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# Swiss National Frequency Allocation Plan and Specific Assignments

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# **Contents**

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
<b>2</b>	<b>Principles of spectrum management.....</b>	<b>7</b>
2.1	National level .....	7
2.2	International level.....	7
<b>3</b>	<b>Explanatory notes to the frequency allocation plan .....</b>	<b>9</b>
<b>4</b>	<b>Frequency Allocation plan .....</b>	<b>11</b>
<b>5</b>	<b>Annexes and Appendices .....</b>	<b>149</b>
5.1	Annex 1: List of frequency bands for UWB and Wideband SRD applications .....	149
5.2	Annex 2: List of specific assignments.....	151
5.3	Annex 3: List of technical interface regulations.....	155
5.4	Annex 4: Harmonised frequency ranges .....	157
5.5	Appendix 1: Abbreviations .....	163
5.6	Appendix 2: Relevant CEPT ERC or ECC Decisions and Recommendations .....	169
5.7	Appendix FN: Relevant Footnotes of RR and ECA .....	174

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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

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
880 - 915 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.317A</a>	880 - 915 MHz / 925 - 960 MHz: Digital cellular primary.	CIV	880-915 MHz (UL) paired with 925-960 MHz <u>Harmonised frequencies: Annex4</u> <u>GSM:</u> <u>RIR0501-01,</u>  <u>GSM-Repeater:</u> <u>RIR0501-05,</u> <u>ERC/DEC/(97)02,</u> <u>ECC/REC/(05)08,</u>  <u>IMT:</u> <u>RIR0501-26,</u> <u>ECC/DEC/(06)13,</u> <u>ECC/REC/(08)02.</u>  <u>UWB Applications, Annex 1</u>	Continued intensive use for digital cellular networks (GSM and IMT 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 number and text.
- European-footnotes included in the ECA Table, relevant to Switzerland with hyperlinks to Appendix 3, European Common Allocation Table (ECA) footnote number and 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**

Contains information about the long-term planning

### **Explanations concerning the status of radiocommunication services:**

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.

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:

- a) 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.
- b) 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.
- c) 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."

## 4 Frequency Allocation plan

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

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: <a href="#">Harmonised frequencies: Annex4</a> 9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> , <a href="#">ERC/REC 70-03</a> ,  9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>	No major changes foreseen in use of these frequencies.
70 - 72 kHz	RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL		Be aware of interference caused by data transmission on high tension power lines in the frequency range of 40-148 kHz.
72 - 84 kHz	FIXED RADIONAVIGATION <a href="#">5.60</a> STANDARD FREQUENCY AND TIME SIGNAL (75 KHZ) <a href="#">5.56</a>		CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> , <a href="#">ERC/REC 70-03</a> ,  9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>  Standard Frequency and Time Signal: 75 kHz	
84 - 86 kHz	RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a>	
86 - 90 kHz	FIXED RADIONAVIGATION <a href="#">5.56</a>		CIV/MIL	9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> , <a href="#">ERC/REC 70-03</a> ,	
90 - 110 kHz	RADIONAVIGATION <a href="#">5.62</a> Fixed <a href="#">5.64</a>		CIV/MIL	9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>	
110 - 112 kHz	FIXED RADIONAVIGATION <a href="#">5.64</a>		CIV/MIL		
112 - 115 kHz	RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
115 - 117.6 kHz	RADIONAVIGATION <a href="#">5.60</a> Fixed <a href="#">5.64</a>	Short range devices Inductive loop systems. Various applications.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> , <a href="#">ERC/REC 70-03</a> ,  9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>	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.
117.6 - 126 kHz	FIXED <a href="#">5.64</a> RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL		
126 - 129 kHz	RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL		
129 - 130 kHz	FIXED <a href="#">5.64</a> RADIONAVIGATION <a href="#">5.60</a>		CIV/MIL		
130 - 135 kHz	FIXED <a href="#">5.64</a>		CIV/MIL		
135 - 135.7 kHz		Short range devices	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> ,  9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>	
135.7 - 137.8 kHz	Amateur <a href="#">5.67A</a> <a href="#">5.67B</a> FIXED <a href="#">5.64</a>	Amateur. Short range devices	CIV/MIL	Amateur: <a href="#">RIR1101-01</a>  Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 9-148.5 kHz: Inductive applications: <a href="#">RIR1005-01</a> ,  9-315 kHz: Active medical implants: ULP-AMI <a href="#">RIR1006-01</a> , <a href="#">ERC/REC 70-03</a>	

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

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
405 - 415 kHz	RADIONAVIGATION <a href="#">5.76</a>	Short range devices.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	No major changes foreseen in use of these frequencies.	
415 - 435 kHz	AERONAUTICAL RADIONAVIGATION	Short range devices.	CIV/MIL	400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	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.	
435 - 472 kHz	Aeronautical radionavigation <a href="#">5.82</a>	Short range devices.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>		
472 - 479 kHz	Amateur <a href="#">5.80A</a> Aeronautical radionavigation <a href="#">5.82</a>	Amateur secondary. Short range devices.	CIV/MIL	457 kHz: Detection of avalanche victims: <a href="#">RIR1003-01</a> , <a href="#">ERC/REC 70-03</a>  472 - 479 kHz: Amateur: <a href="#">RIR1101-24</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>		
479 - 495 kHz	Aeronautical radionavigation <a href="#">5.82</a>	Short range devices.	CIV/MIL	457 kHz: Detection of avalanche victims: <a href="#">RIR1003-01</a> , <a href="#">ERC/REC 70-03</a>  472 - 479 kHz: Amateur: <a href="#">RIR1101-24</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>		
495 - 505 kHz	MARITIME MOBILE	Short range devices.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	No major changes foreseen in use of these frequencies.	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
505 - 526.5 kHz	AERONAUTICAL RADIONAVIGATION	Aeronautical non-directional beacons (NDB) primary. Short range devices.	CIV/MIL	505.0 - 526.5 kHz: Aeronautical navigation Beacons (NDB, aeronautical): <a href="#">RIR012-01</a> , NDB: See AIP.  Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	No major changes foreseen in use of these frequencies.
526.5 - 1'606.5 kHz	BROADCASTING	Broadcasting primary.	CIV	531 kHz Beromünster. 558 kHz Monte Ceneri-Cima. 765 kHz Sottens. 1485 kHz Savièse. 1566 kHz Sarnen. AM sound analogue: <a href="#">RIR0201-11</a>  Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 400 - 600 kHz: Inductive applications: RFID only: <a href="#">RIR1005-14</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	No major changes foreseen in use of these frequencies.
1'606.5 - 1'625 kHz	MARITIME MOBILE <a href="#">5.90</a> LAND MOBILE <a href="#">5.92</a>		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
1'625 - 1'635 kHz	RADIOLOCATION		CIV/MIL		
1'635 - 1'800 kHz	MARITIME MOBILE <a href="#">5.90</a> LAND MOBILE <a href="#">5.92</a> <a href="#">5.96</a>		CIV/MIL		

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
1'800 - 1'810 kHz	RADIOLOCATION		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
1'810 - 1'850 kHz	AMATEUR 5.100 5.98 5.99	Amateur primary	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
1'850 - 2'000 kHz	MOBILE EXCEPT AERONAUTICAL MOBILE 5.92 5.96 5.103	Amateur secondary	CIV/MIL			
2'000 - 2'025 kHz	MOBILE EXCEPT AERONAUTICAL MOBILE (R) 5.92 5.103		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
2'025 - 2'045 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) 5.92 5.103		CIV/MIL			
2'045 - 2'160 kHz	FIXED MARITIME MOBILE LAND MOBILE 5.92		CIV/MIL			
2'160 - 2'170 kHz	RADIOLOCATION		CIV/MIL			
2'170 - 2'173.5 kHz	MARITIME MOBILE		CIV/MIL			
2'173.5 - 2'190.5 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.  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
2'190.5 - 2'194 kHz	MARITIME MOBILE		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'194 - 2'300 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.92</u> <u>5.103</u>		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing
2'300 - 2'498 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.103</u>		CIV/MIL		
2'498 - 2'501 kHz	STANDARD FREQUENCY AND TIME SIGNAL (2 500 KHZ)		CIV/MIL		
2'501 - 2'502 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL		
2'502 - 2'625 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.92</u> <u>5.103</u>		CIV/MIL		
2'625 - 2'650 kHz	MARITIME MOBILE MARITIME RADIONAVIGATION <u>5.92</u>		CIV/MIL		
2'650 - 2'850 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.92</u> <u>5.103</u>		CIV/MIL		
2'850 - 3'025 kHz	AERONAUTICAL MOBILE (R) <u>5.111</u> <u>5.115</u>	Aeronautical mobile (R) primary.	CIV/MIL	<a href="#">3010 kHz Annex 2</a> <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
3'025 - 3'155 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
3'155 - 3'200 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.116</u>		CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 3155 - 3400 kHz: Inductive applications: <a href="#">RIR1005-10,</a> <a href="#">ERC/REC 70-03</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
3'200 - 3'230 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <u>5.116</u>		CIV/MIL			
3'230 - 3'400 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.116</u>	Various fixed services (e.g. Security, CICR) secondary.	CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
3'400 - 3'500 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
3'500 - 3'800 kHz	AMATEUR FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.92</u>	Amateur	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
3'800 - 3'900 kHz	FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	Various fixed services (e.g. Security, CICR) secondary.	CIV/MIL	3820 kHz Tests and development.  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
3'900 - 3'950 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
3'950 - 4'000 kHz	BROADCASTING	Broadcasting primary.	CIV		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
4'000 - 4'063 kHz	FIXED MARITIME MOBILE <u>5.127</u>	Various fixed services (e.g. Security) secondary.	CIV/MIL		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
4'063 - 4'438 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	<a href="#">4207.5 kHz Annex 2</a> 4207.5 kHz: international distress frequency for digital selective calling.  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
4'438 - 4'488 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) Radiolocation 5.132A	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.
4'488 - 4'650 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R)		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
4'650 - 4'700 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL	<a href="#">4654 kHz Annex 2</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
4'700 - 4'750 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.
4'750 - 4'850 kHz	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">4763 kHz Annex 2</a>  <a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
4'850 - 4'995 kHz	FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">148.5 kHz - 5 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
4'995 - 5'003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (5 000 KHZ)		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
5'003 - 5'005 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
5'005 - 5'060 kHz	FIXED		CIV/MIL		Predominantly used by military.
5'060 - 5'250 kHz	FIXED Mobile except aeronautical mobile		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
5'250 - 5'275 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE Radiolocation <a href="#">5.132A</a>	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
5'275 - 5'351.5 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE					
5'351.5 - 5'366.5 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE Amateur <a href="#">5.133B</a>	Various fixed services (e.g. Security) secondary. Amateur secondary.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
5'366.5 - 5'450 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
5'450 - 5'480 kHz	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">5450.5 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
5'480 - 5'680 kHz	AERONAUTICAL MOBILE (R) <a href="#">5.111</a> <a href="#">5.115</a>	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
5'680 - 5'730 kHz	AERONAUTICAL MOBILE (OR) <a href="#">5.111</a> <a href="#">5.115</a>					
5'730 - 5'900 kHz	FIXED LAND MOBILE					
5'900 - 5'950 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.136</a>	Broadcasting primary	CIV		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
5'950 - 6'200 kHz	BROADCASTING					
6'200 - 6'525 kHz	MARITIME MOBILE <a href="#">5.109</a> <a href="#">5.110</a> <a href="#">5.130</a> <a href="#">5.132</a> <a href="#">5.137</a>	Various fixed services (e.g. Security) secondary.	CIV/MIL	<a href="#">6312.0 kHz Annex 2</a> 6312.0 kHz: international distress frequency for digital selective calling.  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
6'525 - 6'685 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary	CIV/MIL	<a href="#">6643 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
6'685 - 6'765 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.
6'765 - 7'000 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <a href="#">5.138</a>	Various fixed services (e.g. Security) secondary.	CIV/MIL	6765-6795 kHz: ISM Band,  Short range devices: Inductive applications: <a href="#">Harmonised frequencies: Annex4</a> <a href="#">RIR1005-02</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7'000 - 7'100 kHz	AMATEUR AMATEUR-SATELLITE	Amateur / Amateur-satellite primary.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7'100 - 7'200 kHz	AMATEUR <a href="#">5.141A</a> <a href="#">5.141B</a>	Amateur primary.	CIV	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
7'200 - 7'300 kHz	BROADCASTING		CIV	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
7'300 - 7'350 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.143</a> <a href="#">5.143B</a>	Broadcasting primary	CIV	7345 kHz Tests and development.  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
7'350 - 7'400 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.143</a> <a href="#">5.143B</a>	Broadcasting primary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	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
7'400 - 7'450 kHz	BROADCASTING <a href="#">5.143B</a>	Broadcasting primary.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 7400-8800 kHz: Inductive applications: <a href="#">RIR1005-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
7'450 - 8'100 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE (R) <a href="#">5.143E</a>	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 7400-8800 kHz: Inductive applications: <a href="#">RIR1005-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
8'100 - 8'195 kHz	FIXED MARITIME MOBILE	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 7400-8800 kHz: Inductive applications: <a href="#">RIR1005-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
8'195 - 8'815 kHz	MARITIME MOBILE <a href="#">5.109</a> <a href="#">5.110</a> <a href="#">5.132</a> <a href="#">5.145</a> <a href="#">5.111</a>	Maritime mobile primary.	CIV/MIL	Maritime mobile: <a href="#">8201-8809 kHz Annex 2</a> 8414.5 kHz: international distress frequency for digital selective calling.  Short range devices: <a href="#">Harmonised frequencies: Annex4</a> 7400-8800 kHz: Inductive applications: <a href="#">RIR1005-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
8'815 - 8'965 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL	<a href="#">8936 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
8'965 - 9'040 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.	
9'040 - 9'305 kHz	FIXED	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
9'305 - 9'355 kHz	FIXED Radiolocation <a href="#">5.145A</a>		CIV/MIL			
9'355 - 9'400 kHz	FIXED		CIV/MIL			
9'400 - 9'500 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.146</a>	Broadcasting primary.	CIV	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
9'500 - 9'900 kHz	BROADCASTING <a href="#">5.147</a>		CIV			
9'900 - 9'995 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 ongoing.	
9'995 - 10'003 kHz	STANDARD FREQUENCY AND TIME SIGNAL (10 000 KHZ) <a href="#">5.111</a>		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
10'003 - 10'005 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research <a href="#">5.111</a>		CIV/MIL			
10'005 - 10'100 kHz	AERONAUTICAL MOBILE (R) <a href="#">5.111</a>	Aeronautical mobile primary.	CIV/MIL	<a href="#">10069 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
10'100 - 10'150 kHz	FIXED Amateur	Amateur.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
10'150 - 11'175 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO) secondary.	CIV/MIL	<u>11172 kHz Annex 2</u>  Short range devices: <u>Harmonised frequencies: Annex4</u> 10200-11000 kHz: Inductive applications: <u>RIR1005-11,</u> <u>ERC/REC 70-03</u>  <u>5 - 30 MHz: Wideband SRD, Annex 1</u>		Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
11'175 - 11'275 kHz	AERONAUTICAL MOBILE (OR)		CIV/MIL	<u>5 - 30 MHz: Wideband SRD, Annex 1</u> <u>Harmonised frequencies: Annex4</u>		
11'275 - 11'400 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL			The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
11'400 - 11'600 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 ongoing.
11'600 - 11'650 kHz	BROADCASTING <u>5.134</u> <u>5.146</u>	Broadcasting primary.	CIV	<u>5 - 30 MHz: Wideband SRD, Annex 1</u> <u>Harmonised frequencies: Annex4</u>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
11'650 - 12'050 kHz	BROADCASTING <u>5.147</u>		CIV			
12'050 - 12'100 kHz	BROADCASTING <u>5.134</u> <u>5.146</u>		CIV			
12'100 - 12'230 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<u>5 - 30 MHz: Wideband SRD, Annex 1</u> <u>Harmonised frequencies: Annex4</u>		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
12'230 - 13'200 kHz	MARITIME MOBILE <a href="#">5.109</a> <a href="#">5.110</a> <a href="#">5.132</a> <a href="#">5.145</a>	Maritime mobile primary.	CIV/MIL	<a href="#">12233-13205 kHz Annex 2</a> 12577.0 kHz: international distress frequency for digital selective calling.  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
13'200 - 13'260 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL	<a href="#">12233-13205 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
13'260 - 13'360 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
13'360 - 13'410 kHz	FIXED RADIO ASTRONOMY <a href="#">5.149</a>		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	
13'410 - 13'450 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.
13'450 - 13'550 kHz	FIXED Mobile except aeronautical mobile (R) Radiolocation <a href="#">5.132A</a>		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
13'550 - 13'570 kHz	FIXED Mobile except aeronautical mobile (R) <a href="#">5.150</a>		CIV/MIL	<p>13553-13567 kHz: ISM-Band:</p> <p>Short range devices: <a href="#">Harmonised frequencies: Annex4</a></p> <p>Inductive applications: <a href="#">RIR1005-04</a>, <a href="#">ERC/REC 70-03</a></p> <p>Inductive applications for RFID: <a href="#">RIR1005-12</a>, <a href="#">ERC/REC 70-03</a></p> <p>Non-specific SRDs: <a href="#">RIR1008-02</a>, <a href="#">ERC/REC 70-03</a></p> <p>Higher power SRD: <a href="#">RIR1021-01</a></p> <p>5 - 30 MHz: Wideband SRD, Annex 1</p>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
13'570 - 13'600 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.151</a>	Broadcasting primary.	CIV	<p>5 - 30 MHz: Wideband SRD, Annex 1</p> <p><a href="#">Harmonised frequencies: Annex4</a></p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
13'600 - 13'800 kHz	BROADCASTING		CIV			
13'800 - 13'870 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.151</a>		CIV			
13'870 - 14'000 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<p><a href="#">13990 kHz Annex 2</a></p> <p>5 - 30 MHz: Wideband SRD, Annex 1</p> <p><a href="#">Harmonised frequencies: Annex4</a></p>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
14'000 - 14'250 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	<p>Amateur: <a href="#">RIR1101-02</a></p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
14'250 - 14'350 kHz	AMATEUR	Amateur primary.	CIV/MIL	<p>5 - 30 MHz: Wideband SRD, Annex 1</p> <p><a href="#">Harmonised frequencies: Annex4</a></p>		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14'350 - 14'990 kHz	FIXED Mobile except aeronautical mobile (R)	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	14900 kHz Tests and development. <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
14'990 - 15'005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (15 000 KHZ) <a href="#">5.111</a>		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15'005 - 15'010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL		
15'010 - 15'100 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL		Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15'100 - 15'600 kHz	BROADCASTING	Broadcasting primary.	CIV		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
15'600 - 15'800 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.146</a>		CIV		
15'800 - 16'100 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL		Predominantly used by military.
16'100 - 16'200 kHz	FIXED Radiolocation <a href="#">5.145A</a>		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is further necessary.
16'200 - 16'360 kHz	FIXED		CIV/MIL		
16'360 - 17'410 kHz	MARITIME MOBILE <a href="#">5.109</a> <a href="#">5.110</a> <a href="#">5.132</a> <a href="#">5.145</a>	Maritime mobile primary.	CIV/MIL	16390-17407 kHz Annex 2 16804.5kHz: international distress frequency for digital selective calling. <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
17'410 - 17'480 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
17'480 - 17'550 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.146</a>	Broadcasting primary.	CIV			
17'550 - 17'900 kHz	BROADCASTING		CIV			
17'900 - 17'970 kHz	AERONAUTICAL MOBILE (R)		CIV/MIL			
17'970 - 18'030 kHz	AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL	<a href="#">18023 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
18'030 - 18'052 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
18'052 - 18'068 kHz	FIXED Space research		CIV/MIL			
18'068 - 18'168 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
18'168 - 18'780 kHz	FIXED Mobile except aeronautical mobile	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">18230 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
18'780 - 18'900 kHz	MARITIME MOBILE	Maritime mobile primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">18804 / 19779 kHz Annex 2</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
18'900 - 19'020 kHz	BROADCASTING <a href="#">5.134</a> <a href="#">5.146</a>	Broadcasting primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
19'020 - 19'680 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	19100 kHz Tests and development. <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is further necessary.
19'680 - 19'800 kHz	MARITIME MOBILE <a href="#">5.132</a>	Maritime mobile primary. Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">18804 / 19779 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
19'800 - 19'990 kHz	FIXED	Various fixed services (e.g. Security, UNO, CICR) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
19'990 - 19'995 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research <a href="#">5.111</a>		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
19'995 - 20'010 kHz	STANDARD FREQUENCY AND TIME SIGNAL (20 000 KHZ) <a href="#">5.111</a>		CIV/MIL		
20'010 - 21'000 kHz	FIXED Mobile	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL	<a href="#">20090 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
21'000 - 21'450 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
21'450 - 21'850 kHz	BROADCASTING	Broadcasting primary.	CIV	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
21'850 - 21'870 kHz	FIXED	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL		Predominantly used by military.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
21'870 - 21'924 kHz	FIXED <a href="#">5.155B</a>		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
21'924 - 22'000 kHz	AERONAUTICAL MOBILE (R)	Aeronautical mobile primary.	CIV/MIL			The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
22'000 - 22'855 kHz	MARITIME MOBILE <a href="#">5.132</a>	Maritime mobile primary.	CIV/MIL	<a href="#">22039-22831 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
22'855 - 23'000 kHz	FIXED	Various fixed services (e.g. Security, Diplomatic, CICR, UNO) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		Predominantly used by military.
23'000 - 23'200 kHz	FIXED Mobile except aeronautical mobile (R)		CIV/MIL			The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
23'200 - 23'350 kHz	FIXED <a href="#">5.156A</a> AERONAUTICAL MOBILE (OR)	Aeronautical mobile primary.	CIV/MIL			
23'350 - 24'000 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.157</a>	Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL			
24'000 - 24'450 kHz	FIXED LAND MOBILE		CIV/MIL			
24'450 - 24'600 kHz	FIXED LAND MOBILE Radiolocation <a href="#">5.132A</a>		CIV/MIL			
24'600 - 24'890 kHz	FIXED LAND MOBILE		CIV/MIL			
24'890 - 24'990 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Amateur: <a href="#">RIR1101-02</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
24'990 - 25'005 kHz	STANDARD FREQUENCY AND TIME SIGNAL (25 000 KHZ)		CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
25'005 - 25'010 kHz	STANDARD FREQUENCY AND TIME SIGNAL Space research		CIV/MIL			

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
25'010 - 25'070 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE	Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
25'070 - 25'210 kHz	MARITIME MOBILE	25110-25210 kHz Various fixed services (e.g. Security, Diplomatic, UNO) secondary. Maritime mobile primary.	CIV/MIL	<a href="#">25076 / 26151 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
25'210 - 25'550 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE	Mobile except aeronautical mobile primary. Various fixed services (e.g. Security, Diplomatic, UNO) secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	Predominantly used by military.  The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
25'550 - 25'670 kHz	RADIO ASTRONOMY <a href="#">5.149</a>		CIV/MIL		The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.	
25'670 - 26'100 kHz	BROADCASTING	Broadcasting primary.	CIV			
26'100 - 26'175 kHz	MARITIME MOBILE <a href="#">5.132</a>	Maritime mobile primary.	CIV/MIL	<a href="#">25076 / 26151 kHz Annex 2</a> <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>		
26'175 - 26'200 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE	Various fixed services secondary.	CIV/MIL	<a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a>	26175 - 26550 kHz: Predominantly used by military.	
26'200 - 26'350 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE Radiolocation <a href="#">5.132A</a>		CIV/MIL		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
26'350 - 27'500 kHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.150</u>	26550-26910 kHz Mobile primary (On-site paging).  26960-27410 kHz CB radio primary.  26990-27800 kHz SRD primary (Model control, Non-specific SRDs, Higher power SRDs, Inductive applications, Wireless Audio Applications).  27420-28000 kHz PMR/PAMR primary.  Various fixed services secondary.	CIV/MIL	26550-26910 kHz: On-site paging: <a href="#">RIR0506-21</a>  <a href="#">26965-27405 kHz Annex 2:</a> CB radio (PR 27, AM/SSB CB): <a href="#">RIR1102-02</a> , <a href="#">ECC/DEC/(11)03</a>  26957-27283 kHz: ISM-Band  Short range devices: <a href="#">Harmonised frequencies: Annex4</a>  27095 kHz: Railway applications: <a href="#">RIR1002-02</a> , <a href="#">ERC/REC 70-03</a>  26995-27195 kHz: Model control: <a href="#">RIR1007-01</a> , Non-specific SRDs: <a href="#">RIR1008-38</a> .  26957-27283 kHz: Non-specific SRDs: <a href="#">RIR1008-03</a> , <a href="#">ERC/REC 70-03</a>  26995-27755 kHz: Higher power SRDs: <a href="#">RIR1021-02</a>  <a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a>  <a href="#">27425-27925 kHz Annex 2:</a> PMR/PAMR: <a href="#">RIR0507-31</a>	26175 - 26550 kHz: 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
27'500 - 28'000 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	<p>26995 - 27755 kHz: Higher power SRDs: <a href="#">RIR1021-02</a></p> <p><a href="#">27425-27925 kHz Annex 2:</a> PMR/PAMR: <a href="#">RIR0507-31</a>, <a href="#">RIR0507-32</a>, <a href="#">RIR0507-33</a>, <a href="#">RIR0507-34</a>.</p> <p>27815-27875 kHz: Baby monitoring: <a href="#">RIR1013-02</a></p> <p><a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a></p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
28'000 - 29'700 kHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	<p>Amateur: <a href="#">RIR1101-02</a></p> <p><a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a></p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
29'700 - 30'000 kHz	MOBILE		MIL	<p><a href="#">5 - 30 MHz: Wideband SRD, Annex 1</a> <a href="#">Harmonised frequencies: Annex4</a></p>	The monitoring of PLC developments in order to prevent EMC problems is still necessary and ongoing.
30 - 30.005 MHz	MOBILE		MIL	<a href="#">30 MHz - 12.4 GHz UWB Applications, Annex 1</a>	
30.005 - 30.01 MHz	MOBILE		MIL	<a href="#">UWB Applications, Annex 1</a>	

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

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
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): <a href="#">RIR1007-05</a>	<a href="#">UWB Applications, Annex 1</a>	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.
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).	<a href="#">UWB Applications, Annex 1</a>	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 <a href="#">5.161B</a>		MIL			
42.5 - 44 MHz	MOBILE		MIL			
44 - 46.4 MHz	MOBILE <a href="#">5.162A</a>		MIL			
46.4 - 47 MHz	MOBILE <a href="#">5.162A</a>		MIL			
47 - 50 MHz	LAND MOBILE <a href="#">5.162A</a> <a href="#">5.164</a> <a href="#">ECA3</a>	Land mobile primary.	CIV/MIL	Military use.  46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A).  <a href="#">UWB Applications, Annex 1</a>		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 <a href="#">5.162A</a> <a href="#">5.164</a> <a href="#">ECA3</a>	Amateur secondary. Land mobile primary.	CIV/MIL	50-52 MHz Amateur: <a href="#">RIR1101-11</a>  46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A).  <a href="#">UWB Applications, Annex 1</a>		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 <a href="#">5.162A</a> <a href="#">5.164</a> <a href="#">ECA3</a>	Land mobile primary.	CIV/MIL	Military use.  46-68 MHz Geographical sharing with wind profiler radars (RR 5.162A).  <a href="#">UWB Applications, Annex 1</a>	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	68 - 87.5 MHz PMR: PMR (analogue): <a href="#">RIR0507-01</a> , PMR (digital): <a href="#">RIR0507-11</a> <a href="#">T/R 25-08</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.
70.45 - 74.8 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Radio astronomy <a href="#">5.149</a>		CIV/MIL	68 - 87.5 MHz PMR: PMR (analogue): <a href="#">RIR0507-01</a> , PMR (digital): <a href="#">RIR0507-11</a> , <a href="#">T/R 25-08</a>  72.250 MHz: Higher Power SRD <a href="#">RIR1021-08</a>  <a href="#">UWB Applications, Annex 1</a>	
74.8 - 75.2 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.180</a>	Aeronautical radionavigation primary.	CIV/MIL	Marker beacons <a href="#">RIR0102-06</a> For more information see AIP.  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.
75.2 - 87.5 MHz	MOBILE	PMR primary.	CIV/MIL	68 - 87.5 MHz PMR: PMR (analogue): <a href="#">RIR0507-01</a> , PMR (digital): <a href="#">RIR0507-11</a> , <a href="#">T/R 25-08</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
87.5 - 108 MHz	BROADCASTING Land mobile <a href="#">4.4</a>	Broadcasting primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): FM sound analog: <a href="#">RIR0201-30</a></p> <p>SAP/SAB and ENG/OB: <a href="#">RIR0203-20</a></p> <p>Short range devices: <a href="#">Harmonised frequencies: Annex4</a> Wireless audio applications <a href="#">RIR1013-19</a>, <a href="#">ERC/REC 70-03</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	
108 - 117.975 MHz	AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE (R) <a href="#">5.197A</a>	Aeronautical radionavigation primary.	CIV/MIL	<p>Aeronautical navigation: VOR: <a href="#">RIR0102-02</a> ILS: <a href="#">RIR0102-04</a> ILS, VOR: see AIP.</p> <p>112-117.975 MHz: GBAS: <a href="#">RIR0102-07</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	Planned for additional use for the transmission of radionavigation satellite differential correction signals by ground-based systems.
117.975 - 121.45 MHz	AERONAUTICAL MOBILE (R) <a href="#">5.200</a> <a href="#">ECA5</a>	Aeronautical Communication.	CIV/MIL	<p>Aeronautical Communication: <a href="#">RIR0101-01</a>, <a href="#">RIR0101-02</a>,</p>	No major changes foreseen in use of these frequencies.
121.45 - 121.55 MHz	AERONAUTICAL MOBILE (R) MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.111</a> <a href="#">5.200</a>		CIV/MIL	<p><a href="#">RIR0101-03</a>, <a href="#">RIR0101-04</a></p> <p>Aer Com: see AIP.</p> <p>121.500 MHz:</p>	
121.55 - 137 MHz	AERONAUTICAL MOBILE (R) <a href="#">5.200</a> <a href="#">ECA5</a>		CIV/MIL	<p>Emergency Position Indication Radio Beacons: ELT: <a href="#">RIR0104-01</a>, PLB: <a href="#">RIR0504-02</a>, EPIRBs: <a href="#">RIR0601-16</a>, <a href="#">RIR0601-20</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
137 - 137.025 MHz	METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208</a> <a href="#">5.208A</a> <a href="#">5.209</a> <a href="#">5.208B</a> Space operation (space-to-Earth) Space research (space-to-Earth) <a href="#">5.206</a> <a href="#">ECA6</a>	MSS secondary. Meteo primary.	CIV	137 - 138 MHz: Downlinks in the MSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0808-13</a>  <a href="#">UWB Applications, Annex 1</a>	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) <a href="#">5.208</a> <a href="#">5.208A</a> <a href="#">5.209</a> <a href="#">5.208B</a> Space operation (space-to-Earth) Space research (space-to-Earth) <a href="#">5.206</a> <a href="#">ECA6</a>		CIV		
137.175 - 137.825 MHz	METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208</a> <a href="#">5.208A</a> <a href="#">5.209</a> <a href="#">5.208B</a> Space operation (space-to-Earth) Space research (space-to-Earth) <a href="#">5.206</a>		CIV		

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
137.825 - 138 MHz	METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE Mobile-satellite (space-to-Earth) <a href="#">5.208</a> <a href="#">5.208A</a> <a href="#">5.209</a> <a href="#">5.208B</a> Space operation (space-to-Earth) Space research (space-to-Earth) <a href="#">5.206</a> <a href="#">ECA6</a>	MSS secondary. Meteo primary.	CIV	137 - 138 MHz: Downlinks in the MSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0808-13</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	
138 - 143.6 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE <a href="#">5.211</a>		MIL	<a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	
143.6 - 143.65 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE SPACE RESEARCH (SPACE-TO-EARTH) <a href="#">5.211</a>		MIL			
143.65 - 144 MHz	AERONAUTICAL MOBILE (OR) LAND MOBILE <a href="#">5.211</a>		MIL			
144 - 146 MHz	AMATEUR AMATEUR-SATELLITE	Amateur primary. Amateur-satellite primary.	CIV/MIL	Civil use: Amateur: <a href="#">RIR1101-12</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	
146 - 146.8 MHz	MOBILE		MIL	<a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	
146.8 - 147.6 MHz	MOBILE	PMR primary.	CIV	147.300-147.400 MHz Paging: Annex 2 <a href="#">RIR0506-02</a>  PMR/PAMR: PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> <a href="#">T/R 25-08</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
147.6 - 148 MHz	MOBILE <a href="#">ECA7</a>	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 <a href="#">RIR0507-09</a>	No major changes foreseen in use of these frequencies.	
148 - 149.9 MHz	MOBILE MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.209</a> <a href="#">5.218</a> <a href="#">5.219</a> <a href="#">5.221</a> <a href="#">ECA6</a> <a href="#">ECA7</a>	147.9-148.2 / 152.5-152.8 MHz PAMR primary.	MIL	148.100-148.775 MHz: Animal Tracking: <a href="#">RIR1003-02</a>		
149.9 - 150.05 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.209</a> <a href="#">5.220</a> <a href="#">ECA6</a>		CIV/MIL	MSS Earth stations 148.0-150.05 MHz civil <a href="#">RIR0808-13</a>		
150.05 - 150.4 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY <a href="#">5.149</a>		MIL	<a href="#">UWB Applications, Annex 1</a>		
150.4 - 151.4 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY <a href="#">5.149</a>	PMR primary	CIV	PMR: Mobile, paired with 155-156 MHz PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> , <a href="#">T/R 25-08</a>		
151.4 - 153 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">ECA7</a>	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 <a href="#">RIR0507-09</a>		
153 - 154 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE		MIL	<a href="#">UWB Applications, Annex 1</a>		
154 - 155 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.225A</a>		MIL			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
155 - 156 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.225A</a>	PMR primary.	CIV	PMR: Mobile, paired with 150.4-151.4 MHz PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> , <a href="#">T/R 25-08</a>  <a href="#">UWB Applications, Annex 1</a>	
156 - 156.4875 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.226</a> <a href="#">5.225A</a>	PMR primary.	CIV	<a href="#">156-174 MHz PMR: Annex 2</a> PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> , <a href="#">T/R 25-08</a>	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) <a href="#">5.111</a> <a href="#">5.226</a> <a href="#">5.227</a>		CIV	Inland waterway communications: <a href="#">RIR0603-10</a> , <a href="#">156-174 MHz PMR: Annex 2</a>  <a href="#">UWB Applications, Annex 1</a>	
156.5375 - 156.5625 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE (R) MARITIME MOBILE (DISTRESS AND CALLING VIA DSC) <a href="#">5.226</a> <a href="#">5.227</a>		CIV		
156.5625 - 156.7625 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.226</a>		CIV		
156.7625 - 156.7875 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE Mobile-satellite (Earth-to-space) <a href="#">5.111</a> <a href="#">5.226</a> <a href="#">5.228</a>		CIV		
156.7875 - 156.8125 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE (DISTRESS AND CALLING) <a href="#">5.111</a> <a href="#">5.226</a>		CIV		

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
156.8125 - 156.8375 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE Mobile-satellite (Earth-to-space) <u>5.111</u> <u>5.226</u> <u>5.228</u>	PMR primary.	CIV	<a href="#">156-174 MHz PMR: Annex 2</a> PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> , <a href="#">T/R 25-08</a>  Inland waterway communications: <a href="#">RIR0603-10</a> , <a href="#">156-174 MHz PMR: Annex 2</a>  <a href="#">UWB Applications, Annex 1</a>		No major changes foreseen in use of these frequencies.
156.8375 - 157.45 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.226</u>	PMR primary.	CIV	<a href="#">156-174 MHz PMR: Annex 2</a> PMR (analogue): <a href="#">RIR0507-02</a> ,		
157.45 - 160.6 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE		CIV	PMR (digital): <a href="#">RIR0507-12</a> , <a href="#">T/R 25-08</a>		
160.6 - 160.975 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.226</u>		CIV	Maritime communications AIS: <a href="#">RIR0603-01</a>		
160.975 - 161.475 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE		CIV	Inland waterway communications: <a href="#">RIR0603-10</a> , <a href="#">156-174 MHz PMR: Annex 2</a>		
161.475 - 161.9375 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.226</u>		CIV	161.300 MHz Emergency services: <a href="#">RIR0504-01</a>		
161.9375 - 161.9625 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Maritime mobile-satellite (Earth-to-space) <u>5.228AA</u> <u>5.226</u>		CIV	<a href="#">UWB Applications, Annex 1</a>		
161.9625 - 161.9875 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Mobile-satellite (Earth-to-space) <u>5.228F</u> <u>5.226</u> <u>5.228A</u> <u>5.228B</u>		CIV			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
161.9875 - 162.0125 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Maritime mobile-satellite (Earth-to-space) <a href="#">5.228AA</a> <a href="#">5.226</a>	PMR primary.	CIV	<a href="#">156-174 MHz PMR: Annex 2</a> PMR (analogue): <a href="#">RIR0507-02</a> PMR (digital): <a href="#">RIR0507-12</a> , T/R 25-08	No major changes foreseen in use of these frequencies.
162.0125 - 162.0375 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Mobile-satellite (Earth-to-space) <a href="#">5.228F</a> <a href="#">5.226</a> <a href="#">5.228A</a> <a href="#">5.228B</a>		CIV	Maritime communications AIS: <a href="#">RIR0603-01</a>  Inland waterway communications: <a href="#">RIR0603-10</a> , <a href="#">156-174 MHz PMR: Annex 2</a>	
162.0375 - 162.05 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.226</a>		CIV	161.300 MHz Emergency services: <a href="#">RIR0504-01</a>	
162.05 - 165.2 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE		CIV	<a href="#">UWB Applications, Annex 1</a>	
165.2 - 169.4 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE	PMR primary.	CIV	<a href="#">156-174 MHz PMR: Annex 2</a> PMR (analogue): <a href="#">RIR0507-02</a> , PMR (digital): <a href="#">RIR0507-12</a> , T/R 25-08  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
169.4 - 169.825 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE	<p>169.400 - 169.600 MHz: SRDs and paging.</p> <p>169.6125 - 169.8125 MHz: Paging and tracking and tracing systems primary.</p>	CIV	<p>169.400 - 169.825 MHz:  <u>Harmonised frequencies: Annex 4</u>  regulated by:  <u>ECC/DEC/(05)02,</u>  <u>ERC/REC 70-03</u></p> <p>169.400-169.7875 MHz:  <u>Paging: Annex 2</u>  <u>RIR0506-01,</u>  <u>ECC/DEC/(05)02</u></p> <p>Short range devices:  <u>169.400-169.475 MHz:</u>  Aids for hearing impaired (500 mW):  <u>RIR1009-14,</u>  Meter reading (500 mW, ≤ 10% DC):  <u>RIR1003-03,</u>  Non-specific SRDs (500 mW, ≤ 1% DC):  <u>RIR1008-32,</u></p> <p>169.400 - 169.4875 MHz:  Non-specific SRDs (10 mW, ≤ 0.1% DC):  <u>RIR1008-33,</u></p> <p>169.4875 - 169.5875 MHz:  Aids for hearing impaired (500 mW):  <u>RIR1009-15,</u>  Non-specific SRDs (10 mW, ≤ 0.001% DC):  <u>RIR1008-34,</u></p> <p>169.5875 - 169.8125 MHz:  Non-specific SRDs (10 mW, ≤ 0.1% DC):  <u>RIR1008-35,</u>  <u>ERC/REC 70-03,</u>  <u>ECC/DEC/(05)02</u></p> <p>169.6125 - 169.6375 MHz and  169.7125 - 169.7625 MHz and  169.7875 - 169.8125 MHz:  <u>Asset tracking and tracing: Annex 2</u>  <u>RIR1003-05,</u>  <u>ECC/DEC/(05)02,</u></p> <p><u>UWB Applications, Annex 1</u></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</p> <p>PMR (analogue): <a href="#">RIR0507-02</a></p> <p>PMR (digital): <a href="#">RIR0507-12</a></p> <p>T/R 25-08</p> <p>Alarms:</p> <p>170.500 MHz: 1 mW</p> <p><a href="#">RIR1001-01</a></p> <p>Higher power SRDs:</p> <p>173.100-173.350 MHz: 500 mW</p> <p><a href="#">RIR1021-04</a></p> <p>173.100 MHz: 2.5 W</p> <p><a href="#">RIR1021-09</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	
174 - 216 MHz	BROADCASTING Land mobile <a href="#">5.235</a>	Broadcasting primary. Short range devices secondary.	CIV	<p>Broadcasting (terrestrial):</p> <p>Band III, channel 5 - 10: <a href="#">174-230 MHz: Annex 2</a>,</p> <p>T-DAB: <a href="#">RIR0201-31</a></p> <p>T-DAB Retransmitter: <a href="#">RIR0201-32</a></p> <p>T-DAB low power indoor repeater: <a href="#">RIR0201-35</a></p> <p>Short range devices:</p> <p>Radio Microphones: <a href="#">RIR1009-02</a>,</p> <p>Personal hearing aids: <a href="#">RIR1009-12</a>, <a href="#">ERC/REC 70-03</a></p> <p>Medical Telemetry: <a href="#">RIR1006-06</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	T-DAB+ according to Regional Agreement GE06.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
216 - 223 MHz	BROADCASTING Land mobile <a href="#">5.235</a>	Broadcasting primary. Short range devices secondary.	CIV	<p>Broadcasting (terrestrial): Band III, channel 11: <a href="#">174-230 MHz: Annex 2</a>,</p> <p>T-DAB: <a href="#">RIR0201-31</a></p> <p>T-DAB Retransmitter: <a href="#">RIR0201-32</a></p> <p>T-DAB low power indoor repeater: <a href="#">RIR0201-35</a></p> <p>Short range devices: Radio Microphones: <a href="#">RIR1009-02</a>, Personal hearing aids: <a href="#">RIR1009-12</a>, <a href="#">ERC/REC 70-03</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	T-DAB+ according to Regional Agreement GE06.	
223 - 230 MHz	BROADCASTING	Broadcasting primary. T-DAB primary.	CIV	<p>Broadcasting (terrestrial): Band III, channel 12: <a href="#">174-230 MHz: Annex 2</a>,</p> <p>T-DAB: <a href="#">RIR0201-31</a></p> <p>T-DAB Retransmitter: <a href="#">RIR0201-32</a></p> <p>T-DAB low power indoor repeater: <a href="#">RIR0201-35</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	T-DAB+ according to Regional Agreement GE06.	
230 - 231.5 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 T-DAB assignments according to Wiesbaden 1995 Special Arrangement, as revised in Constanta 2007.	
235 - 240 MHz	MOBILE <a href="#">5.254</a>		MIL	<a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
240 - 242.95 MHz	MOBILE <a href="#">5.254</a>		MIL	<a href="#">UWB Applications, Annex 1</a>		No major changes foreseen in use of these frequencies.
242.95 - 243.05 MHz	AERONAUTICAL MOBILE <a href="#">5.111</a> <a href="#">5.254</a> <a href="#">5.256</a>		MIL	243.0 MHz: Search and rescue, Emergency Position Indication Radio Beacons: ELT: <a href="#">RIR0104-01</a> , PLB: <a href="#">RIR0504-02</a> , EPIRBs: <a href="#">RIR0601-16</a> , <a href="#">RIR0601-20</a> See AIP.  <a href="#">UWB Applications, Annex 1</a>		
243.05 - 267 MHz	MOBILE <a href="#">5.254</a>		MIL	<a href="#">UWB Applications, Annex 1</a>		
267 - 272 MHz	MOBILE <a href="#">5.254</a> <a href="#">5.257</a>		MIL			
272 - 273 MHz	MOBILE <a href="#">5.254</a>		MIL			
273 - 312 MHz	MOBILE <a href="#">5.254</a>		MIL			
312 - 315 MHz	MOBILE <a href="#">5.254</a> <a href="#">5.255</a>		MIL			
315 - 322 MHz	MOBILE <a href="#">5.254</a>		MIL			
322 - 328.6 MHz	MOBILE RADIO ASTRONOMY <a href="#">5.149</a>		MIL			
328.6 - 335.4 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.258</a>	ILS primary.	CIV/MIL	Aeronautical navigation: ILS: <a href="#">RIR0102-04</a> ILS: see AIP.  <a href="#">UWB Applications, Annex 1</a>		No change.
335.4 - 380 MHz	MOBILE <a href="#">5.254</a>		MIL	<a href="#">UWB Applications, Annex 1</a>		No changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations					Strategy	
	National Allocation	Main Use	Civ/Mil	Notes			
380 - 385 MHz	MOBILE <a href="#">5.254</a>	PMR/PAMR primary	MIL	Digital Land Mobile System for Emergency Services: <a href="#">RIR0507-16</a> , <a href="#">ERC/DEC/(01)19</a> , <a href="#">ECC/DEC/(06)05</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	Emergency Services CH and FL.		
385 - 387 MHz	MOBILE <a href="#">5.254</a>		MIL	380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>	No changes foreseen in use of these frequencies.		
387 - 390 MHz	MOBILE <a href="#">5.254</a> <a href="#">5.255</a>		MIL	<a href="#">UWB Applications, Annex 1</a>	No changes foreseen in use of these frequencies.		
390 - 395 MHz	MOBILE <a href="#">5.254</a>	PMR/PAMR primary	MIL	Digital Land Mobile System for Emergency Services: <a href="#">RIR0507-16</a> , <a href="#">ERC/DEC/(01)19</a> , <a href="#">ECC/DEC/(06)05</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	Emergency Services CH and FL.		
395 - 399.9 MHz	MOBILE <a href="#">5.254</a>		MIL	380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	No changes foreseen in use of these frequencies.		
399.9 - 400.05 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.209</a> <a href="#">5.220</a>		CIV/MIL	MSS Earth stations <a href="#">RIR0808-13</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.		
400.05 - 400.15 MHz	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHZ) <a href="#">5.261</a>		CIV/MIL	380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
400.15 - 401 MHz  METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE-SATELLITE (SPACE-TO-EARTH) <u>5.208A</u> <u>5.209</u> <u>5.208B</u> SPACE OPERATION (SPACE-TO-EARTH) SPACE RESEARCH (SPACE-TO-EARTH) <u>5.263</u> <u>5.264</u>	Various meteorological aids and meteorological-satellite applications primary.	CIV/MIL	Meteorology: Sondes: <a href="#">RIR0702-01</a> , <a href="#">RIR0702-02</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	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: <a href="#">RIR0702-01</a> , <a href="#">RIR0702-02</a>  <a href="#">Harmonised frequencies: Annex4</a> Ultra Low Power Active Medical Implant communication systems (ULP-AMI): <a href="#">RIR1006-07</a> , <a href="#">ERC/DEC/(01)17</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>		

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: <a href="#">RIR0702-01</a>, <a href="#">RIR0702-02</a></p> <p>Harmonised frequencies: <a href="#">Annex4</a> Ultra Low Power Active Medical Implant communication systems (ULP-AMI): 402-405 MHz: <a href="#">RIR1006-02</a>, <a href="#">ERC/DEC/(01)17</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	
403 - 406 MHz	METEOROLOGICAL AIDS <a href="#">5.265</a>	Various meteorological aids primary. ULP-AMI secondary.	CIV/MIL	<p>Meteorology: Sondes: <a href="#">RIR0702-01</a>, <a href="#">RIR0702-02</a></p> <p>Harmonised frequencies: <a href="#">Annex4</a> Ultra Low Power Active Medical Implant communication systems (ULP-AMI): 402-405 MHz: <a href="#">RIR1006-02</a>,</p> <p>405-406 MHz: <a href="#">RIR1006-08</a>, <a href="#">ERC/DEC/(01)17</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
406 - 406.1 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.265</a> <a href="#">5.266</a> <a href="#">5.267</a>	Satellite emergency position-indicating radio beacons primary.	CIV/MIL	Search and rescue, Emergency Position Indication Radio Beacons: ELT: <a href="#">RIR0104-01</a> , PLB: <a href="#">RIR0504-02</a> , EPIRBs: <a href="#">RIR0601-16</a> See AIP.  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	Ensure protection of satellite EPIRBs use.
406.1 - 410 MHz	LAND MOBILE RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">5.265</a>	PMR primary.	CIV	PMR: Railways, Various private multiple use networks PMR (analogue): <a href="#">RIR0507-03</a> , PMR (digital): <a href="#">RIR0507-13</a> , T/R 25-08  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
410 - 418 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE	PMR/PAMR primary.	CIV	<p>410 - 428 MHz PMR/PAMR:</p> <p>PMR (analogue): <a href="#">RIR0507-03</a>,</p> <p>PMR (digital): <a href="#">RIR0507-13</a>,</p> <p>T/R 25-08</p> <p>Trunking radio:</p> <p>TETRAPOL: <a href="#">RIR0507-17</a>,</p> <p>ECC/DEC/(06)06, <a href="#">T/R 25-08</a></p> <p>TETRA:</p> <p>RIR0507-20, <a href="#">ECC/DEC/(06)06</a>,</p> <p>T/R 25-08</p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	The frequencies for the digital technology are available.
418 - 420 MHz		MIL		<p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
420 - 428 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE Radiolocation	PMR/PAMR primary.	CIV	<p>410 - 428 MHz PMR/PAMR:</p> <p>PMR (analogue): <a href="#">RIR0507-03</a></p> <p>PMR (digital): <a href="#">RIR0507-13</a>, <a href="#">T/R 25-08</a></p> <p>Trunking radio: TETRAPOL: <a href="#">RIR0507-17</a>, <a href="#">ECC/DEC/(06)06</a>, <a href="#">T/R 25-08</a></p> <p>TETRA: <a href="#">RIR0507-20</a>, <a href="#">ECC/DEC/(06)06</a>, <a href="#">T/R 25-08</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	The frequencies for the digital technology are available.
428 - 430 MHz			MIL	<p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No changes foreseen in use of these frequencies.
430 - 432 MHz	AMATEUR Land mobile <a href="#">5.276</a>	Amateur	CIV/MIL	<p>Civil use: Amateur: <a href="#">RIR1101-13</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No major changes foreseen in use of these frequencies.
432 - 433.05 MHz	AMATEUR Land mobile <a href="#">5.276</a> Earth exploration-satellite (active) <a href="#">5.279A</a>	Amateur primary.	CIV/MIL	<p>Civil use: Amateur: <a href="#">RIR1101-13</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
433.05 - 434.79 MHz	AMATEUR Land mobile <a href="#">5.138</a> <a href="#">5.280</a> <a href="#">5.276</a> Earth exploration-satellite (active) <a href="#">5.279A</a>	SRD primary. Amateur secondary. 433.25-434.50 MHz: Higher power short range devices.	CIV/MIL	<p>Civil use: 433.05-434.79 MHz: ISM-Band,</p> <p>Short range devices: <a href="#">Harmonised frequencies: Annex4</a></p> <p>Non-specific SRDs: 10 mW, &lt; 10% Duty Cycle: <a href="#">RIR1008-05</a>,</p> <p>1 mW, ≤ 100 % Duty Cycle: <a href="#">RIR1008-18</a>,</p> <p>434.04-434.79 MHz: Non-specific SRDs: 10 mW, ≤ 100 % Duty Cycle: <a href="#">RIR1008-19</a>, <a href="#">ERC/REC 70-03</a></p> <p>Higher power SRDs: 433.25-434.50 MHz: ≤ 0.5 W, ≤ 1% Duty Cycle <a href="#">RIR1021-05</a>, 433.65-434.20 MHz: ≤ 2.5 W, ≤ 1% Duty Cycle <a href="#">RIR1021-06</a>.</p> <p>Amateur: <a href="#">RIR1101-13</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No major changes foreseen in use of these frequencies.
434.79 - 438 MHz	AMATEUR AMATEUR-SATELLITE <a href="#">5.276</a> <a href="#">5.282</a> Earth exploration-satellite (active) <a href="#">5.279A</a>	434.79-438 MHz Amateur primary. 435-438 MHz Amateur Satellite secondary.	CIV/MIL	<p>Civil use: Amateur: <a href="#">RIR1101-13</a></p> <p>380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	No major changes foreseen in use of these frequencies.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
438 - 440 MHz	AMATEUR <a href="#">5.276</a>	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	<a href="#">439.550-439.650 MHz: Annex 2</a> Amateur: <a href="#">RIR1101-13</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	No major changes foreseen in use of these frequencies.
440 - 450 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE	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): <a href="#">RIR0507-04</a> , PMR (digital): <a href="#">RIR0507-14</a>  446.0 - 446.2 MHz: <a href="#">Harmonised frequencies: Annex4</a> PMR 446 analog and digital: <a href="#">Annex 2</a> , <a href="#">RIR0507-35</a> , <a href="#">ERC/DEC/(15)05</a>  Paging: <a href="#">RIR0506-03</a>  449.8 - 449.9 MHz: On site Paging: <a href="#">RIR0506-22</a>  380 - 470 MHz: Tuning range for PPDR: <a href="#">ECC/DEC/(08)05</a>  <a href="#">UWB Applications, Annex 1</a>	No changes of allocation currently planned.

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

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
470 - 608 MHz	BROADCASTING Land mobile <a href="#">5.291A</a> <a href="#">5.296</a>	Broadcasting primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): Band IV, channel 21 - 34: <a href="#">470-582 MHz: Annex 2,</a></p> <p>Lower part of band V, channel 35 - 37: <a href="#">582-608 MHz: Annex 2,</a></p> <p>DVB-T: <a href="#">RIR0201-71</a></p> <p>DVB-T Retransmitter: <a href="#">RIR0201-72</a></p> <p>470-518 MHz: Land mobile applications, inside shielded rooms only: <a href="#">RIR0507-08</a></p> <p>Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): <a href="#">RIR1009-10,</a> <a href="#">ERC/REC 70-03,</a></p> <p>477-782 MHz (max. 250 mW): <a href="#">RIR1009-11</a></p> <p>Wireless audio applications: 477-782 MHz: <a href="#">RIR1013-20</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	<p>Terrestrial digital television broadcasting (DVB-T) or mobile multimedia services (as DVB-H) according to Regional Agreement GE06.</p> <p>470-494 MHz: Wind profilers: Geographical sharing with wind profiler radars (RR 5.291A).</p>
608 - 614 MHz	BROADCASTING Radio astronomy Land mobile <a href="#">5.149</a> <a href="#">5.296</a> <a href="#">5.306</a>	Radio astronomy secondary. Land mobile secondary.	CIV	<p>Land mobile applications: Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): <a href="#">RIR1009-10,</a> <a href="#">ERC/REC 70-03,</a></p> <p><a href="#">UWB Applications, Annex 1</a></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 - 694 MHz	BROADCASTING Land mobile <a href="#">5.296</a> <a href="#">5.311A</a>	Broadcasting primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): Lower part of band V, channel 39 - 48: <a href="#">614-694 MHz: Annex 2</a>,</p> <p>DVB-T: <a href="#">RIR0201-71</a></p> <p>DVB-T Retransmitter: <a href="#">RIR0201-72</a></p> <p>Land mobile: Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): <a href="#">RIR1009-10</a>,</p> <p>477-782 MHz (max. 250 mW): <a href="#">RIR1009-11</a>, <a href="#">ERC/REC 70-03</a></p> <p>Wireless audio applications: 477-782 MHz: <a href="#">RIR1013-20</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	Terrestrial digital television broadcasting (DVB-T) or mobile multimedia services (as DVB-H) according to Regional Agreement GE06.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
694 - 790 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.312A</a> <a href="#">5.317A</a> BROADCASTING <a href="#">5.311A</a>	MFCN primary. Land mobile secondary.	CIV	<p>Broadcasting (terrestrial): Lower part of band V, channel 49 - 59: <a href="#">694-782 MHz: Annex 2</a>.</p> <p>DVB-T: <a href="#">RIR0201-71</a></p> <p>DVB-T Retransmitter: <a href="#">RIR0201-72</a></p> <p>Land mobile: Radio microphones and in-ear monitor systems: 470-786 MHz (max. 50 mW): <a href="#">RIR1009-10</a>,</p> <p>477-782 MHz (max. 250 mW): <a href="#">RIR1009-11</a>, <a href="#">ERC/REC 70-03</a></p> <p>Wireless audio applications: 477-782 MHz: <a href="#">RIR1013-20</a></p> <p>PPDR (IMT): 733-736 MHz (UL) paired with 788-791 MHz (DL): <a href="#">RIR0504-04 (UL)</a> <a href="#">RIR0504-05 (DL)</a> <a href="#">ECC/DEC/(16)02</a>, <a href="#">ECC/REC/(16)03</a>, <a href="#">ECC Report 218 option B</a>.</p> <p><a href="#">UWB Applications, Annex 1</a></p>	<p>Terrestrial digital television broadcasting (DVB-T) or mobile multimedia services (as DVB-H) according to Regional Agreement GE 06 until end of 2018.</p> <p>Current Broadcasting and Land mobile services will be reallocated to 470 - 694 MHz until end of 2018.</p> <p>Use of radiomicrophones, in-ear monitoring systems and wireless audio applications possible with restrictions until end of 2018.</p> <p>PPDR (IMT): 698-703 MHz (UL) paired with 753-758 MHz (DL): Planned according to <a href="#">ECC/DEC/(16)02</a>, <a href="#">ECC/REC/(16)03</a>, <a href="#">ECC Report 218 option B</a>. The frequency resources in the bands 733-736 MHz / 788-791 MHz and 698-703 MHz / 753-758 MHz are foreseen for the implementation of PPDR transmitters complementary to the public mobile networks.</p> <p>Civil MFCN (IMT): 703-733 MHz (UL) paired with 758-788 MHz (DL): Starting at 1.1.2019 according to <a href="#">ECC/DEC/(15)01</a>, <a href="#">ECC/REC/(15)01</a>.</p> <p>Civil MFCN (SDL) (IMT): 738-753 MHz: Planned according to <a href="#">ECC/DEC/(15)01</a>, <a href="#">ECC/REC/(15)01</a>, <a href="#">ECC Report 218 option B</a>.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
790 - 862 MHz	BROADCASTING MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.316B</a> <a href="#">5.317A</a>	791-821 MHz / 832-862 MHz: Mobile primary.	CIV	<p>791-821 MHz (DL) paired with 832-862 MHz: MFCN (IMT): <a href="#">RIR0501-19</a>,</p> <p>832-862 MHz (UL) paired with 791-821 MHz: MFCN (IMT): <a href="#">RIR0501-20</a>, <a href="#">ECC/DEC/(09)03</a>, <a href="#">ECC/REC/(11)04</a></p> <p>Land mobile: Radio microphones and in-ear monitor systems: 823-826 MHz (max. 20 / 100 mW e.i.r.p.): <a href="#">RIR1009-18</a>,</p> <p>826-832 MHz (max. 100 mW e.i.r.p.): <a href="#">RIR1009-13</a>, <a href="#">ERC/REC 70-03</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
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><b>SRD A: 863-865 MHz</b>  <u>Harmonised frequencies: Annex4</u>          Wireless audio applications:  <u>RIR1013-01</u>.</p> <p>Radio microphones:  <u>RIR1009-05</u>.</p> <p>864.8-865.0 MHz:          Wireless audio applications:  <u>RIR1013-17</u>.</p> <p>SRD 863-868 MHz          Tracking, tracing and data acquisition:  <u>RIR1003-11, 25 mW, ≤ 2.8% DC,</u>  <u>RIR1003-12: 25 mW, ≤ 10% DC for network relay points and network access points only</u>.</p> <p><b>SRD C: 865-868 MHz</b>  <u>Harmonised frequencies: Annex4</u>          Tracking, tracing and data acquisition:  <u>RIR1003-09, 500 mW, ≤ 2.5% DC,</u>  <u>RIR1003-10: 500 mW, ≤ 10% DC for network relay points and network access points only</u>.</p> <p>RFID:          865.6-867.6 MHz: 2 W,  <u>RIR1011-07</u>,  <u>ERC/REC 70-03</u></p> <p>866.885-866.915 MHz:          Detection of avalanche victims:  <u>RIR1003-06</u></p> <p><b>Continued on the following page.</b></p>	863 - 870 MHz: Within CEPT harmonised band for short range devices (SRD).	

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

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

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
870 - 876 MHz	MOBILE	870 - 873 MHz: SRD primary. 873 - 876 MHz / 918 - 921 MHz: GSM-R extension band primary.	CIV	870 - 873 MHz: SRD Tracking, tracing and data acquisition: <a href="#">RIR1003-07</a> : 500 mW, ≤ 2.5% DC, <a href="#">RIR1003-08</a> : 500 mW, ≤ 10% DC, network relay points and network access points in data networks.  Non-specific SRDs: <a href="#">RIR1008-42</a> : 25 mW, ≤ 1% DC, BW max. 600 kHz <a href="#">ERC/REC 70-03</a> 873 - 876 MHz (UL) paired with 918-921 MHz: GSM-R extension band: <a href="#">RIR0501-16</a> , <a href="#">ECC/DEC/(04)06</a>  GSM-R Repeater: <a href="#">RIR0501-18</a>  <a href="#">UWB Applications, Annex 1</a>	870 - 873 MHz: SRD use. 873 - 876 MHz: Railway use.	
876 - 880 MHz	MOBILE	GSM-R primary.	CIV	876-880 MHz (UL) paired with 921-925 MHz <a href="#">Harmonised frequencies: Annex4</a> GSM-R: <a href="#">RIR0501-16</a> ,  GSM-R Repeater: <a href="#">RIR0501-18</a> , <a href="#">ECC/DEC/(02)05</a>  <a href="#">UWB Applications, Annex 1</a>	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 <a href="#">5.317A</a>	880 - 915 MHz / 925 - 960 MHz: Digital cellular primary.	CIV	880-915 MHz (UL) paired with 925-960 MHz <a href="#">Harmonised frequencies: Annex4</a> GSM: <a href="#">RIR0501-01</a> ,  GSM-Repeater: <a href="#">RIR0501-05</a> , <a href="#">ERC/DEC/(97)02</a> , <a href="#">ECC/REC/(05)08</a> .  IMT: <a href="#">RIR0501-26</a> , <a href="#">ECC/DEC/(06)13</a> , <a href="#">ECC/REC/(08)02</a> .  <a href="#">UWB Applications, Annex 1</a>	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
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: <a href="#">RIR1008-39: 25 mW, 0.1% DC, BW max. 200 kHz</a>  915.2 - 918 MHz: Non-specific SRDs: <a href="#">RIR1008-40: 25 mW, 1% DC, BW max. 600 kHz</a>  916.1 - 916.5 MHz and 917.3 - 917.7 MHz: Non-specific SRDs: <a href="#">RIR1008-41: 100 mW, 1% DC, BW max. 400 kHz</a> , RFID: <a href="#">RIR1011-08: 4 W, BW max. 400 kHz</a> ,  917.3 - 917.7 MHz: SRD data networks: <a href="#">RIR1003-13, 500 mW, ≤ 2.5% DC, BW max. 200 kHz</a> , <a href="#">RIR1003-14, 500 mW, ≤ 10% DC, BW max. 200 kHz for network relay points and network access points only</a> . Reference for SRD: <a href="#">ERC/REC 70-03</a>  918-921 MHz (DL) paired with 873-876 MHz: GSM-R extension band: <a href="#">RIR0501-17</a> , <a href="#">ECC/DEC/(04)06</a>  GSM-Repeater: <a href="#">RIR0501-18</a>  <a href="#">UWB Applications, Annex 1</a>	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  <u>Harmonised frequencies: Annex4</u>  GSM-R:  <u>RIR0501-17.</u></p> <p>GSM-R Repeater:  <u>RIR0501-18,</u>  <u>ECC/DEC/(02)05,</u>  <u>ECC/REC/(05)08.</u></p> <p><u>UWB Applications, Annex 1</u></p>	No changes foreseen in use of these frequencies.
925 - 960 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.317A</u>	925 - 960 MHz / 880 - 915 MHz: Digital cellular primary.	CIV	<p>925-960 MHz (DL) paired with 880 - 915 MHz  <u>Harmonised frequencies: Annex4</u>  GSM:  <u>RIR0501-03,</u></p> <p>GSM onboard vessels:  <u>RIR0501-14.</u></p> <p>GSM-Repeater:  <u>RIR0501-05,</u>  <u>ERC/DEC/(97)02,</u>  <u>ECC/REC/(05)08.</u></p> <p>IMT:  <u>RIR0501-27,</u>  <u>ECC/DEC/(06)13,</u>  <u>ECC/REC/(08)02.</u></p> <p><u>UWB Applications, Annex 1</u></p>	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.
960 - 1'164 MHz	AERONAUTICAL RADIONAVIGATION <u>5.328</u> AERONAUTICAL MOBILE (R) <u>5.327A</u> <u>5.328AA</u>	Aer Nav equipment primary.	CIV/MIL	<p>Aeronautical surveillance:  SSR:  <u>RIR0103-05,</u>  <u>RIR0103-06</u></p> <p>Aeronautical navigation:  <u>RIR0102-03</u>  DME: see AIP.</p> <p><u>UWB Applications, Annex 1</u></p>	1087.7 - 1092.3 MHz is used for space station reception of ADS-B emissions from aircraft transmitters (GFT).

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'164 - 1'215 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.328</a> RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.328B</a> <a href="#">5.328A</a>	Aer Nav equipment primary. RNSS primary.	CIV/MIL	Aeronautical navigation: <a href="#">RIR0102-03</a> DME: see AIP.  GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments. Implementation of RNSS (GALILEO) in progress.
1'215 - 1'240 MHz	RADIONAVIGATION <a href="#">5.331</a> RADIOLOCATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.328B</a> <a href="#">5.329</a> <a href="#">5.329A</a> EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.332</a> SPACE RESEARCH (ACTIVE)	RNSS primary.	CIV/MIL	GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments.
1'240 - 1'260 MHz	RADIONAVIGATION <a href="#">5.331</a> RADIOLOCATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.328B</a> <a href="#">5.329</a> <a href="#">5.329A</a> EARTH EXPLORATION-SATELLITE (ACTIVE) SPACE RESEARCH (ACTIVE) <a href="#">5.332</a> Amateur	RNSS primary. Amateur secondary.	CIV/MIL	GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  Amateur: <a href="#">RIR1101-14</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'260 - 1'270 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.328B</a> <a href="#">5.329</a> <a href="#">5.329A</a> SPACE RESEARCH (ACTIVE) Amateur Amateur-satellite <a href="#">5.282</a> <a href="#">5.331</a> <a href="#">5.335A</a>	RNSS primary. Amateur secondary. Amateur Satellite secondary.	CIV/MIL	GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  Amateur: <a href="#">RIR1101-14</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments. Implementation of RNSS (GALILEO) in progress.
1'270 - 1'300 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.328B</a> <a href="#">5.329</a> <a href="#">5.329A</a> SPACE RESEARCH (ACTIVE) Amateur <a href="#">5.282</a> <a href="#">5.331</a> <a href="#">5.335A</a>	RNSS primary. Amateur secondary.	CIV/MIL	GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  1270-1295 MHz: Wind profilers <a href="#">RIR0705-01</a> Resolution 217.  Amateur: <a href="#">RIR1101-14</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments. Implementation of RNSS (GALILEO) in progress.  Wind profiler radars to have due regard to minimising interference to other services, dependent on the status of those services.
1'300 - 1'350 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.337</a> RADIOLOCATION RADIONAVIGATION-SATELLITE (EARTH-TO-SPACE) <a href="#">5.149</a> <a href="#">5.337A</a>	Aeronautical radionavigation primary Radiolocation secondary	CIV/MIL	Aeronautical surveillance: Primary radar: <a href="#">RIR0103-01</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'350 - 1'375 MHz	FIXED RADIOLOCATION MOBILE <a href="#">5.149</a> <a href="#">5.339</a> <a href="#">5.338A</a>	Fixed primary.	CIV	1350-1375 MHz paired with 1492-1517 MHz: Fixed: Point-to-Point: <a href="#">RIR0302-01</a> , <a href="#">T/R 13-01</a> Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  All existing fixed links must be switched off until end of 2018.  1350 - 1400 MHz: Radiomicrophones according ERC/REC 70-03 Annex 10 under study.
1'375 - 1'389.5 MHz			MIL	Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	
1'389.5 - 1'400 MHz			CIV	1389.5-1400 MHz paired with 1441.5-1452 MHz: Fixed: Point-to-Point: <a href="#">RIR0302-02</a> , <a href="#">T/R 13-01</a> Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	
1'400 - 1'427 MHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a> <a href="#">5.341</a>	All emissions are prohibited.	CIV	<a href="#">UWB Applications, Annex 1</a>	No changes planned.  Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .
1'427 - 1'429 MHz	SPACE OPERATION (EARTH-TO-SPACE) FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341A</a> <a href="#">5.341</a> <a href="#">5.338A</a>	MFCN planned.	CIV	Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	Future use for MFCN according to <a href="#">ECC/DEC/(17)06</a>  All existing fixed links must be switched off until end of 2018.
1'429 - 1'441.5 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341A</a> <a href="#">5.341</a>	MFCN planned.	CIV	Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	Future use for MFCN according to <a href="#">ECC/DEC/(17)06</a>  All existing fixed links must be switched off until end of 2018.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
1'441.5 - 1'452 MHz	<a href="#">5.338A</a>	Fixed primary. MFCN planned.	CIV	1441.5-1452 MHz paired with 1389.5-1400 MHz: Fixed: Point-to-Point: <a href="#">RIR0302-02</a> , <a href="#">T/R 13-01</a> Protection of EESS according to <a href="#">ECC/DEC/(11)01</a> .  <a href="#">UWB Applications, Annex 1</a>	Future use for MFCN according to <a href="#">ECC/DEC/(17)06</a>  All existing fixed links must be switched off until end of 2018.	
1'452 - 1'492 MHz	BROADCASTING BROADCASTING-SATELLITE <a href="#">5.345</a> <a href="#">5.208B</a> Fixed MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341</a>	MFCN SDL planned.	CIV	MFCN SDL: <a href="#">RIR0501-24</a> , <a href="#">ECC/REC/(15)01</a> , <a href="#">ECC/DEC/(13)03</a> .  <a href="#">UWB Applications, Annex 1</a>	1452.0-1479.5 MHz: according to Wiesbaden 1995 / revised Maastricht 2002 special agreement / revised in Constanta in 2007.  All existing fixed links must be switched off until end of 2018.	
1'492 - 1'517 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341A</a> <a href="#">5.341</a>	Fixed primary. MFCN planned.	CIV	1492-1517 MHz paired with 1350-1375 MHz: Fixed: Point-to-Point: <a href="#">RIR0302-01</a> , <a href="#">T/R 13-01</a>  <a href="#">UWB Applications, Annex 1</a>	Future use for MFCN according to <a href="#">ECC/DEC/(17)06</a>  All existing fixed links must be switched off until end of 2018.	
1'517 - 1'518 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341A</a> <a href="#">5.341</a>	MFCN planned.	CIV	<a href="#">UWB Applications, Annex 1</a>	Future use for MFCN according to <a href="#">ECC/DEC/(17)06</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'518 - 1'525 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.348</a> <a href="#">5.348A</a> <a href="#">5.348B</a> <a href="#">5.351A</a> <a href="#">5.341</a>	Fixed primary. MSS (S/E) secondary.	CIV/MIL	Fixed: Point-to-Point unidirectional analogue links: <a href="#">RIR0302-03</a> , <a href="#">T/R 13-01</a>  Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: Land Mobile Earth Stations (LMESs): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a>  <a href="#">UWB Applications, Annex 1</a>	1518 - 1525 MHz: Radiomicrophones according ERC/REC 70-03 Annex 10 restricted to indoor use under study.
1'525 - 1'530 MHz	SPACE OPERATION (SPACE-TO-EARTH) FIXED MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a>	MSS primary.	CIV/MIL	Civil use: <a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESs): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> , <a href="#">RIR0601-06</a>  <a href="#">UWB Applications, Annex 1</a>	Possible expansion of MSS. No new fixed link assignments in this band.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'530 - 1'533 MHz	SPACE OPERATION (SPACE-TO-EARTH) MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.353A</a> Earth exploration-satellite Fixed Mobile except aeronautical mobile <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a>	MSS primary.	CIV	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESS): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> , <a href="#">RIR0601-06</a>  <a href="#">UWB Applications, Annex 1</a>	Priority to GMDSS (space-to Earth) Distress and safety communications.
1'533 - 1'535 MHz	SPACE OPERATION (SPACE-TO-EARTH) MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.353A</a> Earth exploration-satellite Mobile except aeronautical mobile <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a>	MSS primary.	CIV	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESS): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> , <a href="#">RIR0601-06</a>  <a href="#">UWB Applications, Annex 1</a>	Priority to GMDSS (space-to Earth) Distress and safety communications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'535 - 1'544 MHz	MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.353A</a> <a href="#">5.354</a>	MSS primary.	CIV	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESSs): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> , <a href="#">RIR0601-06</a>  <a href="#">UWB Applications, Annex 1</a>	Priority to GMDSS (space-to Earth) Distress and safety communications.
1'544 - 1'545 MHz	MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.341</a> <a href="#">5.354</a> <a href="#">5.356</a>	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: <a href="#">RIR0601-05</a> , <a href="#">RIR0601-06</a>  SAR-Downlink (GALILEO, L6 band)  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'545 - 1'555 MHz	MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a> <a href="#">5.357</a> <a href="#">5.357A</a>	MSS primary.	CIV/MIL	Civil use: MSS Earth stations Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESSs): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> ,  <a href="#">UWB Applications, Annex 1</a>	Priority to AMS(R)S
1'555 - 1'559 MHz	MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.208B</a> <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a>	MSS primary.	CIV/MIL	Civil use: Harmonised frequencies: <a href="#">Annex4</a> MSS Earth stations: Downlinks (S/E) in the MSS: For corresponding uplink transmitter frequencies see: INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> , Land Mobile Earth Stations (LMESSs): <a href="#">RIR0808-17</a> , S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a> Maritime GMDSS INMARSAT: <a href="#">RIR0601-05</a> ,  <a href="#">UWB Applications, Annex 1</a>	
1'559 - 1'610 MHz	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.329A</a> <a href="#">5.328B</a> <a href="#">5.208B</a> <a href="#">5.341</a>	Radionavigation-satellite (Nav Sat) primary.	CIV/MIL	Satellite navigation systems: GPS, GLONASS, GALILEO.  GNSS Repeaters: <a href="#">RIR0809-01</a> , <a href="#">ECC/REC/(10)02</a>  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments. Implementation of RNSS (GALILEO) in progress.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'610 - 1'610.6 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.364</a> <a href="#">5.366</a> <a href="#">5.367</a> <a href="#">5.368</a> <a href="#">5.371</a> <a href="#">5.372</a>	MSS primary.	CIV/MIL	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations S-PCS: <a href="#">RIR0808-05</a> , <a href="#">RIR0808-06</a> , <a href="#">ECC/DEC/(09)02</a>  <a href="#">UWB Applications, Annex 1</a>	
1'610.6 - 1'613.8 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">5.341</a> <a href="#">5.364</a> <a href="#">5.366</a> <a href="#">5.367</a> <a href="#">5.368</a> <a href="#">5.371</a> <a href="#">5.372</a>	MSS primary.	CIV/MIL	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations S-PCS: <a href="#">RIR0808-05</a> , <a href="#">RIR0808-06</a> , <a href="#">ECC/DEC/(09)02</a>  <a href="#">UWB Applications, Annex 1</a>	
1'613.8 - 1'626.5 MHz	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.208B</a> <a href="#">5.351A</a> Mobile-satellite (space-to-Earth) <a href="#">5.341</a> <a href="#">5.364</a> <a href="#">5.365</a> <a href="#">5.366</a> <a href="#">5.367</a> <a href="#">5.368</a> <a href="#">5.371</a> <a href="#">5.372</a>	MSS primary.	CIV/MIL	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations S-PCS: <a href="#">RIR0808-05</a> , <a href="#">RIR0808-06</a> , <a href="#">ECC/DEC/(09)02</a>  Non-voice transmit-only mobile satellite terminals: <a href="#">RIR0808-08</a> , <a href="#">ECC/DEC/(09)04</a>  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'626.5 - 1'631.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a> <a href="#">5.353A</a>	MSS primary.	CIV/MIL	<u>Harmonised frequencies: Annex4</u> <u>MSS Earth stations</u> <u>INMARSAT:</u> <u>RIR0808-02,</u>  <u>Land Mobile Earth Stations (LMESs):</u> <u>RIR0808-17,</u>  <u>S-PCS:</u> <u>RIR0808-07,</u> <u>ECC/DEC/(04)09</u>  <u>Maritime GMDSS INMARSAT:</u> <u>RIR0601-05,</u> <u>RIR0601-06</u>  <u>UWB Applications, Annex 1</u>	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.
1'631.5 - 1'636.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.353A</a> <a href="#">5.354</a> <a href="#">5.374</a>	MSS primary.	CIV/MIL	<u>Harmonised frequencies: Annex4</u> <u>MSS Earth stations:</u> <u>INMARSAT:</u> <u>RIR0808-02,</u> <u>1631.5 MHz - 1634.5 MHz:</u> <u>RIR0808-01,</u>  <u>1626.5-1645.5 MHz:</u> <u>Land Mobile Earth Stations (LMESs):</u> <u>RIR0808-17,</u>  <u>S-PCS:</u> <u>RIR0808-07,</u> <u>ECC/DEC/(04)09</u>  <u>Maritime GMDSS INMARSAT:</u> <u>RIR0601-05,</u> <u>RIR0601-06</u>  <u>UWB Applications, Annex 1</u>	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'636.5 - 1'645.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.353A</a> <a href="#">5.354</a>	MSS primary.	CIV/MIL	<u>Harmonised frequencies: Annex4</u> <u>MSS Earth stations</u> <u>INMARSAT:</u> <u>RIR0808-02,</u>  <u>Land Mobile Earth Stations (LMESSs):</u> <u>RIR0808-17,</u>  <u>S-PCS:</u> <u>RIR0808-07,</u> <u>ECC/DEC/(04)09</u>  <u>Maritime GMDSS INMARSAT:</u> <u>RIR0601-05,</u> <u>RIR0601-06</u>  <u>UWB Applications, Annex 1</u>	MSS: Priority to GMDSS (Earth-to-Space) Distress and safety communications.
1'645.5 - 1'646.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.341</a> <a href="#">5.354</a> <a href="#">5.375</a>	MSS primary.	CIV/MIL	<u>Maritime GMDSS INMARSAT:</u> <u>RIR0601-05</u>  <u>UWB Applications, Annex 1</u>	
1'646.5 - 1'656.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a> <a href="#">5.357A</a> <a href="#">5.376</a>	MSS primary.	CIV/MIL	<u>MSS Earth stations</u> <u>INMARSAT:</u> <u>RIR0808-02</u>  <u>Land Mobile Earth Stations (LMESSs):</u> <u>RIR0808-17,</u>  <u>S-PCS:</u> <u>RIR0808-07</u> <u>ECC/DEC/(04)09</u>  <u>UWB Applications, Annex 1</u>	MSS: Priority to AMS(R)S.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'656.5 - 1'660 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a> <a href="#">5.374</a>	MSS primary.	CIV/MIL	<a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> ,  Land Mobile Earth Stations (LMESs): <a href="#">RIR0808-17</a> ,  S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a>  <a href="#">UWB Applications, Annex 1</a>	
1'660 - 1'660.5 MHz	MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">5.341</a> <a href="#">5.351</a> <a href="#">5.354</a> <a href="#">5.376A</a>	MSS primary.	CIV/MIL	MSS Earth stations INMARSAT: <a href="#">RIR0808-01</a> , <a href="#">RIR0808-02</a> ,  Land Mobile Earth Stations (LMESs): <a href="#">RIR0808-17</a> ,  S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a>  <a href="#">UWB Applications, Annex 1</a>	Protection of radio astronomy service from undue interference from Mobile Satellite service.
1'660.5 - 1'668 MHz	RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) Fixed Mobile except aeronautical mobile <a href="#">5.149</a> <a href="#">5.341</a> <a href="#">5.379A</a>		CIV/MIL	<a href="#">UWB Applications, Annex 1</a>	Protection of radio astronomy service should be ensured.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'668 - 1'668.4 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	<a href="#">UWB Applications, Annex 1</a>	Protection of radio astronomy service should be ensured.
1'668.4 - 1'670 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	<a href="#">UWB Applications, Annex 1</a>	Protection of radio astronomy service should be ensured.
1'670 - 1'675 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): <a href="#">RIR0808-17</a> ,  S-PCS: <a href="#">RIR0808-07</a> , <a href="#">ECC/DEC/(04)09</a>  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'675 - 1'690 MHz	METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.341</a>	Meteorological aids / Meteorological satellite primary.	CIV/MIL	1675 - 1683 MHz: Meteorology: Sondes: <a href="#">RIR0702-03</a> , <a href="#">RIR0702-04</a>  <a href="#">UWB Applications, Annex 1</a>	
1'690 - 1'700 MHz	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) Fixed Mobile except aeronautical mobile <a href="#">5.341</a> <a href="#">5.289</a>	Meteorological aids / Meteorological satellite primary.	CIV/MIL	<a href="#">UWB Applications, Annex 1</a>	
1'700 - 1'710 MHz	FIXED METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) Mobile except aeronautical mobile <a href="#">5.341</a> <a href="#">5.289</a>		CIV	<a href="#">UWB Applications, Annex 1</a>	
1'710 - 1'785 MHz	MOBILE <a href="#">5.384A</a> <a href="#">5.149</a> <a href="#">5.341</a> <a href="#">5.385</a>	Digital cellular primary.	CIV	1710-1785 MHz (UL) paired with 1805-1880 MHz: <a href="#">Harmonised frequencies: Annex4</a> GSM: <a href="#">RIR0501-02</a> ,  GSM-Repeater: <a href="#">RIR0501-06</a> , <a href="#">ERC/DEC/(95)03</a> , <a href="#">ECC/REC/(05)08</a> , <a href="#">ECC/DEC/(06)07</a> .  IMT: <a href="#">RIR0501-21</a> , <a href="#">ECC/DEC/(06)13</a> , <a href="#">ECC/REC/(08)02</a> .  <a href="#">UWB Applications, Annex 1</a>	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'785 - 1'800 MHz	MOBILE <a href="#">5.384A</a>	Mobile primary.	CIV	<p>Short range devices: 1785-1800 MHz: Radio microphones: <a href="#">RIR1009-09</a>,</p> <p>1795-1800 MHz: Wireless audio/multimedia applications: <a href="#">RIR1013-18</a>, <a href="#">ERC/REC 70-03</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	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.
1'800 - 1'805 MHz	MOBILE <a href="#">5.384A</a>	Mobile primary.	CIV	<p>1800 - 1804.8 MHz: Short range devices: Radio microphones: <a href="#">RIR1009-09</a>, <a href="#">ERC/REC 70-03</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	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.
1'805 - 1'855 MHz	MOBILE <a href="#">5.384A</a>	Digital cellular primary.	CIV	<p>Civil use: 1805-1880 MHz (DL) paired with 1710-1785 MHz: <a href="#">Harmonised frequencies: Annex4</a></p> <p>GSM: <a href="#">RIR0501-04</a>.</p> <p>GSM onboard vessels: <a href="#">RIR0501-15</a>.</p> <p>GSM-Repeater: <a href="#">RIR0501-06</a>.</p> <p>Airborne GSM/LTE: <a href="#">RIR0501-10</a>, <a href="#">ERC/DEC/(95)03</a>, <a href="#">ECC/REC/(05)08</a>, <a href="#">ECC/DEC/(06)07</a>,</p> <p>IMT: <a href="#">RIR0501-22</a>, <a href="#">ECC/DEC/(06)13</a>, <a href="#">ECC/REC/(08)02</a>.</p> <p><a href="#">UWB Applications, Annex 1</a></p>	Continued intensive use for digital cellular networks (GSM and IMT systems) in the FDD mode.
1'855 - 1'880 MHz			CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
1'880 - 1'885 MHz	MOBILE <a href="#">5.384A</a>	Mobile primary.	CIV/MIL	Civil use: <a href="#">Harmonised frequencies: Annex4</a>	Continued intensive use of DECT frequencies.
1'885 - 1'900 MHz	MOBILE <a href="#">5.388A</a> <a href="#">5.388</a>	Mobile primary.	CIV/MIL	DECT: <a href="#">RIR0503-01</a> , <a href="#">ERC/DEC/(94)03</a>  <a href="#">UWB Applications, Annex 1</a>	
1'900 - 1'980 MHz	MOBILE <a href="#">5.388A</a> <a href="#">5.388</a>	1920 - 1980 MHz: MFCN primary.	CIV/MIL	Civil use: 1920 - 1980 MHz paired with 2110 - 2170 MHz: MFCN including terrestrial IMT (FDD Uplink): FDD- Terminal: <a href="#">RIR0501-07</a> ,  Repeater: <a href="#">RIR0501-09</a> , <a href="#">ECC/DEC/(06)01</a> , <a href="#">ERC/REC 01-01</a>  <a href="#">UWB Applications, Annex 1</a>	1900 - 1920 MHz: Under study in CEPT.  1920 - 1980 MHz: continued intensive use for digital cellular public mobile networks (IMT systems) in the FDD mode.
1'980 - 2'010 MHz	MOBILE MOBILE-SATELLITE (EARTH-TO-SPACE) <a href="#">5.351A</a> <a href="#">5.388</a> <a href="#">5.389A</a>	MSS primary. SAP/SAB and ENG/OB secondary.	CIV/MIL	Civil use: <a href="#">Harmonised frequencies: Annex4</a> MSS Earth stations: IMT-2000 Sat component: <a href="#">RIR0808-10</a> , MSS including Complementary Ground Component (CGC): <a href="#">ECC/DEC/(06)09</a> , <a href="#">ECC/DEC/(06)10</a>  SAP/SAB and ENG/OB (temporary): Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">ERC/REC 25-10</a>  <a href="#">UWB Applications, Annex 1</a>	Temporary SAB/SAP and ENG/OB until MSS is active.
2'010 - 2'025 MHz	MOBILE <a href="#">5.388A</a> <a href="#">5.388</a>		CIV/MIL	Civil use: 2010-2025 MHz: under study.  SAP/SAB and ENG/OB (temporary): Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">ERC/REC 25-10</a>  <a href="#">UWB Applications, Annex 1</a>	2010-2025 MHz: under study in CEPT. Temporary SAB/SAP and ENG/OB until other services are active.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'025 - 2'110 MHz	FIXED MOBILE <u>5.391</u> 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) <u>5.392</u>	Defence systems. SAP/SAB and ENG/OB.	CIV/MIL	SAP/SAB and ENG/OB (temporary): Cordless cameras: <u>RIR0203-11</u> , <u>ERC/REC 25-10</u> ,  <u>UWB Applications, Annex 1</u>	SAP/SAB and ENG/OB (temporary) cordless cameras: Co-ordination with military required.
2'110 - 2'120 MHz	MOBILE <u>5.388A</u> SPACE RESEARCH (DEEP SPACE) (EARTH-TO-SPACE) <u>5.388</u>	MFCN primary.	CIV/MIL	Civil use: 2110 - 2170 MHz paired with 1920 - 1980 MHz: MFCN including terrestrial IMT (FDD Downlink): <u>RIR0501-08</u> ,  Repeater: <u>RIR0501-09</u> , <u>ECC/DEC/(06)01</u> , <u>ERC/REC 01-01</u> ,  Airborne UMTS: <u>RIR0501-10</u> , <u>ECC/DEC/(06)07</u> ,  <u>UWB Applications, Annex 1</u>	2110 - 2170 MHz: continued intensive use for digital cellular public mobile networks (IMT systems) in the FDD mode.
2'120 - 2'155 MHz	FIXED MOBILE <u>5.388A</u>	MFCN primary.	CIV/MIL	Civil use: 2110 - 2170 MHz paired with 1920 - 1980 MHz: MFCN including terrestrial IMT (FDD Downlink): <u>RIR0501-08</u> ,  Repeater: <u>RIR0501-09</u> , <u>ECC/DEC/(06)01</u> , <u>ERC/REC 01-01</u> ,  Airborne UMTS: <u>RIR0501-10</u> , <u>ECC/DEC/(06)07</u> ,  <u>UWB Applications, Annex 1</u>	
2'155 - 2'170 MHz	<u>5.388</u>		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'170 - 2'200 MHz	MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) <a href="#">5.351A</a> <a href="#">5.388</a> <a href="#">5.389A</a>	MSS primary. SAP/SAB and ENG/OB secondary.	CIV	<u>Harmonised frequencies: Annex4</u> IMT-2000 Sat component: Downlinks (S/E) in the MSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0808-10</a> , MSS including Complementary Ground Component (CGC) <a href="#">ECC/DEC/(06)09</a> , <a href="#">ECC/DEC/(06)10</a> , <a href="#">ECC/REC/(10)01</a>  SAP/SAB and ENG/OB: Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">ERC/REC 25-10</a>  <u>UWB Applications, Annex 1</u>	Temporary SAP/SAB and ENG/OB until MSS is active.
2'200 - 2'290 MHz	SPACE OPERATION (SPACE-TO-EARTH) (SPACE-TO-SPACE) EARTH EXPLORATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) FIXED MOBILE <a href="#">5.391</a> SPACE RESEARCH (SPACE-TO-EARTH) (SPACE-TO-SPACE) <a href="#">5.392</a>	Defence systems. SAP/SAB and ENG/OB.	CIV\AMIL	SAP/SAB and ENG/OB (temporary): Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">ERC/REC 25-10</a> ,  <u>UWB Applications, Annex 1</u>	SAP/SAB and ENG/OB (temporary) cordless cameras: Co-ordination with military required.
2'290 - 2'300 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE SPACE RESEARCH (DEEP SPACE) (SPACE-TO-EARTH)	Mobile primary.	CIV	SAP/SAB and ENG/OB: Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">RIR0203-16</a> , <a href="#">RIR0203-17</a> , <a href="#">RIR0203-18</a> , <a href="#">ERC/REC 25-10</a>  <u>UWB Applications, Annex 1</u>	SAP/SAB and ENG/OB: Cordless cameras.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
2'300 - 2'400 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), <a href="#">ERC/REC 62-02</a>  SAP/SAB and ENG/OB: Cordless cameras: <a href="#">RIR0203-11</a> , <a href="#">RIR0203-16</a> , <a href="#">RIR0203-17</a> , <a href="#">RIR0203-18</a> , <a href="#">ERC/REC 25-10</a>  2300 - 2450 MHz: Amateur: <a href="#">RIR1101-15</a>  <a href="#">UWB Applications, Annex 1</a>	SAP/SAB and ENG/OB: Cordless cameras.	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'400 - 2'450 MHz	FIXED MOBILE Amateur Amateur-satellite <u>5.150</u> <u>5.282</u>	SRD primary. Amateur secondary. Amateur-Satellite secondary.	CIV	<p>2400-2500 MHz: ISM-Band.</p> <p>2400-2483.5 MHz: <a href="#">Harmonised frequencies: Annex4</a></p> <p>Short range devices: Non-specific SRDs: <a href="#">RIR1008-11</a>.</p> <p>Wideband data transmission systems: <a href="#">RIR1010-01</a>,</p> <p>Radiodetermination applications: <a href="#">RIR1004-01</a>, <a href="#">ERC/DEC/(01)08</a>, <a href="#">ERC/REC 70-03</a></p> <p>DECT: <a href="#">RIR0503-04</a></p> <p>2446-2454 MHz: Short Range Devices: RFID: <a href="#">RIR1011-01</a>, <a href="#">ERC/REC 70-03</a></p> <p>2300-2450 MHz: Amateur: <a href="#">RIR1101-15</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
2'450 - 2'483.5 MHz	FIXED MOBILE <u>5.150</u>	SRD primary.	CIV	<p>2400-2500 MHz: ISM-Band.</p> <p>2400-2483.5 MHz: <a href="#">Harmonised frequencies: Annex4</a> Short Range Devices: Non-specific SRDs: <a href="#">RIR1008-11</a>.</p> <p>Wideband data transmission systems: <a href="#">RIR1010-01</a>,</p> <p>Radiodetermination applications: <a href="#">RIR1004-01</a>, <a href="#">ERC/DEC/(01)08</a>, <a href="#">ERC/REC 70-03</a></p> <p>DECT: <a href="#">RIR0503-04</a></p> <p>2446-2454 MHz: Short Range Devices: RFID: <a href="#">RIR1011-01</a>, <a href="#">ERC/REC 70-03</a></p> <p>UWB Applications, Annex 1</p>		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'483.5 - 2'500 MHz	FIXED MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) <u>5.351A</u> RADIODETERMINATION-SATELLITE (SPACE-TO-EARTH) <u>5.398</u> <u>5.150</u> <u>5.402</u>	Mobile primary. MSS primary.	CIV	<p>2400-2500 MHz: ISM-Band.</p> <p><u>Harmonised frequencies: Annex4</u> Downlinks (S/E) in the MSS. For corresponding uplink transmitter frequencies see: <u>RIR0808-05</u>, <u>ECC/DEC/(09)02</u></p> <p>Short Range Devices: Active medical implants: LP-AMI: <u>RIR1006-09</u>, <u>ERC/REC/(70)03</u></p> <p>Medical Body Area Network Systems MBANS: 1 mW within healthcare facilities: <u>RIR1006-10</u>, 10 mW, within patient's home: <u>RIR1006-11</u>, <u>ERC/REC/(70)03</u></p> <p><u>UWB Applications, Annex 1</u></p>	
2'500 - 2'520 MHz	Fixed MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.384A</u>	MFCN (IMT) primary.	CIV	<p>MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: User Equipment: <u>RIR0501-11</u>, Repeater: <u>RIR0501-13</u>, <u>ECC/DEC/(05)05</u>, <u>ECC/REC/(11)05</u>.</p> <p><u>UWB Applications, Annex 1</u></p>	2500 - 2690 MHz: continued intensive use for digital cellular networks (IMT systems) in the FDD mode.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
2'520 - 2'655 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.384A</a> <a href="#">5.339</a> <a href="#">5.418B</a> <a href="#">5.418C</a>	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: User Equipment: <a href="#">RIR0501-11</a> , Base station: <a href="#">RIR0501-12</a> , Repeater:  <a href="#">RIR0501-13</a> , 2570 - 2620 MHz unpaired: <a href="#">RIR0501-25</a> , <a href="#">ECC/DEC/(05)05</a> , <a href="#">ECC/REC/(11)05</a> .  <a href="#">UWB Applications, Annex 1</a>	2500 - 2690 MHz: continued intensive use for digital cellular networks (IMT systems) in the FDD mode.
2'655 - 2'670 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.384A</a> Earth exploration-satellite (passive) Radio astronomy Space research (passive) <a href="#">5.149</a> <a href="#">5.208B</a>	MFCN (IMT) primary.	CIV	 <a href="#">UWB Applications, Annex 1</a>	
2'670 - 2'690 MHz	Fixed MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.384A</a> Radio astronomy <a href="#">5.149</a>	MFCN (IMT) primary.	CIV	MFCN (IMT): 2500 - 2570 MHz paired with 2620 - 2690 MHz: Base station: <a href="#">RIR0501-12</a> , Repeater: <a href="#">RIR0501-13</a> , <a href="#">ECC/DEC/(05)05</a> , <a href="#">ECC/REC/(11)05</a> , <a href="#">ERC/REC 01-01</a>  <a href="#">UWB Applications, Annex 1</a>	
2'690 - 2'700 MHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a>	All emissions are prohibited.	CIV	<a href="#">UWB Applications, Annex 1</a>	No changes planned in medium term.
2'700 - 2'900 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.337</a> Radiolocation <a href="#">5.423</a>	Aeronautical surveillance Primary radar Radiolocation (military)	CIV/MIL	Aeronautical surveillance: Primary radar: <a href="#">RIR0103-02</a>  <a href="#">UWB Applications, Annex 1</a>	
2'900 - 3'100 MHz	Radiolocation <a href="#">5.424A</a> RADIONAVIGATION <a href="#">5.426</a> <a href="#">5.425</a> <a href="#">5.427</a>	Radiolocation (military)	CIV/MIL	Radar  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
3'100 - 3'300 MHz	RADIOLOCATION Earth exploration-satellite (active) Space research (active) <u>5.149</u>	Radiolocation (military)	CIV/MIL	Radar <a href="#">UWB Applications, Annex 1</a>	
3'300 - 3'400 MHz	RADIOLOCATION <u>5.149</u>	Radiolocation (military)	CIV/MIL	Radar <a href="#">UWB Applications, Annex 1</a>	
3'400 - 3'410 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH)	Radiolocation (military)	CIV	For military use. <a href="#">UWB Applications, Annex 1</a>	
3'410 - 3'500 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.430A</u>	Fixed primary. Mobile primary. FSS primary.	CIV	Fixed Point-to-Multipoint (BWA, FWA) including nomadic / mobile applications: <a href="#">RIR0301-01</a> , <a href="#">RIR0301-03</a> , <a href="#">ECC/DEC/(07)02</a> , <a href="#">ECC/REC/(04)05</a> , <a href="#">ERC/REC 14-03</a>  MFCN: <a href="#">RIR0501-23</a> , <a href="#">ECC/DEC/(11)06</a> , <a href="#">ECC/REC/(15)01</a>  SAP/SAB and ENG/OB. Cordless cameras: <a href="#">RIR0203-11</a> ,  Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-15</a>  <a href="#">UWB Applications, Annex 1</a>	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					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
3'500 - 3'600 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.430A</u>	Fixed primary. Mobile primary. FSS primary.	CIV	Fixed Point-to-Multipoint (BWA, FWA) including nomadic / mobile applications: <a href="#">RIR0301-01</a> , <a href="#">RIR0301-03</a> , <a href="#">ECC/DEC/(07)02</a> , <a href="#">ECC/REC/(04)05</a> , <a href="#">ERC/REC 14-03</a>  MFCN: <a href="#">RIR0501-23</a> , <a href="#">ECC/DEC/(11)06</a> , <a href="#">ECC/REC/(15)01</a> .  SAP/SAB and ENG/OB. Cordless cameras: <a href="#">RIR0203-11</a> .  Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-15</a>  <a href="#">UWB Applications, Annex 1</a>	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.	
3'600 - 3'800 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE	Fixed primary. Mobile primary. FSS primary.	CIV	BWA: <a href="#">RIR0301-04</a> , <a href="#">ECC/DEC/(07)02</a> , <a href="#">ECC/REC/(04)05</a>  MFCN: <a href="#">RIR0501-23</a> , <a href="#">ECC/DEC/(11)06</a> , <a href="#">ECC/REC/(15)01</a> .  SAP/SAB and ENG/OB. Cordless cameras: <a href="#">RIR0203-11</a> .  Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-15</a>  <a href="#">UWB Applications, Annex 1</a>	Extension band for BWA and MFCN (IMT).  Fixed (MFCN) / FSS: Co-ordination required.  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.	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
3'800 - 4'200 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH)  <a href="#">5.436</a> <a href="#">5.438</a> <a href="#">5.437</a> <a href="#">5.440</a>	FSS primary. 3800-4200 MHz Fixed primary.	CIV	Fixed Point-to-Point: <a href="#">RIR0302-05</a> , <a href="#">ERC/REC 12-08</a>  Downlinks (S/E) in the FSS. For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-15</a>  <a href="#">UWB Applications, Annex 1</a>		Fixed / FSS: Co-primary use with the terms of sufficient geographical separation.
4'200 - 4'400 MHz	AERONAUTICAL MOBILE (R) <a href="#">5.436</a> AERONAUTICAL RADIONAVIGATION <a href="#">5.438</a> <a href="#">5.437</a> <a href="#">5.440</a>	Aeronautical navigation	CIV/MIL	Aeronautical communications: WAIC  Aeronautical navigation: Altimeters  <a href="#">UWB Applications, Annex 1</a>		Protection of critical safety systems.
4'400 - 4'500 MHz	FIXED MOBILE		MIL	<a href="#">UWB Applications, Annex 1</a>		
4'500 - 4'800 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.441</a> MOBILE	FSS primary.	MIL			
4'800 - 4'990 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE Radio astronomy <a href="#">5.149</a> <a href="#">5.339</a>		MIL			
4'990 - 5'000 MHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY <a href="#">5.149</a>		MIL			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'000 - 5'010 MHz	AERONAUTICAL MOBILE-SATELLITE (R) <u>5.443AA</u> 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).  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments
5'010 - 5'030 MHz	AERONAUTICAL MOBILE-SATELLITE (R) <u>5.443AA</u> AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (SPACE-TO-EARTH) (SPACE-TO-SPACE) <u>5.328B</u> <u>5.443B</u> Radio astronomy Space research (passive)		CIV/MIL	5000-5010 MHz (up) / 5010-5030 MHz (down): Possible use by RNSS (e.g. Galileo).  <a href="#">UWB Applications, Annex 1</a>	Monitor international developments
5'030 - 5'091 MHz	AERONAUTICAL MOBILE (R) <u>5.443C</u> AERONAUTICAL MOBILE-SATELLITE (R) <u>5.443D</u> AERONAUTICAL RADIONAVIGATION <u>5.444</u>		CIV/MIL	<a href="#">UWB Applications, Annex 1</a>	
5'091 - 5'150 MHz	FIXED-SATELLITE (EARTH-TO-SPACE) <u>5.444A</u> AERONAUTICAL MOBILE <u>5.444B</u> AERONAUTICAL MOBILE-SATELLITE (R) <u>5.443AA</u> AERONAUTICAL RADIONAVIGATION <u>5.444</u>	Aeronautical telemetry.	CIV/MIL	Aeronautical telemetry. <a href="#">RIR0105-01</a>  <a href="#">UWB Applications, Annex 1</a>	Use for Aeronautical telemetry according 5.444B.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'150 - 5'250 MHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.447A</a> MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.446B</a> <a href="#">5.446</a> <a href="#">5.446C</a> <a href="#">5.447B</a> <a href="#">5.447C</a>	FSS primary. SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5150 - 5250 MHz: BBDR: <a href="#">RIR0504-03</a> , <a href="#">ECC/REC 08-04</a>  5150 - 5350 MHz: <a href="#">Harmonised frequencies: Annex4</a> Short range devices: Wide band data transmission systems: <a href="#">RIR1010-05</a> , <a href="#">ECC/DEC/(04)08</a>  <a href="#">UWB Applications, Annex 1</a>	Preferred band for the deployment of BBDR radio applications.  Wide band data transmission systems for indoor use only.
5'250 - 5'255 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION SPACE RESEARCH <a href="#">5.447D</a> MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.447F</a> <a href="#">5.448A</a>	SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  5150 - 5350 MHz: <a href="#">Harmonised frequencies: Annex4</a> Wide band data transmission systems: <a href="#">RIR1010-05</a> , <a href="#">ECC/DEC/(04)08</a>  <a href="#">UWB Applications, Annex 1</a>	Wide band data transmission systems for indoor use only.
5'255 - 5'350 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION SPACE RESEARCH (ACTIVE) MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.447F</a> <a href="#">5.448A</a>	SRD: Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  5150 - 5350 MHz: <a href="#">Harmonised frequencies: Annex4</a> Wide band data transmission systems: <a href="#">RIR1010-05</a> , <a href="#">ECC/DEC/(04)08</a>  <a href="#">UWB Applications, Annex 1</a>	Wide band data transmission systems for indoor use only.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'350 - 5'450 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.449</a> EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.448B</a> RADIOLOCATION <a href="#">5.448D</a> SPACE RESEARCH (ACTIVE) <a href="#">5.448C</a> Fixed	Radiolocation primary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  <a href="#">UWB Applications, Annex 1</a>	Predominantly used by military.  5420 - 5478 MHz: Ground based weather radars in CH.
5'450 - 5'460 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.449</a> EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.448B</a> RADIOLOCATION <a href="#">5.448D</a> SPACE RESEARCH (ACTIVE) <a href="#">5.448C</a>	Radiolocation primary.	CIV/MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  <a href="#">UWB Applications, Annex 1</a>	
5'460 - 5'470 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION <a href="#">5.448D</a> RADIONAVIGATION <a href="#">5.449</a> SPACE RESEARCH (ACTIVE) <a href="#">5.448B</a>		CIV/MIL		
5'470 - 5'570 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) MARITIME RADIONAVIGATION MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.450A</a> RADIOLOCATION <a href="#">5.450B</a> SPACE RESEARCH (ACTIVE) <a href="#">5.448B</a>	Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  5470-5725 MHz: <a href="#">Harmonised frequencies: Annex4</a> Wide band data transmission systems: <a href="#">RIR1010-04</a> , <a href="#">ECC/DEC/(04)08</a>  <a href="#">UWB Applications, Annex 1</a>	Wide band data transmission systems for indoor and outdoor use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'570 - 5'650 MHz	MARITIME RADIONAVIGATION MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.450A</a> RADIOLOCATION <a href="#">5.450B</a> <a href="#">5.452</a>	Wireless Access Systems / Radio Local Area Networks (WAS/RLANs) secondary.	MIL	5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a>  5470-5725 MHz: <a href="#">Harmonised frequencies: Annex4</a> Wide band data transmission systems: <a href="#">RIR1010-04</a> , <a href="#">ECC/DEC/(04)08</a>  <a href="#">UWB Applications, Annex 1</a>	Wide band data transmission systems for indoor and outdoor use.  5600 - 5650 MHz: Preferred band for ground based weather radar in Europe.
5'650 - 5'725 MHz	MOBILE EXCEPT AERONAUTICAL MOBILE <a href="#">5.446A</a> <a href="#">5.450A</a> RADIOLOCATION Amateur Amateur-satellite (Earth-to-space) <a href="#">5.282</a> <a href="#">ECA17</a> <a href="#">ECA23</a>	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: <a href="#">RIR0703-01</a>  5470-5725 MHz: <a href="#">Harmonised frequencies: Annex4</a> Wide band data transmission systems: <a href="#">RIR1010-04</a> , <a href="#">ECC/DEC/(04)08</a>  Amateur: <a href="#">RIR1101-16</a>  <a href="#">UWB Applications, Annex 1</a>	Wide band data transmission systems for indoor and outdoor use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'725 - 5'830 MHz	FIXED-SATELLITE (EARTH-TO-SPACE) RADIOLOCATION Amateur Mobile Fixed <u>5.150</u>	5725 - 5795 MHz and 5815 - 5875 MHz: BFWA. SRD. 5795 - 5815 MHz: TTT. Amateur secondary.	MIL	<p>5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a></p> <p>5725-5875 MHz: ISM-Band,</p> <p><a href="#">Harmonised frequencies: Annex4</a> Short range devices: Non-Specific SRDs: <a href="#">RIR1008-12</a> <a href="#">ERC/REC 70-03</a></p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA: <a href="#">RIR0301-05</a>, <a href="#">ECC/REC 06-04</a></p> <p>5795 - 5805 MHz: TTT: <a href="#">RIR1012-01</a></p> <p>5805 - 5815 MHz: TTT: <a href="#">RIR1012-06</a></p> <p>Amateur: <a href="#">RIR1101-16</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'830 - 5'850 MHz	FIXED-SATELLITE (EARTH-TO-SPACE) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) Mobile Fixed <u>5.150</u>	BFWA. SRD. Amateur secondary.	MIL	<p>5250 - 5850 MHz: Meteorology: Weather radar: <a href="#">RIR0703-01</a></p> <p>5725-5875 MHz: ISM-Band,</p> <p><a href="#">Harmonised frequencies: Annex4</a> Short range devices: Non-Specific SRDs: <a href="#">RIR1008-12</a> <a href="#">ERC/REC 70-03</a></p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA: <a href="#">RIR0301-05</a>, <a href="#">ECC/REC 06-04</a></p> <p>Amateur: <a href="#">RIR1101-16</a></p> <p><a href="#">UWB Applications, Annex 1</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
5'850 - 5'925 MHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE <u>5.150</u>	5850 - 5875 MHz BFWA. 5850 - 5875 MHz SRD. FSS primary.	CIV	<p>5725 - 5875 MHz: ISM-Band,   <u>Harmonised frequencies: Annex4</u>  Short range devices:  Non-Specific SRDs:  <u>RIR1008-12</u>  <u>ERC/REC 70-03</u></p> <p>5725 - 5795 MHz and 5815 - 5875 MHz: BFWA:  <u>RIR0301-05</u>,  <u>ECC/REC/(06)04</u></p> <p>ITS: 5855 - 5875 MHz Non safety applications:  <u>RIR0510-02</u>,  5875 - 5905 MHz: Road safety applications:  <u>RIR0510-01</u>,  5905 - 5925 MHz: Extension band for non safety applications:  <u>RIR0510-03</u>,  <u>ECC/DEC/(08)01</u>,  <u>ECC/REC/(08)01</u></p> <p>5850 - 6650 MHz: FSS: VSAT:  <u>RIR0806-15</u></p> <p><u>UWB Applications, Annex 1</u></p>	
5'925 - 6'425 MHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <u>5.457A</u>	Fixed primary. FSS primary.	CIV	<p>Fixed:  <u>RIR0302-06</u>,  <u>ERC/REC 14-01</u></p> <p>5850-6650 MHz: FSS: VSAT:  <u>RIR0806-15</u></p> <p><u>UWB Applications, Annex 1</u></p>	Fixed / FSS: Co-primary with the terms of sufficient geographical separation.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
6'425 - 6'700 MHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) Earth exploration-satellite (passive) <a href="#">5.149</a> <a href="#">5.440</a> <a href="#">5.458</a>	Fixed primary. FSS primary.	CIV	6425 - 7125 MHz: Fixed: <a href="#">RIR0302-07</a> , <a href="#">ERC/REC 14-02</a>  5850-6650 MHz: FSS: VSAT: <a href="#">RIR0806-15</a>  <a href="#">UWB Applications, Annex 1</a>	Fixed / FSS: Co-primary with the terms of sufficient geographical separation.  <a href="#">Old links have to be reassigned according to RIR0302-07</a> .  6650 - 6675.2 MHz: Radio astronomy according 5.149
6'700 - 7'075 MHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) (SPACE-TO-EARTH) <a href="#">5.441</a> Earth exploration-satellite (passive) <a href="#">5.458</a> <a href="#">5.458A</a> <a href="#">5.458B</a>	Fixed primary. 6725 - 7025 FSS planned.	CIV	6425 - 7125 MHz: Fixed: <a href="#">RIR0302-07</a> , <a href="#">ERC/REC 14-02</a>  <a href="#">UWB Applications, Annex 1</a>	Fixed / FSS: Co-primary with the terms of sufficient geographical separation.  <a href="#">Old links have to be reassigned according to RIR0302-07</a> .
7'075 - 7'145 MHz	FIXED Earth exploration-satellite (passive) <a href="#">5.458</a>	Fixed primary.	CIV	6425 - 7125 MHz: Fixed: <a href="#">RIR0302-07</a> , <a href="#">ERC/REC 14-02</a>  7125 - 7425 MHz: Fixed: <a href="#">RIR0302-08</a> , <a href="#">ECC/REC 02-06</a>  <a href="#">UWB Applications, Annex 1</a>	<a href="#">Old links have to be reassigned according to RIR0302-07 or RIR0302-08</a> .  7125 - 7425 MHz: new civil links until 2023 only, beyond 2023 no civil use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
7'145 - 7'190 MHz	FIXED MOBILE SPACE RESEARCH (DEEP SPACE) (EARTH-TO-SPACE) <u>5.460</u> Space operation (Earth-to-space) <u>5.458</u>	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: <u>RIR0302-08</u> , <u>ECC/REC 02-06</u>  <u>UWB Applications, Annex 1</u>	<u>Old links have to be reassigned according to RIR0302-08.</u>  7125 - 7425 MHz: new civil links until 2023 only, beyond 2023 no civil use.
7'190 - 7'235 MHz	EARTH EXPLORATION-SATELLITE (EARTH-TO-SPACE) <u>5.460A</u> <u>5.460B</u> FIXED MOBILE SPACE RESEARCH (EARTH-TO-SPACE) <u>5.460</u> <u>5.458</u>				
7'235 - 7'250 MHz	EARTH EXPLORATION-SATELLITE (EARTH-TO-SPACE) <u>5.460A</u> FIXED MOBILE <u>5.458</u>	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: <u>RIR0302-08</u> , <u>ECC/REC 02-06</u>  <u>UWB Applications, Annex 1</u>	<u>Old links have to be reassigned according to RIR0302-08.</u>  7125 - 7425 MHz: new civil links until 2023 only, beyond 2023 no civil use.
7'250 - 7'300 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE <u>5.461</u>	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: <u>RIR0302-08</u> , <u>ECC/REC 02-06</u>  <u>UWB Applications, Annex 1</u>	<u>Old links have to be reassigned according to RIR0302-08.</u>  7125 - 7425 MHz: new civil links until 2023 only, beyond 2023 no civil use.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
7'300 - 7'375 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.461</u>	Fixed primary.	CIV	7125 - 7425 MHz: Fixed: <u>RIR0302-08</u>  7425 - 7725 MHz: Fixed: <u>RIR0302-10,</u> <u>ECC/REC 02-06</u>  <u>UWB Applications, Annex 1</u>	7125 - 7425 MHz: <u>Old links have to be reassigned according to RIR0302-08.</u>  7125 - 7425 MHz: new civil links until 2023 only, beyond 2023 no civil use.  7425 - 7775 MHz: : new civil links until 2020 only, beyond 2020 no civil use.
7'375 - 7'450 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE-SATELLITE (SPACE-TO-EARTH) <u>5.461AA</u> <u>5.461AB</u>				
7'450 - 7'550 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE-SATELLITE (SPACE-TO-EARTH) <u>5.461AA</u> <u>5.461AB</u> <u>5.461A</u>	Fixed primary.	CIV	7425 - 7725 MHz: Fixed: <u>RIR0302-10,</u> <u>ECC/REC 02-06</u>  <u>UWB Applications, Annex 1</u>	7425 - 7775 MHz: : new civil links until 2020 only, beyond 2020 no civil use.
7'550 - 7'750 MHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE EXCEPT AERONAUTICAL MOBILE MARITIME MOBILE-SATELLITE (SPACE-TO-EARTH) <u>5.461AA</u> <u>5.461AB</u>	Fixed primary.	CIV	7425 - 7725 MHz: Fixed: <u>RIR0302-10,</u> <u>ECC/REC 02-06</u>  7725 - 7750 MHz: Mil use.  <u>UWB Applications, Annex 1</u>	
7'750 - 7'900 MHz	FIXED METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) <u>5.461B</u> MOBILE EXCEPT AERONAUTICAL MOBILE		MIL	<u>UWB Applications, Annex 1</u>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
7'900 - 8'025 MHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE <u>5.461</u>		MIL	<a href="#">UWB Applications, Annex 1</a>	
8'025 - 8'175 MHz	EARTH EXPLORATION-SATELLITE (SPACE-TO-EARTH) FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE <u>5.463</u> <u>5.462A</u>		MIL	<a href="#">UWB Applications, Annex 1</a>	
8'175 - 8'215 MHz	EARTH EXPLORATION-SATELLITE (SPACE-TO-EARTH) FIXED FIXED-SATELLITE (EARTH-TO-SPACE) METEOROLOGICAL-SATELLITE (EARTH-TO-SPACE) MOBILE <u>5.463</u> <u>5.462A</u>		MIL	<a href="#">UWB Applications, Annex 1</a>	
8'215 - 8'400 MHz	EARTH EXPLORATION-SATELLITE (SPACE-TO-EARTH) FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <u>5.462A</u> <u>5.463</u>		MIL	<a href="#">UWB Applications, Annex 1</a>	
8'400 - 8'500 MHz	FIXED SPACE RESEARCH (SPACE-TO-EARTH) <u>5.465</u> Radiolocation		MIL	<a href="#">UWB Applications, Annex 1</a>	
8'500 - 8'550 MHz	RADIOLOCATION <u>5.469</u>	Radiolocation primary.	MIL	<a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
8'550 - 8'650 MHz	RADIOLOCATION SPACE RESEARCH (ACTIVE) EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.469</a> <a href="#">5.469A</a>	Radiolocation primary.	MIL	<a href="#">UWB Applications, Annex 1</a>		
8'650 - 8'750 MHz	RADIOLOCATION <a href="#">5.469</a>	Radiolocation primary.	MIL			
8'750 - 8'850 MHz	RADIOLOCATION AERONAUTICAL RADIONAVIGATION <a href="#">5.470</a> Space research	Radiolocation primary.	CIV/MIL	<a href="#">UWB Applications, Annex 1</a>		
8'850 - 9'000 MHz	RADIOLOCATION MARITIME RADIONAVIGATION <a href="#">5.472</a> Space research	Radiolocation primary.	CIV/MIL			
9'000 - 9'200 MHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.337</a> RADIOLOCATION <a href="#">5.471</a> <a href="#">5.473A</a> Space research	Aeronautical surveillance Primary radar Radiolocation (military)	CIV/MIL	Aeronautical surveillance: Primary radar: <a href="#">RIR0103-03</a>  <a href="#">UWB Applications, Annex 1</a>		
9'200 - 9'300 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.474A</a> <a href="#">5.474B</a> <a href="#">5.474C</a> RADIOLOCATION MARITIME RADIONAVIGATION <a href="#">5.472</a> Space research <a href="#">5.473</a> <a href="#">5.474</a> <a href="#">5.474D</a>	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9200 - 9500 MHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-02</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">UWB Applications, Annex 1</a>		Predominantly used by military.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
9'300 - 9'500 MHz	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (ACTIVE) SPACE RESEARCH (ACTIVE) RADIOLOCATION <a href="#">5.427</a> <a href="#">5.474</a> <a href="#">5.475</a> <a href="#">5.475A</a> <a href="#">5.475B</a> <a href="#">5.476A</a>	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	Maritime navigation: <a href="#">RIR0604-01</a> <a href="#">RIR0604-02</a> <a href="#">RIR0604-03</a> <a href="#">RIR0604-04</a>  Radiolocation: Bird migration radar: <a href="#">RIR1108-05</a>  9200 - 9500 MHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-02</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">UWB Applications, Annex 1</a>	Predominantly used by military.
9'500 - 9'800 MHz	RADIOLOCATION EARTH EXPLORATION-SATELLITE (ACTIVE) SPACE RESEARCH (ACTIVE) <a href="#">5.476A</a>	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">UWB Applications, Annex 1</a>	
9'800 - 9'900 MHz	RADIOLOCATION Space research (active) Earth exploration-satellite (active) <a href="#">5.478A</a> <a href="#">5.478B</a>	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">UWB Applications, Annex 1</a>	
9'900 - 10'000 MHz	EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.474A</a> <a href="#">5.474B</a> <a href="#">5.474C</a> RADIOLOCATION <a href="#">5.479</a> <a href="#">5.474D</a>	Radiodetermination applications primary. Short Range Devices secondary.	CIV/MIL	9500 - 9975 MHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-03</a> , <a href="#">ERC/REC 70-03</a>  <a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
10 - 10.15 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.474A</a> <a href="#">5.474B</a> <a href="#">5.474C</a> FIXED MOBILE RADIOLOCATION Amateur <a href="#">5.479</a> <a href="#">5.474D</a>	Mobile primary. Fixed primary. Radiolocation primary. Amateur secondary.	CIV	10.00-10.68 GHz: SAP/SAB and ENG/OB: <a href="#">RIR0203-12</a> , <a href="#">RIR0203-51</a> , <a href="#">ERC/REC 25-10</a>  Radiolocation: Long range radar (LRR, Puls): <a href="#">RIR1108-03</a> Medium range radar (MRR, FM/CW) <a href="#">RIR1108-06</a> Short range radar (SRR): <a href="#">RIR1108-04</a>  Amateur: <a href="#">RIR1101-17</a>  <a href="#">UWB Applications, Annex 1</a>	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	EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.474A</a> <a href="#">5.474B</a> <a href="#">5.474C</a> FIXED MOBILE RADIOLOCATION Amateur <a href="#">5.474D</a>	Fixed primary. Amateur secondary.	CIV	10.15-10.30 GHz paired with 10.50-10.65 GHz: Fixed: <a href="#">RIR0302-11</a> , <a href="#">ERC/REC 12-05</a>  10.00-10.68 GHz: SAP/SAB and ENG/OB: <a href="#">RIR0203-12</a> , <a href="#">RIR0203-51</a>	Old links with 65 MHz duplex have to be reassigned.
10.3 - 10.4 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) <a href="#">5.474A</a> <a href="#">5.474B</a> <a href="#">5.474C</a> FIXED MOBILE RADIOLOCATION Amateur <a href="#">5.474D</a>		CIV	Amateur: <a href="#">RIR1101-17</a>  <a href="#">UWB Applications, Annex 1</a>	
10.4 - 10.45 GHz	FIXED RADIOLOCATION Amateur Mobile				

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
10.45 - 10.5 GHz	FIXED RADIOLOCATION MOBILE Amateur Amateur-satellite <a href="#">ECA17</a> <a href="#">ECA23</a>	Radiodetermination applications primary. Amateur / Amateur-Satellite secondary.	CIV	Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-04</a>  10.00-10.68 GHz: SAP/SAB and ENG/OB: <a href="#">RIR0203-12</a> , <a href="#">RIR0203-51</a>  Amateur: <a href="#">RIR1101-17</a>  <a href="#">UWB Applications, Annex 1</a>	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: <a href="#">RIR0302-11</a> ,	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	ERC/REC 12-05, <a href="#">ECC/DEC/(10)01</a>  10.5 - 10.6 GHz: Short Range Devices:	
10.6 - 10.65 GHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY EARTH EXPLORATION-SATELLITE (PASSIVE) SPACE RESEARCH (PASSIVE) Radiolocation <a href="#">5.149</a> <a href="#">5.482</a> <a href="#">5.482A</a>		CIV	Radiodetermination applications: <a href="#">RIR1004-05</a> , ERC/REC 70-03  10.00-10.60 / 10.68 GHz: ENG/OB: <a href="#">RIR0203-12</a> , <a href="#">RIR0203-51</a> , <a href="#">ECC/DEC/(10)01</a>  <a href="#">UWB Applications, Annex 1</a>	
10.65 - 10.68 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.149</a> <a href="#">5.482</a> <a href="#">5.482A</a>		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
10.68 - 10.7 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a>	All emissions are prohibited.	CIV	<a href="#">UWB Applications, Annex 1</a>	No changes planned in medium term.
10.7 - 10.95 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.441</a> FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.484</a> Mobile except aeronautical mobile Mobile-satellite (space-to-Earth)	FSS primary. Fixed primary. AES Downlinks (S/E) in the FSS and MSS secondary.	CIV	<a href="#">Harmonised frequencies: Annex4</a> Downlinks (S/E) in the FSS for SNG / VSAT and SIT / SUT. For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-01</a> , <a href="#">RIR0806-05</a> , <a href="#">RIR0806-06</a> , <a href="#">RIR0806-16</a> , <a href="#">RIR0806-17</a> , <a href="#">RIR0806-18</a> , <a href="#">ERC/DEC/(00)08</a>  Fixed: <a href="#">RIR0302-12</a> , <a href="#">ERC/REC 12-06</a> , <a href="#">ERC/DEC/(00)08</a>	Fixed / FSS: Co-primary use with the terms of sufficient geographical separation.  Old FS links in 40 MHz raster have to be reassigned.
10.95 - 11.2 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.484A</a> <a href="#">5.484B</a> FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.484</a> Mobile except aeronautical mobile Mobile-satellite (space-to-Earth)			Downlinks (S/E) in the MSS: Downlinks (S/E) for AES in the FSS and MSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0808-15</a> , <a href="#">RIR0808-16</a> , <a href="#">ECC/DEC/(05)11</a> .	
11.2 - 11.45 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.441</a> FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.484</a> Mobile except aeronautical mobile Mobile-satellite (space-to-Earth)			Downlinks (S/E) in the FSS for NGSO FSS satellite systems (Earth stations): For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-22</a> , <a href="#">ECC/DEC/(17)04</a> .	
11.45 - 11.7 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.484A</a> <a href="#">5.484B</a> FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.484</a> Mobile except aeronautical mobile Mobile-satellite (space-to-Earth)			<a href="#">UWB Applications, Annex 1</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
11.7 - 12.5 GHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE BROADCASTING-SATELLITE <a href="#">5.492</a> <a href="#">5.487</a> <a href="#">5.487A</a>	BSS primary.	CIV	<p>BSS according to RR, see Appendix 30,  <a href="#">11.7-12.5 GHz: Annex 2</a>,  <a href="#">ERC/DEC/(00)08</a></p> <p>Downlinks (S/E) in the FSS for NGSO FSS satellite systems (Earth stations):  For corresponding uplink transmitter frequencies see:  <a href="#">RIR0806-22</a>,  <a href="#">ECC/DEC/(17)04</a>.</p> <p><a href="#">30 MHz - 12.4 GHz UWB Applications, Annex 1</a></p>	
12.5 - 12.75 GHz	FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.484A</a> <a href="#">5.484B</a>	FSS primary.	CIV	<p><a href="#">Harmonised frequencies: Annex4</a></p> <p>Downlinks (S/E) in the FSS for SNG / VSAT and SIT / SUT.  For corresponding uplink transmitter frequencies see:  <a href="#">RIR0806-01</a>,  <a href="#">RIR0806-05</a>,  <a href="#">RIR0806-06</a>,  <a href="#">RIR0806-16</a>,  <a href="#">RIR0806-17</a>,  <a href="#">RIR0806-18</a>.</p> <p>Downlinks (S/E) in the MSS:  Downlinks (S/E) for AES in the FSS and MSS:  For corresponding uplink transmitter frequencies see:  <a href="#">RIR0808-15</a>,  <a href="#">RIR0808-16</a>,  <a href="#">ECC/DEC/(05)11</a>.</p> <p>Downlinks (S/E) in the FSS for NGSO FSS satellite systems (Earth stations):  For corresponding uplink transmitter frequencies see:  <a href="#">RIR0806-22</a>,  <a href="#">ECC/DEC/(17)04</a>.</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
12.75 - 13.25 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.441</a>	FSS primary. Fixed primary.	CIV	FSS: SNG: <a href="#">RIR0806-01</a>  Fixed: <a href="#">RIR0302-13</a> , <a href="#">ERC/REC 12-02</a>	Fixed / FSS: Co-primary use with the terms of sufficient geographical separation.
13.25 - 13.4 GHz	AERONAUTICAL RADIONAVIGATION <a href="#">5.497</a> EARTH EXPLORATION-SATELLITE (ACTIVE) SPACE RESEARCH (ACTIVE) <a href="#">5.498A</a>		CIV/MIL		
13.4 - 13.65 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.499A</a> <a href="#">5.499B</a> RADIOLOCATION SPACE RESEARCH <a href="#">5.499C</a> <a href="#">5.499D</a> <a href="#">5.499E</a> <a href="#">5.501B</a>	Radiodetermination applications.	MIL	13.4-14.0 GHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-06</a> , <a href="#">ERC/REC 70-03</a>	
13.65 - 13.75 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION SPACE RESEARCH <a href="#">5.501A</a> <a href="#">5.501B</a>				
13.75 - 14 GHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.484A</a> Earth exploration-satellite RADIOLOCATION Space research <a href="#">5.502</a> <a href="#">5.503</a>	FSS. Radiodetermination applications.	MIL	Civil use for FSS. FSS: SNG: <a href="#">RIR0806-01</a> , VSAT: <a href="#">RIR0806-19</a> .  13.4-14.0 GHz: Short Range Devices: Radiodetermination applications: <a href="#">RIR1004-06</a> , <a href="#">ERC/REC 70-03</a>	FSS: Before every frequency assignment in the FSS a CIV/MIL co-ordination is necessary.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14 - 14.25 GHz	<p>FIXED-SATELLITE (EARTH-TO-SPACE)</p> <p><a href="#">5.457A</a></p> <p><a href="#">5.484A</a></p> <p><a href="#">5.506B</a></p> <p><a href="#">5.484B</a></p> <p>Space research</p> <p>Mobile-satellite (Earth-to-space)</p> <p><a href="#">5.506A</a></p> <p><a href="#">5.504A</a></p> <p><a href="#">5.504</a></p>	FSS primary.	CIV	<p>Harmonised frequencies: Annex4</p> <p>FSS:</p> <p>SNG:</p> <p><a href="#">RIR0806-01</a>,</p> <p>VSAT:</p> <p><a href="#">RIR0806-16</a>,</p> <p><a href="#">ERC/REC 13-03</a></p> <p>VSAT / HEST:</p> <p><a href="#">RIR0806-18</a>,</p> <p><a href="#">ECC/DEC/(06)03</a></p> <p>MSS:</p> <p><a href="#">RIR0808-15</a></p> <p>Uplinks for AES in the MSS:</p> <p><a href="#">RIR0808-16</a>,</p> <p><a href="#">ECC/DEC/(05)11</a></p> <p>Uplinks (E/S) in the FSS for NGSO FSS satellite systems (Earth stations):</p> <p><a href="#">RIR0806-22</a>,</p> <p><a href="#">ECC/DEC/(17)04</a></p>	
14.25 - 14.3 GHz	<p>FIXED-SATELLITE (EARTH-TO-SPACE)</p> <p><a href="#">5.457A</a></p> <p><a href="#">5.484A</a></p> <p><a href="#">5.506B</a></p> <p><a href="#">5.484B</a></p> <p>Space research</p> <p>Mobile-satellite (Earth-to-space)</p> <p><a href="#">5.506A</a></p> <p><a href="#">5.504A</a></p> <p><a href="#">5.504</a></p> <p><a href="#">5.508</a></p>	FSS primary.	CIV	<p>FSS:</p> <p>SNG:</p> <p><a href="#">RIR0806-01</a>,</p> <p>VSAT:</p> <p><a href="#">RIR0806-16</a>,</p> <p><a href="#">ERC/REC 13-03</a></p> <p>Uplinks for AES in the MSS:</p> <p><a href="#">RIR0808-16</a>,</p> <p><a href="#">ECC/DEC/(05)11</a></p> <p>Uplinks (E/S) in the FSS for NGSO FSS satellite systems (Earth stations):</p> <p><a href="#">RIR0806-22</a>,</p> <p><a href="#">ECC/DEC/(17)04</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14.3 - 14.4 GHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.457A</a> <a href="#">5.484A</a> <a href="#">5.506B</a> <a href="#">5.484B</a> Mobile-satellite (Earth-to-space) <a href="#">5.504B</a> <a href="#">5.506A</a> <a href="#">5.509A</a> <a href="#">5.504A</a>	FSS primary.	CIV/MIL	FSS: SNG: <a href="#">RIR0806-01</a> . VSAT: <a href="#">RIR0806-16</a> . <a href="#">ERC/REC 13-03</a>  Uplinks for AES in the MSS: <a href="#">RIR0808-16</a> . <a href="#">ECC/DEC/(05)11</a>  Uplinks (E/S) in the FSS for NGSO FSS satellite systems (Earth stations): <a href="#">RIR0806-22</a> . <a href="#">ECC/DEC/(17)04</a>	FSS: Before every frequency assignment in the FSS a CIV/MIL co-ordination is necessary.
14.4 - 14.47 GHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.457A</a> <a href="#">5.484A</a> <a href="#">5.506B</a> <a href="#">5.484B</a> Mobile-satellite (Earth-to-space) <a href="#">5.504B</a> <a href="#">5.506A</a> <a href="#">5.504A</a>	FSS primary.	CIV/MIL	FSS: SNG: <a href="#">RIR0806-01</a> . VSAT: <a href="#">RIR0806-16</a> . <a href="#">ERC/REC 13-03</a>  Uplinks for AES in the MSS: <a href="#">RIR0808-16</a> . <a href="#">ECC/DEC/(05)11</a>  Uplinks (E/S) in the FSS for NGSO FSS satellite systems (Earth stations): <a href="#">RIR0806-22</a> . <a href="#">ECC/DEC/(17)04</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
14.47 - 14.5 GHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.457A</a> <a href="#">5.484A</a> <a href="#">5.506B</a> Mobile-satellite (Earth-to-space) <a href="#">5.504B</a> <a href="#">5.506A</a> <a href="#">5.509A</a> Radio astronomy <a href="#">5.149</a> <a href="#">5.504A</a>	FSS primary.	CIV/MIL	FSS: SNG: <a href="#">RIR0806-01</a> , VSAT: <a href="#">RIR0806-16</a> , <a href="#">ERC/REC 13-03</a>  Uplinks for AES in the MSS: <a href="#">RIR0808-16</a> , <a href="#">ECC/DEC/(05)11</a>  Uplinks (E/S) in the FSS for NGSO FSS satellite systems (Earth stations): <a href="#">RIR0806-22</a> , <a href="#">ECC/DEC/(17)04</a>	
14.5 - 14.62 GHz	FIXED MOBILE Radio astronomy	14.50-14.62 / 15.229-15.350 GHz: Fixed primary.	CIV	Fixed: <a href="#">RIR0302-14</a> , <a href="#">ERC/REC 12-07</a>	
14.62 - 14.8 GHz			MIL	15.229-15.230 GHz: civil use, according to <a href="#">ERC/REC 12-07</a> .	
14.8 - 15.23 GHz	FIXED MOBILE		MIL		
15.23 - 15.35 GHz	Radio astronomy <a href="#">5.339</a>	15.229-15.350 / 14.50-14.62 GHz: Fixed primary.	CIV	Fixed: <a href="#">RIR0302-14</a> , <a href="#">ERC/REC 12-07</a>  15.34 GHz: Experiments.	
15.35 - 15.4 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a>	All emissions are prohibited.	CIV		
15.4 - 15.43 GHz	RADIOLOCATION <a href="#">5.511E</a> <a href="#">5.511F</a> AERONAUTICAL RADIONAVIGATION	Radar secondary.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
15.43 - 15.63 GHz	FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.511A</a> RADIOLOCATION <a href="#">5.511E</a> <a href="#">5.511F</a> AERONAUTICAL RADIONAVIGATION <a href="#">5.511C</a>	Radar secondary.	CIV/MIL		
15.63 - 15.7 GHz	RADIOLOCATION <a href="#">5.511E</a> <a href="#">5.511F</a> AERONAUTICAL RADIONAVIGATION	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	<a href="#">17.1 - 17.3 GHz: Harmonised frequencies: Annex4</a>	
17.2 - 17.3 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) MOBILE RADIOLOCATION SPACE RESEARCH (ACTIVE) <a href="#">5.513A</a>	Radar secondary.	MIL	Short range devices: Radiodetermination applications: GBSAR: <a href="#">RIR1004-14</a> , <a href="#">ERC/REC 70-03</a>	
17.3 - 17.7 GHz	FIXED-SATELLITE (SPACE-TO-EARTH) (EARTH-TO-SPACE) <a href="#">5.516</a> <a href="#">5.516A</a> <a href="#">5.516B</a> 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), <a href="#">ECC/DEC/(05)08</a> , and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a> , <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a> , <a href="#">ECC/DEC/(15)04</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
17.7 - 18.1 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) (EARTH-TO-SPACE) <a href="#">5.484A</a> <a href="#">5.516</a>	Fixed primary. FSS primary.	CIV	Fixed: <a href="#">RIR0302-15</a> , <a href="#">RIR0302-16</a> , <a href="#">RIR0302-17</a> , <a href="#">ERC/REC 12-03</a> , <a href="#">ERC/DEC/(00)07</a>  FSS: BSS- Feeder link plan RR Appendix 30A,  Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a> , <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a> , <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a> , <a href="#">ECC/DEC/(15)04</a>	Fixed: FS P-P links. FS has priority to FSS.
18.1 - 18.3 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) (EARTH-TO-SPACE) <a href="#">5.484A</a> <a href="#">5.520</a> METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH) <a href="#">5.519</a>	Fixed primary.	CIV	Fixed: <a href="#">RIR0302-15</a> , <a href="#">RIR0302-16</a> , <a href="#">RIR0302-17</a> , <a href="#">ERC/REC 12-03</a> , <a href="#">ERC/DEC/(00)07</a>  Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a> , <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a> , <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a> , <a href="#">ECC/DEC/(15)04</a>	Fixed: FS P-P links. FS has priority to FSS.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
18.3 - 18.4 GHz	<p>FIXED FIXED-SATELLITE (SPACE-TO-EARTH) (EARTH-TO-SPACE) <a href="#">5.484A</a> <a href="#">5.520</a></p> <p>METEOROLOGICAL-SATELLITE (SPACE-TO-EARTH)</p>	Fixed primary.	CIV	<p>Fixed: <a href="#">RIR0302-15</a>, <a href="#">RIR0302-16</a>, <a href="#">RIR0302-17</a>, <a href="#">ERC/REC 12-03</a>, <a href="#">ERC/DEC/(00)07</a></p> <p>Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a>, <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a>, <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a>, <a href="#">ECC/DEC/(15)04</a></p>	Fixed: FS P-P links. FS has priority to FSS.
18.4 - 18.6 GHz	<p>FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <a href="#">5.484A</a></p>	Fixed primary.	CIV	<p>Fixed: <a href="#">RIR0302-15</a>, <a href="#">RIR0302-16</a>, <a href="#">RIR0302-17</a>, <a href="#">ERC/REC 12-03</a>, <a href="#">ERC/DEC/(00)07</a></p> <p>Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a>, <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a>, <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a>, <a href="#">ECC/DEC/(15)04</a></p>	Fixed: FS P-P links. FS has priority to FSS.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
18.6 - 18.8 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <u>5.522B</u> EARTH EXPLORATION-SATELLITE (PASSIVE) <u>5.522A</u>	Fixed primary. Earth Exploration Satellite co-primary.	CIV	Fixed: <a href="#">RIR0302-15</a> , <a href="#">RIR0302-16</a> , <a href="#">RIR0302-17</a> , <a href="#">ERC/REC 12-03</a> , <a href="#">ERC/DEC/(00)07</a>  Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a> , <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a> , <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a> , <a href="#">ECC/DEC/(15)04</a>	Fixed: FS P-P links. FS has priority to FSS. Limitation of FS and FSS emissions according to RR 5.522A.
18.8 - 19.3 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <u>5.523A</u>	Fixed primary.	CIV	Fixed: <a href="#">RIR0302-15</a> , <a href="#">RIR0302-16</a> , <a href="#">RIR0302-17</a>	Fixed: FS P-P links. FS has priority to FSS.
19.3 - 19.7 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) (EARTH-TO-SPACE) <u>5.523B</u> <u>5.523C</u> <u>5.523D</u> <u>5.523E</u>		CIV	ERC/REC 12-03, <a href="#">ERC/DEC/(00)07</a>  Downlinks (S/E) in the FSS: For corresponding uplink transmitter frequencies see: <a href="#">RIR0806-10</a> , <a href="#">RIR0806-11</a> and: 17.3-20.2 GHz: GSO ESOMPs (S/E): <a href="#">RIR0806-20</a> , <a href="#">ECC/DEC/(13)01</a> NGSO ESOMPs (S/E): <a href="#">RIR0806-21</a> , <a href="#">ECC/DEC/(15)04</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
19.7 - 20.1 GHz	<p>FIXED-SATELLITE (SPACE-TO-EARTH)</p> <p><a href="#">5.484A</a></p> <p><a href="#">5.484B</a></p> <p><a href="#">5.516B</a></p> <p><a href="#">5.527A</a></p> <p>Mobile-satellite (space-to-Earth)</p>	FSS primary. MSS (secondary) planned.	MIL	<p>Civil use for FSS.</p> <p>HDFSS (S/E)</p> <p><a href="#">ECC/DEC/(05)08</a>,</p> <p>HEST (S/E):</p> <p><a href="#">ECC/DEC/(06)03</a></p> <p>For corresponding uplink transmitter frequencies see:</p> <p><a href="#">RIR0806-10</a>,</p> <p><a href="#">RIR0806-11</a>,</p> <p><a href="#">RIR0806-17</a>,</p> <p><a href="#">RIR0806-18</a></p> <p>and:</p> <p>17.3-20.2 GHz:</p> <p>GSO ESOMPs (S/E):</p> <p><a href="#">RIR0806-20</a>,</p> <p><a href="#">ECC/DEC/(13)01</a></p> <p>NGSO ESOMPs (S/E):</p> <p><a href="#">RIR0806-21</a>,</p> <p><a href="#">ECC/DEC/(15)04</a></p>	
20.1 - 20.2 GHz	<p>FIXED-SATELLITE (SPACE-TO-EARTH)</p> <p><a href="#">5.484A</a></p> <p><a href="#">5.484B</a></p> <p><a href="#">5.516B</a></p> <p><a href="#">5.527A</a></p> <p>MOBILE-SATELLITE (SPACE-TO-EARTH)</p> <p><a href="#">5.525</a></p> <p><a href="#">5.526</a></p> <p><a href="#">5.527</a></p> <p><a href="#">5.528</a></p>	FSS primary. MSS (primary) planned.	MIL	<p>Civil use for FSS.</p> <p>HDFSS (S/E)</p> <p><a href="#">ECC/DEC/(05)08</a>,</p> <p>HEST (S/E):</p> <p><a href="#">ECC/DEC/(06)03</a></p> <p>For corresponding uplink transmitter frequencies see:</p> <p><a href="#">RIR0806-10</a>,</p> <p><a href="#">RIR0806-11</a>,</p> <p><a href="#">RIR0806-17</a>,</p> <p><a href="#">RIR0806-18</a></p> <p>and:</p> <p>17.3-20.2 GHz:</p> <p>GSO ESOMPs (S/E):</p> <p><a href="#">RIR0806-20</a>,</p> <p><a href="#">ECC/DEC/(13)01</a></p> <p>NGSO ESOMPs (S/E):</p> <p><a href="#">RIR0806-21</a>,</p> <p><a href="#">ECC/DEC/(15)04</a></p>	
20.2 - 21.2 GHz	<p>FIXED-SATELLITE (SPACE-TO-EARTH)</p> <p>MOBILE-SATELLITE (SPACE-TO-EARTH)</p>		MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
21.2 - 21.4 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED MOBILE SPACE RESEARCH (PASSIVE)	ENG/OB secondary.	CIV	ENG/OB: <a href="#">RIR0203-14</a>	
21.4 - 22 GHz	FIXED BROADCASTING-SATELLITE <a href="#">5.208B</a> <a href="#">5.530B</a> <a href="#">5.530A</a> <a href="#">5.530D</a>	Fixed primary. ENG/OB secondary.	CIV	Fixed: Various systems.  ENG/OB: <a href="#">RIR0203-52</a>  <a href="#">Harmonised frequencies: Annex4</a> SRD: Automotive SRR: <a href="#">RIR1012-05</a> , <a href="#">ECC/DEC/(04)10</a>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.
22 - 22.21 GHz	FIXED MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.149</a>	Fixed primary.	CIV	Fixed: 22.0-22.6 GHz paired with 23.0-23.6 GHz: HDFS, P-P links: <a href="#">RIR0302-21</a> , <a href="#">T/R 13-02</a> ,	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until 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) <a href="#">5.532</a>		CIV	<a href="#">Harmonised frequencies: Annex4</a> SRD: Automotive SRR: <a href="#">RIR1012-05</a> , <a href="#">ECC/DEC/(04)10</a>	
22.5 - 22.55 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE)		CIV		
22.55 - 23.15 GHz	FIXED INTER-SATELLITE <a href="#">5.338A</a> MOBILE RADIO ASTRONOMY SPACE RESEARCH (EARTH-TO-SPACE) <a href="#">5.532A</a> <a href="#">5.149</a>		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
23.15 - 23.55 GHz	FIXED INTER-SATELLITE <u>5.338A</u> MOBILE	Fixed primary.	CIV	Fixed: 22.0-22.6 GHz paired with 23.0-23.6 GHz: HDFS, P-P links: <u>RIR0302-21</u> ,	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.
23.55 - 23.6 GHz	FIXED INTER-SATELLITE MOBILE		CIV	T/R 13-02,  <u>Harmonised frequencies: Annex4</u> SRD: Automotive SRR: <u>RIR1012-05</u> , <u>ECC/DEC/(04)10</u>	
23.6 - 24 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u>	All emissions are prohibited.	CIV	<u>Harmonised frequencies: Annex4</u> SRD: Automotive SRR: <u>RIR1012-05</u> , <u>ECC/DEC/(04)10</u>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.
24 - 24.05 GHz	AMATEUR AMATEUR-SATELLITE <u>5.150</u>	Amateur / Amateur-Satellite primary.	CIV/MIL	24.00-24.25 GHz: ISM-Band.  Amateur: <u>RIR1101-18</u>  <u>Harmonised frequencies: Annex4</u> Short range devices: Non-specific SRDs: <u>RIR1008-13</u> , <u>ERC/REC 70-03</u>  Automotive SRR: <u>RIR1012-05</u> , <u>ECC/DEC/(04)10</u>  24.00-24.25 GHz: Radiolocation (civil): <u>RIR1108-01</u>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
24.05 - 24.25 GHz	RADIOLOCATION Amateur Earth exploration-satellite (active) Fixed Mobile <u>5.150</u>	SRD primary. Amateur secondary.	CIV/MIL	<p>24.00-24.25 GHz: ISM Band.</p> <p><a href="#">Harmonised frequencies: Annex4</a></p> <p>Short range devices: Non-specific SRDs: <a href="#">RIR1008-13</a>, <a href="#">ERC/REC 70-03</a></p> <p>Automotive SRR: <a href="#">RIR1012-05</a>, <a href="#">ECC/DEC/(04)10</a></p> <p>WLAM <a href="#">RIR1012-08</a>, <a href="#">ERC/REC 70-03</a></p> <p>Amateur: <a href="#">RIR1101-18</a></p> <p>24.00-24.25 GHz: Radiolocation (civil): <a href="#">RIR1108-01</a></p>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.	
24.25 - 24.45 GHz	FIXED MOBILE	ENG/OB primary.	CIV	<p>ENG/OB: <a href="#">RIR0203-14</a>, <a href="#">RIR0203-52</a></p> <p><a href="#">Harmonised frequencies: Annex4</a></p> <p>SRD: Automotive SRR: <a href="#">RIR1012-05</a>, <a href="#">RIR1012-07</a>, <a href="#">ECC/DEC/(04)10</a></p> <p>WLAM <a href="#">RIR1012-08</a>, <a href="#">ERC/REC 70-03</a></p>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.	
24.45 - 24.5 GHz	FIXED MOBILE		CIV		24.25 – 26.65 GHz: Automotive Short Range Radar (SRR) equipment according to RIR1012-07 may only be placed onto the market until 1 January 2018. This date is ex-tended by 4 years for SRR equipment mounted on motor vehicles for which vehicle conformity compliance has been granted before 1 January 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band until to the end of lifetime of the vehicles.	

Frequency Band	Swiss Allocations					Strategy
	National Allocation	Main Use	Civ/Mil	Notes		
24.5 - 24.65 GHz	FIXED	Fixed primary.	CIV	24.549 - 25.445 GHz paired with 25.557 - 26.453 GHz: Fixed links Point-to-Point <a href="#">RIR0302-23</a> , <a href="#">T/R 13-02</a> .	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.  24.25 – 26.65 GHz: Automotive Short Range Radar (SRR) equipment according to RIR1012-07 may only be placed onto the market until 1 January 2018. This date is ex-tended by 4 years for SRR equipment mounted on motor vehicles for which vehicle conformity compliance has been granted before 1 January 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band until to the end of lifetime of the vehicles.	
24.65 - 24.75 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.532B</a>	Fixed primary.	CIV			
24.75 - 25.25 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.532B</a>	Fixed primary.	CIV	<a href="#">Harmonised frequencies: Annex4</a> SRD: Automotive SRR: <a href="#">RIR1012-05</a> , <a href="#">RIR1012-07</a> , <a href="#">ECC/DEC/(04)10</a>		
25.25 - 25.5 GHz	FIXED MOBILE INTER-SATELLITE <a href="#">5.536</a>	Fixed primary.	CIV			
25.5 - 26.5 GHz	FIXED MOBILE INTER-SATELLITE <a href="#">5.536</a> SPACE RESEARCH (SPACE-TO-EARTH) <a href="#">5.536C</a> Earth exploration-satellite (space-to-Earth) <a href="#">5.536A</a>	Fixed primary.	CIV			

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
26.5 - 27 GHz	FIXED MOBILE INTER-SATELLITE <u>5.536</u> SPACE RESEARCH (SPACE-TO-EARTH) <u>5.536A</u> Earth exploration-satellite (space-to-Earth) <u>5.536A</u>		MIL	<a href="#">Harmonised frequencies: Annex4</a> SRD: Automotive SRR: <a href="#">RIR1012-05</a> , <a href="#">RIR1012-07</a> , <a href="#">ECC/DEC/(04)10</a>	21.65 – 26.65 GHz: Existing 24 GHz automotive short range radar (SRR) equipment according to RIR1012-05 may still operate in this band until to the end of lifetime of the vehicles.  24.25 – 26.65 GHz: Automotive Short Range Radar (SRR) equipment according to RIR1012-07 may only be placed onto the market until 1 January 2018. This date is extended by 4 years for SRR equipment mounted on motor vehicles for which vehicle conformity compliance has been granted before 1 January 2018. After this date, existing 24 GHz equipment may still operate in the 24 GHz band until to the end of lifetime of the vehicles.
27 - 27.5 GHz	FIXED MOBILE INTER-SATELLITE <u>5.536</u> Earth exploration-satellite (space-to-Earth)		MIL		
27.5 - 28.5 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <u>5.484A</u> <u>5.539</u> <u>5.516B</u> <u>5.538</u> <u>5.540</u>	27.5000-27.8285 GHz and 28.4445-28.9485 GHz and 29.4525-29.5000 GHz: FSS primary.  27.8285 – 27.9405 GHz: FS primary.	CIV	Fixed (HDFS) and FSS: <a href="#">ECC/DEC/(05)01</a> :  FS: 27.8285-27.9405 GHz (unpaired band), 27.9405-28.4445 GHz paired with 28.9485-29.4525 GHz <a href="#">RIR0302-24</a> .	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
28.5 - 29.1 GHz	<p>FIXED FIXED-SATELLITE (EARTH-TO-SPACE)  <a href="#">5.484A</a>  <a href="#">5.523A</a>  <a href="#">5.539</a>  <a href="#">5.516B</a>            Earth exploration-satellite (Earth-to-space)  <a href="#">5.540</a>  <a href="#">5.541</a></p>	27.9405-28.4445 GHz paired with 28.9485-29.4525 GHz: FS primary.	CIV	<p><a href="#">T/R 13-02</a>             FSS:            27.5000-27.8285 GHz,            28.4445-28.9485 GHz,            29.4525-29.5000 GHz,  <a href="#">RIR0806-05</a>,  <a href="#">RIR0806-10</a>,             GSO ESOMPs (E/S):  <a href="#">RIR0806-20</a>,</p>	
29.1 - 29.5 GHz	<p>FIXED FIXED-SATELLITE (EARTH-TO-SPACE)  <a href="#">5.523C</a>  <a href="#">5.523E</a>  <a href="#">5.535A</a>  <a href="#">5.539</a>  <a href="#">5.541A</a>  <a href="#">5.516B</a>            Earth exploration-satellite (Earth-to-space)  <a href="#">5.541</a>  <a href="#">5.540</a></p>		CIV	<p><a href="#">ECC/DEC/(13)01</a>            NGSO ESOMPs (E/S):  <a href="#">RIR0806-21</a>,  <a href="#">ECC/DEC/(15)04</a></p>	
29.5 - 29.9 GHz	<p>FIXED-SATELLITE (EARTH-TO-SPACE)  <a href="#">5.484A</a>  <a href="#">5.484B</a>  <a href="#">5.539</a>  <a href="#">5.516B</a>  <a href="#">5.527A</a>            Earth exploration-satellite (Earth-to-space)  <a href="#">5.541</a>            Mobile-satellite (Earth-to-space)  <a href="#">5.540</a></p>	FSS primary. MSS (secondary) planned.	CIV/MIL	<p>Civil use for FSS.            HDFSS (E/S)  <a href="#">ECC/DEC/(05)08</a>:  <a href="#">RIR0806-06</a>,  <a href="#">RIR0806-11</a>             SIT/SUT and HEST:  <a href="#">RIR0806-17</a>,  <a href="#">ECC/DEC/(06)03</a>             GSO ESOMPs (E/S):  <a href="#">RIR0806-20</a>,</p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
29.9 - 30 GHz	<p>FIXED-SATELLITE (EARTH-TO-SPACE)</p> <p><a href="#">5.484A</a></p> <p><a href="#">5.484B</a></p> <p><a href="#">5.539</a></p> <p><a href="#">5.516B</a></p> <p><a href="#">5.527A</a></p> <p>MOBILE-SATELLITE (EARTH-TO-SPACE)</p> <p>Earth exploration-satellite (Earth-to-space)</p> <p><a href="#">5.541</a></p> <p><a href="#">5.540</a></p> <p><a href="#">5.525</a></p> <p><a href="#">5.526</a></p> <p><a href="#">5.527</a></p> <p><a href="#">5.538</a></p> <p><a href="#">5.543</a></p>	FSS primary. MSS (primary) planned.	CIV/MIL	<p><a href="#">ECC/DEC/(13)01</a></p> <p>NGSO ESOMPs (E/S):</p> <p><a href="#">RIR0806-21</a></p> <p><a href="#">ECC/DEC/(15)04</a></p>	
30 - 31 GHz	<p>FIXED-SATELLITE (EARTH-TO-SPACE)</p> <p>MOBILE-SATELLITE (EARTH-TO-SPACE)</p> <p><a href="#">5.338A</a></p>		CIV/MIL		If fixed satellite service will be planned <a href="#">ECC/DEC/(10)02</a> should be considered.
31 - 31.3 GHz	<p>FIXED</p> <p>MOBILE</p> <p><a href="#">5.149</a></p> <p><a href="#">5.338A</a></p>		CIV/MIL	For civil use.	<p>Available for HAPS.</p> <p>If fixed links will be planned, <a href="#">ECC/REC 02-02</a> should be considered.</p>
31.3 - 31.5 GHz	<p>EARTH EXPLORATION-SATELLITE (PASSIVE)</p> <p>RADIO ASTRONOMY</p> <p>SPACE RESEARCH (PASSIVE)</p> <p><a href="#">5.340</a></p>	All emissions are prohibited.	CIV		
31.5 - 31.8 GHz	<p>EARTH EXPLORATION-SATELLITE (PASSIVE)</p> <p>RADIO ASTRONOMY</p> <p>SPACE RESEARCH (PASSIVE)</p> <p>Fixed</p> <p>Mobile except aeronautical mobile</p> <p><a href="#">5.149</a></p>		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
31.8 - 32 GHz	FIXED <a href="#">5.547A</a> RADIONAVIGATION SPACE RESEARCH (SPACE-TO-EARTH) <a href="#">5.547</a> <a href="#">5.548</a>	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: <a href="#">RIR0302-31</a> , <a href="#">ERC/REC 01-02</a>	
32 - 32.3 GHz	FIXED <a href="#">5.547A</a> RADIONAVIGATION SPACE RESEARCH (SPACE-TO-EARTH) <a href="#">5.547</a> <a href="#">5.548</a>		CIV/MIL		
32.3 - 33 GHz	FIXED <a href="#">5.547A</a> INTER-SATELLITE RADIONAVIGATION <a href="#">5.547</a> <a href="#">5.548</a>		CIV/MIL		
33 - 33.4 GHz	FIXED <a href="#">5.547A</a> RADIONAVIGATION INTER-SATELLITE <a href="#">5.547</a>		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) <a href="#">RIR1108-02</a>	
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) <a href="#">5.549A</a>	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 <u>5.149</u> <u>5.550A</u>		MIL		
37 - 37.5 GHz	FIXED SPACE RESEARCH (SPACE-TO-EARTH) <u>5.547</u>	Fixed primary.	CIV	Fixed: 37.0 - 38.178 GHz paired with 38.318 - 39.5 GHz HDFS, P-P links: <u>RIR0302-32</u> , <u>T/R 12-01</u> , <u>ERC/DEC/(00)02</u>	
37.5 - 38 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) SPACE RESEARCH (SPACE-TO-EARTH) Earth exploration-satellite (space-to-Earth) <u>5.547</u>		CIV		
38 - 39.5 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) Earth exploration-satellite (space-to-Earth) <u>5.547</u>		CIV		
39.5 - 40 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <u>5.516B</u> MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) Earth exploration-satellite (space-to-Earth) <u>5.547</u>		CIV/MIL		FSS according to <u>ERC/DEC/(00)02</u>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
40 - 40.5 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) <u>5.516B</u> MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH) SPACE RESEARCH (EARTH-TO-SPACE) Earth exploration-satellite (space-to-Earth)		CIV/MIL		FSS according to <a href="#">ERC/DEC/(00)02</a>
40.5 - 41 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE <u>5.547</u>	MWS primary.	CIV	MWS: <a href="#">RIR0201-80</a> , <a href="#">ERC/DEC/(99)15</a> , <a href="#">ECC/REC/(01)04</a>  BSS: <a href="#">ECC/DEC/(02)04</a>	
41 - 42 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE <u>5.547</u>	Fixed primary.	CIV	Fixed: 41-42 GHz paired with 42.5 – 43.5 GHz: HDFS, P-P links: <a href="#">RIR0302-48</a> , <a href="#">ERC/DEC/(99)15</a> , <a href="#">ECC/REC/(01)04</a>  BSS: <a href="#">ECC/DEC/(02)04</a>	
42 - 42.5 GHz	FIXED BROADCASTING BROADCASTING-SATELLITE <u>5.547</u> <u>5.551H</u> <u>5.551I</u>	MWS primary.	CIV	MWS: <a href="#">RIR0201-80</a> , <a href="#">ERC/DEC/(99)15</a> , <a href="#">ECC/REC/(01)04</a>  BSS: <a href="#">ECC/DEC/(02)04</a>	
42.5 - 43.5 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <u>5.552</u> MOBILE EXCEPT AERONAUTICAL MOBILE RADIO ASTRONOMY <u>5.149</u> <u>5.547</u>	Fixed primary.	CIV/MIL	Civil use for Fixed: 42.5 – 43.5 GHz paired with 41-42 GHz: HDFS, P-P links: <a href="#">RIR0302-48</a> , <a href="#">ERC/DEC/(99)15</a> , <a href="#">ECC/REC/(01)04</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
43.5 - 45.5 GHz	MOBILE <a href="#">5.553</a> MOBILE-SATELLITE Fixed-satellite <a href="#">5.554</a>		CIV/MIL		
45.5 - 47 GHz	MOBILE <a href="#">5.553</a> MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE <a href="#">5.554</a>		CIV/MIL		
47 - 47.2 GHz	AMATEUR AMATEUR-SATELLITE	Amateur / Amateur-Satellite primary.	CIV/MIL	Civil use: Amateur: <a href="#">RIR1101-19</a>	
47.2 - 47.5 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.552</a> MOBILE <a href="#">5.552A</a>	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. <a href="#">RIR0203-15</a>	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) <a href="#">5.552</a> <a href="#">5.516B</a> <a href="#">5.554A</a> 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. <a href="#">RIR0203-15</a>  HDFSS (E/S) <a href="#">ECC/DEC/(05)08</a>	
47.9 - 48.2 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.552</a> MOBILE <a href="#">5.552A</a>	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. <a href="#">RIR0203-15</a>	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) <a href="#">5.552</a> <a href="#">5.516B</a> <a href="#">5.554A</a> <a href="#">5.555B</a> 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. <a href="#">RIR0203-15</a>  HDFSS (E/S) <a href="#">ECC/DEC/(05)08</a>	If fixed links will be planned in the band 48.5 - 50.2 / 50.9 - 52.6 GHz <a href="#">ERC/REC 12-11 (Annex 3)</a> should be considered.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
48.54 - 49.44 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.552</a> MOBILE RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">5.340</a> <a href="#">5.555</a>	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. <a href="#">RIR0203-15</a>	If fixed links will be planned in the band 48.5 - 50.2 / 50.9 - 52.6 GHz <a href="#">ERC/REC 12-11 (Annex 3)</a> should be considered.
49.44 - 50.2 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) (SPACE-TO-EARTH) <a href="#">5.552</a> <a href="#">5.516B</a> <a href="#">5.554A</a> <a href="#">5.555B</a> <a href="#">5.338A</a> 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. <a href="#">RIR0203-15</a>  HDFSS (E/S) <a href="#">ECC/DEC/(05)08</a>	
50.2 - 50.4 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) SPACE RESEARCH (PASSIVE) <a href="#">5.340</a>	All emissions are prohibited.	CIV		
50.4 - 51.4 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) <a href="#">5.338A</a> Mobile-satellite (Earth-to-space)		CIV/MIL		If fixed links will be planned in the band 50.9 - 52.6 / 48.5 - 50.2 GHz <a href="#">ERC/REC 12-11 (Annex 3)</a> should be considered.
51.4 - 52.6 GHz	FIXED <a href="#">5.338A</a> MOBILE RADIO ASTRONOMY <a href="#">5.547</a> <a href="#">5.556</a>	Fixed primary.	CIV	Fixed: HDFS, P-P links: <a href="#">RIR0302-41</a> , <a href="#">ERC/REC 12-11</a>	If fixed links will be planned in the band 50.9 - 52.6 / 48.5 - 50.2 GHz <a href="#">ERC/REC 12-11 (Annex 3)</a> should be considered. Fixed P-P links only.
52.6 - 54.25 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) SPACE RESEARCH (PASSIVE) <a href="#">5.340</a> <a href="#">5.556</a>	All emissions are prohibited.	CIV		
54.25 - 55.78 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) SPACE RESEARCH (PASSIVE)		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
55.78 - 56.9 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED <u>5.557A</u> INTER-SATELLITE <u>5.556A</u> SPACE RESEARCH (PASSIVE) <u>5.547</u> <u>5.558</u>	Fixed primary.	CIV/MIL	Civil use: Fixed: HDFS, P-P links: <u>RIR0302-42,</u> <u>ERC/REC 12-12</u>  Passive applications.	
56.9 - 57 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED MOBILE <u>5.558</u> SPACE RESEARCH (PASSIVE) <u>5.547</u> <u>5.558A</u>	Fixed primary.	CIV/MIL	Civil use: Fixed: HDFS, P-P links: <u>RIR0302-42,</u> <u>ERC/REC 12-12</u>  Passive applications.	
57 - 58 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED INTER-SATELLITE <u>5.556A</u> MOBILE <u>5.558</u> SPACE RESEARCH (PASSIVE) <u>5.547</u>	Fixed primary.	CIV/MIL	Civil use: Fixed: <u>RIR0302-43,</u> <u>ECC/REC/(09)01</u>  Passive applications.  <u>Harmonised frequencies: Annex 4</u> Short range devices: 57-64 GHz: Non-specific SRDs: <u>RIR1008-31,</u>  57-66 GHz: Wideband data transmission systems: <u>RIR1010-07,</u> <u>ERC/REC 70-03</u>	Fixed TDD P-P links: No new Assignments.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
58 - 58.2 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED INTER-SATELLITE <a href="#">5.556A</a> MOBILE <a href="#">5.558</a> SPACE RESEARCH (PASSIVE) <a href="#">5.547</a>	Fixed secondary.	CIV/MIL	Civil use: Fixed: <a href="#">RIR0302-47</a> <a href="#">ECC/REC/(09)01</a>  Passive applications.  <a href="#">Harmonised frequencies: Annex 4</a> Short range devices: 57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a> .  57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a> , <a href="#">ERC/REC 70-03</a>	
58.2 - 59 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.547</a> <a href="#">5.556</a> <a href="#">ECA19</a>	Fixed secondary.	CIV/MIL	Civil use: Fixed: <a href="#">RIR0302-47</a> <a href="#">ECC/REC/(09)01</a>  Passive applications.  <a href="#">Harmonised frequencies: Annex 4</a> Short range devices: 57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a> .  57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a> , <a href="#">ERC/REC 70-03</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
59 - 59.3 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) FIXED INTER-SATELLITE <a href="#">5.556A</a> MOBILE <a href="#">5.558</a> RADIOLOCATION <a href="#">5.559</a> SPACE RESEARCH (PASSIVE)	Fixed secondary.	CIV/MIL	Civil use: Fixed: <a href="#">RIR0302-47</a> <a href="#">ECC/REC/(09)01</a>  Passive applications.  <a href="#">Harmonised frequencies: Annex 4</a> Short range devices: 57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a> .  57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a> , <a href="#">ERC/REC 70-03</a>	
59.3 - 62 GHz	FIXED INTER-SATELLITE RADIOLOCATION <a href="#">5.559</a> MOBILE <a href="#">5.558</a> <a href="#">5.138</a>	61.0-61.5 GHz SRD secondary. Fixed secondary.	CIV/MIL	Civil use: Fixed: <a href="#">RIR0302-47</a> <a href="#">ECC/REC/(09)01</a>  61.0-61.5 GHz: ISM Band:  <a href="#">Harmonised frequencies: Annex 4</a> Short range devices: 61.0-61.5 GHz: Non-specific SRDs: <a href="#">RIR1008-14</a> ,  57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a> .  57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a> , <a href="#">ERC/REC 70-03</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
62 - 63 GHz	FIXED INTER-SATELLITE MOBILE <u>5.558</u> RADIOLOCATION <u>5.559</u>	Fixed secondary.	CIV/MIL	<p>Civil use: Fixed: <a href="#">RIR0302-47</a> <a href="#">ECC/REC/(09)01</a></p> <p><a href="#">Harmonised frequencies: Annex 4</a></p> <p>Short range devices: 57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a>,</p> <p>57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a>, <a href="#">ERC/REC 70-03</a></p>	
63 - 64 GHz	FIXED INTER-SATELLITE MOBILE <u>5.558</u> RADIOLOCATION <u>5.559</u>	ITS.	CIV/MIL	<p>Civil use: ITS: <a href="#">RIR0510-04</a> <a href="#">ECC/DEC/(09)01</a></p> <p><a href="#">Harmonised frequencies: Annex 4</a></p> <p>Short range devices: 57-64 GHz: Non-specific SRDs: <a href="#">RIR1008-31</a>,</p> <p>57-66 GHz: Wideband data transmission systems: <a href="#">RIR1010-07</a>, <a href="#">ERC/REC 70-03</a></p>	
64 - 65 GHz	FIXED INTER-SATELLITE MOBILE EXCEPT AERONAUTICAL MOBILE <u>5.547</u> <u>5.556</u>	Fixed secondary.	CIV	<p>Fixed links: <a href="#">RIR0302-45</a>, <a href="#">ECC/REC/(05)02</a></p> <p>57-66 GHz: <a href="#">Harmonised frequencies: Annex4</a></p> <p>Short range devices: Wideband data transmission systems: <a href="#">RIR1010-07</a>, <a href="#">ERC/REC 70-03</a></p>	<p>64 - 66 GHz: Fixed links Point-to-Point.</p>

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
65 - 66 GHz	EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE EXCEPT AERONAUTICAL MOBILE SPACE RESEARCH <a href="#">5.547</a>	Fixed secondary.	CIV	Fixed links: <a href="#">RIR0302-45</a> , <a href="#">ECC/REC/(05)02</a>  57-66 GHz: <a href="#">Harmonised frequencies: Annex4</a> Short range devices: Wideband data transmission systems: <a href="#">RIR1010-07</a> , <a href="#">ERC/REC 70-03</a>	64 - 66 GHz: Fixed links Point-to-Point.
66 - 71 GHz	INTER-SATELLITE MOBILE <a href="#">5.553</a> <a href="#">5.558</a> MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE <a href="#">5.554</a>		CIV/MIL		
71 - 74 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE MOBILE-SATELLITE (SPACE-TO-EARTH)	Fixed primary.	CIV/MIL	Civil use: 71 - 76 GHz paired with 81 - 86 GHz: Fixed links: <a href="#">RIR0302-46</a> , <a href="#">ECC/REC/(05)07</a>	
74 - 75.5 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) <a href="#">5.561</a>	Fixed primary.	CIV/MIL		
75.5 - 76 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) <a href="#">5.561</a>	Fixed primary.	CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
76 - 77.5 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) <a href="#">5.149</a>	Amateur / Amateur-Satellite secondary. 76.00 - 77.00 GHz TTT secondary.	CIV/MIL	<p>Civil use:  <a href="#">Harmonised frequencies: Annex4</a>          Short range devices:          76 - 77 GHz:          TTT:  <a href="#">RIR1012-03</a>,          Railway applications:  <a href="#">RIR1002-06</a>,  <a href="#">ERC/REC 70-03</a></p> <p>Obstacle detection radars for rotorcraft use:  <a href="#">RIR1004-19</a>,  <a href="#">ECC/DEC/(16)01</a></p> <p>77-81 GHz:          Automotive SRR:  <a href="#">RIR1012-04</a>,  <a href="#">ECC/DEC/(04)03</a></p> <p>Amateur:  <a href="#">RIR1101-20</a></p>	
77.5 - 78 GHz	AMATEUR AMATEUR-SATELLITE RADIOLOCATION <a href="#">5.559B</a> Radio astronomy Space research (space-to-Earth) <a href="#">5.149</a>	Amateur / Amateur-Satellite primary.	CIV/MIL	<p>Civil use:  <a href="#">Harmonised frequencies: Annex4</a>          77-81 GHz:          Short range devices:          Automotive SRR:  <a href="#">RIR1012-04</a>,  <a href="#">ECC/DEC/(04)03</a></p> <p>Amateur:  <a href="#">RIR1101-20</a></p>	
78 - 79 GHz	RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) <a href="#">5.149</a> <a href="#">5.560</a>	Amateur / Amateur-Satellite secondary.	CIV/MIL	<p>Civil use:  <a href="#">Harmonised frequencies: Annex4</a>          77-81 GHz:          Short range devices:          Automotive SRR:  <a href="#">RIR1012-04</a>,  <a href="#">ECC/DEC/(04)03</a></p> <p>Amateur:  <a href="#">RIR1101-20</a></p>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
79 - 81 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) <a href="#">5.149</a>	Amateur / Amateur-Satellite secondary.	CIV/MIL	Civil use: <a href="#">Harmonised frequencies: Annex4</a> 77-81 GHz: Short range devices: Automotive SRR: <a href="#">RIR1012-04</a> , <a href="#">ECC/DEC/(04)03</a>  Amateur: <a href="#">RIR1101-20</a>	
81 - 84 GHz	FIXED <a href="#">5.338A</a> FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE MOBILE-SATELLITE (EARTH-TO-SPACE) RADIO ASTRONOMY Space research (space-to-Earth) <a href="#">5.149</a> <a href="#">5.561A</a>	Fixed primary. 81 - 81.5 GHz Amateur / Amateur-Satellite secondary (RR 5.561A).	CIV/MIL	Civil use: 81 - 86 GHz paired with 71 - 76 GHz: Fixed links: <a href="#">RIR0302-46</a> , <a href="#">ECC/REC/(05)07</a>  81 - 81.5 GHz Amateur: <a href="#">RIR1101-20</a>	
84 - 86 GHz	FIXED <a href="#">5.338A</a> FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE RADIO ASTRONOMY <a href="#">5.149</a>	Fixed primary.	CIV/MIL	Civil use: 81 - 86 GHz paired with 71 - 76 GHz: Fixed links: <a href="#">RIR0302-46</a> , <a href="#">ECC/REC/(05)07</a>	
86 - 92 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a>	All emissions are prohibited.	CIV		
92 - 94 GHz	FIXED <a href="#">5.338A</a> MOBILE RADIO ASTRONOMY RADIOLOCATION <a href="#">5.149</a>	Fixed primary planned.	CIV/MIL	Fixed planned.	92 - 94.0 and 94.1 - 95 GHz: Fixed (Point to Point) according to <a href="#">ECC/REC/(14)01</a> planned.

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
94 - 94.1 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) RADIOLOCATION SPACE RESEARCH (ACTIVE) Radio astronomy <u>5.562</u> <u>5.562A</u>		CIV/MIL		
94.1 - 95 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION <u>5.149</u>	Fixed primary planned.	CIV/MIL	Fixed planned.	92 - 94.0 and 94.1 - 95 GHz: Fixed (Point to Point) according to <a href="#">ECC/REC/(14)01</a> planned.
95 - 100 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE <u>5.149</u> <u>5.554</u>	Planned according to National Allocation.	CIV/MIL		
100 - 102 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u> <u>5.341</u>	All emissions are prohibited.	CIV		
102 - 105 GHz	FIXED MOBILE RADIO ASTRONOMY <u>5.149</u> <u>5.341</u>		CIV/MIL		
105 - 109.5 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.562B</u> <u>5.149</u> <u>5.341</u>		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
109.5 - 111.8 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a> <a href="#">5.341</a>	All emissions are prohibited.	CIV		
111.8 - 114.25 GHz	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.562B</a> <a href="#">5.149</a> <a href="#">5.341</a>		CIV/MIL		
114.25 - 116 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a> <a href="#">5.341</a>	All emissions are prohibited.	CIV		
116 - 119.98 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) INTER-SATELLITE <a href="#">5.562C</a> SPACE RESEARCH (PASSIVE) <a href="#">5.341</a>		CIV		
119.98 - 120.02 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) INTER-SATELLITE <a href="#">5.562C</a> SPACE RESEARCH (PASSIVE) <a href="#">5.341</a>		CIV		
120.02 - 122.25 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) INTER-SATELLITE <a href="#">5.562C</a> SPACE RESEARCH (PASSIVE) <a href="#">5.138</a>	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: <a href="#">RIR1008-36</a> , <a href="#">ERC/REC 70-03</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
122.25 - 123 GHz	FIXED INTER-SATELLITE MOBILE <u>5.558</u> Amateur <u>5.138</u>	Amateur secondary. SRD secondary.	CIV/MIL	122.0-123.0 GHz: ISM Band  Short Range Devices: Non-specific SRDs: <a href="#">RIR1008-15</a> , <a href="#">ERC/REC 70-03</a>  Amateur: <a href="#">RIR1101-21</a>	
123 - 126 GHz	FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE-SATELLITE (SPACE-TO-EARTH) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy <u>5.554</u>		CIV/MIL		
126 - 130 GHz	FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE-SATELLITE (SPACE-TO-EARTH) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy <u>5.149</u> <u>5.554</u>		CIV/MIL		
130 - 134 GHz	EARTH EXPLORATION-SATELLITE (ACTIVE) <u>5.562E</u> FIXED INTER-SATELLITE MOBILE <u>5.558</u> RADIO ASTRONOMY <u>5.149</u> <u>5.562A</u>		CIV/MIL		
134 - 136 GHz	AMATEUR AMATEUR-SATELLITE Radio astronomy		CIV/MIL	Amateur: <a href="#">RIR1101-22</a>	

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
136 - 141 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite <u>5.149</u>		CIV/MIL	Amateur: <u>RIR1101-22</u>	
141 - 148.5 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION <u>5.149</u>		CIV/MIL		
148.5 - 151.5 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u>	All emissions are prohibited.	CIV		
151.5 - 155.5 GHz	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION <u>5.149</u>		CIV/MIL		
155.5 - 158.5 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) <u>5.562F</u> FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.562B</u> <u>5.149</u> <u>5.562G</u>		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) <u>5.340</u>	All emissions are prohibited.	CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
167 - 168 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) INTER-SATELLITE MOBILE <u>5.558</u>		CIV/MIL		
168 - 170 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) INTER-SATELLITE MOBILE <u>5.558</u> <u>5.149</u>		CIV/MIL		
170 - 174.5 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) INTER-SATELLITE MOBILE <u>5.558</u> <u>5.149</u>		CIV/MIL		
174.5 - 174.8 GHz	FIXED INTER-SATELLITE MOBILE <u>5.558</u>		CIV/MIL		
174.8 - 182 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) INTER-SATELLITE <u>5.562H</u> SPACE RESEARCH (PASSIVE)		CIV/MIL		
182 - 185 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u>	All emissions are prohibited.	CIV		
185 - 190 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) INTER-SATELLITE <u>5.562H</u> SPACE RESEARCH (PASSIVE)		CIV		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
190 - 191.8 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) SPACE RESEARCH (PASSIVE) <u>5.340</u>	All emissions are prohibited.	CIV		
191.8 - 200 GHz	FIXED INTER-SATELLITE MOBILE <u>5.558</u> MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE <u>5.149</u> <u>5.341</u> <u>5.554</u>		CIV/MIL		
200 - 202 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u> <u>5.341</u> <u>5.563A</u>	All emissions are prohibited.	CIV		
202 - 209 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u> <u>5.341</u> <u>5.563A</u>	All emissions are prohibited.	CIV		
209 - 217 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE RADIO ASTRONOMY <u>5.149</u> <u>5.341</u>		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
217 - 226 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.562B</u> <u>5.149</u> <u>5.341</u>		CIV/MIL		
226 - 231.5 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <u>5.340</u>	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) <u>5.563A</u> <u>5.563B</u>		CIV		
238 - 240 GHz	FIXED FIXED-SATELLITE (SPACE-TO-EARTH) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE		CIV/MIL		
240 - 241 GHz	FIXED MOBILE RADIOLOCATION		CIV/MIL		

Frequency Band	Swiss Allocations				
	National Allocation	Main Use	Civ/Mil	Notes	Strategy
241 - 248 GHz	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite <a href="#">5.138</a> <a href="#">5.149</a>	Amateur / Amateur-Satellite. Short Range Devices.	CIV/MIL	244-246 GHz: ISM band: Short Range Devices: Non-specific SRDs: <a href="#">RIR1008-16</a> , <a href="#">ERC/REC 70-03</a>  241-250 GHz Amateur: <a href="#">RIR1101-23</a>	
248 - 250 GHz	AMATEUR AMATEUR-SATELLITE Radio astronomy <a href="#">5.149</a>	Amateur / Amateur-Satellite primary.	CIV/MIL	Amateur: <a href="#">RIR1101-23</a>	
250 - 252 GHz	EARTH EXPLORATION-SATELLITE (PASSIVE) RADIO ASTRONOMY SPACE RESEARCH (PASSIVE) <a href="#">5.340</a> <a href="#">5.563A</a>	All emissions are prohibited.	CIV		
252 - 265 GHz	FIXED MOBILE MOBILE-SATELLITE (EARTH-TO-SPACE) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE <a href="#">5.149</a> <a href="#">5.554</a>		CIV/MIL		
265 - 275 GHz	FIXED FIXED-SATELLITE (EARTH-TO-SPACE) MOBILE RADIO ASTRONOMY <a href="#">5.149</a> <a href="#">5.563A</a>		CIV/MIL		
275 - 3'000 GHz	Not allocated <a href="#">5.565</a>	Not allocated.	CIV/MIL	Not allocated.	

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## 5 Annexes and Appendices

### 5.1 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
<b>148.5 – 5 000 kHz</b>	Inductive applications	<u>ERC/REC 70 -03</u>	RIR1005-09
<b>984 – 7 484 kHz</b>	Eurobalise 4 234 kHz	<u>ERC/REC 70 -03</u>	RIR1002-04
<b>516 – 8 516 kHz</b>	Euroloop 4 516 kHz		RIR1002-03
<b>5 000 – 30 000 kHz</b>	Inductive applications	<u>ERC/REC 70 -03</u>	RIR1005-13
<b>7 300 – 23 000 kHz</b>	Euroloop 13 547 kHz	<u>ERC/REC 70 -03</u>	RIR1002-05
<b>30 MHz – 12.4 GHz</b>	GPR/WPR (Ground- and Wall Probing Radar imaging systems using Ultra-Wideband (UWB) technology).	ECC/DEC/(06)08	RIR1023-04
<b>2 200 – 8 000 MHz</b>	BMA (Building Material Analysis and classification applications and specific Material Sensing devices using Ultra-Wideband (UWB) technology)	ECC/DEC/(07)01	RIR1023-05
<b>1 600 MHz - 10.6 GHz</b> 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
<b>1 600 MHz - 10.6 GHz</b> 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
<b>1 600 MHz - 10.6 GHz</b> 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

<b>Frequency Range / Main operating frequency bands:</b>	<b>Applications</b>	<b>ECC Decision / Recommendations</b>	<b>Technical interface regulations</b>
<b>6 000 – 8 500 MHz</b>	Devices using UWB technology onboard aircraft operating in the frequency band from 6 GHz to 8.5 GHz.	ECC/DEC/(12)03	RIR1023-06
<b>21.65 – 26.65 GHz</b>	24 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)10	RIR1012-05
<b>24.25 – 26.65 GHz</b>	24 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)10	RIR1012-07
<b>76 – 77 GHz</b>	76 GHz Vehicle and infrastructure radar	ERC/REC 70-03	RIR1012-03
<b>77 – 81 GHz</b>	79 GHz Automotive Short Range Radar (SRR)	ECC/DEC/(04)03	RIR1012-04
<b>4 500 – 7000 MHz</b>	Tank level probing radar (TLPR)	ERC/REC 70-03	<u>RIR1004-09</u>
<b>8 500 – 10 600 MHz</b>	Tank level probing radar (TLPR)	ERC/REC 70-03	<u>RIR1004-10</u>
<b>24.05 – 27.00 GHz</b>	Tank level probing radar (TLPR)	ERC/REC 70-03	<u>RIR1004-11</u>
<b>57.00 – 64.00 GHz</b>	Tank level probing radar (TLPR)	ERC/REC 70-03	<u>RIR1004-12</u>
<b>75.00 – 85.00 GHz</b>	Tank level probing radar (TLPR)	ERC/REC 70-03	<u>RIR1004-13</u>
<b>6 000 – 8 500 MHz</b>	Level probing radar (LPR)	<u>ECC/DEC/(11)02</u>	<u>RIR1004-15</u>
<b>24.05 – 26.5 GHz</b>	Level probing radar (LPR)	<u>ECC/DEC/(11)02</u>	<u>RIR1004-16</u>
<b>57 – 64 GHz</b>	Level probing radar (LPR)	<u>ECC/DEC/(11)02</u>	<u>RIR1004-17</u>
<b>75 – 85 GHz</b>	Level probing radar (LPR)	<u>ECC/DEC/(11)02</u>	<u>RIR1004-18</u>

## 5.2 Annex 2: List of specific assignments

Frequency - Range	TX Fix	TX Mobile	Applications
<b>3010 kHz</b>	3010.0	3010.0	Automatic DTS-Mail and voice
<b>4086 - 4426 kHz</b>	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
<b>4654 kHz</b>	4654.0	4654.0	Aeronautical Simplex
<b>4763 kHz</b>	4763.0	4763.0	Automatic DTS-Mail and voice
<b>5450.5 kHz</b>	5450.5	5450.5	Automatic DTS-Mail and voice
<b>6312.0 kHz</b>	6312.0	6312.0	International distress frequency for DSC
<b>6643 kHz</b>	6643.0	6643.0	Aeronautical Simplex
<b>8201 - 8809 kHz</b>	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
<b>8936 kHz</b>	8936.0	8936.0	Aeronautical Simplex
<b>10069 kHz</b>	10069.0	10069.0	Aeronautical Simplex
<b>11172 kHz</b>	11172.0	11172.0	Automatic DTS-Mail and voice
<b>12233 - 13205 kHz</b>	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
<b>13990 kHz</b>	13990.0	13990.0.	Automatic DTS-Mail and voice
<b>16390 - 17407 kHz</b>	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

<b>Frequency - Range</b>	<b>TX Fix</b>	<b>TX Mobile</b>	<b>Applications</b>
<b>18023 kHz</b>	18023.0	18023.0	Aeronautical Simplex
<b>18230 kHz</b>	18230.0	18230.0	Automatic DTS-Mail and voice
<b>18804 / 19779 kHz</b>	19779.0	18804.0	Maritime Duplex
<b>20090 kHz</b>	20090.0	20090.0.	Automatic DTS-Mail and voice
<b>22039 - 22831 kHz</b>	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
<b>25076 / 26151 kHz</b>	26151.0	25076.0	Maritime Duplex

<b>Frequency - Range</b>	<b>Frequency 1</b>	<b>Frequency 2</b>	<b>Frequency 3</b>	<b>Frequency 4</b>	<b>Frequency 5</b>	<b>Applications</b>
<b>26965 - 27405 kHz</b>	26965	26975	26985	27005	27015	<b>CB radio</b>
	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
<b>27425 - 27925 kHz</b>						<b>Professional radio</b>
	27425	27435	27445	27465	27475	Private companies
	27485	27905				Private companies
	27805	27885				Public police services
	27845	27925				Firebrigades
	27455					Rescue services
<b>147.300 - 147.400 MHz</b>	147.300	147.325	147.375	147.400		<b>Paging</b>
<b>156 - 174 MHz</b>						<b>PMR</b>
	156.800					Rescue on lakes
	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

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
<b>156 - 174 MHz</b>	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)
	159.675	and	159.850			Heli 1 and 2
	161.300					Emergency
	161.975	162.025	<u>NIB/NPBU</u>			Automatic Identification and Surveillance System (AIS) <b>Maritime AIS equipment shall not be operated on Swiss territory with the exception on the Rhine, between Rheinfelden and Kembs!</b>
	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
<b>174 - 230 MHz</b>						<b>Broadcasting band III</b>
	174	to	181			Channel 5
	181	to	188			Channel 6
	↓	↓	↓			↓
	216	to	223			Channel 11
	223	to	230			Channel 12
<b>439.550 - 439.650MHz</b>	439.550	439.650				<b>Civil defence</b>
<b>446.0 - 446.2 MHz</b>						<b>PMR 446; Professional Mobile Radio</b>
	446.003125	446.009375	to	446.190625	446.196875	6.25 kHz raster
	446.00625	446.01875	to	446.10625	446.11875	12.5 kHz raster
<b>470 - 582 MHz</b>						<b>Broadcasting band IV</b>
	470	to	478			channel 21
	478	to	486			channel 22
	↓	↓	↓			↓
	574	to	582			channel 34
<b>582 - 782 MHz</b>						<b>Broadcasting band V</b>
	582	to	590			channel 35
	590	to	598			channel 36

Frequency - Range	Frequency 1	Frequency 2	Frequency 3	Frequency 4	Frequency 5	Applications
11746.66 - 12091.90 MHz	598	to	606			channel 37
	606	to	614			channel 38
	↓	↓	↓			↓
	686	to	694			channel 48
	↓	↓	↓			↓
	774	to	782			channel 59
						<b>BSS channels according to RR Appendix 30 at orbital position – 18.8°</b>
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	

## 5.3 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 making available 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:

<b>Aeronautical</b>	Aeronautical communications	<a href="#">RIR0101</a>
	Aeronautical navigation	<a href="#">RIR0102</a>
	Aeronautical surveillance	<a href="#">RIR0103</a>
	Aeronautical emergency	<a href="#">RIR0104</a>
	Aeronautical telemetry	<a href="#">RIR0105</a>
<b>Broadcasting</b>	Broadcasting (terrestrial)	<a href="#">RIR0201</a>
	SAP/SAB and ENG/OB	<a href="#">RIR0203</a>
<b>Fixed links</b>	Point-to-Multipoint	<a href="#">RIR0301</a>
	Point-to-Point	<a href="#">RIR0302</a>
<b>Land mobile</b>	Digital cellular	<a href="#">RIR0501</a>
	Cordless telephones	<a href="#">RIR0503</a>
	Emergency services	<a href="#">RIR0504</a>
	Paging	<a href="#">RIR0506</a>
	PMR/PAMR	<a href="#">RIR0507</a>
	ITS	<a href="#">RIR0510</a>
<b>Maritime</b>	GMDSS	<a href="#">RIR0601</a>
	Maritime communications	<a href="#">RIR0603</a>
	Maritime navigation	<a href="#">RIR0604</a>
<b>Meteorology</b>	Sondes	<a href="#">RIR0702</a>
	Weather radar	<a href="#">RIR0703</a>
	Wind profilers	<a href="#">RIR0705</a>
<b>Satellite systems (civil)</b>	FSS Earth stations	<a href="#">RIR0806</a>
	MSS Earth stations	<a href="#">RIR0808</a>
	Radionavigation-satellite systems (RNSS)	<a href="#">RIR0809</a>

<b>Short Range Devices</b>	Alarms	<a href="#">RIR1001</a>
	Railway applications	<a href="#">RIR1002</a>
	Tracking, tracing and data acquisition	<a href="#">RIR1003</a>
	Radiodetermination applications	<a href="#">RIR1004</a>
	Inductive applications	<a href="#">RIR1005</a>
	Wireless applications in healthcare	<a href="#">RIR1006</a>
	Model control	<a href="#">RIR1007</a>
	Non-specific SRDs	<a href="#">RIR1008</a>
	Radio microphones and ALD	<a href="#">RIR1009</a>
	Wideband data transmission systems	<a href="#">RIR1010</a>
	RFID	<a href="#">RIR1011</a>
	TTT	<a href="#">RIR1012</a>
	Wireless audio applications	<a href="#">RIR1013</a>
	Telecommand, telemetry and data transmission with higher power	<a href="#">RIR1021</a>
	UWB applications	<a href="#">RIR1023</a>
<b>Other</b>	Amateur	<a href="#">RIR1101</a>
	CB Radio	<a href="#">RIR1102</a>
	Radiolocation (civil)	<a href="#">RIR1108</a>
<b>Draft</b>	Draft for future RIR	<a href="#">RIR9999</a>

- \*) Federal Office of Communications OFCOM  
 Licenses and Frequency Management / Frequency Planning  
 Zukunftstrasse 44  
 P.O. Box  
 CH – 2501 Biel - Bienne  
 Switzerland  
 Tel : +41 (0) 32 327 55 11  
 Fax: +41 (0) 32 327 57 77  
<http://www.ofcom.ch>  
<http://www.bakom.ch>: → Frequencies and antennas → National Frequency Allocation Plan → Technical interface regulations:  
<https://www.bakom.admin.ch/bakom/en/homepage/frequencies-and-antennas/national-frequency-allocation-plan/technical-interface-regulations.html>

## 5.4 Annex 4: Harmonised frequency ranges

Indicative list of harmonised frequency ranges and applications in Switzerland (CH) and the Principality of Liechtenstein (FL) and in Europe.

Frequency band	Application	Regulation in CH and FL	Difference in regulation	Harmonised regulation in Europe *
9 – 315 kHz	SRD / Active medical implants	<a href="#">RIR1006-01</a>	-	81 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
9 – 20.05 kHz	SRD / Inductive applications	<a href="#">RIR1005-01</a>	-	36 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
20.05 – 135 kHz	SRD / Inductive applications	<a href="#">RIR1005-01</a>	-	36, 37, 39, 40a-e, 41, 42a-b ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
135 – 140 kHz	SRD / Inductive applications	<a href="#">RIR1005-01</a>	-	106 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
140 – 148.5 kHz	SRD / Inductive applications	<a href="#">RIR1005-01</a>	-	73 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
148.5 – 5000 kHz	SRD / Inductive applications	<a href="#">RIR1005-09</a>	-	74 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
400 – 600 kHz	SRD / Inductive applications	<a href="#">RIR1005-14</a>	-	75 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
457 kHz	SRD / Detection of avalanche victims	<a href="#">RIR1003-01</a>	-	49 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
984-7484 kHz	Transport and Traffic Telematics, for Eurobalise only	<a href="#">RIR1002-04</a>	-	109 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
3155 – 3400 kHz	SRD / Inductive applications	<a href="#">RIR1005-10</a>	-	76 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
5000 – 30000 kHz	SRD / Inductive applications	<a href="#">RIR1005-13</a>	-	77 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
6765 – 6795 kHz	SRD / Inductive applications	<a href="#">RIR1005-02</a>	-	114 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
7 300 – 23 000 kHz	Transport and Traffic Telematics , for Euroloop only	<a href="#">RIR1002-05</a>	-	110 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
7400 – 8800 kHz	SRD / Inductive applications	<a href="#">RIR1005-03</a>	-	45 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
10200 – 11000 kHz	SRD / Inductive applications	<a href="#">RIR1005-11</a>	-	78 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
13.553 – 13.567 MHz	SRD / Inductive applications	<a href="#">RIR1005-04</a>	-	116 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
13.553 – 13.567 MHz	SRD / Inductive applications	<a href="#">RIR1005-12</a>	-	79 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
13.553 – 13.567 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-02</a>	-	24 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
26.957 – 27.283 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-03</a>	-	25 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
26.990 – 27.000 MHz	SRD / Model control	<a href="#">RIR1007-01</a>	-	94 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483
26.990 – 27.000 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-38</a>	-	118 ( <a href="#">2014_12_subcl_1</a> ), (EU) 2017/1483

Frequency band	Application	Regulation in CH and FL	Difference in regulation	Harmonised regulation in Europe *)
27.040 – 27.050 MHz	SRD / Model control	<a href="#">RIR1007-01</a>	-	95 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.040 – 27.050 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-38</a>	-	119 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.090 – 27.100 MHz	SRD / Model control	<a href="#">RIR1007-01</a>	-	96 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.090 – 27.100 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-38</a>	-	120 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.140 – 27.150 MHz	SRD / Model control	<a href="#">RIR1007-01</a>	-	97 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.140 – 27.150 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-38</a>	-	121 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.190 – 27.200 MHz	SRD / Model control	<a href="#">RIR1007-01</a>	-	98 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
27.190 – 27.200 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-38</a>	-	122 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
30 – 37.5 MHz	SRD / Medical implants	<a href="#">RIR1006-04</a>	-	82 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
40.660 – 40.700 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-04</a>	-	19 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
87.5 – 108 MHz	SRD / Wireless audio application	<a href="#">RIR1013-19</a>	-	86 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4 – 169.475 MHz	SRD / Aids for hearing impaired	<a href="#">RIR1009-14</a>	-	68 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4 – 169.475 MHz	SRD / Meter reading systems	<a href="#">RIR1003-03</a>	-	123 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4 – 169.475 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-32</a>	-	80 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4 – 169.4875 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-33</a>	-	128 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4875 – 169.5875 MHz	SRD / Aids for hearing impaired	<a href="#">RIR1009-15</a>	-	64 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.4875 – 169.5875 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-34</a>	-	124 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
169.5875 - 169.8125 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-35</a>	-	129 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
401 – 402 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	<a href="#">RIR1006-07</a>	-	83 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
402 – 405 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	<a href="#">RIR1006-02</a>	-	47 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
405 – 406 MHz	Ultra Low Power Active Medical Implant communication systems (ULP-AMI)	<a href="#">RIR1006-08</a>	-	84 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
433.05 – 434.04 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-18</a>	-	61 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483
433.05 – 434.04 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-05</a>	-	20 <a href="#">(2014_12_subcl_1)</a> , (EU) 2017/1483

<b>Frequency band</b>	<b>Application</b>	<b>Regulation in CH and FL</b>	<b>Difference in regulation</b>	<b>Harmonised regulation in Europe *)</b>
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	<u>RIR1008-18</u>	-	63 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	<u>RIR1008-05</u>	-	20, 125 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
434.04 – 434.79 MHz	SRD / Non Specific Short Range Devices	<u>RIR1008-19</u>	-	65 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
446.0 – 446.2 MHz	Land mobile / PMR446 analog and digital	<u>RIR0507-35</u>		51 <u>(2014_12_subcl_1)</u> , 99 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
863 – 865 MHz	SRD / Radio Microphones	<u>RIR1009-05</u>	-	48 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
863 – 865 MHz	SRD / Wireless Audio applications	<u>RIR1013-01</u>	-	48 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
863 – 870 MHz	SRD / Non Specific Short Range Devices / FHSS	<u>RIR1008-20</u>	-	<u>(EU) 2017/1483</u>
863 – 870 MHz	SRD / Non Specific Short Range Devices / Wide band DSSS and other non FHSS	<u>RIR1008-22</u>	-	66 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
863 – 870 MHz	SRD / Non Specific Short Range Devices / Narrow / wide band, BW max. 0.6 MHz	<u>RIR1008-29</u>	-	66 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 868 MHz	SRD / Non Specific Short Range Devices / FHSS	<u>RIR1008-21</u>	-	67 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 868 MHz	SRD / Non Specific Short Range Devices / non FHSS, BW max. 0.6 MHz	<u>RIR1008-25</u>	-	67 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 868 MHz	SRD / Non Specific Short Range Devices / non FHSS, BW 0.2 – 3 MHz	<u>RIR1008-28</u>	-	67 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 868 MHz	SRD / Non Specific Short Range Devices / Narrow / wide band: BW max. 0.3 MHz	<u>RIR1008-30</u>	-	67 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 868 MHz	SRD / Radio Frequency Identification (RFID) Devices	<u>RIR1011-07</u>	-	56 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
865 – 870 MHz	SRD / Non Specific Short Range Devices / Wide band non FHSS	<u>RIR1008-24</u>	-	67 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
868.0 – 868.6 MHz	SRD / Non Specific Short Range Devices	<u>RIR1008-06</u>	-	28 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
868.6 – 868.7 MHz	SRD / Alarms	<u>RIR1001-02</u>	-	32 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
868.7 – 869.2 MHz	SRD / Non Specific Short Range Devices	<u>RIR1008-07</u>	-	29 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
869.2 – 869.25 MHz	SRD / Social Alarms	<u>RIR1001-05</u>	-	35 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
869.25 – 869.3 MHz	SRD / Alarms	<u>RIR1001-03</u>	-	33 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483
869.300 – 869.400 MHz	SRD / Alarms	<u>RIR1001-06</u>	-	72 <u>(2014_12_subcl_1)</u> , (EU) 2017/1483

Frequency band	Application	Regulation in CH and FL	Difference in regulation	Harmonised regulation in Europe *)
869.4 – 869.65 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-09</a>	-	30 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
869.4 – 869.65 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-29</a>	-	130 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
869.65 – 869.7 MHz	SRD / Alarms	<a href="#">RIR1001-04</a>	-	34 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
869.7 – 870 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-27</a>	-	69 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
869.7 – 870 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-10</a>	-	31 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
876 – 880 / 921 – 925 MHz	Land mobile / GSM-R	<a href="#">RIR0501-16</a>	-	9a ( <u>2014_12_subcl_1</u> )
880 – 915 / 925 – 960 MHz	Land mobile / GSM	<a href="#">RIR0501-01</a>	-	9a ( <u>2014_12_subcl_1</u> ), <u>2011/251/EU</u> , <u>2009/766/EC</u>
1525.0 – 1544.0 MHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-01</a>	-	11 ( <u>2014_12_subcl_1</u> )
1525.0 – 1544.0 MHz	Satellite systems / Land Mobile Satellite Service	<a href="#">RIR0808-07</a>	-	16 ( <u>2014_12_subcl_1</u> )
1555.0 – 1559.0 MHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-01</a>	-	11 ( <u>2014_12_subcl_1</u> )
1555.0 – 1559.0 MHz	Satellite systems / Land Mobile Satellite Service	<a href="#">RIR0808-07</a>	-	16 ( <u>2014_12_subcl_1</u> )
1610 – 1613.5 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	<a href="#">RIR0808-06</a>	Frequency range	14 ( <u>2014_12_subcl_1</u> )
1613.8 – 1626.5 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	<a href="#">RIR0808-06</a>	Frequency range	14 ( <u>2014_12_subcl_1</u> )
1626.5 – 1645.5 MHz	Satellite systems / Land Mobile Satellite Service	<a href="#">RIR0808-07</a>	Frequency range	16 ( <u>2014_12_subcl_1</u> )
1631.5 – 1634.5 MHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-01</a>	Frequency range	11 ( <u>2014_12_subcl_1</u> )
1656.5 – 1660.5 MHz	Satellite systems / Land Mobile Satellite Service	<a href="#">RIR0808-02</a>	Frequency range	16 ( <u>2014_12_subcl_1</u> )
1656.5 – 1660.5 MHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-01</a>	Frequency range	11 ( <u>2014_12_subcl_1</u> )
1710 – 1785 / 1805 – 1880 MHz	Land mobile / GSM	<a href="#">RIR0501-02</a>	Frequency range	9a ( <u>2014_12_subcl_1</u> ), <u>2011/251/EU</u> , <u>2009/766/EC</u>
1880 – 1900 MHz	Land mobile / DECT	<a href="#">RIR0503-01</a>	-	18 ( <u>2014_12_subcl_1</u> )
1880 – 1900 MHz	Land mobile / DECT	<a href="#">RIR0503-01</a>	-	H10 ( <u>2014_12_subcl_2</u> )
1980 – 2010 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	<a href="#">RIR0808-10</a>	-	15 ( <u>2014_12_subcl_1</u> )
2170 – 2200 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	<a href="#">RIR0808-10</a>	-	15 ( <u>2014_12_subcl_1</u> )
2400 – 2483.5 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-11</a>	-	21 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483

Frequency band	Application	Regulation in CH and FL	Difference in regulation	Harmonised regulation in Europe *)
2400 – 2483.5 MHz	SRD / Wideband Data Transmission Systems	<a href="#">RIR1010-01</a>	-	22 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
2400 – 2483.5 MHz	SRD / Radio determination applications	<a href="#">RIR1004-01</a>	-	26 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
2446 – 2454 MHz	SRD / Radio Frequency Identification (RFID)	<a href="#">RIR1011-01</a>	-	100 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
2483.5 – 2500 MHz	Satellite systems / Satellite-Personal Communications (PCN) earth stations	<a href="#">RIR0808-05</a>	-	14 ( <u>2014_12_subcl_1</u> )
2483.5 – 2500 MHz	SRD / Active medical implants (not for peripheral master units)	<a href="#">RIR1006-09</a>	-	117 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
2483.5 – 2500 MHz	SRD / Active medical implants (peripheral master units)	<a href="#">RIR1006-09</a>	-	H09 ( <u>2014_12_subcl_2</u> ), (EU) 2017/1483
2483.5 – 2500 MHz	SRD / Medical body area network systems, within healthcare facilities	<a href="#">RIR1006-10</a>	-	H09 ( <u>2014_12_subcl_2</u> ), (EU) 2017/1483
2483.5 – 2500 MHz	SRD / Medical body area network systems, within patient's home	<a href="#">RIR1006-11</a>	-	H09 ( <u>2014_12_subcl_2</u> ), (EU) 2017/1483
2500 – 2570 MHz	Land mobile / IMT User Equipment	<a href="#">RIR0501-11</a>	-	<u>EC Decision 2008/477/EC</u>
2620 – 2690 MHz	Land mobile / IMT Base Station	<a href="#">RIR0501-12</a>	-	<u>EC Decision 2008/477/EC</u>
4500 – 7000 MHz	SRD / Tank level probing radar (TLPR)	<a href="#">RIR1004-09</a>	-	89 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
5150 – 5350 MHz	Wideband Data Transmission Systems	<a href="#">RIR1010-05</a>	-	H01 ( <u>2014_12_subcl_2</u> ), 2005/513/EC 2007/90/EC
5470 – 5725 MHz	Wideband Data Transmission Systems	<a href="#">RIR1010-04</a>	-	54 ( <u>2014_12_subcl_1</u> ), 2005/513/EC
5725 – 5875 MHz	SRD / Non Specific Short Range Devices	<a href="#">RIR1008-12</a>	-	43 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
5795 – 5805 MHz	Transport and Traffic Telematics. For Road Toll Systems only.	<a href="#">RIR1012-01</a>	-	H05 ( <u>2014_12_subcl_2</u> ), (EU) 2017/1483
5875 – 5905 MHz	Intelligent Transport Systems (ITS)	<a href="#">RIR0501-01</a>	-	<u>2008/671/EC</u>
6000 – 8500 MHz	SRD / Level probing radar (LPR)	<a href="#">RIR1004-15</a>	-	H06 ( <u>2014_12_subcl_2</u> ), (EU) 2017/1483
8500 – 10600 MHz	SRD / Tank level probing radar (TLPR)	<a href="#">RIR1004-10</a>	-	90 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
10.7 – 11.7 GHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-15</a>	-	12 ( <u>2014_12_subcl_1</u> )
12.5 – 12.75 GHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-15</a>	-	12 ( <u>2014_12_subcl_1</u> )
14.0 – 14.25 GHz	Satellite systems / Land Mobile Earth Stations	<a href="#">RIR0808-15</a>	-	12 ( <u>2014_12_subcl_1</u> )
17.1 – 17.3 GHz	SRD / Radio determination applications	<a href="#">RIR1004-14</a>	-	88 ( <u>2014_12_subcl_1</u> ), (EU) 2017/1483
21.65 – 26.65 GHz	SRD / Automotive short-range radar 24 GHz	<a href="#">RIR1012-05</a>	-	52 ( <u>2014_12_subcl_1</u> ), 2005/50/EC, 2011/485/EU

<b>Frequency band</b>	<b>Application</b>	<b>Regulation in CH and FL</b>	<b>Difference in regulation</b>	<b>Harmonised regulation in Europe *)</b>
24.00 – 24.25 GHz	SRD / Non Specific Short Range Devices	<u>RIR1008-13</u>	Frequency range TX Power	101, 102, 103, 104 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
24.05 – 26.5 GHz	SRD / Level probing radar (LPR)	<u>RIR1004-16</u>	-	H07 <u>(2014_12_subcl_2)</u> , <u>(EU) 2017/1483</u>
24.05 – 27.00 GHz	SRD / Tank level probing radar (TLPR)	<u>RIR1004-11</u>	-	91 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
24.15 – 24.25 GHz	SRD / Movement Detection / Non Specific Short Range Devices	<u>RIR1008-13</u>	-	27 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
24.25 – 24.5 GHz	SRD / Automotive radar	<u>RIR1012-08</u>	-	111, 112, 113 <u>(2014_12_subcl_1)</u> , <u>(2014_subcl_2)</u>
24.25 – 26.65 GHz	SRD / Automotive short-range radar 24 GHz	<u>RIR1012-07</u>	-	52b <u>(2014_12_subcl_1)</u> , <u>(2011/485/EU)</u>
57 – 64 GHz	SRD / Tank level probing radar (TLPR)	<u>RIR1004-12</u>	-	92 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
57 – 66 GHz	SRD / Wideband Data Transmission Systems	<u>RIR1010-07</u>	-	H03 <u>(2014_12_subcl_2)</u> , <u>(EU) 2017/1483</u>
61.0 – 61.5 GHz	SRD / Non Specific Short Range Devices	<u>RIR1008-14</u>	-	71 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
63 – 64 GHz	Intelligent Transport Systems (ITS)	<u>RIR0510-04</u>	-	105 <u>(2014_12_subcl_1)</u>
75 – 85 GHz	SRD / Level probing radar (LPR)	<u>RIR1004-18</u>	-	H08 <u>(2014_12_subcl_2)</u> , <u>(EU) 2017/1483</u>
75 – 85 GHz	SRD / Tank level probing radar (TLPR)	<u>RIR1004-13</u>	-	93 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
76 – 77 GHz	SRD / Vehicle and infrastructure radar	<u>RIR1012-03</u>	-	50 <u>(2014_12_subcl_1)</u>
76 – 77 GHz	SRD / Obstacle detection systems for rotorcraft use	<u>RIR1004-19</u>	-	<u>(EU) 2017/1483</u>
77 – 81 GHz	SRD / Vehicle and infrastructure radar	<u>RIR1012-04</u>	-	53 <u>(2014_12_subcl_1)</u> , <u>2004/545/EC</u>
122 – 122.25-GHz	SRD / Non Specific Short Range Devices	<u>RIR1008-36</u>		(107) <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
122.25 – 123-GHz	SRD / Non Specific Short Range Devices	<u>RIR1008-15</u>	-	107 <u>(2014_12_subcl_1)</u> , <u>(EU) 2017/1483</u>
1.6 – 10.6 GHz	SRD using ultra-wideband technology	<u>RIR1023</u>	-	H02 a-f <u>(2014_12_subcl_2)</u> , <u>(EU) 2017/1438</u> <u>2014/702/EU</u> <u>2009/343/EC</u> , <u>2007/131/EC</u>

\*) Sub- classes of Class 1 according to Art. 1(1) of Commission Decision 2000/299/EC and Art. 8(2) of Directive 2014/53/EU and relevant EC Decisions.

## 5.5 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
CNPC	Control and Non-Payload Communication
COM	Communication
COSPAS	Cosmicheskaya Sistema Poiska Avariynich Sudow
CT	Cordless Telephone
DA2GC	Direct Air-to-Ground Communications
CW	Continuous 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 or e.r.p.e.p.	Effective Radiated Peak Envelope Power
ES	Earth Station
ESV	Earth Stations on-board Vessels
ETSI	European Telecommunications Standards Institute
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
GFT	Global Flight Tracking
GLONASS	Global Orbiting Navigation Satellite System (Globalnaya Navigatsionnaya Sputnikovaya 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
IoT	Internet of Things
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
LBRDC	Low Bit Rate Data Communications
LBT	Listen Before Talk, Listen Before Transmit
LEO	Low Earth Orbiting
LEST	Low EIRP Satellite Terminal
Links	Radio Connections
LPD	Low Power Device
LPR	Level Probing Radar
LLR	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)
UA	Unmanned Aircraft
UAS	Unmanned Aircraft System
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 Band Width
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)
WAIC	Wireless Avionics Intra-Communications systems
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

## **5.6 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/(17)06** The harmonised use of the frequency bands 1427-1452 MHz and 1492-1518 MHz for Mobile/Fixed Communications Networks Supplemental Downlink (MFCN SDL). Approved 17. November 2017.
- **ECC/DEC/(17)04** The harmonised use and exemption from individual licensing of fixed earth stations operating with NGSO FSS satellite systems in the frequency bands 10.7-12.75 GHz and 14.0-14.5 GHz. Approved 30 June 2017.
- **ECC/DEC/(16)02** Harmonised technical conditions and frequency bands for the implementation of Broadband Public Protection and Disaster Relief (BB-PPDR) systems. Approved 17 June 2016.
- **ECC/DEC/(16)01** The harmonised frequency band 76-77 GHz, technical characteristics, exemption from individual licensing and free carriage and use of obstacle detection radars for rotorcraft use. Approved 04 March 2016. Corrected 18 November 2016.
- **ECC/DEC/(15)05** 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** 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)01** 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** 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** The harmonised use, free circulation, and exemption from individual licensing of Earth Stations On Mobile Platforms (ESOMPs) within the frequency bands 17.3-20.2 GHz and 27.5-30.0 GHz. Approved 8 March 2013.
- **ECC/DEC/(12)04** ECC Decision of 2 November 2012 on the withdrawal of ECC Decision (02)01. Approved 02 November 2012.
- **ECC/DEC/(12)03** The harmonised conditions for UWB applications onboard aircraft. Approved 02 November 2012.
- **ECC/DEC/(12)01** Exemption from individual licensing and free circulation and use of terrestrial and satellite mobile terminals operating under the control of networks. Approved 01 June 2012. Corrected 3 July 2015.
- **ECC/DEC/(11)06** Harmonised frequency arrangements for mobile/fixed communications networks (MFCN) operating in the bands 3400-3600 MHz and 3600-3800 MHz. Approved 09 December 2011. Amended 14 March 2014.
- **ECC/DEC/(11)05** 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** The harmonised use of frequencies for Citizens' Band (CB) radio equipment. Approved 24 June 2011. Amended 17 June 2016.
- **ECC/DEC/(11)02** 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. Approved 11 March 2011. Updated 17 November 2017.
- **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. Amended 03 March 2017.
- **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/\(09\)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\*\*](#) 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\*\*](#) Harmonised use of the 63-64 GHz frequency band for Intelligent Transport Systems (ITS). Approved 13 March 2009. Amended 04 March 2016.
- [\*\*ECC/DEC/\(08\)05\*\*](#) The harmonisation of frequency bands for the implementation of digital Public Protection and Disaster Relief (PPDR) narrow band and wide band radio applications in bands within the 380-470 MHz range. Approved 27 June 2008. Amended 17 June 2016.
- [\*\*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\*\*](#) ECC Decision of 30 March 2007 on specific Material Sensing devices using Ultra-Wideband (UWB) technology. Amended 26 June 2009. Corrected 18 November 2016.
- [\*\*ECC/DEC/\(06\)13\*\*](#) 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\*\*](#) 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. Approved 01 December 2006. Amended 03 March 2017.
- [\*\*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\*\*](#) 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. Updated 30 June 2017.
- [\*\*ECC/DEC/\(06\)06\*\*](#) 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\*\*](#) 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\*\*](#) 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\*\*](#) 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, updated 17 November 2017.
- **ECC/DEC/(05)01** 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** ECC Decision of 12 November 2004 on the designation of the bands 1518 - 1525 MHz and 1670 - 1675 MHz for the Mobile-Satellite Service. Amended 26 June 2009.
- **ECC/DEC/(04)08** ECC Decision of 9 July 2004 on the harmonised use of the 5 GHz frequency bands for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs). Amended 12 November 2004, 5 September 2007, 30 October 2009.
- **ECC/DEC/(04)06** 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** 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** 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. Updated 17 November 2017.
- **ERC/DEC/(01)12** 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. Approved 12 March 2001. Updated 17 November 2017.
- **ERC/DEC/(01)11** 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. Approved 12 March 2001. Updated 17 November 2017.
- **ERC/DEC/(01)08** ERC Decision of 19 October 2000 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** 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). Approved 19 October 2000. Amended: 04 March 2016.
- **ERC/DEC/(00)02** ERC Decision of 27 March 2000 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)15** ERC Decision 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** ERC Decision of 21 March 1997 on the extended frequency bands to be used for the GSM Digital Pan-European Communication System.

- [\*\*ERC/DEC/\(95\)03\*\*](#) ERC Decision of 1 December 1995 on the frequency bands to be designated for the introduction of DCS 1800.
- [\*\*ERC/DEC/\(94\)03\*\*](#) ERC Decision of 24th October 1994 on the frequency band to be designated for the coordinated introduction of the Digital European Cordless Telecommunications system.
- [\*\*ERC/DEC/\(94\)01\*\*](#) ERC Decision of 24th October 1994 on the frequency bands to be designated for the coordinated introduction of the GSM digital pan-European communications system.

### **Recommendations:**

- [\*\*ECC/REC/\(16\)03\*\*](#) Cross-border coordination for Broadband Public Protection and Disaster Relief (BB-PPDR) systems in the frequency band 698 to 791 MHz. Approved 17 October 2016.
- [\*\*ECC/REC/\(15\)01\*\*](#) Cross-border coordination for mobile / fixed communications networks (MFCN) in the frequency bands: 694-790 MHz, 1452-1492 MHz, 3400-3600 MHz and 3600-3800 MHz. Approved 13 February 2015. Amended 5 February 2016.
- [\*\*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. Amended May 2015.
- [\*\*ECC/REC/\(11\)10\*\*](#) Location tracking application for emergency and disaster situations. Approved 21 October 2011.
- [\*\*ECC/REC/\(11\)09\*\*](#) UWB Location Tracking Systems TYPE 2 (LT2). Approved 21 October 2011. Amended 22 May 2015.
- [\*\*ECC/REC/\(11\)08\*\*](#) Framework for authorisation regime of indoor global navigation satellite system (GNSS) pseudolites in the band 1559-1610 MHz. Approved 21 October 2011.
- [\*\*ECC/REC/\(11\)06\*\*](#) Block Edge Mask Compliance Measurements for Base Stations. Approved October 2011. Approved Annex 3 - October 2013. Approved Annex 4 – October 2016.
- [\*\*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\*\*](#) Frequency planning and frequency coordination for the GSM 900, GSM 1800, E-GSM and GSM-R Land Mobile Systems (Except direct mode operation (DMO) channels).
- [\*\*ECC/REC/\(05\)07\*\*](#) (Revised Dublin 2009 and Lugano 2013) Radio frequency channel arrangements for Fixed Service Systems operating in the bands 71 - 76 GHz and 81 – 86.
- [\*\*ECC/REC/\(05\)02\*\*](#) (Revised Dublin 2009) Use of the 64-66 GHz frequency band for Fixed Service.
- [\*\*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\*\*](#) (revised June 2007 and May 2011 and June 2015) Channel arrangements for digital Fixed Service Systems operating in the frequency range 7125-8500 MHz.

- [\*\*ECC/REC/\(02\)02\*\*](#) (Revised, Rottach Egern, February 2010) Preferred channel arrangement for fixed service systems (point-to-point and point-to-multipoint) operating in the frequency band 31 – 31.3 GHz.
- [\*\*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\*\*](#) (revised Rottach Egern, February 2010) Preferred channel arrangement for digital fixed service systems operating in the frequency band 31.8- 33.4 GHz.
- [\*\*ERC/REC/\(01\)01\*\*](#) (revised Dublin 2003, Helsinki 2007, Cluj-Napoca 2016). Cross-border coordination for mobile/fixed communications networks (MFCN) in the frequency bands: 1920-1980 MHz and 2110-2170 MHz.
- [\*\*ERC/REC/\(00\)04\*\*](#) Harmonised frequencies and free circulation and use for meteor scatter applications.
- [\*\*ERC/REC 70-03\*\*](#) Relating to the use of Short Range Devices (SRD). Tromsø 1997. Subsequent amendments. 13 October 2017.
- [\*\*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 terrestrial audio and video Programme Making and Special Events (PMSE) applications. Approved 01 May 1995. Amended 11 February 2003. Amended 18 October 2016.
- [\*\*ERC/REC 14-03\*\*](#) Turku 1996, Podebrady 1997. Harmonised radio frequency channel arrangements and block allocations for low and medium capacity systems in the band 3'400 MHz to 3'600 MHz.
- [\*\*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. Approved Bonn 1995. Amended 19 September 2014.
- [\*\*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 Hague 1996) The use of the band 14.0- 14.5 GHz for Very Small Aperture Terminals (VSAT) and Satellite News Gathering (SNG).
- [\*\*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 May 2015.
- [\*\*ERC/REC 12-08\*\*](#) (Podebrady 1997, Saariselkä 1998) Harmonised radio frequency channel arrangements and block allocations for medium and high capacity systems in the band 3'600 MHz to 4'200 GHz.
- [\*\*ERC/REC 12-07\*\*](#) (Rome 1996) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 15.23 GHz to 15.35 GHz.
- [\*\*ERC/REC 12-06\*\*](#) (Rome 1996, revised Rottach Egern, February 2010) Preferred channel arrangements for fixed systems operating in the band 10.7 - 11.7 GHz.
- [\*\*ERC/REC 12-05\*\*](#) (Rome 1996, revised June 2007) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 10.0- 10.68 GHz.
- [\*\*ERC/REC 12-03\*\*](#) (Bonn 1994) Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 17.7 GHz to 19.7 GHz.
- [\*\*ERC/REC 12-02\*\*](#) (Bonn 1994, revised June 2007) Harmonised radio frequency channel arrangements for analogue and digital terrestrial fixed systems operating in the band 12.75 GHz to 13.25 GHz.
- [\*\*T/R 25-08\*\*](#) Planning criteria and coordination of frequencies for land mobile systems in the range 29.7-470 MHz. Approved 15 January 1990. Amended 27 May 2016.
- [\*\*T/R 13-02\*\*](#) (Montreux 1993, amended Tromsø, May 2010) Preferred channel arrangements for fixed service systems in the frequency range 22.0 - 29.5 GHz.
- [\*\*T/R 13-01\*\*](#) (Montreux 1993, Revised Rottach-Egern, February 2010) Preferred channel arrangements for fixed service systems operating in the frequency range 1 - 2.3 GHz.
- [\*\*T/R 12-01\*\*](#) (Helsinki 1991, revised Rottach-Egern, February 2010) Preferred channel arrangements for fixed service systems operating in the frequency band 37.0 - 39.5 GHz.

## 5.7 Appendix FN: Relevant Footnotes of RR and ECA

### Relevant footnotes of Radio Regulations, Article 5 and relevant ECA footnotes included in the European Common Allocation (ECA)

#### a) Relevant Footnotes of Radio Regulations, Article 5

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	1bis) 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

RR foot-note No	RR footnote text
	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.
<b>5.67A</b>	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. <b>5.67</b> . (WRC-07)
<b>5.67B</b>	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)
<b>5.76</b>	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.
<b>5.79A</b>	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)
<b>5.80A</b>	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)
<b>5.82</b>	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)
<b>5.90</b>	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.
<b>5.92</b>	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.
<b>5.96</b>	In Germany, Armenia, Austria, Azerbaijan, Belarus, Croatia, 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 frequency bands 1'715- 1'800 kHz and 1'850- 2'000 kHz. However, when allocating the frequency 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-15)

RR foot-note No	RR footnote text
<b>5.98</b>	Alternative allocation: 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 and Turkey, the frequency band 1'810-1'830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-15)
<b>5.99</b>	Additional allocation: 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)
<b>5.100</b>	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. <b>5.98</b> and <b>5.99</b> 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.
<b>5.103</b>	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.
<b>5.108</b>	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)
<b>5.109</b>	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.
<b>5.110</b>	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.
<b>5.111</b>	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)
<b>5.115</b>	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)
<b>5.116</b>	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.
<b>5.127</b>	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).
<b>5.128</b>	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)
<b>5.130</b>	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)

RR foot-note No	RR footnote text										
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)										
5.133B	Stations in the amateur service using the frequency band 5'351.5 – 5'366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5'351.5 – 5'366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas territories of the Netherlands in Region 2, stations in the amateur service using the frequency band 5'351.5 – 5'366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-15)										
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 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	Additional allocation: 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. <b>5.280</b>,</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. <b>5.280</b> ,	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. <b>5.280</b> ,										
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										

RR foot-note No	RR footnote text
	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)
<b>5.143</b>	<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)
<b>5.143B</b>	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)
<b>5.143E</b>	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)
<b>5.145</b>	The conditions for the use of the carrier frequencies 8'291 kHz, 12'290 kHz and 16'420 kHz are prescribed in Articles <b>31</b> and <b>52</b> . (WRC-07)
<b>5.145A</b>	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 <b>612 (Rev.WRC-12)</b> . (WRC 12)
<b>5.146</b>	<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)
<b>5.147</b>	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.

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5.149	<p>In making assignments to stations of other services to which the bands:</p> <table> <tbody> <tr><td>13'360- 13'410 kHz,</td><td>31.2- 31.3 GHz,</td></tr> <tr><td>25'550- 25'670 kHz,</td><td>31.5- 31.8 GHz in Regions 1 and 3,</td></tr> <tr><td>37.5- 38.25 MHz,</td><td>36.43- 36.5 GHz,</td></tr> <tr><td>73- 74.6 MHz in Regions 1 and 3,</td><td>42.5- 43.5 GHz,</td></tr> <tr><td>150.05- 153 MHz in Region 1,</td><td>42.77- 42.87 GHz,</td></tr> <tr><td>322- 328.6 MHz,</td><td>43.07- 43.17 GHz,</td></tr> <tr><td>406.1- 410 MHz,</td><td>43.37- 43.47 GHz,</td></tr> <tr><td>608- 614 MHz in Regions 1 and 3,</td><td>48.94- 49.04 GHz,</td></tr> <tr><td>1'330- 1'400 MHz,</td><td>76- 86 GHz,</td></tr> <tr><td>1'610.6- 1'613.8 MHz,</td><td>92- 94 GHz,</td></tr> <tr><td>1'660- 1'670 MHz,</td><td>94.1- 100 GHz,</td></tr> <tr><td>1'718.8- 1'722.2 MHz,</td><td>102- 109.5 GHz,</td></tr> <tr><td>2'655- 2'690 MHz,</td><td>111.8- 114.25 GHz,</td></tr> <tr><td>3'260- 3'267 MHz,</td><td>128.33- 128.59 GHz,</td></tr> <tr><td>3'332- 3'339 MHz,</td><td>129.23- 129.49 GHz,</td></tr> <tr><td>3'345.8- 3'352.5 MHz,</td><td>130- 134 GHz,</td></tr> <tr><td>4'825- 4'835 MHz,</td><td>136- 148.5 GHz,</td></tr> <tr><td>4'950- 4'990 MHz,</td><td>151.5- 158.5 GHz,</td></tr> <tr><td>4'990- 5'000 MHz,</td><td>168.59- 168.93 GHz,</td></tr> <tr><td>6'650- 6'675.2 MHz,</td><td>171.11- 171.45 GHz,</td></tr> <tr><td>10.6- 10.68 GHz,</td><td>172.31- 172.65 GHz,</td></tr> <tr><td>14.47- 14.5 GHz,</td><td>173.52- 173.85 GHz,</td></tr> <tr><td>22.01- 22.21 GHz,</td><td>195.75- 196.15 GHz,</td></tr> <tr><td>22.21- 22.5 GHz,</td><td>209- 226 GHz,</td></tr> <tr><td>22.81- 22.86 GHz,</td><td>241- 250 GHz,</td></tr> <tr><td>23.07- 23.12 GHz,</td><td>252- 275 GHz</td></tr> </tbody> </table> <p>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)</p>	13'360- 13'410 kHz,	31.2- 31.3 GHz,	25'550- 25'670 kHz,	31.5- 31.8 GHz in Regions 1 and 3,	37.5- 38.25 MHz,	36.43- 36.5 GHz,	73- 74.6 MHz in Regions 1 and 3,	42.5- 43.5 GHz,	150.05- 153 MHz in Region 1,	42.77- 42.87 GHz,	322- 328.6 MHz,	43.07- 43.17 GHz,	406.1- 410 MHz,	43.37- 43.47 GHz,	608- 614 MHz in Regions 1 and 3,	48.94- 49.04 GHz,	1'330- 1'400 MHz,	76- 86 GHz,	1'610.6- 1'613.8 MHz,	92- 94 GHz,	1'660- 1'670 MHz,	94.1- 100 GHz,	1'718.8- 1'722.2 MHz,	102- 109.5 GHz,	2'655- 2'690 MHz,	111.8- 114.25 GHz,	3'260- 3'267 MHz,	128.33- 128.59 GHz,	3'332- 3'339 MHz,	129.23- 129.49 GHz,	3'345.8- 3'352.5 MHz,	130- 134 GHz,	4'825- 4'835 MHz,	136- 148.5 GHz,	4'950- 4'990 MHz,	151.5- 158.5 GHz,	4'990- 5'000 MHz,	168.59- 168.93 GHz,	6'650- 6'675.2 MHz,	171.11- 171.45 GHz,	10.6- 10.68 GHz,	172.31- 172.65 GHz,	14.47- 14.5 GHz,	173.52- 173.85 GHz,	22.01- 22.21 GHz,	195.75- 196.15 GHz,	22.21- 22.5 GHz,	209- 226 GHz,	22.81- 22.86 GHz,	241- 250 GHz,	23.07- 23.12 GHz,	252- 275 GHz
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5.150	<p>The following bands:</p> <table> <tbody> <tr><td>13'553- 13'567 kHz</td><td>(centre frequency 13'560 kHz),</td></tr> <tr><td>26'957- 27'283 kHz</td><td>(centre frequency 27'120 kHz),</td></tr> <tr><td>40.66- 40.70 MHz</td><td>(centre frequency 40.68 MHz),</td></tr> <tr><td>902- 928 MHz</td><td>in Region 2 (centre frequency 915 MHz),</td></tr> <tr><td>2'400- 2'500 MHz</td><td>(centre frequency 2'450 MHz),</td></tr> <tr><td>5'725- 5'875 MHz</td><td>(centre frequency 5'800 MHz), and</td></tr> <tr><td>24- 24.25 GHz</td><td>(centre frequency 24.125 GHz)</td></tr> </tbody> </table> <p>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.</p>	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)																																						
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5.151	<p><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)</p>																																																				
5.155B	<p>The band 21'870- 21'924 kHz is used by the fixed service for provision of services related to aircraft flight safety.</p>																																																				

RR foot-note No	RR footnote text
<b>5.156A</b>	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.
<b>5.157</b>	The use of the band 23'350- 24'000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.
<b>5.161B</b>	<i>Alternative allocation:</i> in Albania, Germany, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, 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, 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-15)
<b>5.162A</b>	<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 <b>217 (WRC-97)</b> . (WRC-12)
<b>5.164</b>	<i>Additional allocation:</i> in Albania, Algeria, Germany, Austria, Belgium, Bosnia and Herzegovina, Botswana, Bulgaria, Côte d'Ivoire, Croatia, 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 frequency band 47-68 MHz, in South Africa the frequency band 47-50 MHz,-and in Latvia the frequency 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 frequency 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 frequency band. (WRC-15)
<b>5.180</b>	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.
<b>5.197A</b>	<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 <b>413 (Rev.WRC-07)</b> . 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)
<b>5.200</b>	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 conditions laid down in Article <b>31</b> for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)
<b>5.206</b>	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. <b>5.33</b> ). (WRC-2000)

RR foot-note No	RR footnote text
<b>5.208</b>	The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A.</b> (WRC-97)
<b>5.208A</b>	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)
<b>5.208B</b>	<p>In the bands:</p> <p>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,</p> <p>Resolution <b>739 (Rev.WRC-15)</b> applies. (WRC-15)</p>
<b>5.209</b>	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)
<b>5.211</b>	<i>Additional allocation:</i> in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Denmark, the United Arab Emirates, Spain, Finland, Greece, Guinea, 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 frequency band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis. (WRC-07) (WRC-15)
<b>5.218</b>	<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. <b>9.21</b> . The bandwidth of any individual transmission shall not exceed $\pm$ 25 kHz.
<b>5.219</b>	The use of the band 148- 149.9 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A.</b> 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.
<b>5.220</b>	The use of the frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A.</b> (WRC-15)
<b>5.221</b>	Stations of the mobile-satellite service in the frequency 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, Georgia, 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, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Zambia, and Zimbabwe. (WRC-15)

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5.225A	<p><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(<math>\mu</math>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 (<math>I/N</math>) value of -6 dB (<math>N = -161 \text{ dBW}/4 \text{ kHz}</math>), or -10 dB for applications with greater protection requirements, such as public protection and disaster relief (PPDR (<math>N = -161 \text{ BW}/4 \text{ kHz}</math>)), 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)</p>
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 <b>31</b> and <b>52</b>, and in Appendix <b>18</b>.</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 <b>31</b> and Appendix <b>18</b>.</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 <b>31</b> and <b>52</b>, and Appendix <b>18</b>).</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	<p><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)</p>
5.228	<p>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 bands by systems operating in the maritime mobile service for communications shall not exceed 1 W. (WRC 12)</p>
5.228A	<p>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)</p>
5.228AA	<p>The use of the frequency bands 161.9375- 161.9625 MHz and 161.9875- 162.0125 MHz by the maritime mobile-satellite (Earth-to-space) service is limited to the systems which operate in accordance with Appendix <b>18</b>. (WRC 15)</p>

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<b>5.228B</b>	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)
<b>5.228F</b>	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)
<b>5.235</b>	<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.
<b>5.254</b>	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. <b>9.21</b> , 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 <b>No. 5.256A</b> . (WRC-03)
<b>5.255</b>	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. <b>9.11A</b> .
<b>5.256</b>	The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)
<b>5.257</b>	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. <b>9.21</b> .
<b>5.258</b>	The use of the band 328.6- 335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).
<b>5.261</b>	Emissions shall be confined in a band of $\pm$ 25 kHz about the standard frequency 400.1 MHz.
<b>5.263</b>	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.
<b>5.264</b>	The use of the band 400.15- 401 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A</b> . The power flux-density limit indicated in Annex 1 of Appendix <b>5</b> shall apply until such time as a competent world radiocommunication conference revises it.
<b>5.265</b>	In the frequency band 403- 410 MHz, Resolution <b>205 (Rev.WRC-15)</b> applies. (WRC-15)
<b>5.266</b>	The use of the band 406- 406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radio Beacons (see also Article <b>31</b> ). (WRC-07)
<b>5.267</b>	Any emission capable of causing harmful interference to the authorised uses of the band 406- 406.1 MHz is prohibited.
<b>5.276</b>	<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, Thailand, Togo, Turkey and Yemen, the frequency band 430-440 MHz is also allocated to the fixed service on a primary basis and the frequency bands 430-435 MHz and 438-440 MHz are also allocated, except in Ecuador, to the mobile, except aeronautical mobile, service on a primary basis. (WRC-15)
<b>5.279A</b>	The use of the frequency band 432– 438 MHz 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 frequency 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. <b>5.29</b> and <b>5.30</b> . (WRC-15)

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<b>5.280</b>	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. <b>15.13</b> . (WRC-07)
<b>5.282</b>	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. <b>5.43</b> ). 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. <b>25.11</b> . 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.
<b>5.287</b>	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)
<b>5.289</b>	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.
<b>5.291A</b>	<i>Additional allocation:</i> in Germany, Austria, Denmark, Estonia, Liechtenstein, the Czech Rep., Serbia and Switzerland, the frequency band 470- 494 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 <b>217 (WRC-97)</b> . (WRC-15)
<b>5.296</b>	<i>Additional allocation:</i> in Albania, Germany, Angola, Saudi Arabia, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Burundi, Cameroon, Vatican, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Djibouti, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Gabon, Georgia, Ghana, Hungary, Iraq, Ireland, Iceland, Israel, Italy, Jordan, Kenya, Kuwait, Lesotho, Latvia, The Former Yugoslav Republic of Macedonia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malawi, Mali, Malta, Morocco, Mauritius, Mauritania, Moldova, Monaco, Mozambique, Namibia, Niger, Nigeria, Norway, Oman, Uganda, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Slovakia, the Czech Republic, the United Kingdom, Rwanda, San Marino, Serbia, Sudan, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Togo, Tunisia, Turkey, Ukraine, Zambia and Zimbabwe, the frequency band 470-694 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting and programme-making. 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-15)
<b>5.306</b>	<i>Additional allocation:</i> in Region 1, except in the African Broadcasting Area (see Nos. <b>5.10</b> to <b>5.13</b> ), and in Region 3, the band 608 - 614 MHz is also allocated to the radio astronomy service on a secondary basis.
<b>5.311A</b>	For the frequency band 620-790 MHz, see also Resolution 549 (WRC-07).
<b>5.312A</b>	In Region 1, the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service is subject to the provisions of Resolution <b>760 (WRC-15)</b> . See also Resolution <b>224 (Rev. WRC 15)</b> . (WRC-15)
<b>5.316B</b>	In Region 1, the allocation to the mobile, except aeronautical mobile, service on a primary basis in the frequency band 790-862 MHz is subject to agreement obtained under No. <b>9.21</b> with respect to the aeronautical radionavigation service in countries mentioned in No. <b>5.312</b> . For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful

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	application of the procedures of that Agreement. Resolutions <b>224 (Rev. WRC-15)</b> and <b>749 (Rev.WRC-15)</b> shall apply, as appropriate. (WRC-15)
<b>5.317A</b>	The parts of the frequency band 698-960 MHz in Region 2 and the frequency bands 694-790 MHz in Region 1 and 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 <b>224 (Rev.WRC-15)</b> , <b>760 (WRC-15)</b> and <b>749 (Rev.WRC-15)</b> , where applicable. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15)
<b>5.327A</b>	The use of the frequency 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 <b>417 (Rev. WRC-15)</b> . (WRC-15)
<b>5.328</b>	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)
<b>5.328A</b>	Stations in the radionavigation-satellite service in the band 1'164- 1'215 MHz shall operate in accordance with the provisions of Resolution <b>609 (WRC-03)</b> and shall not claim protection from stations in the aeronautical radionavigation service in the band 960- 1'215 MHz. No. <b>5.43A</b> does not apply. The provisions of No. <b>21.18</b> shall apply. (WRC-03)
<b>5.328AA</b>	The frequency band 1'087.7- 1'092.3 MHz is also allocated to the aeronautical mobile-satellite (R) service (Earth-to-space) on a primary basis, limited to the space station reception of Automatic Dependent Surveillance-Broadcast (ADS-B) emissions from aircraft transmitters that operate in accordance with recognized international aeronautical standards. Stations operating in the aeronautical mobile-satellite (R) service shall not claim protection from stations operating in the aeronautical radionavigation service. Resolution 425 (WRC-15) shall apply. (WRC-15)
<b>5.328B</b>	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. <b>9.12</b> , <b>9.12A</b> and <b>9.13</b> . Resolution <b>610 (WRC-03)</b> shall also apply; however, in the case of radionavigation-satellite service (space-to-space) networks and systems, Resolution <b>610 (WRC-03)</b> shall only apply to transmitting space stations. In accordance with No. <b>5.329A</b> , 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. <b>9.7</b> , <b>9.12</b> , <b>9.12A</b> and <b>9.13</b> shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)
<b>5.329</b>	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. <b>5.331</b> . 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. <b>5.43</b> shall not apply in respect of the radiolocation service. Resolution <b>608 (WRC-03)</b> shall apply. (WRC-03)
<b>5.329A</b>	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)
<b>5.331</b>	<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,

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	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)
<b>5.332</b>	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)
<b>5.335A</b>	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 impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis. (WRC-2000)
<b>5.337</b>	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.
<b>5.337A</b>	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.
<b>5.338A</b>	In the frequency bands 1'350-1'400 MHz, 1427-1'452 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 <b>750 (Rev. WRC-15)</b> applies. (WRC-15)
<b>5.339</b>	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.

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<b>5.340</b>	<p>All emissions are prohibited in the following bands:</p> <table border="1"> <tr><td>1'400- 1'427 MHz,</td><td></td></tr> <tr><td>2'690- 2'700 MHz,</td><td>except those provided for by No. <b>5.422</b>,</td></tr> <tr><td>10.68- 10.7GHz,</td><td>except those provided for by No. <b>5.483</b>,</td></tr> <tr><td>15.35- 15.4 GHz,</td><td>except those provided for by No. <b>5.511</b>,</td></tr> <tr><td>23.6- 24 GHz,</td><td></td></tr> <tr><td>31.3- 31.5 GHz,</td><td></td></tr> <tr><td>31.5- 31.8 GHz,</td><td>in Region 2,</td></tr> <tr><td>48.94- 49.04 GHz,</td><td>from airborne stations,</td></tr> <tr><td>50.2- 50.4 GHz<sup>2</sup>,</td><td></td></tr> <tr><td>52.6- 54.25 GHz,</td><td></td></tr> <tr><td>86- 92 GHz,</td><td></td></tr> <tr><td>100- 102 GHz,</td><td></td></tr> <tr><td>109.5- 111.8 GHz,</td><td></td></tr> <tr><td>114.25- 116 GHz</td><td></td></tr> <tr><td>148.5- 151.5 GHz,</td><td></td></tr> <tr><td>164- 167 GHz,</td><td></td></tr> <tr><td>182- 185 GHz,</td><td></td></tr> <tr><td>190- 191.8 GHz,</td><td></td></tr> <tr><td>200- 209 GHz,</td><td></td></tr> <tr><td>226- 231.5 GHz,</td><td></td></tr> <tr><td>250- 252 GHz. (WRC-2003)</td><td></td></tr> </table> <hr/>	1'400- 1'427 MHz,		2'690- 2'700 MHz,	except those provided for by No. <b>5.422</b> ,	10.68- 10.7GHz,	except those provided for by No. <b>5.483</b> ,	15.35- 15.4 GHz,	except those provided for by No. <b>5.511</b> ,	23.6- 24 GHz,		31.3- 31.5 GHz,		31.5- 31.8 GHz,	in Region 2,	48.94- 49.04 GHz,	from airborne stations,	50.2- 50.4 GHz <sup>2</sup> ,		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)	
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	<p><sup>2</sup> <b>5.340.1</b> 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)</p>																																										
<b>5.341</b>	<p>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.</p>																																										
<b>5.341A</b>	<p>In Region 1, the frequency bands 1'427- 1'452 MHz and 1'492- 1'518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution <b>223 (Rev.WRC-15)</b>. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. <b>9.21</b> with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. <b>5.342</b>. (WRC-15)</p>																																										
<b>5.345</b>	<p>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 <b>528 (WARC-92)*</b>.</p> <hr/>																																										
	<p>* Note by the Secretariat: This Resolution was revised by WRC-03 and WRC-15.</p>																																										
<b>5.348</b>	<p>The use of the band 1'518- 1'525 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A</b>. 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. <b>5.43A</b> does not apply. (WRC-03)</p>																																										
<b>5.348A</b>	<p>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. <b>9.11A</b> 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<sup>2</sup>) in any 4 kHz band for all angles of arrival, instead of those given in</p>																																										

RR foot-note No	RR footnote text
	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.

RR foot-note No	RR footnote text
<b>5.365</b>	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. <b>9.11A</b> .
<b>5.366</b>	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. <b>9.21</b> .
<b>5.367</b>	<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. <b>9.21</b> . (WRC-12)
<b>5.368</b>	With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. <b>4.10</b> do not apply in the band 1'610- 1'626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.
<b>5.371</b>	<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. <b>9.21</b> . (WRC-12)
<b>5.372</b>	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. <b>29.13</b> applies).
<b>5.374</b>	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. <b>5.359</b> . (WRC-97)
<b>5.375</b>	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 <b>31</b> ).
<b>5.376</b>	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.
<b>5.376A</b>	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)
<b>5.379A</b>	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.
<b>5.379B</b>	The use of the band 1'668-1'675 MHz by the mobile-satellite service is subject to coordination under No. <b>9.11A</b> . In the band 1'668-1'668.4 MHz, Resolution <b>904 (WRC-07)</b> shall apply. (WRC-07)
<b>5.379C</b>	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 <sup>2</sup> ) in 10 MHz and - 194 dB(W/m <sup>2</sup> ) 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)
<b>5.379D</b>	For sharing of the band 1'668.4-1'675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution <b>744 (Rev.WRC-07)</b> shall apply. (WRC-07)
<b>5.379E</b>	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)
<b>5.380A</b>	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)
<b>5.384A</b>	The frequency bands 1'710-1'885 MHz, 2'300-2'400 MHz and 2'500-2'690 MHz, or portions thereof, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution <b>223 (Rev.WRC-15)</b> . This identification does not preclude the use of these

RR foot-note No	RR footnote text
	frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15).
<b>5.385</b>	<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)
<b>5.388</b>	The frequency 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 frequency bands by other services to which they are allocated. The frequency bands should be made available for IMT-2000 in accordance with Resolution <b>212 (Rev.WRC-15)</b> (see also Resolution <b>223 (WRC-15)</b> ). (WRC-15)
<b>5.388A</b>	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 <b>221 (Rev.WRC-03)</b> . 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)
<b>5.389A</b>	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. <b>9.11A</b> and to the provisions of Resolution <b>716 (Rev.WRC-2000)</b> . (WRC-07)
<b>5.391</b>	In making assignments to the mobile service in the frequency 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.1154-0, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-15)
<b>5.392</b>	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.
<b>5.398</b>	In respect of the radiodetermination-satellite service in the band 2'483.5- 2'500 MHz, the provisions of No. <b>4.10</b> do not apply.
<b>5.402</b>	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. <b>9.11A</b> . 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.
<b>5.418B</b>	Use of the band 2'630- 2'655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. <b>5.418</b> , for which complete Appendix <b>4</b> coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. <b>9.12</b> . (WRC- 03)
<b>5.418C</b>	Use of the band 2'630-2'655 MHz by geostationary-satellite networks for which complete Appendix <b>4</b> coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. <b>9.13</b> with respect to non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. <b>5.418</b> and No. <b>22.2</b> does not apply. (WRC-03)
<b>5.423</b>	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.
<b>5.424A</b>	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)
<b>5.425</b>	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.
<b>5.426</b>	The use of the band 2'900- 3'100 MHz by the aeronautical radionavigation service is limited to ground-based radars.

RR foot-note No	RR footnote text
<b>5.427</b>	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. <b>4.9</b> .
<b>5.430A</b>	The allocation of the frequency band 3'400-3'600 MHz to the mobile, except aeronautical mobile, service is subject to agreement obtained under No. 9.21. This frequency band is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The provisions of Nos. <b>9.17</b> and <b>9.18</b> shall also apply in the coordination phase. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band, it shall ensure that the power flux-density (pfд) produced at 3 m above ground does not exceed $-154.5 \text{ dB}(W/(m^2 * 4 \text{ kHz}))$ 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 so agreed. In order to ensure that the pfд limit at the border of the territory of any other administration is met, 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), and with the assistance of the Bureau if so requested. In case of disagreement, calculation and verification of the pfд shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3'400-3'600 MHz shall not claim more protection from space stations than that provided in Table <b>21-4</b> of the Radio Regulations (Edition of 2004). (WRC-15)
<b>5.436</b>	Use of the frequency band 4'200- 4'400 MHz by stations in the aeronautical mobile (R) service is reserved exclusively for wireless avionics intra-communication systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution <b>424 (WRC-15)</b> . (WRC-15)
<b>5.437</b>	Passive sensing in the Earth exploration-satellite and space research services may be authorized in the frequency band 4'200-4'400 MHz on a secondary basis. (WRC-15)
<b>5.438</b>	Use of the frequency 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. (WRC-15)
<b>5.440</b>	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 $\pm 2 \text{ MHz}$ of these frequencies, subject to agreement obtained under No. <b>9.21</b> .
<b>5.441</b>	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 <b>30B</b> . 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 <b>30B</b> . 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. <b>9.12</b> 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. <b>5.43A</b> 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)

RR foot-note No	RR footnote text
<b>5.443AA</b>	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. <b>9.21</b> . The use of these bands by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
<b>5.443B</b>	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 frequency band 5'030 -5'150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the frequency band 5'010- 5'030 MHz shall not exceed -124.5 dB(W/m <sup>2</sup> ) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the frequency band 4'990 - 5'000 MHz, radionavigation-satellite service systems operating in the frequency band 5'010- 5'030 MHz shall comply with the limits in the frequency band 4'990- 5'000 MHz defined in Resolution <b>741 (Rev. WRC-15)</b> . (WRC-15)
<b>5.443C</b>	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)
<b>5.443D</b>	In the frequency band 5'030-5'091 MHz, the aeronautical mobile-satellite (R) service is subject to coordination under No. <b>9.11A</b> . The use of this frequency band by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)
<b>5.444</b>	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. <b>5.444A</b> and Resolution <b>114 (Rev.WRC-15)</b> apply. (WRC-15)
<b>5.444A</b>	The use of the allocation to the fixed-satellite service (Earth-to-space) in the frequency band 5'091- 5'150 MHz is limited to feeder links of non-geostationary satellite systems in the mobile-satellite service and is subject to coordination under No. 9.11A. The use of the frequency band 5'091- 5'150 MHz by feeder links of non-geostationary satellite systems in the mobile-satellite service shall be subject to application of Resolution 114 (Rev.WRC-15). Moreover, to ensure that the aeronautical radionavigation service is protected from harmful interference, coordination is required for feeder-link earth stations of the non-geostationary satellite systems in the mobile-satellite service which are separated by less than 450 km from the territory of an administration operating ground stations in the aeronautical radionavigation service. (WRC-15)
<b>5.444B</b>	The use of the frequency band 5091-5150 MHz by the aeronautical mobile service is limited to: <ul style="list-style-type: none"> <li>– 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 <b>748 (Rev.WRC-15)</b>;</li> <li>– aeronautical telemetry transmissions from aircraft stations (see No. 1.83) in accordance with Resolution <b>418 (Rev.WRC-15)</b>. (WRC-15)</li> </ul>
<b>5.446</b>	<i>Additional allocation:</i> in the countries listed in Nos. <b>5.369</b> and <b>5.400</b> , the frequency 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. <b>9.21</b> . In Region 2 (except in Mexico), the frequency 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. <b>5.369</b> and <b>5.400</b> , the frequency 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 frequency 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/m <sup>2</sup> ) in any 4 kHz band for all angles of arrival. (WRC-15)
<b>5.446A</b>	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 <b>229 (Rev. WRC-12)</b> . (WRC-12)

RR foot-note No	RR footnote text
<b>5.446B</b>	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. <b>5.43A</b> does not apply to the mobile service with respect to fixed-satellite service earth stations. (WRC-03)
<b>5.446C</b>	<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. <b>1.83</b> ), in accordance with Resolution <b>418 (Rev.WRC-12)</b> . These stations shall not claim protection from other stations operating in accordance with Article <b>5</b> . No. <b>5.43A</b> does not apply. (WRC-12)
<b>5.447A</b>	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. <b>9.11A</b> .
<b>5.447B</b>	<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. <b>9.11A</b> . 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/m <sup>2</sup> ) in any 4 kHz band for all angles of arrival.
<b>5.447C</b>	Administrations responsible for fixed-satellite service networks in the band 5'150- 5'250 MHz operated under Nos. <b>5.447A</b> and <b>5.447B</b> shall coordinate on an equal basis in accordance with No. <b>9.11A</b> with administrations responsible for non-geostationary-satellite networks operated under No. <b>5.446</b> and brought into use prior to 17 November 1995. Satellite networks operated under No. <b>5.446</b> 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. <b>5.447A</b> and <b>5.447B</b> .
<b>5.447D</b>	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)
<b>5.447F</b>	In the frequency band 5'250- 5'350 MHz, stations in the mobile service shall not claim protection from the radiolocation 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.1638-0 and ITU-R SA.1632-0. (WRC-15)
<b>5.448A</b>	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. <b>5.43A</b> does not apply. (WRC-03)
<b>5.448B</b>	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)
<b>5.448C</b>	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)
<b>5.448D</b>	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. <b>5.449</b> . (WRC-03)
<b>5.449</b>	The use of the band 5'350 - 5'470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
<b>5.450A</b>	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.1638-0. (WRC-15)

RR foot-note No	RR footnote text
<b>5.450B</b>	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)
<b>5.452</b>	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.
<b>5.457A</b>	In the frequency 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 <b>902 (WRC-03)</b> . In the frequency band 5'925-6'425 MHz, earth stations located on board vessels and communicating with space stations of the fixed-satellite service may employ transmit antennas with minimum diameter of 1.2 m and operate without prior agreement of any administration if located at least 330 km away from the low-water mark as officially recognized by the coastal State. All other provisions of Resolution <b>902 (WRC-03)</b> shall apply. (WRC-15)
<b>5.458</b>	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.
<b>5.458A</b>	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.
<b>5.458B</b>	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. <b>9.11A</b> . 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. <b>22.2</b> .
<b>5.460</b>	No emissions from space research service (Earth-to-space) systems intended for deep space shall be effected in the frequency band 7'190- 7'235 MHz. Geostationary satellites in the space research service operating in the frequency band 7'190- 7'235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. <b>5.43A</b> does not apply. (WRC-15)
<b>5.460A</b>	The use of the frequency band 7'190- 7'250 MHz (Earth-to-space) by the Earth exploration-satellite service shall be limited to tracking, telemetry and command for the operation of spacecraft. Space stations operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7'190- 7'250 MHz shall not claim protection from existing and future stations in the fixed and mobile services, and No. <b>5.43A</b> does not apply. No. <b>9.17</b> applies. Additionally, to ensure protection of the existing and future deployment of fixed and mobile services, the location of earth stations supporting spacecraft in the Earth exploration-satellite service in non-geostationary orbits or geostationary orbit shall maintain a separation distance of at least 10 km and 50 km, respectively, from the respective border(s) of neighbouring countries, unless a shorter distance is otherwise agreed between the corresponding administrations. (WRC 15)
<b>5.460B</b>	Space stations on the geostationary orbit operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7'190- 7'235 MHz shall not claim protection from existing and future stations of the space research service, and No. <b>5.43A</b> does not apply. (WRC 15)
<b>5.461</b>	<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 <b>No. 9.21</b> .
<b>5.461A</b>	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)
<b>5.461AA</b>	The use of the frequency band 7'375-7'750 MHz by the maritime mobile-satellite service is limited to geostationary-satellite networks. (WRC 15)

RR foot-note No	RR footnote text
<b>5.461AB</b>	In the frequency band 7'375- 7'750 MHz, earth stations in the maritime mobile-satellite service shall not claim protection from, nor constrain the use and development of, stations in the fixed and mobile, except aeronautical mobile, services. No. 5.43A does not apply. (WRC 15)
<b>5.461B</b>	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)
<b>5.462A</b>	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 ( $\theta$ ), without the consent of the affected administration:
	- 135 dB (W/m <sup>2</sup> ) in a 1 MHz band for $0^\circ \leq \theta < 5^\circ$
	- 135 + 0.5 ( $\theta - 5$ ) dB (W/m <sup>2</sup> ) in a 1 MHz band for $5^\circ \leq \theta < 25^\circ$
	- 125 dB (W/m <sup>2</sup> ) in a 1 MHz band for $25^\circ \leq \theta \leq 90^\circ$
	(WRC-12)
<b>5.463</b>	Aircraft stations are not permitted to transmit in the band 8'025- 8'400 MHz.
<b>5.465</b>	In the space research service, the use of the band 8'400- 8'450 MHz is limited to deep space.
<b>5.469</b>	<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)
<b>5.469A</b>	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)
<b>5.470</b>	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.
<b>5.471</b>	<i>Additional allocation:</i> in Algeria, Germany, Bahrain, Belgium, China, Egypt, the United Arab Emirates, France, Greece, Indonesia, Iran (Islamic Republic of), Libya, the Netherlands, Qatar, and Sudan, the frequency bands 8'825- 8'850 MHz and 9'000- 9'200 MHz are also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars only. (WRC-15)
<b>5.472</b>	In the bands 8'850- 9'000 MHz and 9'200- 9'225 MHz, the maritime radionavigation service is limited to shore-based radars.
<b>5.473</b>	<i>Additional allocation:</i> in Armenia, Austria, Azerbaijan, Belarus, Cuba, the Russian Federation, Georgia, Hungary, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Romania, Tajikistan, Turkmenistan and Ukraine, the bands 8 850-9 000 MHz and 9 200-9 300 MHz are also allocated to the radionavigation service on a primary basis. (WRC-07)
<b>5.473A</b>	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. <b>5.471</b> . (WRC-07)
<b>5.474</b>	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 <b>Article 31</b> ).
<b>5.474A</b>	The use of the frequency bands 9'200- 9'300 MHz and 9'900- 10'400 MHz by the Earth exploration-satellite service (active) is limited to systems requiring necessary bandwidth greater than 600 MHz that cannot be fully accommodated within the frequency band 9'300- 9'900 MHz. Such use is subject to agreement to be obtained under No. 9.21 from Algeria, Saudi Arabia, Bahrain, Egypt, Indonesia, Iran (Islamic Republic of), Lebanon and Tunisia. An administration that has not replied under No. 9.52 is considered as not having agreed to the coordination request. In this case, the notifying administration of the satellite system operating in the Earth exploration-satellite service (active) may request the assistance of the Bureau under Sub-Section IID of Article 9. (WRC-15)
<b>5.474B</b>	Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2066-0. (WRC-15)
<b>5.474C</b>	Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2065-0. (WRC-15)

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5.474D	Stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, or claim protection from, stations of the maritime radionavigation and radiolocation services in the frequency band 9'200- 9'300 MHz, the radionavigation and radiolocation services in the frequency band 9'900- 10'000 MHz and the radiolocation service in the frequency band 10.0- 10.4 GHz. (WRC-15)
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, 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

RR foot-note No	RR footnote text
	such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)
<b>5.484B</b>	Resolution <b>155 (WRC-15)</b> shall apply. (WRC-15)
<b>5.487</b>	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 <b>30</b> . (WRC-03)
<b>5.487A</b>	<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. <b>9.12</b> 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. <b>5.43A</b> 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)
<b>5.492</b>	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 <b>30</b> 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)
<b>5.497</b>	The use of the band 13.25- 13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
<b>5.498A</b>	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)
<b>5.499A</b>	The use of the frequency band 13.4- 13.65 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary-satellite systems and is subject to agreement obtained under No. <b>9.21</b> with respect to satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in non-geostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015. (WRC-15)
<b>5.499B</b>	Administrations shall not preclude the deployment and operation of transmitting earth stations in the standard frequency and time signal-satellite service (Earth-to-space) allocated on a secondary basis in the frequency band 13.4- 13.65 GHz due to the primary allocation to FSS (space-to-Earth). (WRC-15)
<b>5.499C</b>	The allocation of the frequency band 13.4-13.65 GHz to the space research service on a primary basis is limited to: <ul style="list-style-type: none"> <li>- satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in non-geostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015,</li> <li>- active spaceborne sensors,</li> <li>- satellite systems operating in the space research service (space-to-Earth) to relay data from space stations in the geostationary-satellite orbit to associated earth stations.</li> </ul> Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)
<b>5.449D</b>	In the frequency band 13.4- 13.65 GHz, satellite systems in the space research service (space-to-Earth) and/or the space research service (space-to-space) shall not cause harmful interference to,

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	nor claim protection from, stations in the fixed, mobile, radiolocation and Earth exploration-satellite (active) services. (WRC-15)
<b>5.499E</b>	In the frequency band 13.4- 13.65 GHz, geostationary-satellite networks in the fixed-satellite service (space to- Earth) shall not claim protection from space stations in the Earth exploration-satellite service (active) operating in accordance with these Regulations, and No. 5.43A does not apply. The provisions of No. 22.2 do not apply to the Earth exploration-satellite service (active) with respect to the fixed-satellite service (space-to-Earth) in this frequency band. (WRC-15)
<b>5.501A</b>	The allocation of the frequency band 13.65- 13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)
<b>5.501B</b>	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)
<b>5.502</b>	<p>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 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"> <li>- 115 dB(W/(m<sup>2</sup> * 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;</li> <li>- 115 dB(W/(m<sup>2</sup> * 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.</li> </ul> <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>
<b>5.503</b>	<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> <ul style="list-style-type: none"> <li>- 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"> <li>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;</li> <li>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;</li> <li>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;</li> <li>iv) 56.2 dB(W/4 kHz) for narrow-band (less than 40 kHz of necessary bandwidth) fixed-satellite service earth station emissions from any fixed-satellite service earth station having an antenna diameter of 4.5 m or greater;</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>- 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.</li> </ul> <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>
<b>5.504</b>	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.
<b>5.504A</b>	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. <b>5.29</b> , <b>5.30</b> and <b>5.31</b> apply. (WRC-03)
<b>5.504B</b>	Aircraft earth stations operating in the aeronautical mobile-satellite service in the frequency band 14- 14.5 GHz shall comply with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643-0, with respect to any radio astronomy station performing observations in the 14.47- 14.5 GHz frequency band located on the territory of Spain, France, India, Italy, the United Kingdom and South Africa. (WRC-15)
<b>5.506A</b>	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 <b>902 (WRC-03)</b> . 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)
<b>5.506B</b>	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 and Malta, within the minimum distance given in Resolution <b>902 (WRC-15)</b> from these countries. (WRC-15)
<b>5.508</b>	<i>Additional allocation:</i> in Germany, France, Italy, Libya, The Former Yugoslav Rep. of Macedonia and the United Kingdom, the band 14.25 - 14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-12)
<b>5.511A</b>	Use of the frequency band 15.43- 15.63 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. <b>9.11A</b> . (WRC-15)
<b>5.511C</b>	Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340-0. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. <b>4.10</b> 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.1340-0. (WRC-15)
<b>5.511E</b>	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)
<b>5.511F</b>	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 $-156 \text{ dB(W/m}^2\text{)}$ 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)
<b>5.513A</b>	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)
<b>5.516</b>	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

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	<p>2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. <b>9.12</b> 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. <b>5.43A</b> 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)</p>
<b>5.516A</b>	<p>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 under Appendix <b>30A</b>, 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)</p>
<b>5.516B</b>	<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,      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 <b>143 (WRC-03)</b>. (WRC-03)</p>
<b>5.519</b>	<p><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)</p>
<b>5.520</b>	<p>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)</p>
<b>5.522A</b>	<p>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. <b>21.5A</b> and <b>21.16.2</b>, respectively. (WRC-2000)</p>
<b>5.522B</b>	<p>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)</p>
<b>5.523A</b>	<p>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. <b>9.11A</b> and No. <b>22.2</b> 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. <b>9.11A</b> with non-geostationary-satellite networks for</p>

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	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)
<b>5.523B</b>	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. <b>9.11A</b> , and No. <b>22.2</b> does not apply.
<b>5.523C</b>	No. <b>22.2</b> 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)
<b>5.523D</b>	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. <b>9.11A</b> , but not subject to the provisions of No. <b>22.2</b> . The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. <b>5.523C</b> and <b>5.523E</b> , is not subject to the provisions of <b>No. 9.11A</b> and shall continue to be subject to Articles 9 (except No. <b>9.11A</b> ) and 11 procedures, and to the provisions of No. <b>22.2</b> . (WRC-97)
<b>5.523E</b>	No. <b>22.2</b> 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)
<b>5.525</b>	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.
<b>5.526</b>	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.
<b>5.527</b>	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.
<b>5.527A</b>	The operation of earth stations in motion communicating with the FSS is subject to Resolution <b>156 (WRC-15)</b> . (WRC-15)
<b>5.528</b>	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. <b>5.524</b> .
<b>5.530A</b>	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 $-120.4 \text{ dB}(W/(m^2 \cdot MHz))$ 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 also the most recent version of Recommendation ITU-R BO.1898). (WRC-15)
<b>5.530B</b>	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)
<b>5.530D</b>	See Resolution <b>555 (WRC-12)*</b> . (WRC-12) ----- <i>* Note by the Secretariat: This Resolution was revised by WRC-15</i>

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<b>5.532</b>	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.
<b>5.532A</b>	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. <b>9.17</b> and <b>9.18</b> do not apply. (WRC-12)
<b>5.532B</b>	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)
<b>5.535</b>	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.
<b>5.535A</b>	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. <b>9.11A</b> , but not subject to the provisions of No. <b>22.2</b> , except as indicated in Nos. <b>5.523C</b> and <b>5.523E</b> where such use is not subject to the provisions of No. <b>9.11A</b> and shall continue to be subject to Articles <b>9</b> (except No. <b>9.11A</b> ) and <b>11</b> procedures, and to the provisions of No. <b>22.2</b> . (WRC-97)
<b>5.536</b>	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.
<b>5.536A</b>	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)
<b>5.538</b>	<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)
<b>5.539</b>	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.
<b>5.540</b>	<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.
<b>5.541</b>	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.
<b>5.541A</b>	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 <b>4</b> 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 <b>4</b> information for coordination before this date are encouraged to utilize these techniques to the extent practicable. (WRC-2000)
<b>5.543</b>	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.

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<b>5.547</b>	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 <b>75 (WRC-2000)</b> ). 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. <b>5.516B</b> ), administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate. (WRC-07)
<b>5.547A</b>	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)
<b>5.548</b>	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 <b>707</b> ).
<b>5.549A</b>	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 <sup>2</sup> ) in this band. (WRC-03)
<b>5.550A</b>	For sharing of the band 36- 37 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile services, Resolution <b>752 (WRC-07)</b> shall apply. (WRC-07)
<b>5.551H</b>	<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"> <li>- 230 dB(W/m<sup>2</sup>) in 1 GHz and –246 dB(W/m<sup>2</sup>) in any 500 kHz of the frequency band 42.5- 43.5 GHz at the site of any radio astronomy station registered as a single-dish telescope; and</li> <li>- 209 dB(W/m<sup>2</sup>) in any 500 kHz of the frequency band 42.5- 43.5 GHz at the site of any radio astronomy station registered as a very long baseline interferometry station.</li> </ul> <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.1631-0 and shall apply over the whole sky and for elevation angles higher than the minimum operating angle <math>\Theta_{\text{eta min}}</math> 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"> <li>- was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or</li> <li>- was notified before the date of receipt of the complete Appendix <b>4</b> information for coordination or notification, as appropriate, for the space station to which the limits apply.</li> </ul> <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 <b>743 (WRC-03)</b> 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-15)</p>

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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"> <li>- 137 dB(W/m<sup>2</sup>) in 1 GHz and -153 dB(W/m<sup>2</sup>) 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</li> <li>- 116 dB(W/m<sup>2</sup>) 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.</li> </ul> <p>These values shall apply at the site of any radio astronomy station that either:</p> <ul style="list-style-type: none"> <li>- was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004;</li> <li>or</li> <li>- 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.</li> </ul> <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 <b>743 (WRC-03)</b> 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 <b>122 (Rev.WRC-07)</b>. (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. <b>5.43</b>). (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>
5.554A	<p>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)</p>
5.555	<p><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)</p>
5.555B	<p>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 dB(W/m<sup>2</sup>) in any 500 kHz band at the site of any radio astronomy station. (WRC-03)</p>
5.556	<p>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)</p>
5.556A	<p>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 dB(W/(m<sup>2</sup> * 100 MHz)) for all angles of arrival. (WRC-97)</p>
5.557A	<p>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)</p>

RR foot-note No	RR footnote text
<b>5.558</b>	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. <b>5.43</b> ). (WRC 2000)
<b>5.558A</b>	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 dB(W/(m <sup>2</sup> * 100 MHz)) for all angles of arrival. (WRC-97)
<b>5.559</b>	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. <b>5.43</b> ). (WRC-2000)
<b>5.559B</b>	The use of the frequency band 77.5- 78 GHz by the radiolocation service shall be limited to short-range radar for ground-based applications, including automotive radars. The technical characteristics of these radars are provided in the most recent version of Recommendation ITU R M.2057. The provisions of No. <b>4.10</b> do not apply. (WRC 15)
<b>5.560</b>	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.
<b>5.561</b>	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)
<b>5.561A</b>	The 81- 81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis. (WRC-2000)
<b>5.562</b>	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)
<b>5.562A</b>	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)
<b>5.562B</b>	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)
<b>5.562C</b>	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 dB(W/(m <sup>2</sup> * MHz)) for all angles of arrival. (WRC-2000)
<b>5.562E</b>	The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5- 134 GHz. (WRC-2000)
<b>5.562F</b>	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)
<b>5.562G</b>	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)
<b>5.562H</b>	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 <sup>2</sup> * MHz)) for all angles of arrival. (WRC 2000)
<b>5.563A</b>	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)

RR foot-note No	RR footnote text
<b>5.563B</b>	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)
<b>5.565</b>	<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"> <li>- 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;</li> <li>- 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.</li> </ul> <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>
<b>9.11A</b>	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. <b>9.12</b> to <b>9.16</b> are applicable; (WRC-2000)
<b>9.12</b>	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. <b>9.11A</b> , 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)
<b>9.12A</b>	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. <b>9.11A</b> , 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)
<b>9.13</b>	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. <b>9.11A</b> , 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)
<b>9.14</b>	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. <b>9.11A</b> in respect of receiving stations of terrestrial services where the threshold value is exceeded; (WRC-07)
<b>9.15</b>	j) 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. <b>9.11A</b> , 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)
<b>9.16</b>	k) 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. <b>9.11A</b> and which is located within the coordination area of an earth station in a non-geostationary-satellite network; (WRC-2000)

RR foot-note No	RR footnote text
<b>9.17</b>	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. <b>9.15</b> ; (WRC-2000)
<b>9.18</b>	n) for any transmitting station of a terrestrial service in the bands referred to in No. <b>9.17</b> within the coordination area of an earth station, in respect of this earth station, with the exception of the coordination under Nos. <b>9.16</b> and <b>9.19</b> ; (WRC-2000)
<b>9.19</b>	o) 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 broadcasting-satellite service. (WRC-2000)
<b>9.21</b>	p) 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)

### b) Relevant European Common Allocation Table (ECA) Footnote

ECA foot-note No	European Common Allocation Table (ECA) footnote text
<b>ECA3</b>	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.
<b>ECA5</b>	In parts of this band aeronautical stations and aircraft stations may utilise 8.33 kHz channel spacing for non-secure communications requirements.
<b>ECA6</b>	The mobile-satellite service is limited to low earth orbiting satellites.
<b>ECA7</b>	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.
<b>ECA17</b>	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.
<b>ECA19</b>	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.
<b>ECA23</b>	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.