the exception of coordination between earth stations operating in the opposite direction of transmission; (WRC-2000)
9.12A	g) for a station in a satellite network using a non-geostationary-satellite orbit, for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to this provision or to No. 9.11A , in respect of any other satellite network using the geostationary-satellite orbit, with the exception of coordination between earth stations operating in the opposite direction of transmission; (WRC-2000)
9.13	h) for a station in a satellite network using the geostationary-satellite orbit, for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to this provision or to No. 9.11A , in respect of any other satellite network using a non-geostationary-satellite orbit, with the exception of coordination between earth stations operating in the opposite direction of transmission; (WRC-2000)
9.14	i) for a transmitting space station of a satellite network for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to this provision or to No. 9.11A in respect of receiving stations of terrestrial services where the threshold value is exceeded; (WRC-07)

RR Foot-note No	RR Footnote Text
9.15	<i>j)</i> for either a specific earth station or typical earth station of a non-geostationary satellite network for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to No. 9.11A , in respect of terrestrial stations in frequency bands allocated with equal rights to space and terrestrial services and where the coordination area of the earth station includes the territory of another country; (WRC-2000)
9.16	<i>k)</i> for a transmitting station of a terrestrial service for which the requirement to coordinate is included in a footnote to the Table of Frequency Allocations referring to No. 9.11A and which is located within the coordination area of an earth station in a non-geostationary-satellite network; (WRC-2000)
9.17	<i>l)</i> for any specific earth station or typical mobile earth station in frequency bands above 100 MHz allocated with equal rights to space and terrestrial services, in respect of terrestrial stations, where the coordination area of the earth station includes the territory of another country, with the exception of the coordination under No. 9.15 ; (WRC-2000)
9.18	<i>n)</i> for any transmitting station of a terrestrial service in the bands referred to in No. 9.17 within the coordination area of an earth station, in respect of this earth station, with the exception of the coordination under Nos. 9.16 and 9.19 ; (WRC-2000)
9.19	<i>o)</i> for any transmitting station of a terrestrial service or any transmitting earth station in the fixed-satellite service (Earth-to-space) in a frequency band shared on an equal primary basis with the broadcasting-satellite service, with respect to typical earth stations included in the service area of a space station in the broadcastingsatellite service. (WRC-2000)
9.21	<i>p)</i> for any station of a service for which the requirement to seek the agreement of other administrations is included in a footnote to the Table of Frequency Allocations referring to this provision. (WRC-2000)

ECA Foot-note No	European Common Allocation Table (ECA) Footnote Text
EU3	CEPT administrations are urged to take all practical steps to clear the band 47-68 MHz of assignments to the broadcasting service. The broadcasting assignments according to Stockholm Agreement 1961 shall be protected.
EU5	In parts of this band aeronautical stations and aircraft stations may utilise 8.33 kHz channel spacing for non secure communications requirements.
EU6	The mobile-satellite service is limited to low earth orbiting satellites.
EU7	This band can also be used by low capacity fixed links in rural areas on a national basis. These links need to be coordinated with mobile service and require full protection.
EU17	In the sub-bands 3400 - 3410 MHz, 5660 - 5670 MHz, 10.36 - 10.37 GHz, 10.45 - 10.46 GHz the amateur service operates on a secondary basis. In making assignments to other services, CEPT administrations are requested wherever possible to maintain these sub-bands in such a way as to facilitate the reception of amateur emissions with minimal power flux densities.
EU19	This band is allocated to the radio astronomy service. CEPT administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from space or airborne stations in this and adjacent bands can cause serious harmful interference.
EU23	In the sub-bands 5660-5670 MHz (earth to space), 5830-5850 MHz (space to earth) and 10.45-10.50 GHz the amateur-satellite additionally operates on a secondary and non interference basis to other services. In making assignments to other services, CEPT administrations are requested wherever possible to maintain these allocations in such a way as to facilitate the reception of amateur emissions with minimal power flux densities.
EU31	The band 440-470 MHz is the tuning range for Private Wide Area Paging (PWAP).
EU33	The band 1880-1900 MHz is generally expected to be used by IMT/DECT.