European Radiocommunications Committee (ERC)
within the European Conference of Postal and Telecommunications Administrations (CEPT)

THE EUROPEAN TABLE OF FREQUENCY ALLOCATIONS AND UTILISATIONS COVERING THE FREQUENCY RANGE 9 kHz TO 275 GHz

Lisboa January 2002

EUROPEAN TABLE OF FREQUENCY ALLOCATIONS AND UTILISATIONS
FREQUENCY RANGE 9 kHz TO 275 GHz

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EUROPEAN TABLE OF FREQUENCY ALLOCATIONS AND UTILISATIONS FREQUENCY RANGE 9 kHz TO 275 GHz

1 INTRODUCTION

Following the World Administrative Radio Conference in 1992 which allocated spectrum to new services in the 1 - 3 GHz frequency range CEPT began to develop a general plan to promote the harmonised European use of frequencies within the band 1350 - 2690 MHz. Particular importance was attached to the early development of such a general plan in order to provide a framework for the implementation of the decisions of WARC-92 and the consequential changes required, in a harmonised way, throughout CEPT member countries and to provide the necessary guidance for European radio equipment manufacturers to commence production.

Since then CEPT has endorsed the principle of adopting a harmonised European Table of Frequency Allocations and Utilisations by the year 2008. This work is being progressed by the CEPT European Radiocommunications Office (ERO) through a series of Detailed Spectrum Investigations (DSIs) which consider in turn different frequency ranges. The DSIs were developed as a major open and transparent consultation process in close cooperation with industry, organizations, administrations and users within the following frequency bands:

- The DSI Phase I covering the frequency range 3400 – 105 GHz developed in 1992-93
- The DSI Phase II covering the frequency range 29.7-960 MHz developed in 1994-95
- The DSI Phase III covering the frequency range 862-3400 MHz developed in 1998-2000

As a result of the DSIs the CEPT adopted the Harmonised European Table of Frequency Allocations and Utilisations. The first table was agreed upon in June 1994 and several updates have been agreed until the current version (Lisbon January 2002)

2 WARC-92, WRC-95 ,WRC-97 and WRC-2000

Due account has been taken of the relevant decisions of the World Radio Conferences WARC-92, WRC-95 ,WRC-97 and WRC-2000 and of strategies developed by other international fora concerning, in particular, the introduction and development of mobile and mobile-satellite services.

3 EUROPEAN TABLE OF FREQUENCY ALLOCATIONS AND UTILISATIONS

A European Table of Frequency Allocations and Utilisations for the frequency band 9 kHz to 275 GHz expected beyond the year 2008 has been developed and is attached as Annex 1 to this Report. Although the implementation of this Table has been arranged for the year 2008 it is expected that CEPT member countries will endeavour to implement, as soon as possible, as many parts of the Table as they are able. It is also expected that the Table will be used as a source document by CEPT member countries for the development of Recommendations, Decisions, and European Common Proposals (ECPs) for future Radio Conferences of the ITU and as background for development of national frequency allocation tables and national frequency usage plans.

This Report and its associated table will be reviewed periodically (once a year) and revised as necessary by the ECC taking into account the results of World Radio Conferences, future DSIs, ECC/ERC Decisions and other relevant developments.

4 CEPT DECISIONS AND RECOMMENDATIONS

During the preparation of the Table account was taken of work already completed by CEPT in respect of systems expected to operate in this frequency range. The ECC/ERC Decisions and ECC/ERC Recommendations, which are relevant to frequency management issues, have been incorporated into the Table and are listed in Annex 4.

5 MILITARY REQUIREMENTS

Liaison with military authorities from CEPT countries has also been necessary in view of their use of, and requirements in, this frequency range. Although no single representative military body exists for all CEPT member countries, the North Atlantic Treaty Organisation (NATO) has a Joint Civil/Military Frequency Agreement (NJFA) which was felt to be a useful basis from which to develop a view of military frequency requirements. A forum that allows both civil and military frequency managers from all CEPT countries to meet has also been established by CEPT. This forum established a project team (JPT1) which has looked in detail at the requirements for harmonised military usage of spectrum to meet the needs of both NATO and non-NATO CEPT countries. The results of the studies by JPT1 are reflected in the Table.

Military requirements vary both between activities and countries. In some countries national requirements may be more than the harmonised band, in other countries for the time being there may be no national requirements in a specific harmonised band.

In general, the harmonised military bands should provide *a common military frequency resource* in order to allow systems to operate in common border areas, facilitate common exercises and Peace Keeping Operations (PKO), include the core frequency assets for day-to-day training, exercise, combat readiness and employment and support electronic countermeasures (ECM) training.

Any spectrum reorganisation should aim at a provision of a common military frequency resource in accordance with the ECA.

ANNEX 1

EUROPEAN TABLE OF FREQUENCY ALLOCATIONS AND UTILISATIONS IN THE RANGE 9 kHz TO 275 GHz EXPECTED BEYOND THE YEAR 2008

EXPLANATORY NOTES TO THE TABLE

The heading of 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

Column 2: RR Region 1 Allocations and relevant footnotes
Contains in each frequency band:
- Current RR Article 5 allocations which correspond to Region 1.
- Current RR Article 5 footnotes relevant to CEPT countries

See Annex 3 for description of the RR Article 5 footnotes included in the table.

Column 3: European Common Allocation (ECA)
Contains in each frequency band:
- Allocations of major use or major interest in CEPT member countries expected beyond 2008.
- RR Art. 5 footnotes affecting a major number of CEPT countries beyond 2008. RR Art 5 footnotes with specific allocation to CEPT countries are only included in the European Table if 10 or more CEPT countries are included in the footnote
- EU footnotes relevant to the European allocation. See Annex 2

Column 4: Major utilisation
This column includes where appropriate in each frequency band and for the services allocated in the European Common Allocation:
- The major uses in CEPT member countries expected beyond 2008.
- Mention of systems expected to be in use in a major number of CEPT member countries beyond the year 2008.

Mention of specific utilisations of a given service does not preclude the use of other services mentioned in the European Common Allocation.

Column 5: EU footnotes
This column contains EU footnotes relevant to the particular utilization.

Column 6: ECC/ERC document
This column contains information about ECC/ERC Decisions and Recommendations relevant to the particular utilization. The ECC/ERC documents are described in Annex 4

Column 7: Standards
This column contains information about the relevant standards.
For Harmonised Standards as defined in the R&TTE Directive see Annex 5

Column 5: Notes

This column indicates where appropriate in each frequency band:

Where applicable, the date of entry into force of:

a) a specific allocation of the European Common Allocation column.
b) ERC Decision / ERC Recommendation mentioned in the utilisations column.
c) major utilisation contained in the utilisation column.

Any other relevant information such as the nature of use of a major utilisation.

In respect of **defence systems** two terms are used with the associated definitions:

1) Common military tuning range:- A common military tuning range is normally a recommended tuning range for radio equipment operating across harmonised military bands. Such a tuning range forms the basis for planning of future military equipment procurement.

2) Harmonised military band:- A frequency band which is in general military use in Europe and identified for military utilisation in the European Common Allocation Table (ECA). Such a frequency band forms a basis for military use and planning. The band can be shared between civil and military users according to national requirements and legislation.

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU-footnote*	*ERC Document*	*Standard*	*Note*
9 - 14 kHz						
RADIONAVIGATION	RADIONAVIGATION	Inductive SRD	EU2	ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		ISM applications				
14 - 19.95 kHz						
FIXED MARITIME MOBILE 5.57 5.55 5.56	FIXED MARITIME MOBILE 5.57 5.56 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
19.95 - 20.05 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)					
20.05 - 70 kHz						
FIXED MARITIME MOBILE 5.57 5.56 5.58	FIXED MARITIME MOBILE 5.57 5.56 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
70 - 72 kHz						
RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	Inductive SRD	EU2	ERC REC 70-03 ERC DEC (01)13	EN 300 330	

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
72 - 84 kHz						
FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56 EU2	DCF time signal				77.5 kHz
		Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
84 - 86 kHz						
RADIONAVIGATION 5.60	RADIONAVIGATION 5.60 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Military applications				
86 - 90 kHz						
FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56	FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
90 - 110 kHz						
RADIONAVIGATION 5.62 Fixed 5.64	RADIONAVIGATION 5.62 Fixed 5.64 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		LORAN-C				
		Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
110 - 112 kHz						
FIXED MARITIME MOBILE RADIONAVIGATION 5.64	FIXED MARITIME MOBILE RADIONAVIGATION 5.64 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
112 - 115 kHz						
RADIONAVIGATION 5.60	RADIONAVIGATION 5.60 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
115 - 117.6 kHz						
RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 5.66	RADIONAVIGATION 5.60 Fixed Maritime mobile 5.64 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
117.6 - 126 kHz						
FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
126 - 129 kHz						
RADIONAVIGATION 5.60	RADIONAVIGATION 5.60 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
129 - 130 kHz						
FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64	FIXED MARITIME MOBILE RADIONAVIGATION 5.60 5.64 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
130 - 148.5 kHz						
FIXED MARITIME MOBILE 5.64 5.67	FIXED MARITIME MOBILE 5.64 EU2	Amateur applications		ERC REC 62-01		Within the band 135.7-137.8 kHz
		Inductive SRD		ERC REC 70-03 ERC DEC (01)13	EN 300 330	
		Maritime applications				
		Military applications				
148.5 - 255 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Assignment plan GE75 Digital systems to be introduced

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
255 - 283.5 kHz						
AERONAUTICAL RADIONAVIGATION BROADCASTING	AERONAUTICAL RADIONAVIGATION BROADCASTING	Aeronautical Radio Beacons				
		Broadcasting				Frequency assignment plan GE75 Digital systems to be introduced
283.5 - 315 kHz						
AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (RADIOBEACON) 5.73 5.72 5.75	AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (RADIOBEACON) 5.73 5.74 EU2	Aeronautical Radio Beacons				Freqeuncy assignment plan GE85 NDB
		Maritime Radio Beacons				Frequency Assignment plan GE85 IALA - plan to allow differential GPS
315 - 325 kHz						
AERONAUTICAL RADIONAVIGATION Maritime Radionavigation (radiobeacons) 5.73 5.72 5.75	AERONAUTICAL RADIONAVIGATION Maritime Radionavigation (radiobeacons) 5.73 EU2	Aeronautical Radio Beacons				NDB
		Maritime Radio Beacons				IALA - plan to allow differential GPS
325 - 405 kHz						
AERONAUTICAL RADIONAVIGATION 5.72	AERONAUTICAL RADIONAVIGATION EU2	Aeronautical Radio Beacons				
405 - 415 kHz						
RADIONAVIGATION 5.76 5.72	RADIONAVIGATION 5.76 EU2	Aeronautical Radio Beacons				
		Maritime Radio Beacons				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
415 - 435 kHz						
AERONAUTICAL RADIONAVIGATION MARITIME MOBILE 5.79 5.72	AERONAUTICAL RADIONAVIGATION MARITIME MOBILE 5.79 EU2	Aeronautical Radio Beacons				Frequency Assignment plan GE85
		Maritime applications				Frequency assignment plan GE85
435 - 495 kHz						
MARITIME MOBILE 5.79 5.79A Aeronautical Radionavigation 5.72 5.82	MARITIME MOBILE 5.79 5.79A Aeronautical Radionavigation 5.82 EU2	Detection of avalanche victims		ERC REC 70-03	EN 300 718	457 kHz
		Maritime applications				Frequency assignment plan GE85
		Navtex transmissions national language			EN 300 065	490 kHz
		Receiver IF				455-457 kHz
495 - 505 kHz						
MOBILE (distress and calling) 5.83	MOBILE (distress and calling) 5.83	Maritime GMDSS				
505 - 526.5 kHz						
AERONAUTICAL RADIONAVIGATION MARITIME MOBILE 5.79 5.79A 5.84 5.72	AERONAUTICAL RADIONAVIGATION MARITIME MOBILE 5.79 5.79A 5.84 EU2	Aeronautical Radio Beacons				Frequency assignment plan GE85
		Maritime applications				Frequency assignment plan GE85
		Navtex transmissions International			EN 300 065	518 kHz
526.5 - 1606.5 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Assignment plan GE75 Digital systems to be introduced

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
1606.5 - 1625 kHz						
FIXED LAND MOBILE MARITIME MOBILE 5.90 5.92	FIXED LAND MOBILE MARITIME MOBILE 5.90 5.92 EU2	Maritime applications				Frequency assignment plan GE85
		Military applications				
		Radiodetermination applications				
1625 - 1635 kHz						
RADIOLOCATION 5.93	RADIOLOCATION 5.93 EU2	Radiodetermination applications				Brussels Agreement 67
1635 - 1800 kHz						
FIXED LAND MOBILE MARITIME MOBILE 5.90 5.92 5.96	FIXED LAND MOBILE MARITIME MOBILE 5.90 5.92 EU2 5.96	Amateur applications				
		Maritime applications				Frequency assignment plan GE85
		Military applications				
		Radiodetermination applications				Brussels Agreement 67
1800 - 1810 kHz						
RADIOLOCATION 5.93	RADIOLOCATION 5.93 EU2	Radiodetermination applications				Brussels Agreement 67
1810 - 1850 kHz						
AMATEUR 5.98 5.99 5.100	AMATEUR 5.100 EU2 5.98	Amateur applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU-footnote	ERC Document	Standard	Note
1850 - 2000 kHz							
FIXED MOBILE except aeronautical mobile 5.92 5.96 5.103	FIXED MOBILE 5.103 5.92 5.96	EU2	Amateur applications				
			Maritime applications				
			Military applications				
			Radiodetermination applications				Brussels Agreement 67
2000 - 2025 kHz							
FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	FIXED MOBILE except aeronautical mobile (R) 5.103 5.92	EU2	Maritime applications				
			Military applications				
			Radiodetermination applications				Brussels Agreement 67
2025 - 2045 kHz							
FIXED MOBILE except aeronautical mobile (R) Meteorological Aids 5.104 5.92 5.103	FIXED MOBILE MOBILE except aeronautical mobile (R) 5.103 5.92	EU2	Maritime applications				
			Military applications				
			Radiodetermination applications				Brussels Agreement 67
2045 - 2160 kHz							
FIXED LAND MOBILE MARITIME MOBILE 5.92	FIXED LAND MOBILE MARITIME MOBILE 5.92		International Merchand shipping				International telephony frequencies (ship TX) in accordance with RR 52.202 - 52.204
			Maritime applications				Frequency assignment plan GE85
			Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
2160 - 2170 kHz						
RADIOLOCATION 5.93	RADIOLOCATION 5.93 EU2	Radiodetermination applications				Brussels Agreement 67
2170 - 2173.5 kHz						
MARITIME MOBILE	MARITIME MOBILE EU2	Maritime applications				Frequency assignment plan GE85
2173.5 - 2190.5 kHz						
MOBILE (distress and calling) 5.108 5.109 5.110 5.111	MOBILE (distress and calling) 5.108 EU2 5.109 5.110 5.111	DSC distress and calling				2187.5 kHz
		Maritime GMDSS				2182 kHz distress and calling
		Telex distress traffic				2174.5 kHz
2190.5 - 2194 kHz						
MARITIME MOBILE	MARITIME MOBILE EU2	Maritime applications				
2194 - 2300 kHz						
FIXED MOBILE except aeronautical mobile (R) 5.92 5.103 5.112	FIXED MOBILE except aeronautical mobile (R) 5.103 EU2 5.92	Maritime applications				
		Military applications				
2300 - 2498 kHz						
BROADCASTING 5.113 FIXED MOBILE except aeronautical mobile (R) 5.103	FIXED MOBILE except aeronautical mobile (R) 5.103 EU2	Maritime applications				
		Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
2498 - 2501 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)					
2501 - 2502 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research					
2502 - 2625 kHz						
FIXED MOBILE except aeronautical mobile (R) 5.92 5.103 5.114	FIXED MOBILE except aeronautical mobile (R) 5.103	Military applications Radiodetermination applications	EU2			
	5.92					
2625 - 2650 kHz						
MARITIME MOBILE MARITIME RADIONAVIGATION 5.92	FIXED MOBILE except aeronautical mobile (R) 5.103 5.92	Maritime applications Military applications	EU2			
2650 - 2850 kHz						
FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	FIXED MOBILE except aeronautical mobile (R) 5.103 5.92	Military applications Radiodetermination applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
2850 - 3025 kHz						
AERONAUTICAL MOBILE (R) 5.111 5.115	AERONAUTICAL MOBILE (R) 5.111 5.115	Aeronautical Mobile (R) applications Telephony distress traffic				Appendix 27 Allotment Plan 3023 kHz
3025 - 3155 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
3155 - 3200 kHz						
FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	FIXED MOBILE except aeronautical mobile (R) 5.116	Maritime applications Military applications	EU2			
3200 - 3230 kHz						
BROADCASTING 5.113 FIXED MOBILE except aeronautical mobile (R) 5.116	FIXED MOBILE except aeronautical mobile (R) 5.116	Maritime applications Military applications	EU2			
3230 - 3400 kHz						
BROADCASTING 5.113 FIXED MOBILE except aeronautical mobile 5.116	FIXED MOBILE except aeronautical mobile 5.116	Maritime applications Military applications	EU2			
3400 - 3500 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
3500 - 3800 kHz						
AMATEUR FIXED MOBILE except aeronautical mobile 5.92	AMATEUR FIXED MOBILE except aeronautical mobile 5.92 EU2	Amateur applications Military applications				
3800 - 3900 kHz						
AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE EU2	Aeronautical Mobile (OR) applications				
3900 - 3950 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
3950 - 4000 kHz						
BROADCASTING FIXED	BROADCASTING FIXED EU2	Broadcasting Military applications				Digital systems to be introduced
4000 - 4063 kHz						
FIXED MARITIME MOBILE 5.127	FIXED MARITIME MOBILE 5.127 EU2	Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
4063 - 4438 kHz						
MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128 5.129	MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.129 EU2	DSC calling				4208, 4208.5, 4209, 4219.5, 4220, 4220.5 kHz
		DSC distress traffic				4207.5 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				4210 kHz
		Meteorological and navigational warnings				4209.5 kHz
		Telephony distress traffic				4125 kHz
		Telex distress traffic				4177.5 kHz
4438 - 4650 kHz						
FIXED MOBILE except aeronautical mobile (R)	FIXED MOBILE except aeronautical mobile (R) EU2	Military applications				
		Railway applications		ERC REC 70-03	EN 300 330	4515 kHz Euroloop
4650 - 4700 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links
4700 - 4750 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
4750 - 4850 kHz						
AERONAUTICAL MOBILE (OR) BROADCASTING 5.113 FIXED LAND MOBILE	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	Aeronautical Mobile (OR) applications				
4850 - 4995 kHz						
BROADCASTING 5.113 FIXED LAND MOBILE	FIXED LAND MOBILE	Military applications	EU2			
4995 - 5003 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)					
5003 - 5005 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research					
5005 - 5060 kHz						
BROADCASTING 5.113 FIXED	FIXED	Military applications	EU2			

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
5060 - 5250 kHz						
FIXED Mobile except aeronautical mobile 5.133	FIXED Mobile except aeronautical mobile EU2	Military applications				
5250 - 5450 kHz						
FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile EU2	Military applications				
5450 - 5480 kHz						
AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE	AERONAUTICAL MOBILE (OR) FIXED LAND MOBILE EU2	Aeronautical Mobile (OR) applications Military applications				
5480 - 5680 kHz						
AERONAUTICAL MOBILE (R) 5.111 5.115	AERONAUTICAL MOBILE (R) 5.111 5.115	Aeronautical Mobile (R) applications Telephony distress traffic				Appendix 27 Allotment Plan Inlcuding HF Data Links 5680 kHz
5680 - 5730 kHz						
AERONAUTICAL MOBILE (OR) 5.111 5.115	AERONAUTICAL MOBILE (OR) 5.111 5.115	Aeronautical Mobile (OR) applications Telephony distress traffic				Appendix 26 Allotment Plan 5680 kHz

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
5730 - 5900 kHz						
FIXED LAND MOBILE	FIXED LAND MOBILE EU2	Military applications				
5900 - 5950 kHz						
BROADCASTING 5.134 5.136	BROADCASTING 5.134 5.136	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
5950 - 6200 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Article 12 planning procedure Digital systems to be introduced
6200 - 6525 kHz						
MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137 EU2	DSC calling				6312.5, 6313, 6313.5, 6331, 6331.5, 6332 kHz
		DSC distress traffic				6312 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				6314 kHz
		Telephony distress traffic				6215 kHz
		Telex distress traffic				6268 kHz
6525 - 6685 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU-footnote	ERC Document	Standard	Note
6685 - 6765 kHz							
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
6765 - 7000 kHz							
FIXED Land Mobile 5.139 5.138	FIXED Land Mobile 5.139 5.138	EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)14	EN 300 330	6765-6795 kHz
			ISM applications				
			Military applications				
			Non Specific SRD applications		ERC REC 70-03 ERC DEC (01)01	EN 300 330	6765-6795 kHz
7000 - 7100 kHz							
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE		Amateur applications				
			Amateur-satellite applications				
7100 - 7300 kHz							
BROADCASTING	BROADCASTING		Broadcasting				Article 12 planning procedure Digital systems to be introduced
7300 - 7350 kHz							
BROADCASTING 5.134 5.143	BROADCASTING 5.134 5.143		Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU-footnote	ERC Document	Standard	Note
7350 - 8100 kHz							
FIXED Land Mobile	FIXED Land Mobile		Inductive SRD		ERC REC 70-03 ERC DEC (01)15	EN 300 330	7400-8800 kHz
		EU2	Military applications				
8100 - 8195 kHz							
FIXED MARITIME MOBILE	FIXED MARITIME MOBILE		Inductive SRD		ERC REC 70-03 ERC DEC (01)15	EN 300 330	7400-8800 kHz
		EU2	Maritime applications				Appendix 17 channeling plan
8195 - 8815 kHz							
MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145		DSC calling				8415, 8415.5, 8416, 8436.5, 8437, 8437.5 kHz
5.111	5.111	EU2	DSC distress traffic				8364 kHz and 8414.5 kHz
			Inductive SRD		ERC REC 70-03 ERC DEC (01)15		
			Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
			Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				8416.5 kHz
			Telephony distress traffic				8291 kHz
			Telex distress traffic				8376.5 kHz
8815 - 8965 kHz							
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
8965 - 9040 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
		Military applications				
9040 - 9400 kHz						
FIXED	FIXED	Military applications				
	EU2					
9400 - 9500 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.134 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
9500 - 9900 kHz						
BROADCASTING 5.147	BROADCASTING 5.147	Broadcasting				Article 12 planning procedure Digital systems to be introduced
9900 - 9995 kHz						
FIXED	FIXED	Military applications				
	EU2					
9995 - 10003 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)					

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
10003 - 10005 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research 5.111	STANDARD FREQUENCY AND TIME SIGNAL Space Research 5.111					
10005 - 10100 kHz						
AERONAUTICAL MOBILE (R) 5.111	AERONAUTICAL MOBILE (R) 5.111	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links
10100 - 10150 kHz						
Amateur FIXED	Amateur FIXED	Amateur applications				
	EU2	Military applications				
10150 - 11175 kHz						
FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	Military applications				
	EU2					
11175 - 11275 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
11275 - 11400 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
11400 - 11600 kHz						
FIXED	FIXED EU2	Military applications				
11600 - 11650 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.134 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
11650 - 12050 kHz						
BROADCASTING 5.147	BROADCASTING 5.147	Broadcasting				Article 12 planning procedure Digital systems to be introduced
12050 - 12100 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
12100 - 12230 kHz						
FIXED	FIXED EU2	Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
12230 - 13200 kHz						
MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145 EU2	DSC calling				12577.5, 12578, 12578.5, 12657, 12657.5, 12658 kHz
		DSC distress traffic				12577 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				12579 kHz
		Telephony distress traffic				12290 kHz
		Telex distress traffic				12520 kHz
13200 - 13260 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
13260 - 13360 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links
13360 - 13410 kHz						
FIXED RADIO ASTRONOMY	FIXED RADIO ASTRONOMY	Military applications				
5.149	5.149 EU2	Radioastronomy				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
13410 - 13570 kHz						
FIXED Mobile except aeronautical mobile (R) 5.150	FIXED Mobile except aeronautical mobile (R) 5.150 EU2	Inductive SRD		ERC REC 70-03 ERC DEC (01)14	EN 300 330	13553-13567 kHz
		ISM applications				13553-13567 kHz
		Military applications				
		Non Specific SRD applications		ERC REC 70-03 ERC DEC (01)01	EN 300 330	13553-13567 kHz
13570 - 13600 kHz						
BROADCASTING 5.134 5.151	BROADCASTING 5.134 5.151	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
13600 - 13800 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Article 12 planning procedure Digital systems to be introduced
13800 - 13870 kHz						
BROADCASTING 5.134 5.151	BROADCASTING 5.134 5.151	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
13870 - 14000 kHz						
FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R) EU2	Military applications				
14000 - 14250 kHz						
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications				
		Amateur-satellite applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
14250 - 14350 kHz						
AMATEUR 5.152	AMATEUR	Amateur applications				
14350 - 14990 kHz						
FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R) EU2	Military applications				
14990 - 15005 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz) 5.111	STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz) 5.111					
15005 - 15010 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research					
15010 - 15100 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
15100 - 15600 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Article 12 planning procedure Digital systems to be introduced
15600 - 15800 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.134 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
15800 - 16360 kHz						
FIXED	FIXED EU2	Military applications				
16360 - 17410 kHz						
MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145 EU2	DSC calling				16805, 16805.5, 16806, 16903, 16903.5, 16904 kHz
		DSC distress traffic				16804.5 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				16806.5 kHz
		Telephony distress traffic				16420 kHz
		Telex distress traffic				16695 kHz
17410 - 17480 kHz						
FIXED	FIXED EU2	Military applications				
17480 - 17550 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.134 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
17550 - 17900 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Article 12 planning procedure Digital systems to be introduced

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
17900 - 17970 kHz						
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links
17970 - 18030 kHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical Mobile (OR) applications				Appendix 26 Allotment Plan
18030 - 18052 kHz						
FIXED	FIXED	Military applications	EU2			
18052 - 18068 kHz						
FIXED Space Research	FIXED Space Research	Military applications	EU2			
18068 - 18168 kHz						
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications				
5.154		Amateur-satellite applications				
18168 - 18780 kHz						
FIXED Mobile except aeronautical mobile	FIXED Mobile except aeronautical mobile	DSC calling				18898.5, 18899, 18899.5 kHz
		Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
18780 - 18900 kHz						
MARITIME MOBILE	MARITIME MOBILE EU2	Maritime applications				Appendix 17 channeling plan
18900 - 19020 kHz						
BROADCASTING 5.134 5.146	BROADCASTING 5.134 5.146	Broadcasting				WARC92 bands to be implemented 2007 Digital systems to be introduced
19020 - 19680 kHz						
FIXED	FIXED EU2					
		Military applications				
19680 - 19800 kHz						
MARITIME MOBILE 5.132	MARITIME MOBILE 5.132 EU2	DSC calling				19703.5, 19704, 19704.5 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				19680.5 kHz
19800 - 19990 kHz						
FIXED	FIXED EU2	Military applications				
19990 - 19995 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research 5.111	STANDARD FREQUENCY AND TIME SIGNAL Space Research 5.111	Search and rescue applications				19993 kHz (+/- 3 kHz) concerning manned space vehicles

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU-footnote	ERC Document	Standard	Note
19995 - 20010 kHz							
STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz) 5.111	STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz) 5.111						
20010 - 21000 kHz							
FIXED Mobile	FIXED Mobile	EU2	Military applications				
21000 - 21450 kHz							
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE		Amateur applications Amateur-satellite applications				
21450 - 21850 kHz							
BROADCASTING	BROADCASTING		Broadcasting				Article 12 planning procedure Digital systems to be introduced
21850 - 21870 kHz							
FIXED 5.155A 5.155	FIXED 5.155A 5.155	EU2	Military applications				
21870 - 21924 kHz							
FIXED 5.155B	FIXED 5.155B	EU2	Military applications				
21924 - 22000 kHz							
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		Aeronautical Mobile (R) applications				Appendix 27 Allotment Plan Inlcuding HF Data Links

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
22000 - 22855 kHz						
MARITIME MOBILE 5.132	MARITIME MOBILE 5.132 EU2	DSC calling				22374.5, 22375, 22375.5, 22444, 22444.5, 22445 kHz
		Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				22376 kHz
22855 - 23000 kHz						
FIXED	FIXED EU2	Military applications				
23000 - 23200 kHz						
FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R) EU2	Military applications				
23200 - 23350 kHz						
AERONAUTICAL MOBILE (OR) FIXED 5.156A	AERONAUTICAL MOBILE (OR) FIXED 5.156A	Aeronautical Mobile (OR) applications				
		Military applications				
23350 - 24000 kHz						
FIXED MOBILE except aeronautical mobile 5.157	FIXED MOBILE except aeronautical mobile 5.157 EU2	Military applications				
24000 - 24890 kHz						
FIXED LAND MOBILE	FIXED LAND MOBILE EU2	Military applications				

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
24890 - 24990 kHz						
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications				
		Amateur-satellite applications				
24990 - 25005 kHz						
STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)					
25005 - 25010 kHz						
STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research	Space Research				Scientific and medical space research
25010 - 25070 kHz						
FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	Military applications				
	EU2					
25070 - 25210 kHz						
MARITIME MOBILE	MARITIME MOBILE	DSC calling				25208.5, 25209, 25209.5 kHz
	EU2	Maritime applications				Appendix 17 channeling plan
25210 - 25550 kHz						
FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	Military applications				
	EU2					

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
25550 - 25670 kHz						
RADIO ASTRONOMY 5.149	RADIO ASTRONOMY 5.149	Radioastronomy				
25670 - 26100 kHz						
BROADCASTING	BROADCASTING	Broadcasting				Article 12 Planning procedure Digital systems to be introduced
26100 - 26175 kHz						
MARITIME MOBILE 5.132	MARITIME MOBILE 5.132	DSC calling				26121, 26121.5, 16122 kHz
	EU2	Maritime applications				Appendix 17 channeling plan Appendix 25 allotment plan
		Maritime Safety Information (MSI) Maritime Safety Imformation (MSI)				26100.5 kHz
26175 - 27500 kHz						
FIXED MOBILE except aeronautical mobile 5.150	FIXED MOBILE except aeronautical mobile 5.150 EU2	CB		ERC DEC (98)11 ERC REC T/R 20-09	ETS 300 135 EN 300 433	26.960-27.410 MHz
		Inductive SRD		ERC REC 70-03 ERC DEC (01)16	EN 300 330	26.957-27-283 MHz
		ISM applications				26.957-27.283 MHz
		Military applications				
		Model control SRD		ERC REC 70-03 ERC DEC (01)10	EN 300 220	26.995, 27.045, 27.095, 27.145, 27.195 MHz
		Non Specific SRD applications		ERC REC 70-03 ERC DEC (01)02	EN 300 330	26.957-27.283 MHz
		Railway applications		ERC REC 70-03	EN 300 330	27.095 MHz Eurobalise

RR Region 1 Allocations and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU-footnote	ERC Document	Standard	Note
27500 - 28000 kHz						
FIXED METEOROLOGICAL AIDS MOBILE	FIXED METEOROLOGICAL AIDS MOBILE	Military applications	EU2			
28000 - 29700 kHz						
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications Amateur-satellite applications				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*		*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
29.7 - 30.005 MHz							
FIXED MOBILE	MOBILE		Defence systems	EU1			
		EU2	Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
30.005 - 30.01 MHz							
FIXED MOBILE SPACE OPERATION (satellite identification) SPACE RESEARCH	MOBILE		Defence systems	EU1			
		EU2	Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
30.01 - 37.5 MHz							
FIXED MOBILE	MOBILE		Defence systems	EU1			The bands 30.3-30.5 MHz and 32.15-32.45 MHz are harmonised military bands
		EU2 EU27	Model control		ERC REC 70-03 ERC DEC (01)11	EN 300 220	Model control in 34.995-35.225 MHz only for flying models.
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Within the band 30.01 - 34.90 MHz. Narrow band audio systems including tour guide systems on a tuning range basis

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
37.5 - 38.25 MHz						
FIXED MOBILE Radio Astronomy 5.149	MOBILE except Aeronautical Mobile Radio Astronomy 5.149 EU2	Defence systems	EU1			
		PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
		Radio astronomy applications				Continuum measurements
		Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
38.25 - 39.986 MHz						
FIXED MOBILE	MOBILE EU2	Defence systems	EU1			
		Meteor-scatter applications		ERC REC 00-04		Within the band 39.0-39.2 MHz
		PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
		Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
39.986 - 40.02 MHz						
FIXED MOBILE Space Research	MOBILE Space Research EU2	Defence systems	EU1			
		PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
		Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*		*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
40.02 - 40.66 MHz							
FIXED MOBILE	MOBILE	EU2	Defence systems	EU1			
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
40.66 - 40.7 MHz							
FIXED MOBILE 5.150	MOBILE 5.150	EU2	Defence systems	EU1			
			ISM				
			Model control		ERC DEC (01)12	EN 300 220	
			Non specific SRD		ERC REC 70-03 ERC DEC (01)03	EN 300 220	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
40.7 - 40.98 MHz							
FIXED MOBILE	MOBILE	EU2	Defence systems	EU1			
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
40.98 - 41.015 MHz							
FIXED MOBILE Space Research	MOBILE Space Research	EU2	Defence systems	EU1			
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
41.015 - 44 MHz							
FIXED MOBILE	MOBILE	EU27	Defence systems	EU1			Harmonised military band
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
44 - 46.4 MHz							
FIXED MOBILE 5.162A	MOBILE 5.162A	EU27	Defence systems	EU1			Harmonised military band
			PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
			Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services.

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
46.4 - 47 MHz						
FIXED MOBILE 5.162A	MOBILE except Aeronautical Mobile 5.162A EU27	Defence systems	EU1			Harmonised military band
		PMR			EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
		Radio microphones		ERC REC 70-03	EN 300 422	Narrow band audio systems including tour guide systems on a tuning range basis
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services.
47 - 48 MHz						
BROADCASTING 5.162A 5.163 5.164	LAND MOBILE 5.162A EU2 5.163 EU3 5.164	Defence systems	EU1			
		On-site paging			EN 300 224	Onsite paging in the band 47.0-47.25 MHz
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services.
48 - 48.5 MHz						
BROADCASTING 5.162A 5.163 5.164	LAND MOBILE 5.162A EU2 5.163 EU3 5.164	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services.

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
48.5 - 50 MHz						
BROADCASTING	LAND MOBILE	Defence systems	EU1			
5.162A	5.162A EU2	Non specific SRD				Non specific SRD in 49.5-50 MHz
5.164	5.164 EU3	PMR		ERC REC T/R 25-08	EN 300 086	Single frequency applications
					EN 300 113	
					EN 300 219	
					EN 300 296	
					EN 300 341	
					EN 300 390	
					EN 300 471	
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services
50 - 51 MHz						
BROADCASTING	LAND MOBILE	Amateur applications				
	Amateur	Defence systems	EU1			
5.162A	5.162A EU2	PMR		ERC REC T/R 25-08	EN 300 086	Single frequency applications
5.164	5.164 EU3				EN 300 113	
					EN 300 219	
					EN 300 296	
					EN 300 341	
					EN 300 390	
					EN 300 471	
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services
51 - 52 MHz						
BROADCASTING	LAND MOBILE	Amateur applications				
	Amateur	Defence systems	EU1			
5.162A	5.162A EU2	PMR		ERC REC T/R 25-08	EN 300 086	Single frequency applications
5.164	5.164 EU3				EN 300 113	
					EN 300 219	
					EN 300 296	
					EN 300 341	
					EN 300 390	
					EN 300 471	
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
52 - 54 MHz						
BROADCASTING 5.162A 5.164	LAND MOBILE 5.162A EU2 5.164 EU3	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	single frequency applications
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services
54 - 61 MHz						
BROADCASTING 5.162A 5.163 5.164	LAND MOBILE 5.162A EU2 5.163 EU3 5.164	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 61-68 MHz
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services
61 - 68 MHz						
BROADCASTING 5.162A 5.164	LAND MOBILE 5.162A EU2 5.164 EU3	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 54-61 MHz
		Wind profiler radars				In the range 46-68 MHz. Geographical sharing with other services

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
68 - 70.45 MHz						
FIXED MOBILE except Aeronautical Mobile 5.149 5.174 5.175 5.176 5.177 5.179	MOBILE EU2 EU4	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 77.8-80.25 MHz
70.45 - 74.8 MHz						
FIXED MOBILE except Aeronautical Mobile 5.149 5.174 5.175 5.176 5.177 5.179	MOBILE except Aeronautical Mobile Radio Astronomy 5.149 EU2 EU4 EU27	Defence systems	EU1			Harmonised military band 73.3-74.1 MHz
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 80.25-84.6 MHz
		Radio astronomy applications				Continuum measurements. In 73-74.6 MHz RA for solar wind monitoring
74.8 - 75.2 MHz						
AERONAUTICAL RADIONAVIGATION 5.180	AERONAUTICAL RADIONAVIGATION 5.180	ILS/marker beacons				
75.2 - 77.7 MHz						
FIXED MOBILE except Aeronautical Mobile 5.175 5.179 5.184 5.187	MOBILE EU2	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 85.0-87.5 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
77.7 - 77.8 MHz						
FIXED	MOBILE	Defence systems	EU1			
MOBILE except Aeronautical Mobile		PMR		ERC REC T/R 25-08	EN 300 086	Single frequency applications
5.175	EU2				EN 300 113	
5.179					EN 300 219	
5.184					EN 300 296	
5.187					EN 300 341	
					EN 300 390	
					EN 300 471	
77.8 - 84.6 MHz						
FIXED	MOBILE	Defence systems	EU1			Harmonised military band 79.0-79.7 MHz
MOBILE except Aeronautical Mobile		PMR		ERC REC T/R 25-08	EN 300 086	FB paired with 68-74.8 MHz
5.175	EU2				EN 300 113	
5.179	EU27				EN 300 219	
5.184					EN 300 296	
5.187					EN 300 341	
					EN 300 390	
					EN 300 471	
84.6 - 85 MHz						
FIXED	MOBILE	Defence systems	EU1			
MOBILE except Aeronautical Mobile		PMR		ERC REC T/R 25-08	EN 300 086	Single frequency applications
5.175	EU2				EN 300 113	
5.179					EN 300 219	
5.184					EN 300 296	
5.187					EN 300 341	
					EN 300 390	
					EN 300 471	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
85 - 87.5 MHz						
FIXED MOBILE except Aeronautical Mobile 5.175 5.179 5.184 5.187	MOBILE EU2	Defence systems	EU1			
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 75.2-77.7 MHz
87.5 - 100 MHz						
BROADCASTING 5.190	BROADCASTING	FM Sound Broadcasting, Geneva Agreement 1984				
100 - 108 MHz						
BROADCASTING 5.194	BROADCASTING	FM Sound Broadcasting, Geneva Agreement 1984				
108 - 117.975 MHz						
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	ILS/Localiser				Within the band 108-112 MHz
		VOR				Within the band 108-117.975 MHz
117.975 - 121.45 MHz						
AERONAUTICAL MOBILE (R) 5.198 5.200	AERONAUTICAL MOBILE (R) 5.200	Aeronautical mobile communications for safety and regularity of flights	EU5			

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
121.45 - 121.55 MHz						
AERONAUTICAL MOBILE (R) 5.111 5.198 5.199 5.200 5.201	AERONAUTICAL MOBILE MOBILE-SATELLITE (E/S) 5.111 5.199 5.200	EPIRB			EN 300 152	Band only available for distress and safety
121.55 - 136 MHz						
AERONAUTICAL MOBILE (R) 5.198 5.200 5.201	AERONAUTICAL MOBILE (R) 5.200 5.201	Aeronautical mobile communications for safety and regularity of flights, airline business and airport mobile communications	EU5			
136 - 137 MHz						
AERONAUTICAL MOBILE (R) 5.202 5.203	AERONAUTICAL MOBILE (R) 5.202	Aeronautical mobile communications for safety and regularity of flights, airline business and airport mobile communications	EU5			
137 - 137.025 MHz						
METEOROLOGICAL-SATELLITE (S/E) MOBILE-SATELLITE (S/E) 5.208A 5.209 SPACE OPERATION (S/E) SPACE RESEARCH (S/E) Fixed Mobile except Aeronautical mobile (R) 5.204 5.206 5.208	METEOROLOGICAL-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) 5.208A 5.209 Space Operation (S/E) Space Research (S/E) 5.206 5.208	Low earth orbiting satellites	EU6	ERC DEC (99)06	EN 301 721	
		Meteorological Satellite				
		Mobile applications				Mobile restricted to Aeronautical Mobile (OR), including air sport

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
137.025 - 137.175 MHz						
METEOROLOGICAL-SATELLITE (S/E) SPACE OPERATION (S/E) SPACE RESEARCH (S/E) Fixed Mobile except Aeronautical mobile (R) Mobile-Satellite (S/E) 5.208A 5.209 5.204 5.206 5.208	METEOROLOGICAL-SATELLITE (S/E) MOBILE Mobile-Satellite (S/E) 5.208A 5.209 Space Operation (S/E) Space Research (S/E) 5.206 5.208	Low earth orbiting satellites Meteorological Satellite Mobile applications	EU6	ERC DEC (99)06	EN 301 721	 Mobile restricted to Aeronautical Mobile (OR), including air sport
137.175 - 137.825 MHz						
METEOROLOGICAL-SATELLITE (S/E) MOBILE-SATELLITE (S/E) 5.208A 5.209 SPACE OPERATION (S/E) SPACE RESEARCH (S/E) Fixed Mobile except Aeronautical mobile (R) 5.204 5.206 5.208	METEOROLOGICAL-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) 5.208A 5.209 Space Operation (S/E) Space Research (S/E) 5.206 5.208	Low earth orbiting satellites Meteorological Satellite Mobile applications	EU6	ERC DEC (99)06	EN 301 721	 Mobile restricted to Aeronautical Mobile (OR), including air sport
137.825 - 138 MHz						
METEOROLOGICAL-SATELLITE (S/E) SPACE OPERATION (S/E) SPACE OPERATION (S/E) Fixed Mobile except Aeronautical mobile (R) Mobile-Satellite (S/E) 5.208A 5.209 5.204 5.206 5.208	METEOROLOGICAL-SATELLITE (S/E) MOBILE Mobile-Satellite (S/E) 5.208A 5.209 Space Operation (S/E) Space Research (S/E) 5.206 5.208	Low earth orbiting satellites Meteorological Satellite Mobile applications	EU6	ERC DEC (99)06	EN 301 721	 Mobile restricted to Aeronautical Mobile (OR), including air sport

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
138 - 143.6 MHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Air operation control	EU5			
	LAND MOBILE	Defence systems				Harmonised military band
	Space Research (S/E)	Mobile applications				
5.210	5.211 EU2	Short Range Devices		ERC REC 70-03	EN 300 220	SRDs in the band 138.2-138.45 MHz
5.211	EU27					
5.214						
143.6 - 143.65 MHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Air operation control	EU5			
SPACE RESEARCH (S/E)	LAND MOBILE	Defence systems				Harmonised military band
	SPACE RESEARCH (S/E)	Mobile applications				
5.211	5.211 EU2					
5.214	EU27					
143.65 - 144 MHz						
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Air operation control	EU5			
	LAND MOBILE	Defence systems				Harmonised military band
5.210	5.211 EU2	Mobile applications				
5.211	EU27					
5.214						
144 - 146 MHz						
AMATEUR	AMATEUR	Amateur applications				
AMATEUR-SATELLITE	AMATEUR-SATELLITE	Amateur Satellite applications				
146 - 146.8 MHz						
FIXED	MOBILE	PMR	EU7	ERC REC T/R 25-08	EN 300 086	Single frequency applications
MOBILE except Aeronautical Mobile (R)					EN 300 113	
					EN 300 219	
					EN 300 296	
					EN 300 341	
					EN 300 390	
					EN 300 471	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
146.8 - 148 MHz						
FIXED MOBILE except Aeronautical Mobile (R)	MOBILE	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 151.4-152.6 MHz
148 - 148.4 MHz						
FIXED MOBILE except Aeronautical Mobile (R) MOBILE-SATELLITE (E/S) 5.209 5.218 5.219 5.221	MOBILE MOBILE-SATELLITE (E/S) 5.209 5.218 5.219 5.221	Low earth orbiting satellites	EU6	ERC DEC (99)06	EN 301 721	
		PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 152.6-153 MHz
148.4 - 149.9 MHz						
FIXED MOBILE except Aeronautical Mobile (R) MOBILE-SATELLITE (E/S) 5.209 5.218 5.219 5.221	MOBILE MOBILE-SATELLITE (E/S) 5.209 5.218 5.219 5.221	Low earth orbiting satellites	EU6	ERC DEC (99)06	EN 301 721	
		PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 153.0-154.5 MHz
149.9 - 150.05 MHz						
MOBILE-SATELLITE (E/S) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B 5.220 5.222 5.223	MOBILE MOBILE-SATELLITE (E/S) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B 5.220 5.222 5.223	Low earth orbiting satellites	EU6	ERC DEC (99)06	EN 301 721	
		PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
150.05 - 151.4 MHz						
FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149	MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 154.65-156.0 MHz
		Radio astronomy applications				Continuum measurement and pulsar/solar observations
151.4 - 153 MHz						
FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149	MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 146.8-148.4 MHz
		Radio astronomy applications				Continuum measurement and pulsar/solar observations
153 - 154 MHz						
FIXED MOBILE except Aeronautical Mobile (R) Meteorological Aids	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 148.4-149.4 MHz
154 - 154.5 MHz						
FIXED MOBILE except Aeronautical Mobile (R)	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 149.4-149.9 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
154.5 - 154.65 MHz						
FIXED MOBILE except Aeronautical Mobile (R)	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
154.65 - 156 MHz						
FIXED MOBILE except Aeronautical Mobile (R)	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 150.05-151.4 MHz
156 - 156.5125 MHz						
FIXED MOBILE except Aeronautical Mobile (R) 5.226	MOBILE except Aeronautical Mobile 5.226	RR Appendix 18	EU7 EU8		EN 300 162 EN 300 698 EN 301 178 EN 301 025	Ship stations paired with 160.6-160.625. Single frequency in 156.375-156.500 MHz
156.5125 - 156.5375 MHz						
FIXED MOBILE except Aeronautical Mobile (R) 5.226 5.227	MARITIME MOBILE 5.226 5.227	Digital selective calling for distress, safety			EN 301 025	The frequency 156.525 MHz
156.5375 - 156.7625 MHz						
FIXED MOBILE except Aeronautical Mobile (R) 5.226	MOBILE except Aeronautical Mobile 5.226	RR Appendix 18	EU7 EU8		EN 300 162 EN 300 698 EN 301 178 EN 301 025	Single frequency applications

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
156.7625 - 156.8375 MHz						
MARITIME MOBILE (distress and calling) 5.111 5.226	MARITIME MOBILE 5.111 5.226	International distress, safety and calling frequency			EN 300 162	The frequency 156.8 MHz + single frequencies
156.8375 - 157.45 MHz						
FIXED MOBILE except Aeronautical Mobile 5.226	MOBILE except Aeronautical Mobile 5.226	RR Appendix 18	EU7 EU8		EN 300 162 EN 300 698 EN 301 178 EN 301 025	Ship stations paired with 161.5-162.0 MHz and Single frequencies
157.45 - 160.6 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 162.05-165.2 MHz
160.6 - 160.975 MHz						
FIXED MOBILE except Aeronautical Mobile 5.226	MOBILE except Aeronautical Mobile 5.226	RR Appendix 18	EU7 EU8		EN 300 162 EN 300 698 EN 301 178 EN 301 025	Cost stations, paired with 156.250-156.350 MHz
160.975 - 161.475 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
161.475 - 162.05 MHz						
FIXED MOBILE except Aeronautical Mobile 5.226	MOBILE except Aeronautical Mobile 5.226	RR Appendix 18	EU7 EU8		EN 300 162 EN 301 025 EN 300 698 EN 301 178	Cost stations, paired with 156.9-157.4 MHz For DSC
		Shipborne Automatic Identification System (AIS)		ERC DEC (99)17		161.975 MHz and 162.025 MHz
162.05 - 165.2 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 157.45-160.6 MHz
165.2 - 165.225 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	PMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
165.225 - 169.4 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 169.825-174.0 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
169.4 - 169.825 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	ERMES	EU7	ERC DEC (94)02		169.4125-169.8125 MHz
		PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
169.825 - 174 MHz						
FIXED MOBILE except Aeronautical Mobile	MOBILE except Aeronautical Mobile	Aids for handicapped		ERC REC 70-03	EN 300 422	Within 173.965-174.015 MHz
		PMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 165.225-169.4 MHz
174 - 216 MHz						
BROADCASTING 5.235	BROADCASTING LAND MOBILE 5.235 EU9	Aids for handicapped		ERC REC 70-03	EN 300 422	Within 173.965-174.015 MHz
		Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		
		TV Stockholm Agreement 1961.		ERC REC T/R 25-06		The band 174-230 MHz be reviewed for possible future applications after the introduction of T-DAB and DVB-T
216 - 223 MHz						
BROADCASTING 5.235	BROADCASTING 5.235	T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		Existing TV transmitters according to stockholm Agreement 1961. The band 174-230 MHz be reviewed for possible future applications after the introduction of T-DAB and DVB-T

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
223 - 225 MHz						
BROADCASTING Fixed Mobile 5.246	BROADCASTING	T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		The band 174-230 MHz be reviewed for possible future applications after the introduction of T-DAB and DVB-T
225 - 230 MHz						
BROADCASTING Fixed Mobile 5.246	BROADCASTING Land Mobile EU10	T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		This band is within the military tuning range 225-400 MHz. T-DAB sharing with defence on national basis. The band 174-230 MHz be reviewed for possible future applications after the introduction of T-DAB and DVB-T
230 - 235 MHz						
FIXED MOBILE	MOBILE	Defence systems				Harmonised military band
	EU10 EU27	T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		T-DAB sharing with defence on a national basis
235 - 240 MHz						
FIXED MOBILE 5.254	MOBILE 5.254 EU10 EU27	Defence systems				Harmonised military band.
		T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		T-DAB sharing with defence on a national basis
240 - 242.95 MHz						
FIXED MOBILE 5.254	MOBILE 5.254 EU10 EU27	Defence systems				Harmonised military band. Air traffic control.

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
242.95 - 243.055 MHz						
FIXED MOBILE 5.111 5.199 5.254 5.256	AERONAUTICAL MOBILE MOBILE-SATELLITE (E/S) 5.111 5.199 5.254 5.256	EPIRB			EN 300 152	Band only available for distress and safety purposes
243.055 - 267 MHz						
FIXED MOBILE except Aeronautical Mobile 5.254	MOBILE 5.254	Defence systems	EU10 EU27			Harmonised military band. Air traffic control.
267 - 272 MHz						
FIXED MOBILE Space Operation (S/E) 5.254 5.257	MOBILE 5.254 5.257	Defence systems	EU10 EU27			Harmonised military band. Air traffic control
272 - 273 MHz						
FIXED MOBILE SPACE OPERATION (S/E) 5.254	MOBILE 5.254	Defence systems	EU10 EU27			Harmonised military band. Air traffic control

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
273 - 312 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU10 EU27	Defence systems				Harmonised military band Air traffic control
312 - 315 MHz							
FIXED MOBILE Mobile-Satellite (E/S) 5.254 5.255	MOBILE 5.254 5.255	EU10 EU27	Defence systems				Harmonised military band. Air traffic control.
315 - 322 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU10 EU27	Defence systems				Harmonised military band Air traffic control.
322 - 328.65 MHz							
FIXED MOBILE RADIO ASTRONOMY 5.149	MOBILE RADIO ASTRONOMY 5.149	EU10 EU27	Defence systems				Harmonised military band
			Radio astronomy applications				Continuum measurements, also VLBI
328.65 - 335.4 MHz							
AERONAUTICAL RADIONAVIGATION 5.258	AERONAUTICAL RADIONAVIGATION 5.258	EU2	ILS/Glide path				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
335.4 - 380 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU10 EU27	Defence systems	EU7			Harmonised military band Air traffic control
380 - 385 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU2 EU10 EU27	Defence systems				Harmonised military band
			Emergency AGA		ERC DEC (01)20	EN 303 035	384.8-385/394.8-395 MHz for AGA emergency
			Emergency DMO		ERC DEC (01)19	EN 303 035	380-380.15/390-390.15 MHz for DMO emergency
			Emergency services		ERC DEC (96)01 ERC REC T/R 02-02	EN 303 035	ML paired with 390.0-395.0 MHz. Emergency services sharing with defence applications.
385 - 387 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU2 EU10 EU27	Defence systems				Harmonised military band
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 02-02	EN 303 035	ML Paired with 395-397 MHz
387 - 390 MHz							
FIXED Mobile-Satellite (S/E) 5.208A 5.254 5.255	MOBILE 5.254 5.255	EU2 EU10 EU27	Defence systems				Harmonised military band
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 02-02	EN 303 035	ML paired with 397-399.9 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
390 - 395 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU2 EU10 EU27	Defence systems				Harmonised military band Emergency services sharing with defence applications.
			Emergency AGA		ERC DEC (01)20		384.8-385/394.8-395 MHz for AGA emergency
			Emergency DMO		ERC DEC (01)19	EN 303 035	380-380.15/390-390.15 MHz for DMO emergency
			Emergency services		ERC DEC (96)01 ERC REC T/R 02-02	EN 303 035	FB paired with 380-385 MHz. Emergency services sharing with defence applications.
395 - 399.9 MHz							
FIXED MOBILE 5.254	MOBILE 5.254	EU2 EU10 EU27	Defence systems				Harmonised military band
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 02-02	EN 303 035	FB paired with 385-389.9 MHz
399.9 - 400.05 MHz							
MOBILE-SATELLITE (E/S) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260 5.220	MOBILE-SATELLITE (E/S) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260 5.220						
400.05 - 400.15 MHz							
STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261 5.262	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)						

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
400.15 - 401 MHz						
METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) MOBILE-SATELLITE (S/E) 5.208A 5.209 SPACE RESEARCH (S/E) 5.263 Space Operation (S/E) 5.262 5.264	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (E/S) MOBILE-SATELLITE (S/E) 5.208A 5.209 SPACE OPERATION (S/E) SPACE RESEARCH (S/E) 5.263 5.264	Low earth orbiting satellites Meteorological radio sondes		ERC DEC (99)06	EN 301 721	
401 - 402 MHz						
EARTH EXPLORATION-SATELLITE (E/S) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (E/S) SPACE OPERATION (S/E) Fixed Mobile except Aeronautical Mobile	EARTH EXPLORATION-SATELLITE (E/S) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (E/S)	Meteorological radio sondes Meteorological satellites, data collection platform	EU2			
402 - 403 MHz						
EARTH EXPLORATION-SATELLITE (E/S) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (E/S) Fixed Mobile except Aeronautical Mobile	EARTH EXPLORATION-SATELLITE (E/S) METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (E/S)	Medical implants SRD Meteorological radio sondes Meteorological satellites, data collection platform	EU2	ERC DEC (01)17 ERC REC 70-03	EN 300 220	Medical implants within 402-405 MHz
403 - 406 MHz						
METEOROLOGICAL AIDS Fixed Mobile except Aeronautical Mobile	METEOROLOGICAL AIDS	Medical implants SRD Meteorological radio sondes	EU2	ERC DEC (01)17 ERC REC 70-03	EN 300 220	Medical implants within 402-405 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
406 - 406.1 MHz						
MOBILE-SATELLITE (E/S) 5.266 5.267	MOBILE-SATELLITE (E/S) 5.266 5.267	EPIRB			EN 300 152	Band only available for distress and safety purposes
406.1 - 410 MHz						
FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149	LAND MOBILE RADIO ASTRONOMY 5.149	Anagolue and digital land mobile PMR/PAMR		ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency applications
		Radio astronomy applications				Continuum measurement and pulsar observation
410 - 420 MHz						
FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (S/S) 5.268	MOBILE except Aeronautical Mobile	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	ML paired with 420-430 MHz
		Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paired with 420-430 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
420 - 430 MHz						
FIXED MOBILE except Aeronautical Mobile Radiolocation 5.269 5.271	MOBILE except Aeronautical Mobile Radiolocation	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 410-420 MHz
		Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	FB paired with 410-420 MHz
430 - 433.05 MHz						
AMATEUR RADIOLOCATION 5.271 5.272 5.273 5.274 5.275 5.276 5.277	AMATEUR RADIOLOCATION 5.277 EU2 EU12	Amateur applications			EN 301 783	
433.05 - 434.79 MHz						
AMATEUR RADIOLOCATION 5.138 5.271 5.272 5.276 5.277 5.280 5.281	AMATEUR RADIOLOCATION Land Mobile 5.138 EU2 5.277 EU12 5.280	Amateur applications			EN 301 783	
		ISM				
		Non specific SRD		ERC REC 70-03	EN 300 220	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
434.79 - 438 MHz						
AMATEUR RADIOLOCATION 5.271 5.276 5.277 5.282	AMATEUR AMATEUR-SATELLITE RADIOLOCATION 5.277 EU2 EU12	Amateur applications			EN 301 783	Amateur Satellite Service restricted to 435-438 MHz
		Amateur Satellite applications			EN 301 783	
438 - 440 MHz						
AMATEUR RADIOLOCATION 5.271 5.273 5.274 5.275 5.276 5.277 5.283	AMATEUR RADIOLOCATION 5.277 EU2 EU12	Amateur applications			EN 301 783	
440 - 450 MHz						
FIXED MOBILE except Aeronautical Mobile Radiolocation 5.269 5.271 5.286	MOBILE except Aeronautical Mobile Radiolocation EU31	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	Single frequency operation
		Digital Land Mobile DMO		ERC DEC (01)21		Within the band 445.2-445.3 MHz
		On-site paging			EN 300 224	Call-out & answer-back
		PMR 446		ERC DEC (98)25	EN 300 296	In the band 446-446.1 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
450 - 455 MHz							
FIXED MOBILE	MOBILE		Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086	ML paired with 460-465 MHz
		EU31				EN 300 113	
5.209						EN 300 219	
5.271						EN 300 296	
5.286						EN 300 341	
5.286A						EN 300 390	
5.286B						EN 300 471	
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paired with 460-465 MHz
			Existing public cellular networks	EU7			
			On-site paging			EN 300 224	Call-out & answer-back
455 - 456 MHz							
FIXED MOBILE	MOBILE		Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086	ML paired with 465-466 MHz
		EU31				EN 300 113	
5.209						EN 300 219	
5.271						EN 300 296	
5.286A						EN 300 341	
5.286B						EN 300 390	
						EN 300 471	
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paired with 465-466 MHz
			Existing public cellular networks				
			On-site paging			EN 300 224	Call-out & answer-back

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
456 - 459 MHz							
FIXED MOBILE 5.271 5.287	MOBILE 5.287	EU31	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086	ML paired with 466-469 MHz. ERC REC T/R 22-01 to be withdrawn 2005 after implementation of GSM-R
					ERC REC T/R 22-01	EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paried with 466-469 MHz
			Existing public cellular networks	EU7			
			Maritime on board communications		ERC REC T/R 32-02	EN 300 720	Within the band 457.525-457.575 MHz
			On-site paging			EN 300 224	Call-out & answer-back
459 - 460 MHz							
FIXED MOBILE 5.209 5.271 5.286A 5.286B	MOBILE	EU31	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08	EN 300 086	ML paired with 469-470 MHz
						EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paired with 469-470 MHz
			Existing public cellular networks				
			On-site paging			EN 300 224	Call-out & answer-back

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
460 - 470 MHz						
FIXED MOBILE Meteorological-Satellite (S/E) 5.287 5.289 5.290	MOBILE 5.287 EU31 5.289	Analogue and digital land mobile PMR/PAMR	EU7	ERC REC T/R 25-08 ERC REC T/R 22-01	EN 300 086 EN 300 113 EN 300 219 EN 300 296 EN 300 341 EN 300 390 EN 300 471	FB paired with 450-460 MHz ERC REC T/R 22-01 to be withdrawn 2005 after implementation of GSM-R
		Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	FB paired with 450-460 MHz
		Existing public cellular networks				
		Maritime on board communications		ERC REC T/R 32-02	EN 300 720	Within the band 467.525-467.575 MHz
		On-site paging			EN 300 224	Call-out & answer-back
470 - 608 MHz						
BROADCASTING 5.149 5.291A 5.296 5.302 5.306	BROADCASTING Mobile 5.291A 5.296	Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		SAP/SAB				Mobile applications restricted to SAB/SAP including radio microphones
		Stockholm Agreement 1961 complemented by the Chester 1997 Agreement	EU9			The band 470-862 be reviewed for possible future applications after the introduction of DVB-T
608 - 614 MHz						
BROADCASTING 5.149 5.291A 5.296 5.306	BROADCASTING Mobile Radio Astronomy 5.149 5.296 5.306	Radio astronomy applications				Continuum measurements and VLBI
		Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		SAP/SAB				Mobile applications restricted to SAB including radio microphones
		Stockholm Agreement 1961 complemented by the Chester 1997 Agreement	EU9			The band 470-862 be reviewed for possible future applications after the introduction of DVB-T

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
614 - 790 MHz						
BROADCASTING 5.149 5.291A 5.296 5.311 5.312	BROADCASTING Mobile 5.296 EU13 5.312	Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		SAP/SAB				Mobile applications restricted to SAB including radiomicrophones
		Stockholm Agreement 1961 complemented by the Chester 1997 Agreement	EU9			The band 470-862 be reviewed for possible future applications after the introduction of DVB-T
790 - 838 MHz						
BROADCASTING FIXED 5.312 5.314 5.315 5.316 5.319	BROADCASTING Mobile 5.316 EU2 EU13	Defence systems				Mobile applications restricted to tactical links and SAB/SAP including radio microphones
		Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		SAP/SAB				Mobile applications restricted to tactical links and SAB/SAP including radio microphones
		Stockholm Agreement 1961 complemented by the Chester 1997 Agreement	EU9			The band 470-862 be reviewed for possible future applications after the introduction of DVB-T
838 - 862 MHz						
BROADCASTING FIXED 5.312 5.314 5.316 5.319 5.321	BROADCASTING MOBILE 5.316 EU2 EU13	Defence systems				Mobile applications restricted to tactical links and SAB/SAP including radio microphones
		Radio microphones		ERC REC 70-03	EN 300 422	On a tuning range basis
		SAP/SAB				Mobile applications restricted to tactical links and SAB/SAP including radio microphones
		Stockholm Agreement 1961 complemented by the Chester 1997 Agreement	EU9			The band 470-862 be reviewed for possible future applications after the introduction of DVB-T

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC/ERC document	Standard	Note
862 - 870 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A 5.319 5.323	MOBILE 5.323	 EU2 EU13	Cordless Telephones		ERC DEC (01)02		To be phased out in accordance with ERC Decisions (01)02
			Defence systems				
			Radio microphones		ERC REC 70-03	EN 300 422 EN 301 357	Within the band 863-865 MHz
			Social Alarms		ERC DEC (97)06 ERC REC 70-03	EN 300 220	Within the band 869.2-869.25 MHz
			SRD in 868-870 MHz		ERC REC 70-03 ERC DEC (01)04	EN 300 220	Strategic Plan for the use of SRD within the band 862-870 MHz adopted
			Wireless Audio		ERC DEC (01)18 ERC REC 70-03	EN 301 357	Within the band 863-865 MHz
870 - 876 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A 5.319 5.323	MOBILE 5.323	 EU2 EU13	Defence systems				Candidate for harmonised military band for tactical radio relay
			Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	ML paired with 915-921 MHz The use to be reviewed by end 2002
876 - 880 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A 5.319 5.323	MOBILE 5.323	 EU2 EU13	Defence systems				Sharing on a national basis
			Digital land mobile				
			UIC Railway systems		ERC REC T/R 25-09	EN 301 419	ML paired with 921-925 MHz
880 - 890 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A 5.319 5.323	MOBILE 5.317A 5.323	 EU2 EU13 EU29	Defence systems				Sharing on a national basis
			EGSM		ERC DEC (97)02	EN 301 419 EN 301 511	ML paried with 925-935 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
890 - 915 MHz						
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation 5.323	MOBILE Radiolocation 5.317A EU13 5.323 EU14 EU29	GSM		ERC DEC (94)01	EN 301 419 EN 301 511	ML paired with 935-960 MHz
915 - 921 MHz						
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation 5.323	MOBILE Radiolocation 5.323 EU2 EU13 EU14	Defence systems				Candidate for harmonised military band for tactical radio relay
		Digital land mobile PMR/PAMR		ERC DEC (96)04 ERC REC T/R 25-08	EN 303 035	FB paired with 870-876 MHz The use to be reviewed by end 2002
921 - 925 MHz						
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation 5.323	MOBILE Radiolocation 5.323 EU2 EU13 EU14	Defence systems				Sharing on a national basis
		Digital land mobile				FB paired with 876-880 MHz
		UIC Railway systems		ERC REC T/R 25-09	EN 301 419	FB paired with 876-880 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band		European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
925 - 935 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation 5.323		MOBILE Radiolocation	Defence systems	EU30			Sharing on a national basis
			EGSM	EU30	ERC DEC (97)02	EN 301 419 EN 301 502	FB paired with 880-890 MHz
	5.317A 5.323	EU2 EU13 EU14 EU29					
935 - 942 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation 5.323		MOBILE Radiolocation	GSM		ERC DEC (94)01	EN 301 419 EN 301 502	FB paired with 890-897 MHz
	5.317A 5.323	EU13 EU14 EU29					
942 - 960 MHz							
BROADCASTING 5.322 FIXED MOBILE except aeronautical mobile 5.317A 5.323		MOBILE	GSM		ERC DEC (94)01	EN 301 419 EN 301 502	FB paired with 897-915 MHz
	5.317A 5.323	EU13 EU29					
960 - 1215 MHz							
AERONAUTICAL RADIONAVIGATION 5.328 5.328A		AERONAUTICAL RADIONAVIGATION 5.328 5.328A	Flight Safety, Navigation and Information Distribution systems (DME,TACAN,SSR,MIDS)				
			GNSS				1164-1215 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
1215 - 1240 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) 5.331 5.332	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION 5.331 RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) 5.332	GNSS Radar and Navigation systems and Active Sensors				
1240 - 1260 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.331 5.332	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION 5.331 RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.332	Amateur applications GNSS Radar and Navigation systems and Active Sensors			EN 301 783	
1260 - 1270 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.331 5.335A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION 5.331 RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur Amateur-Satellite 5.282 5.335A	Amateur applications Amateur Satellite applications Radar and Navigation systems and Active Sensors			EN 301 783 EN 301 783	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1270 - 1300 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.331 5.335A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION 5.331 RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.335A	Amateur applications			EN 301 783	
		Radar and Navigation systems and Active Sensors				
		Wind profiler radars				Within the band 1270-1295 MHz
1300 - 1350 MHz						
AERONAUTICAL RADIONAVIGATION S5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (E/S) 5.149 5.337A	AERONAUTICAL RADIONAVIGATION S5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (E/S) 5.149 5.337A	Radar and Navigation systems				
		Radio astronomy applications				Spectral line observations 1330-1400 MHz
1350 - 1400 MHz						
FIXED MOBILE RADIOLOCATION 5.149 5.338 5.339	FIXED MOBILE RADIOLOCATION 5.149 EU2 5.339 EU15	Defence systems	EU15A			
		Low capacity fixed links		ERC REC T/R 13-01	EN 301 751	
		Radio astronomy applications				Spectral line observations in 1330-1400 MHz
1400 - 1427 MHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 EU15 5.341	Passive applications				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1427 - 1429 MHz						
FIXED MOBILE except Aeronautical Mobile SPACE OPERATION (E/S) 5.341	FIXED MOBILE except Aeronautical Mobile SPACE OPERATION (E/S) 5.341 EU2 EU15	Defence systems	EU15A			
		Low capacity fixed links		ERC REC T/R 13-01	EN 301 751	
1429 - 1452 MHz						
FIXED MOBILE except Aeronautical Mobile 5.341 5.342	FIXED MOBILE except Aeronautical Mobile 5.341 EU2 EU15	Defence systems	EU15A			
		Low capacity fixed links		ERC REC T/R 13-01	EN 301 751	
1452 - 1492 MHz						
BROADCASTING 5.345 5.347 BROADCASTING-SATELLITE 5.345 5.347 FIXED MOBILE except Aeronautical Mobile 5.341 5.342	BROADCASTING 5.345 BROADCASTING-SATELLITE 5.345 Fixed Mobile except Aeronautical Mobile 5.341 EU15	Digital Audio Broadcasting				Planning Conference June 2002
		T-DAB Wiesbaden special Arrangement, 1995		ERC REC T/R 52-02		
1492 - 1517 MHz						
FIXED MOBILE except Aeronautical Mobile 5.341 5.342	FIXED MOBILE except Aeronautical Mobile 5.341 EU2 EU15	Defence systems	EU15A			
		Low capacity fixed links		ERC REC T/R 13-01	EN 301 751	
1517 - 1525 MHz						
FIXED MOBILE except Aeronautical Mobile 5.341 5.342	FIXED MOBILE except Aeronautical Mobile 5.341 EU2 EU15	Defence systems	EU15A			
		Unidirectional fixed links			EN 301 751	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1525 - 1530 MHz						
FIXED	FIXED	Mobile satellite applications			EN 301 426	
MOBILE-SATELLITE (S/E) 5.351A	MOBILE-SATELLITE (S/E) 5.351A				EN 301 444	
SPACE OPERATION (S/E)	SPACE OPERATION (S/E)				EN 301 681	
Earth Exploration-Satellite		Unidirectional fixed links			EN 301 751	
Mobile except Aeronautical Mobile 5.349						
5.341	5.341 EU15					
5.342	5.351					
5.350	5.354					
5.351						
5.352A						
5.354						
1530 - 1533 MHz						
MOBILE-SATELLITE (S/E) 5.353A 5.351A	MOBILE-SATELLITE (S/E) 5.353A 5.351A	Mobile satellite applications			EN 301 426	
SPACE OPERATION (S/E)	SPACE OPERATION (S/E)				EN 301 444	
Earth Exploration-Satellite	Earth Exploration-Satellite				EN 301 681	
Fixed	Fixed					
Mobile except Aeronautical Mobile	Mobile except Aeronautical Mobile					
5.341	5.341 EU15					
5.342	5.351					
5.351	5.354					
5.354						
1533 - 1535 MHz						
MOBILE-SATELLITE (S/E) 5.353A 5.351A	MOBILE-SATELLITE (S/E) 5.353A 5.351A	Mobile satellite applications			EN 301 426	
SPACE OPERATION (S/E)	SPACE OPERATION (S/E)				EN 301 444	
Earth Exploration-Satellite	Earth Exploration-Satellite				EN 301 681	
Fixed	Mobile except Aeronautical Mobile					
Mobile except Aeronautical Mobile						
5.341	5.341 EU15					
5.342	5.351					
5.351	5.354					
5.354						

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1535 - 1544 MHz						
MOBILE-SATELLITE (S/E) 5.351A 5.341 5.351 5.353A 5.354 5.355	MOBILE-SATELLITE (S/E) 5.351A 5.341 EU15 5.351 5.353A 5.354	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1544 - 1545 MHz						
MOBILE-SATELLITE (S/E) 5.351A 5.341 5.354 5.355 5.356	MOBILE-SATELLITE (S/E) 5.351A 5.341 EU15 5.354 5.356	Mobile satellite applications Search and rescue satellite systems (incl GMDSS)				
1545 - 1555 MHz						
MOBILE-SATELLITE (S/E) 5.351A 5.341 5.351 5.354 5.355 5.357 5.357A 5.359	MOBILE-SATELLITE (S/E) 5.351A 5.341 EU15 5.351 5.354 5.357 5.357A 5.359	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1555 - 1559 MHz						
MOBILE-SATELLITE (S/E) 5.351A 5.341 5.351 5.354 5.355 5.359	MOBILE-SATELLITE (S/E) 5.351A 5.341 EU15 5.351 5.354 5.359	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
1559 - 1610 MHz						
AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329A 5.341 5.362B 5.362C 5.363	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (S/E) (S/S) 5.329A 5.341 EU15 5.362B	GNSS				
1610 - 1610.6 MHz						
AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (E/S) 5.351A 5.341 5.355 5.359 5.363 5.364 5.366 5.367 5.368 5.371 5.372	AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.359 5.364 5.366 5.367 5.368 5.371 5.372	Mobile satellite applications		ERC DEC (97)03	EN 301 441	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
1610.6 - 1613.8 MHz						
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Mobile satellite applications		ERC DEC (97)03	EN 301 441	
MOBILE-SATELLITE (E/S) 5.351A	MOBILE-SATELLITE (E/S) 5.351A	Radio astronomy applications				Spectral line observations
RADIO ASTRONOMY	RADIO ASTRONOMY					
5.149	5.149 EU15					
5.341	5.341					
5.355	5.359					
5.359	5.364					
5.363	5.366					
5.364	5.367					
5.366	5.368					
5.367	5.371					
5.368	5.372					
5.371						
5.372						
1613.8 - 1626.5 MHz						
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Mobile satellite applications		ERC DEC (97)03	EN 301 441	
MOBILE-SATELLITE (E/S) 5.351A	MOBILE-SATELLITE (E/S) 5.351A					
Mobile-Satellite (S/E)	Mobile-Satellite (S/E)					
5.341	5.341 EU15					
5.355	5.359					
5.359	5.364					
5.363	5.365					
5.364	5.366					
5.365	5.367					
5.366	5.368					
5.367	5.371					
5.368	5.372					
5.371						
5.372						

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1626.5 - 1631.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.359	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.351 5.353A 5.354 5.359	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1631.5 - 1636.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.359 5.374	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.351 5.353A 5.354 5.359 5.374	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1636.5 - 1645.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.359	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.351 5.353A 5.354 5.359	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1645.5 - 1646.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.354 5.375	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.354 5.375	Search and rescue satellite systems (incl GMDSS)				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1646.5 - 1656.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.351 5.354 5.355 5.357A 5.359 5.376	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.351 5.354 5.357A 5.359 5.376	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1656.5 - 1660 MHz						
MOBILE-SATELLITE (E/S) 5.351A 5.341 5.351 5.354 5.355 5.359 5.374	MOBILE-SATELLITE (E/S) 5.351A 5.341 EU15 5.351 5.354 5.359 5.374	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
1660 - 1660.5 MHz						
MOBILE-SATELLITE (E/S) 5.351A RADIO ASTRONOMY 5.149 5.341 5.351 5.354 5.376A	MOBILE-SATELLITE (E/S) 5.351A RADIO ASTRONOMY 5.149 EU15 5.341 5.351 5.354 5.376A	Mobile satellite applications			EN 301 426 EN 301 444 EN 301 681	
		Radio astronomy applications				Continuum line and VLBI Measurements

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1660.5 - 1668.4 MHz						
RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except Aeronautical Mobile 5.149 5.341 5.379A	RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except Aeronautical Mobile 5.149 EU2 5.341 EU15 5.379A	Defence systems Radio astronomy applications	EU15A			Continuum line and VLBI measurements
1668.4 - 1670 MHz						
FIXED METEOROLOGICAL AIDS MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149 5.341	FIXED METEOROLOGICAL AIDS RADIO ASTRONOMY Mobile except Aeronautical Mobile 5.149 EU2 5.341 EU15	Defence systems Meteorological applications Radio astronomy applications	EU15A			
1670 - 1675 MHz						
FIXED METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) MOBILE 5.380 5.341	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) MOBILE 5.380 Fixed 5.341	Meteorological applications TFTS		ERC DEC (92)01 ERC REC T/R 42-01	EN 301 423	Ground -Air. Review of TFTS requirements 2001
1675 - 1690 MHz						
FIXED METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.341	FIXED METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.341 EU2 EU15	Defence systems Meteorological applications	EU15A			

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1690 - 1700 MHz						
METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) Fixed Mobile except Aeronautical Mobile 5.289 5.341 5.382	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (S/E) Fixed Mobile except Aeronautical Mobile 5.289 EU2 5.341 EU15 5.382	Defence systems Meteorological applications	EU15A			
1700 - 1710 MHz						
FIXED METEOROLOGICAL-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.289 5.341	FIXED METEOROLOGICAL-SATELLITE (S/E) Mobile except Aeronautical Mobile 5.289 EU2 5.341 EU15	Defence systems Meteorological applications	EU15A			
1710 - 1785 MHz						
FIXED MOBILE 5.384A 5.149 5.341 5.385 5.387	FIXED MOBILE 5.384A 5.149 EU15 5.341 EU29 5.385	GSM1800		ERC DEC (95)03 ERC REC T/R 22-07	EN 301 419 EN 301 511	
1785 - 1800 MHz						
FIXED MOBILE 5.384A 5.387	FIXED MOBILE EU2 EU15	Mobile applications Radio microphones		 ERC REC 70-03	 EN 301 840	 Within the band 1785.7-1799.4 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1800 - 1805 MHz						
FIXED MOBILE S.380 5.384A	MOBILE 5.380 Fixed EU15	TFTS		ERC DEC (92)01 ERC REC T/R 42-01	EN 301 423	Air-Ground. Review of the TFTS requirements 2001
1805 - 1880 MHz						
FIXED MOBILE 5.384A	FIXED MOBILE 5.384A EU15 EU29	GSM1800		ERC DEC (95)03 ERC REC T/R 22-07	EN 301 419 EN 301 502	
1880 - 1885 MHz						
FIXED MOBILE 5.384A	MOBILE 5.384A Fixed EU15	DECT		ERC DEC (94)03	EN 301 406	
1885 - 1900 MHz						
FIXED MOBILE 5.388A 5.388	MOBILE 5.388A Fixed 5.388 EU15	DECT		ERC DEC (94)03	EN 301 406	
1900 - 1930 MHz						
FIXED MOBILE 5.388A 5.388	FIXED MOBILE 5.388A 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01 ERC DEC (99)25		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25
1930 - 1970 MHz						
FIXED MOBILE 5.388A 5.388	FIXED MOBILE 5.388A 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
1970 - 1980 MHz						
FIXED MOBILE 5.388A 5.388	FIXED MOBILE 5.388A 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25
1980 - 2010 MHz						
FIXED MOBILE MOBILE-SATELLITE (E/S) 5.351A 5.388 5.389A	FIXED MOBILE MOBILE-SATELLITE (E/S) 5.351A 5.388 EU15 5.389A EU16	Mobile satellite applications		ERC DEC (97)03 ERC DEC (97)04	EN 301 442	
		UMTS/IMT-2000 satellite component		ERC DEC (97)07 ERC DEC (00)01 ERC DEC (99)25	EN 301 442	
2010 - 2025 MHz						
FIXED MOBILE 5.388A 5.388	FIXED MOBILE 5.388A 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01 ERC DEC (99)25		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25
2025 - 2110 MHz						
EARTH EXPLORATION-SATELLITE (E/S) (S/S) FIXED MOBILE 5.391 SPACE OPERATION (E/S) (S/S) SPACE RESEARCH (E/S) (S/S) 5.392	EARTH EXPLORATION-SATELLITE (E/S) (S/S) FIXED MOBILE 5.391 SPACE OPERATION (E/S) (S/S) SPACE RESEARCH (E/S) (S/S) 5.392 EU2 EU15 EU27	Fixed links		ERC REC T/R 13-01	EN 301 751	
		SAP/SAB	EU16A	ERC REC 25-10		On a tuning range basis
		Space science services				
		Tactical Radio Relay	EU16A			Harmonised military band for Tactical Radio Relay linksfor near cross border operation within the band 2025-2070 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
2110 - 2120 MHz						
FIXED MOBILE 5.388A SPACE RESEARCH (deep space) (E/S) 5.388	FIXED MOBILE 5.388A SPACE RESEARCH (deep space) (E/S) 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01 ERC DEC (99)25		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25
2120 - 2170 MHz						
FIXED MOBILE 5.388A 5.388 5.392A	FIXED MOBILE 5.388A 5.388 EU15 EU16	UMTS/IMT-2000		ERC DEC (97)07 ERC DEC (00)01 ERC DEC (99)25		For border coordination see also ERC REC(01)01 For harmonised spectrum scheme see also ERC DEC (99)25
2170 - 2200 MHz						
FIXED MOBILE MOBILE-SATELLITE (S/E) 5.351A 5.388 5.389A 5.392A	FIXED MOBILE MOBILE-SATELLITE (S/E) 5.351A 5.388 EU15 5.389A EU16	Mobile satellite applications		ERC DEC (97)03 ERC DEC (97)04	EN 301 442	
		UMTS/IMT-2000 satellite component		ERC DEC (97)07 ERC DEC (00)01	EN 301 442	
2200 - 2290 MHz						
EARTH EXPLORATION-SATELLITE (S/E) (S/S) FIXED MOBILE 5.391 SPACE OPERATION (S/E) (S/S) SPACE RESEARCH (S/E) (S/S) 5.392	EARTH EXPLORATION-SATELLITE (S/E) (S/S) FIXED MOBILE 5.391 SPACE OPERATION (S/E) (S/S) SPACE RESEARCH (S/E) (S/S) 5.392 EU15 EU27	Fixed links		ERC REC T/R 13-01	EN 301 751	
		Radio astronomy applications				VLBI
		SAP/SAB	EU16A	ERC REC 25-10		On a tuning range basis
		Space science services				
		Tactical Radio Relay	EU16A			Harmonised military band for Tactical Radio Relay links for near cross border operation within the band 2200-2245 MHz.

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
2290 - 2300 MHz						
FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (deep space) (S/E)	FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (deep space) (S/E)	Mobile applications				
	EU2					
2300 - 2400 MHz						
FIXED MOBILE Amateur Radiolocation 5.395	FIXED MOBILE Amateur Radiolocation	Aeronautical Telemetry		ERC REC 62-02		Parts of the band are used for aeronautical telemetry on a national basis
		Amateur applications			EN 301 783	
		Mobile applications				
		SAP/SAB		ERC REC 25-10		
	EU2					
	EU15					
2400 - 2450 MHz						
FIXED MOBILE Amateur Radiolocation 5.150 5.282	FIXED MOBILE Amateur Amateur-Satellite	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		ISM				
		Motion sensors		ERC DEC (01)08	EN 300 440	
		Non specific SRD		ERC DEC (01)05 ERC REC 70-03	EN 300 440	
		RFID		ERC REC 70-03	EN 300 440	
		RLAN		ERC DEC (01)07 ERC REC 70-03	EN 300 328	
	5.150		EU2			
	5.282		EU15			
2450 - 2483.5 MHz						
FIXED MOBILE Radiolocation 5.150 5.397	FIXED MOBILE	ISM				
		Motion sensors		ERC DEC (01)08	EN 300 440	
		Non specific SRD		ERC DEC (01)05 ERC REC 70-03	EN 300 440	
		RFID		ERC REC 70-03	EN 300 440	
		RLAN		ERC DEC (01)07 ERC REC 70-03	EN 300 328	
	5.150		EU2			
			EU15			

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
2483.5 - 2500 MHz						
FIXED MOBILE MOBILE-SATELLITE (S/E) 5.351A Radiolocation 5.150 5.371 5.397 5.398 5.399 5.402	FIXED MOBILE MOBILE-SATELLITE (S/E) 5.351A 5.150 EU15 5.371 5.398 5.402	Fixed links		ERC REC T/R 13-01	EN 301 751	
		ISM				
		Mobile applications				
		Mobile satellite applications		ERC DEC (97)03	EN 301 441 EN 301 681	
		SAP/SAB		ERC REC 25-10		
2500 - 2520 MHz						
FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (S/E) 5.403 5.351A 5.405 5.412 5.414	MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (S/E) 5.403 5.351A Fixed 5.414 EU15	Mobile satellite applications				
		UMTS/IMT-2000				Extension bands (See ITU Res 225)
2520 - 2655 MHz						
BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A 5.339 5.403 5.405 5.412 5.418 5.418B 5.418C	FIXED MOBILE except aeronautical mobile 5.384A 5.339 EU2 5.418B EU15 5.418C EU16	Defence systems				
		Fixed links		ERC REC T/R 13-01	EN 301 751	
		SAP/SAB		ERC REC 25-10		On a tuning range basis until UMTS/IMT2000 is implemented
		UMTS/IMT-2000				Extension bands

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	*European Common Allocation*	*Utilisation*	*EU footnote*	*ECC/ERC document*	*Standard*	*Note*
2655 - 2670 MHz						
BROADCASTING-SATELLITE 5.413 5.416	FIXED	Fixed links		ERC REC T/R 13-01	EN 301 751	
FIXED 5.409 5.410 5.411	MOBILE except aeronautical mobile 5.384A	Radio astronomy applications				Continuum measurements
MOBILE except aeronautical mobile 5.384A	Earth Exploration-Satellite (passive)	SAP/SAB		ERC REC 25-10		On a tuning range basis until UMTS/IMT2000 is implemented
Earth Exploration-Satellite (passive)	Radio Astronomy	UMTS/IMT-2000				Extension bands (See ITU Res 225)
Radio Astronomy	Space Research (passive)					
Space Research (passive)						
5.149	5.149 EU2					
5.412	EU15					
5.420	EU16					
2670 - 2690 MHz						
FIXED 5.409 5.410 5.411	MOBILE except aeronautical mobile 5.384A	Mobile satellite applications				
MOBILE except aeronautical mobile 5.384A	MOBILE-SATELLITE (E/S) 5.351A	Radio astronomy applications				Continuum measurements
MOBILE-SATELLITE (E/S) 5.351A	Fixed	UMTS/IMT-2000				Extension bands (See ITU Res 225)
Earth Exploration-Satellite (passive)	Radio Astronomy					
Radio Astronomy						
Space Research (passive)						
5.149	5.149 EU15					
5.412	5.419					
5.419	5.420					
5.420						
2690 - 2700 MHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Passive applications				
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340					
5.421						
5.422						

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
2700 - 2900 MHz						
AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation 5.423	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation 5.423	Meteorological radars Radar and Navigation systems				
2900 - 3100 MHz						
RADIONAVIGATION 5.426 Radiolocation 5.425 5.427	RADIOLOCATION RADIONAVIGATION 5.426 5.425 5.427	Radar and Navigation systems				
3100 - 3300 MHz						
RADIOLOCATION Earth Exploration-Satellite (active) Space Research (active) 5.149 5.428	RADIOLOCATION Earth Exploration-Satellite (active) Space Research (active) 5.149	Radars and active sensors				
3300 - 3400 MHz						
RADIOLOCATION 5.149 5.430	RADIOLOCATION 5.149	Radars				Upper limit for airborne radars 3410 MHz.
3400 - 3500 MHz						
FIXED FIXED-SATELLITE (S/E) Mobile Radiolocation 5.431	FIXED FIXED-SATELLITE (S/E) MOBILE Amateur Radiolocation	Amateur applications	EU17		EN 301 783	EU17 within the band 3400-3410 MHz
		Fixed links		ERC REC 14-03	EN 301 751 EN 301 753	Including point to multipoint
		Fixed wireless access systems		ERC REC 13-04 ERC REC 14-03	EN 301 751 EN 301 753	
		Radars				Upper limit for airborne radars is 3410 MHz
		SAP/SAB	EU17A			For coordinated SAB/SAP applications for occasional use

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
3500 - 3600 MHz						
FIXED FIXED-SATELLITE (S/E) Mobile Radiolocation	FIXED FIXED-SATELLITE (S/E) MOBILE	Fixed links		ERC REC 14-03	EN 301 751 EN 301 753	Including point to mulitpoint
		Fixed wireless access systems		ERC REC 13-04 ERC REC 14-03	EN 301 751 EN 301 753	
		Mobile applications	EU17A			For coordinated SAB/SAP applications for occasional use
3600 - 4200 MHz						
FIXED FIXED-SATELLITE (S/E) Mobile	FIXED FIXED-SATELLITE (S/E)	Coordinated earth stations in FSS			EN 301 443	Priority for civil networks
		Fixed wireless access systems		ERC REC 14-03	EN 301 751 EN 301 753	3600-3800 MHz including point-to-multipoint
		Medium/high capacity fixed links		ERC REC 12-08	EN 301 751	
4200 - 4400 MHz						
AERONAUTICAL RADIONAVIGATION S5.338 5.440	AERONAUTICAL RADIONAVIGATION S5.338 5.440 EU18	Earth Exploration Satellite systems				For sea surface temperature measurements
		Radio altimeters				
4400 - 4500 MHz						
FIXED MOBILE	FIXED MOBILE EU2 EU27	Defence systems	EU20			Harmonised military band for fixed and mobile systems
		Mobile applications				For coordinated SAB/SAP applicaitons for occasional use
		Transhorizon links	EU20			
4500 - 4800 MHz						
FIXED FIXED-SATELLITE (S/E) 5.441 MOBILE	FIXED FIXED-SATELLITE (S/E) 5.441 MOBILE EU27	Coordinated earth stations in FSS				Fixed-Satellite service not to be implemented in NATO Europe. Fixed-Satellite frequency plan in 4500-4800 MHz
		Defence systems	EU20			Harmonised military band for fixed and mobile systems
		Mobile applications				For coordinated SAB/SAP applicaitons for occational use
		Transhorizon links				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
4800 - 4990 MHz						
FIXED MOBILE 5.442 Radio Astronomy 5.149 5.339	FIXED MOBILE except Aeronautical Mobile Radio Astronomy 5.149 EU27 5.339	Defence systems	EU20			Harmonised military band for fixed and mobile systems
		Mobile applications				For coordinated SAB/SAP applications for occasional use
		Passive applications				Space Research and EES (passive) above 4950 MHz in some countries Continuum measurements.
		Radio astronomy applications				Continuum measurements and VLBI
4990 - 5000 MHz						
FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY Space Research (passive) 5.149	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149 EU27	Defence systems	EU20			Harmonised military band for fixed and mobile systems
		Mobile applications				For coordinated SAB/SAP applicaitons for occasional use
		Radio astronomy applications				Continuum measurements and VLBI
5000 - 5030 MHz						
AERONAUTICAL RADIONAVIGATION 5.367 5.443A 5.443B	AERONAUTICAL RADIONAVIGATION Radio Astronomy Space Research (passive) 5.367 5.443A 5.443B					Aeronautical Radionavigation and Fixed Satellite Service envisaged in some countries
		Radio astronomy applications				VLBI observations
5030 - 5150 MHz						
AERONAUTICAL RADIONAVIGATION 5.367 5.444 5.444A	AERONAUTICAL RADIONAVIGATION 5.367 EU18 5.443B 5.444 5.444A	MLS				Aeronautical Radionavigation envisaged in some countries. Fixed Satellite Service in use in some countries

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
5150 - 5250 MHz						
AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (E/S) 5.447A 5.446 5.447 5.447B 5.447C	FIXED-SATELLITE (E/S) 5.447A MOBILE 5.446 5.447 5.447B 5.447C	Feederlinks for MSS				Aeronautical Radionavigation and Fixed Satellite Service envisaged in some countries
		HIPERLANs		ERC DEC (99)23 ERC REC 70-03	EN 300 836	
5250 - 5255 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D 5.448 5.448A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D Mobile 5.448A EU22	Active Sensors				
		HIPERLANs		ERC DEC (99)23 ERC REC 70-03	EN 300 836	
		Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
		Weapon system radars				
		Weather radars				Ground based and airborne
5255 - 5350 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.448 5.448A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Mobile 5.448A EU22	Active Sensors				
		HIPERLANs		ERC DEC (99)23 ERC REC 70-03	EN 300 836	
		Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
		Weapon system radars				
		Weather radars				Ground based and airborne

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
5350 - 5450 MHz						
AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B Radiolocation	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B Fixed Radiolocation	Active Sensors				
		Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
	EU22	Weapon system radars				
		Weather radars				Ground based and airborne
5450 - 5460 MHz						
AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B Radiolocation	AERONAUTICAL RADIONAVIGATION S5.449 EARTH EXPLORATION-SATELLITE (active) 5.448B Radiolocation	Active Sensors				
		Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
	EU22	Weapon system radars				
		Weather radars				Ground based and airborne
5460 - 5470 MHz						
RADIONAVIGATION 5.449 Radiolocation	RADIONAVIGATION 5.449 Radiolocation	Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
	EU22	Weapon system radars				
		Weather radars				Ground based and airborne
5470 - 5650 MHz						
MARITIME RADIONAVIGATION Radiolocation 5.450 5.451 5.452	MARITIME RADIONAVIGATION MOBILE Radiolocation	HIPERLANs		ERC DEC (99)23 ERC REC 70-03	EN 300 836	
	5.452 EU22	Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
		Weapon system radars				
		Weather radars				Ground based and airborne

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
5650 - 5725 MHz						
RADIOLOCATION Amateur Space research (deep space) 5.282 5.451 5.454 5.455	MOBILE RADIOLOCATION Amateur 5.282 EU17 EU22	Amateur applications	EU17		EN 301 783	Within 5660-5670 MHz
		Amateur Satellite applications (E/S)	EU23		EN 301 783	Within 5660-5670 MHz
		HIPERLANs		ERC DEC (99)23 ERC REC 70-03	EN 300 836	
		Position fixing				
		Shipborne and VTS radar				
		Tactical radars				
		Weapon system radars				
		Weather radars				Ground based and airborne
5725 - 5830 MHz						
FIXED-SATELLITE (E/S) RADIOLOCATION Amateur 5.150 5.451 5.455 5.456	FIXED-SATELLITE (E/S) RADIOLOCATION Amateur Mobile 5.150 EU22	Amateur applications			EN 301 783	
		ISM				Within the band 5725-5875 MHz
		Non civil radiolocation				
		Non specific SRD		ERC DEC (01)06 ERC REC 70-03	EN 300 440	Within the band 5725-5875 MHz
		Road Transport and Traffic Telematic Systems (RTTT)		ERC DEC (92)02 ERC REC 70-03	EN 300 674	Within the band 5795-5805 MHz. RTTT in the band 5805-5815 MHz on a national basis
		Weather radars				Ground based and airborne
5830 - 5850 MHz						
FIXED-SATELLITE (E/S) RADIOLOCATION Amateur Amateur-Satellite (S/E) 5.150 5.451 5.455	FIXED-SATELLITE (E/S) RADIOLOCATION Amateur Amateur-Satellite (S/E) Mobile 5.150 EU22	Amateur Satellite applications (S/E)	EU23			Within the band 5830-5850 MHz
		ISM				Within the band 5725-5875 MHz
		Non civil radiolocation				
		Non specific SRD		ERC DEC (01)06 ERC REC 70-03	EN 300 440	Within the band 5725-5875 MHz
		Weather radars				Ground based and airborne

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
5850 - 5925 MHz						
FIXED FIXED-SATELLITE (E/S) MOBILE 5.150	FIXED FIXED-SATELLITE (E/S) MOBILE 5.150	Coordinated earth stations in FSS			EN 301 443	Priority for civil networks
		ISM				Within the band 5725-5875 MHz
		Non specific SRD		ERC DEC (01)06 ERC REC 70-03	EN 300 440	Within the band 5725-5875 MHz
5925 - 6425 MHz						
FIXED FIXED-SATELLITE (E/S) MOBILE	FIXED FIXED-SATELLITE (E/S)	Coordinated earth stations in FSS			EN 301 443	Priority for civil networks
		Medium/high capacity fixed links		ERC REC 14-01	EN 301 751	
6425 - 6700 MHz						
FIXED FIXED-SATELLITE (E/S) MOBILE 5.149 5.440 5.458	FIXED FIXED-SATELLITE (E/S) Earth Exploration-Satellite (passive) 5.149 5.440 5.458	Coordinated earth stations in FSS			EN 301 443	Priority for civil networks
		Earth Exploration Satellite systems				For sea surface temperature measurements
		Medium/high capacity fixed links		ERC REC 14-02	EN 301 751	
6700 - 7075 MHz						
FIXED FIXED-SATELLITE (S/E) (E/S) 5.441 MOBILE 5.458 5.458A 5.458B 5.458C	FIXED FIXED-SATELLITE (E/S) 5.441 Earth Exploration-Satellite (passive) 5.458 5.458A 5.458B 5.458C	Earth Exploration Satellite systems				For sea surface temperature measurements
		Feederlinks for MSS				Within the band 6925-7075 MHz
		Fixed Satellite applications				Within the band 6725-7025 MHz Priority for civil networks
		Medium/high capacity fixed links		ERC REC 14-02	EN 301 751	

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
7075 - 7125 MHz						
FIXED MOBILE 5.458 5.459	FIXED Earth Exploration-Satellite (passive) 5.458	Earth Exploration Satellite systems				For sea surface temperature measurements
		Medium/high capacity fixed links		ERC REC 14-02	EN 301 751	
7125 - 7250 MHz						
FIXED MOBILE 5.458 5.459 5.460	FIXED MOBILE Earth Exploration-satellite (E/S) Space Operation (E/S) Space Research (E/S) 5.458 5.460	Earth Exploration Satellite systems				For sea surface temperature measurements
		Fixed links			EN 301 751	ITU-R Recommendation F.385
7250 - 7300 MHz						
FIXED FIXED-SATELLITE (S/E) MOBILE 5.461	FIXED FIXED-SATELLITE (S/E) MOBILE 5.461 EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Fixed links			EN 301 751	ITU-R Recommendation F.385 FIXED and MOBILE services not to be implemented in most NATO countries
		Mobile satellite applications				Within the band 7250-7375 MHz
7300 - 7450 MHz						
FIXED FIXED-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.461	FIXED FIXED-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.461 EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Fixed links			EN 301 751	ITU-R Recommendation F.385
		Mobile satellite applications				Within the band 7250-7375 MHz

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
7450 - 7550 MHz						
FIXED FIXED-SATELLITE (S/E) METEOROLOGICAL-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.461A	FIXED FIXED-SATELLITE (S/E) METEOROLOGICAL-SATELLITE (S/E) MOBILE except Aeronautical Mobile 5.461A EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Fixed links			EN 301 751	ITU-R Recommendation F.385
		Meteorological Satellite				Limited to geostationary systems
7550 - 7750 MHz						
FIXED FIXED-SATELLITE (S/E) MOBILE except Aeronautical Mobile	FIXED FIXED-SATELLITE (S/E) MOBILE except Aeronautical Mobile EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Fixed links			EN 301 751	ITU-R Recommendation F.385
7750 - 7850 MHz						
FIXED METEOROLOGICAL-SATELLITE (S/E) 5.461B MOBILE except Aeronautical Mobile	FIXED METEOROLOGICAL-SATELLITE (S/E) 5.461B MOBILE except Aeronautical Mobile EU2	Defence systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386
		Meteorological Satellite				Limited to non-geostationary systems
7850 - 7900 MHz						
FIXED MOBILE except Aeronautical Mobile	FIXED MOBILE except Aeronautical Mobile	Defence systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386
7900 - 8025 MHz						
FIXED FIXED-SATELLITE (E/S) MOBILE 5.461	FIXED FIXED-SATELLITE (E/S) MOBILE 5.461 EU2 EU27	Defence systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386 FIXED and MOBILE services not to be implemented above 7975 MHz in NATO countries
		Mobile satellite applications				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
8025 - 8175 MHz						
EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) MOBILE 5.463 5.462A	EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) MOBILE 5.463 5.462A EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Earth Exploration Satellite systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386
		Mobile applications				Within the band 8025-8200 MHz
8175 - 8215 MHz						
EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) METEOROLOGICAL-SATELLITE (E/S) MOBILE 5.463 5.462A	EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) METEOROLOGICAL-SATELLITE (E/S) MOBILE 5.463 5.462A EU2 EU27	Defence systems				Harmonised military band for satellite operation
		Earth Exploration Satellite systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386
		Mobile applications				Within the band 8025-8200 MHz
8215 - 8400 MHz						
EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) MOBILE 5.463 5.462A	EARTH EXPLORATION-SATELLITE (S/E) FIXED FIXED-SATELLITE (E/S) 5.462A EU2 5.463 EU27	Defence systems				Harmonised military band for satellite operation
		Earth Exploration Satellite systems				
		Fixed links			EN 301 751	ITU-R Recommendation F.386
		Radio astronomy applications				VLBI observations
8400 - 8500 MHz						
FIXED MOBILE except Aeronautical Mobile SPACE RESEARCH (S/E) 5.465 5.467	FIXED SPACE RESEARCH (S/E) 5.465 Radiolocation	Fixed links			EN 301 751	ITU-R Recommendation F.386

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
8500 - 8550 MHz						
RADIOLOCATION 5.469	RADIOLOCATION 5.469 EU2 EU24	Civil and military aeronautical radionavigation e.g. airfield approach Shipborne, land and airborne surveillance and weapon radars				
8550 - 8650 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.469 5.469A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.469 EU2 5.469A EU24	Civil and military aeronautical radionavigation e.g. airfield approach Shipborne, land and airborne surveillance and weapon radars Spaceborne active sensors				
8650 - 8750 MHz						
RADIOLOCATION 5.469	RADIOLOCATION 5.469 EU2 EU24	Civil and military aeronautical radionavigation e.g. airfield approach Shipborne, land and airborne surveillance and weapon radars				
8750 - 8850 MHz						
AERONAUTICAL RADIONAVIGATION S5.470 RADIOLOCATION 5.471	AERONAUTICAL RADIONAVIGATION S5.470 RADIOLOCATION Space Research EU2 EU24	Civil and military aeronautical radionavigation e.g. airfield approach Shipborne, land and airborne surveillance and weapon radars				
8850 - 9000 MHz						
MARITIME RADIONAVIGATION 5.472 RADIOLOCATION 5.473	MARITIME RADIONAVIGATION 5.472 RADIOLOCATION Space Research 5.473 EU2 EU24	Civil and military aeronautical radionavigation e.g. airfield approach Shipborne, land and airborne surveillance and weapon radars				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
9000 - 9200 MHz						
AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation	AERONAUTICAL RADIONAVIGATION S5.337 Radiolocation Space Research	Civil and military aeronautical radionavigation e.g. airfield approach				
5.471	EU2 EU24	Shipborne, land and airborne surveillance and weapon radars				
9200 - 9300 MHz						
MARITIME RADIONAVIGATION 5.472 RADIOLOCATION	MARITIME RADIONAVIGATION 5.472 RADIOLOCATION Space Research	Civil and military aeronautical radionavigation e.g. airfield approach				
5.473 5.474	5.473 EU2 5.474 EU24	Motion sensors		ERC REC 70-03	EN 300 440	
		Shipborne, land and airborne surveillance and weapon radars				
9300 - 9500 MHz						
RADIONAVIGATION 5.476 Radiolocation	RADIONAVIGATION 5.476 Radiolocation Space Research	Civil and military aeronautical radionavigation e.g. airfield approach				
5.427 5.474 5.475	5.427 EU2 5.474 EU24 5.475	Motion sensors		ERC REC 70-03	EN 300 440	
		Shipborne, land and airborne surveillance and weapon radars				
9500 - 9800 MHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	Civil and military aeronautical radionavigation e.g. airfield approach				
5.476A	5.476A EU2 EU24	Motion sensors		ERC REC 70-03	EN 300 440	
		Shipborne, land and airborne surveillance and weapon radars				
		Spaceborne active sensors				

RR Region 1 Allocation and RR footnotes relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC/ERC document	Standard	Note
9800 - 10000 MHz						
RADIOLOCATION Fixed 5.477 5.478 5.479	RADIOLOCATION Space Research 5.479 EU2 EU24	Civil and military aeronautical radionavigation e.g. airfield approach				
		Motion sensors		ERC REC 70-03	EN 300 440	Within the band 9500-9975 MHz
		Shipborne, land and airborne surveillance and weapon radars				

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC ERC Document	Standard	Note
10 - 10.15 GHz							
FIXED MOBILE RADIOLOCATION Amateur 5.479	FIXED MOBILE RADIOLOCATION Amateur 5.479	EU2	Amateur applications			EN 301 783	
			Non civil radar				
			SAP/SAB applications	EU17A	ERC REC 25-10		
10.15 - 10.3 GHz							
FIXED MOBILE RADIOLOCATION Amateur	FIXED MOBILE RADIOLOCATION Amateur	EU2	Amateur applications			EN 301 783	
			Civil and military radars				Low power radars in certain subbands
			Fixed links		ERC REC 12-05	EN 301 751	
			Fixed wireless access systems		ERC REC 13-04	EN 301 753	Including point- to- multipoint
			SAP/SAB applications	EU17A	ERC REC 25-10		
10.3 - 10.45 GHz							
FIXED MOBILE RADIOLOCATION Amateur	FIXED RADIOLOCATION Amateur Mobile	EU2 EU17	Amateur applications			EN 301 783	
			Civil and military radars				Low power radars in certain subbands
			SAP/SAB applications	EU17A	ERC REC 25-10		
10.45 - 10.5 GHz							
RADIOLOCATION Amateur Amateur-Satellite	FIXED MOBILE RADIOLOCATION Amateur Amateur-Satellite		Amateur applications	EU23		EN 301 783	
			Amateur Satellite applications	EU23		EN 301 783	
			Civil and military radars				
			Fixed links		ERC REC 12-05	EN 301 751	
5.481		EU2 EU17	SAP/SAB applications	EU17A	ERC REC 25-10		

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
10.5 - 10.55 GHz						
FIXED MOBILE Radiolocation	FIXED MOBILE Radiolocation	Fixed links		ERC REC 12-05	EN 301 751	
		Fixed wireless access systems		ERC REC 13-04	EN 301 753	Including point- to- multipoint
		Motion sensors		ERC REC 70-03	EN 300 440	
		SAP/SAB applications	EU17A	ERC REC 25-10		
10.55 - 10.6 GHz						
FIXED MOBILE except Aeronautical Mobile Radiolocation	FIXED MOBILE except Aeronautical Mobile Radiolocation	Fixed links		ERC REC 12-05	EN 301 751	
		Fixed wireless access systems		ERC REC 13-04	EN 301 753	Including point- to- multipoint
		Motion sensors		ERC REC 70-03	EN 300 440	
		SAP/SAB applications	EU17A	ERC REC 25-10		
10.6 - 10.65 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation 5.149 5.482	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation 5.149 5.482	Fixed links		ERC REC 12-05	EN 301 751	
		Fixed wireless access systems		ERC REC 13-04	EN 301 753	Including point- to- multipoint
		Passive applications				Continuum measurements and VLBI Surface emissivity and precipitation measurements
		SAP/SAB applications	EU17A	ERC REC 25-10		
10.65 - 10.68 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation 5.149 5.482	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149 5.482	Fixed links		ERC REC 12-05	EN 301 751	
		Passive applications				Continuum measurements and VLBI Surface emissivity and precipitation measurements
		SAP/SAB applications	EU17A	ERC REC 25-10		

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
10.68 - 10.7 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.483	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Continuum measurements and VLBI Surface emmissivity and precipitation
10.7 - 11.7 GHz						
FIXED FIXED-SATELLITE (S/E) 5.441 (E/S) 5.484 MOBILE except Aeronautical Mobile	FIXED FIXED-SATELLITE (S/E) 5.441 (E/S) 5.484 MOBILE except Aeronautical Mobile Land Mobile-satellite (S/E)	Fixed links		ERC DEC (00)08 ERC REC 12-06	EN 301 751	Limited to high capacity fixed links
		Fixed Satellite Service applications		ERC DEC (00)08	EN 301 427 EN 301 428 EN 301 430 EN 301 459 EN 301 360	Within the band 10.7-10.95/11.2-11.45 GHz in accordance with App 30B SIT/SUT - Eureltrack - VSAT
11.7 - 12.5 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED Mobile except Aeronautical Mobile 5.487 5.487A 5.492	BROADCASTING-SATELLITE FIXED Mobile except Aeronautical Mobile 5.487 EU28 5.487A 5.492	Satellite Broadcasting		ERC DEC (00)08	EN 301 360	In accordance with App S30
12.5 - 12.75 GHz						
FIXED-SATELLITE (S/E) (E/S) 5.484A 5.495 5.496	FIXED-SATELLITE (S/E) 5.484A 5.495	Fixed Satellite Service applications			EN 301 427 EN 301 428 EN 301 430 EN 301 459 EN 301 360	Priority for civil networks. Low density carriers, including VSATs and digital SNG are encouraged to use this band VSAT - SIT/SUT

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation		Utilisation	EU footnote	ECC ERC Document	Standard	Note
12.75 - 13.25 GHz							
FIXED	FIXED						
FIXED-SATELLITE (E/S) 5.441	FIXED-SATELLITE (E/S) 5.441		Fixed links		ERC REC 12-02	EN 301 751	
Space Research (deep space) (S/E)			Fixed Satellite Service applications			EN 301 430	
13.25 - 13.4 GHz							
AERONAUTICAL RADIONAVIGATION 5.497	AERONAUTICAL RADIONAVIGATION 5.497		Doppler Navigation aids				
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Earth exploration observations				
SPACE RESEARCH (active)	SPACE RESEARCH (active)		Ship berthing radars				
5.498A	5.498A	EU26					
13.4 - 13.75 GHz							
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Doppler Navigation aids				
RADIOLOCATION	RADIOLOCATION		Military land, airborne and naval radars				
SPACE RESEARCH 5.501A	SPACE RESEARCH 5.501A		Motion sensors		ERC REC 70-03	EN 300 440	Within 13.4-14.0 GHz
Standard Frequency and Time Signal-satellite (E/S)			Ship berthing radars				
5.499	5.501B	EU2					
5.500		EU26					
5.501							
5.501B							
13.75 - 14 GHz							
FIXED-SATELLITE (E/S) 5.484A	FIXED-SATELLITE (E/S) 5.484A		Fixed Satellite Service applications			EN 301 430	
RADIOLOCATION	RADIOLOCATION		Military land, airborne and naval radars				
Space Research	Space Research		Motion sensors		ERC REC 70-03	EN 300 440	Within 13.4-14.0 GHz
Standard Frequency and Time Signal-satellite (E/S)			Navigation radars				
5.500	5.502	EU2	Passive applications				Future VLBI ovservations
5.501	5.503	EU26	Ship berthing radars				
5.502							
5.503							
5.503A							

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
14 - 14.25 GHz						
FIXED-SATELLITE (E/S) 5.484A 5.506 RADIONAVIGATION 5.504 Mobile-Satellite (E/S) except aeronautical mobile-satellite Space Research	FIXED-SATELLITE (E/S) 5.484A Mobile-Satellite (E/S) except aeronautical mobile-satellite Space Research 5.504	Mobile satellite systems			EN 301 427	Priority for civil networks
		VSAT/SNG applications		ERC REC 13-03	EN 301 428 EN 301 430	Low density carriers, including VSATs and digital SNG, are encouraged to use this band
14.25 - 14.3 GHz						
FIXED-SATELLITE (E/S) 5.484A 5.506 RADIONAVIGATION 5.504 Mobile-Satellite (E/S) except aeronautical mobile-satellite Space Research 5.508	FIXED-SATELLITE (E/S) 5.484A Mobile-Satellite (E/S) except aeronautical mobile-satellite Space Research 5.504 5.508	Mobile satellite systems			EN 301 427	Priority for civil networks Fixed links to be coordinated with fixed satellite service on a national basis
		VSAT/SNG applications		ERC REC 13-03	EN 301 428 EN 301 430	
14.3 - 14.4 GHz						
FIXED FIXED-SATELLITE (E/S) 5.484A 5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (E/S) except aeronautical mobile-satellite Radionavigation-Satellite	FIXED-SATELLITE (E/S) 5.484A Mobile-Satellite (E/S) except aeronautical mobile-satellite	Fixed and Mobile Satellite Service applications			EN 301 427	Priority for vicil networks Fixed links to be coordinated with fixed satellite services on a national basis
		VSAT/SNG applications		ERC REC 13-03	EN 301 428 EN 301 430	

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
14.4 - 14.47 GHz						
FIXED FIXED-SATELLITE (E/S) 5.484A 5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (E/S) except aeronautical mobile-satellite Space Research (S/E)	FIXED-SATELLITE (E/S) 5.484A Mobile-Satellite (E/S) except aeronautical mobile-satellite	Fixed and Mobile Satellite Service applications			EN 301 427	Priority for vicil networks Fixed links to be coordinated with fixed satellite services on a national basis
		VSAT/SNG applications		ERC REC 13-03	EN 301 428 EN 301 430	
14.47 - 14.5 GHz						
FIXED FIXED-SATELLITE (E/S) 5.484A 5.506 MOBILE except Aeronautical Mobile Mobile-Satellite (E/S) except aeronautical mobile-satellite Radio Astronomy 5.149	FIXED-SATELLITE (E/S) 5.484A Mobile-Satellite (E/S) except aeronautical mobile-satellite Radio Astronomy 5.149	Fixed and Mobile Satellite Service applications			EN 301 427	Priority for vicil networks Fixed links to be coordinated with fixed satellite services on a national basis
		Radio astronomy applications				Spectral line observations and future VLBI
		VSAT/SNG applications		ERC REC 13-03	EN 301 428	VSAT&SNG
14.5 - 14.8 GHz						
FIXED FIXED-SATELLITE (E/S) 5.510 MOBILE Space Research	FIXED MOBILE Radio Astronomy EU27	Defence systems	EU20			The band 14.62-15.23 GHz is a harmonised military band for fixed and mobile services
		Fixed links	EU20	ERC REC 12-07	EN 301 751	
		Radio astronomy applications				Future VLBI observations compatible with primary use
14.8 - 15.35 GHz						
FIXED MOBILE Space Research 5.339	FIXED MOBILE Radio Astronomy 5.339 EU27	Defence systems	EU20			The band 14.62-15.23 GHz is a harmonised military band for fixed and mobile services
		Fixed links	EU20	ERC REC 12-07	EN 301 753	
		Radio astronomy applications				Future VLBI observations compatible with primary use

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
15.35 - 15.4 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.511	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Continuum measurements and future VLBI
15.4 - 15.43 GHz						
AERONAUTICAL RADIONAVIGATION 5.511D	AERONAUTICAL RADIONAVIGATION 5.511D	Doppler radar low power sensing Ground movement radars				
15.43 - 15.63 GHz						
AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (E/S) 5.511A 5.511C	AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (E/S) 5.511A 5.511C	Doppler radar low power sensing Fixed Satellite Service applications Ground movement radars				MSS feeder links
15.63 - 15.7 GHz						
AERONAUTICAL RADIONAVIGATION 5.511D	AERONAUTICAL RADIONAVIGATION 5.511D	Doppler radar low power sensing Ground movement radars				
15.7 - 16.6 GHz						
RADIOLOCATION 5.512	RADIOLOCATION EU27	Defence systems				Harmonised military band for land, airborne and naval radars
16.6 - 17.1 GHz						
RADIOLOCATION Space Research (deep space) (E/S) 5.512	RADIOLOCATION Space Research (E/S) EU27	Defence systems				Harmonised military band for land, airborne and naval radars

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
17.1 - 17.2 GHz						
RADIOLOCATION	RADIOLOCATION	Defence systems				Military radar applications
	Mobile	HIPERLANs		ERC REC 70-03		
5.512	EU2			ERC REC T/R 22-06		
17.2 - 17.3 GHz						
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)	Airborne terrain following radars				
RADIOLOCATION	MOBILE	Defence systems				Military radar applications
SPACE RESEARCH (active)	RADIOLOCATION	HIPERLANs		ERC REC 70-03		Mobile application for HIPERLANs which have priority over space services. HIPERLANs cannot claim protection from radiolocation service
	SPACE RESEARCH (active)	Missile systems radars				
5.512	5.513A EU2					
5.513A						
17.3 - 17.7 GHz						
FIXED-SATELLITE (E/S) 5.516	FIXED-SATELLITE (E/S) 5.516					
Radiolocation	Radiolocation	Defence systems				Missile systems radars
5.514	EU2	Feeder link plan				Feederl links for 11.7-12.5 GHz. Appendix S30A of RR
17.7 - 18.1 GHz						
FIXED	FIXED	Feeder link plan				Appendix S30A
FIXED-SATELLITE (S/E) 5.484A (E/S) 5.516	FIXED-SATELLITE (S/E) 5.484A (E/S) 5.516	Fixed links		ERC DEC (00)07	EN 301 751	
MOBILE				ERC REC 12-03		
		Fixed Satellite Service applications		ERC DEC (00)07	EN 301 360	To coordinated earth stations Priority for civil networks
18.1 - 18.3 GHz						
FIXED	FIXED	Feeder link band				
FIXED-SATELLITE (S/E) 5.484A (E/S) 5.520	FIXED-SATELLITE (S/E) 5.484A (E/S) 5.520	Fixed links		ERC REC 12-03	EN 301 751	
MOBILE	METEOROLOGICAL-SATELLITE (S/E)	Fixed Satellite Service applications			EN 301 360	To coordinated earth stations Priority for civil networks
5.519	5.519					
5.521						

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
18.3 - 18.4 GHz						
FIXED FIXED-SATELLITE (S/E) 5.484A (E/S) 5.520 MOBILE 5.521	FIXED FIXED-SATELLITE (S/E) 5.484A (E/S) 5.520	Feeder link band				
		Fixed links		ERC REC 12-03	EN 301 751	
		Fixed Satellite Service applications			EN 301 360	To coordinated earth stations Priority for civil networks
18.4 - 18.6 GHz						
FIXED FIXED-SATELLITE (S/E) 5.484A MOBILE	FIXED FIXED-SATELLITE (S/E) 5.484A	Fixed links		ERC DEC (00)07 ERC REC 12-03	EN 301 751	
		Fixed Satellite Service applications		ERC DEC (00)07	EN 301 360	To coordinated earth stations Priority for civil networks
18.6 - 18.8 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (S/E) 5.522B MOBILE except Aeronautical Mobile Space Research (passive) 5.522A	EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (S/E) 5.522B 5.522A	Fixed links		ERC DEC (00)07 ERC REC 12-03	EN 301 751	
		Fixed Satellite Service applications		ERC DEC (00)07	EN 301 360	To coordinated earth stations Priority for civil networks
		Passive applications				EESS surface emmissivity, snow, sea ice and preception. Earth Exploration Satellite is included.
18.8 - 19.3 GHz						
FIXED FIXED-SATELLITE (S/E) 5.523A MOBILE	FIXED FIXED-SATELLITE (S/E) 5.523A	Fixed links		ERC DEC (00)07 ERC REC 12-03	EN 301 751	
		Fixed Satellite Service applications		ERC DEC (00)07	EN 301 360	To coordinated earth stations Priority for civil networks

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
19.3 - 19.7 GHz						
FIXED FIXED-SATELLITE (S/E) (E/S) 5.523B 5.523C 5.523D 5.523E MOBILE	FIXED FIXED-SATELLITE (S/E) (E/S) 5.523B 5.523C 5.523D 5.523E	Fixed links		ERC DEC (00)07 ERC REC 12-03	EN 301 751	
		Fixed Satellite Service applications		ERC DEC (00)07	EN 301 360	To coordinated earth stations Priority for civil networks
19.7 - 20.1 GHz						
FIXED-SATELLITE (S/E) 5.484A Mobile-Satellite (S/E)	FIXED-SATELLITE (S/E) 5.484A Mobile-Satellite (S/E) 5.525	Fixed and Mobile Satellite Service applications			EN 301 459	For uncoordinated earth stations SUT
20.1 - 20.2 GHz						
FIXED-SATELLITE (S/E) 5.484A MOBILE-SATELLITE (S/E) 5.525 5.526 5.527 5.528	FIXED-SATELLITE (S/E) 5.484A MOBILE-SATELLITE (S/E) 5.525 5.526 5.527 5.528	Fixed and Mobile Satellite Service applications			EN 301 459	For uncoordinated earth stations SUT
20.2 - 21.2 GHz						
FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E) Standard Frequency and Time Signal-satellite (S/E)	FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E)	Fixed and Mobile Satellite Service applications				For uncoordinated earth stations Harmonised military band for satellite downlinks
	EU2 EU27					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
21.2 - 21.4 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	Passive applications				Passive systems will be phased out by 2015
		Unidirectional temporary fixed or mobile links		ERC REC 25-10		Including SAP/SAB
21.4 - 22 GHz						
BROADCASTING-SATELLITE FIXED MOBILE	BROADCASTING-SATELLITE	Wide band high definition television				Fixed service envisaged in some countries
5.530	5.530					
22 - 22.21 GHz						
FIXED MOBILE except Aeronautical Mobile	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Passive applications				Spectral line observations (water line and redshifted water line under 22.5 GHz)
		SAP/SAB applications	EU17A	ERC REC 25-10		
5.149	5.149					
22.21 - 22.5 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	FIXED MOBILE except Aeronautical Mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Earth Exploration-Satellite (passive	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Radio astronomy applications				EESS systems will be phased out by 2015. Spectral line observations (water line and redshifted water line under 22.5 GHz) also VLBI
		SAP/SAB applications	EU17A	ERC REC 25-10		
5.149	5.149					
5.532	5.532					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
22.5 - 22.55 GHz						
FIXED MOBILE	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive)	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Radio astronomy applications				
		SAP/SAB applications	EU17A	ERC REC 25-10		
22.55 - 22.6 GHz						
FIXED INTER-SATELLITE MOBILE 5.149	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Radio astronomy applications				
		SAP/SAB applications	EU17A	ERC REC 25-10		
22.6 - 23 GHz						
FIXED INTER-SATELLITE MOBILE 5.149	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149	Radio astronomy applications				Spectral line observations (Methyl Formate and Ammonia lines 22.81-22.86 GHz)
		SAP/SAB applications	EU17A	ERC REC 25-10		
23 - 23.55 GHz						
FIXED INTER-SATELLITE MOBILE 5.149	FIXED INTER-SATELLITE MOBILE 5.149	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Radio astronomy applications				Spectral line observations
		SAP/SAB applications		ERC REC 25-10		
23.55 - 23.6 GHz						
FIXED MOBILE	FIXED INTER-SATELLITE MOBILE	Fixed links		ERC REC T/R 13-02	EN 301 751	
		SAP/SAB applications		ERC REC 25-10		

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
23.6 - 24 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Continuum observations Ammonia line Water vapout measurements
24 - 24.05 GHz						
AMATEUR AMATEUR-SATELLITE 5.150	AMATEUR AMATEUR-SATELLITE 5.150	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		ISM				Within 24-24.25 GHz
		Non specific SRD		ERC REC 70-03	EN 300 440	
		SAP/SAB applications		ERC REC 25-10		
24.05 - 24.25 GHz						
RADIOLOCATION Amateur Earth Exploration-Satellite (active) 5.150	RADIOLOCATION Amateur Earth Exploration-Satellite (active) Fixed Mobile 5.150 EU2	Amateur applications				
		Defence systems				
		ISM				
		Motion sensors		ERC REC 70-03	EN 300 440	
		Non specific SRD		ERC REC 70-03	EN 300 440	
		Rain radar from satellites				
		SAP/SAB applications		ERC REC 25-10		
24.25 - 24.45 GHz						
FIXED	FIXED MOBILE	SAP/SAB applications	EU17A	ERC REC 25-10		
		Unidirectional temporary fixed links				

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
24.45 - 24.5 GHz						
FIXED INTER-SATELLITE	FIXED MOBILE	SAP/SAB applications	EU17A	ERC REC 25-10		
		Unidirectional temporary fixed links				
24.5 - 24.65 GHz						
FIXED INTER-SATELLITE	FIXED	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Fixed wireless access systems		ERC REC 00-05 ERC REC 13-04	EN 301 753	CRS paired with 25.5-26.5 GHz for FDD systems
24.65 - 24.75 GHz						
FIXED INTER-SATELLITE	FIXED	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Fixed wireless access systems		ERC REC 00-05 ERC REC 13-04	EN 301 753	CRS paired with 25.5-26.5 GHz for FDD systems
24.75 - 25.25 GHz						
FIXED	FIXED	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Fixed wireless access systems		ERC REC 00-05 ERC REC 13-04	EN 301 753	CRS paired with 25.5-26.5 GHz for FDD systems
25.25 - 25.5 GHz						
FIXED INTER-SATELLITE 5.536 MOBILE Standard Frequency and Time Signal-satellite (E/S)	FIXED INTER-SATELLITE 5.536 MOBILE	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Fixed wireless access systems		ERC REC 00-05 ERC REC 13-04	EN 301 753	CRS paired with 25.5-26.5 GHz for FDD systems

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
25.5 - 26.5 GHz						
EARTH EXPLORATION-SATELLITE (S/E) 5.536A 5.536B FIXED INTER-SATELLITE 5.536 MOBILE Standard Frequency and Time Signal-satellite (E/S)	FIXED INTER-SATELLITE 5.536 MOBILE Earth Exploration-Satellite (S/E) 5.536A 5.536B	Fixed links		ERC REC T/R 13-02	EN 301 751	
		Fixed wireless access systems		ERC REC 00-05 ERC REC 13-04	EN 301 753	TS paried with 24.5-25.5 GHz for FDD systems
26.5 - 27 GHz						
EARTH EXPLORATION-SATELLITE (S/E) 5.536A 5.536B FIXED INTER-SATELLITE 5.536 MOBILE Standard Frequency and Time Signal-satellite (E/S)	FIXED INTER-SATELLITE 5.536 MOBILE Earth Exploration-Satellite (S/E) 5.536A 5.536B EU27	Defence systems				Harmonised military band for fixed and mobile systems
27 - 27.5 GHz						
FIXED INTER-SATELLITE 5.536 MOBILE	FIXED INTER-SATELLITE 5.536 MOBILE Earth Exploration-Satellite (S/E) EU27	Defence systems				Harmonised military band for fixed and mobile systems
27.5 - 28.5 GHz						
FIXED 5.537A FIXED-SATELLITE (E/S) 5.484A 5.539 MOBILE 5.538 5.540	FIXED FIXED-SATELLITE (S/E) (E/S) 5.484A 5.539 5.538 5.540	Feeder link band				Feeder links to Broadcasting satellites (HDTV) 27.5-29.5 GHz
		Fixed links		ERC DEC (00)09 ERC REC T/R 13-02	EN 301 751	Within the band 28.0525-28.4445 GHz
		Fixed Satellite Service applications		ERC DEC (00)09	EN 301 360	The Earth-to-Space direction for uncoordinated earth stationswithin the band 27.5-27.8285 GHz The Space-to-Earth direction is limited to beacons for uplink power control 27.5-27.501 GHz
		Fixed wireless access systems		ERC REC 13-04	EN 301 753	CRS paired with 28.5-29.5 GHz for FDD systems

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
28.5 - 29.1 GHz						
FIXED	FIXED					Priority for civil networks
FIXED-SATELLITE (E/S) 5.484A 5.523A 5.539	FIXED-SATELLITE (E/S) 5.484A 5.523A 5.539	Feeder link band		ERC DEC (00)09		Feeder links to Broadcasting satellites (HDTV) 27.5-29.5 GHz
MOBILE	Earth Exploration-Satellite (E/S) 5.541	Fixed links		ERC DEC (00)09 ERC REC T/R 13-02	EN 301 751	
Earth Exploration-Satellite (E/S) 5.541		Fixed Satellite Service applications		ERC DEC (00)09	EN 301 360	Uncoordinated earth stations within the band 28.4445-28.8365 GHz
5.540	5.540	Fixed wireless access systems		ERC REC 13-04	EN 301 753	TS paired with 27.5-28.5 GHz for FDD systems
29.1 - 29.5 GHz						
FIXED	FIXED	Feeder link band				Feeder links to Broadcasting satellites (HDTV) 27.5-29.5 GHz
FIXED-SATELLITE (E/S) 5.523C 5.523E 5.535A 5.539 5.541A	FIXED-SATELLITE (E/S) 5.523C 5.523E 5.535A 5.539 5.541A	Fixed links		ERC REC T/R 13-02	EN 301 751	Within the band 29.0605-29.4525 GHz
MOBILE	Earth Exploration-Satellite (E/S) 5.541	Fixed Satellite Service applications		ERC DEC (00)09	EN 301 360	Uncoordinated earth stations within the band 29.4525-29.5 GHz
Earth Exploration-Satellite (E/S) 5.541		Fixed wireless access systems		ERC REC 13-04	EN 301 753	TS paired with 27.5-28.5 GHz for FDD systems
5.540	5.540					
29.5 - 29.9 GHz						
FIXED-SATELLITE (E/S) 5.484A 5.539	FIXED-SATELLITE (E/S) 5.484A 5.539	Fixed and Mobile Satellite Service applications			EN 301 459	For uncoordinated earth stations
Earth Exploration-Satellite (E/S) 5.541	Earth Exploration-Satellite (E/S) 5.541					
Mobile-Satellite (E/S)	Mobile-Satellite (E/S)					
5.540	5.540					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
29.9 - 30 GHz						
FIXED-SATELLITE (E/S) 5.484A 5.539	FIXED-SATELLITE (S/E) (E/S) 5.484A 5.539	Fixed Satellite Service applications		ERC DEC (01)03	EN 301 459	Limited to beacons for uplink power control 29.999-30 GHz
MOBILE-SATELLITE (E/S)	MOBILE-SATELLITE (E/S)	Mobile satellite systems				For uncoordinated earth stations
Earth Exploration-Satellite (E/S) 5.541	Earth Exploration-Satellite (E/S) 5.541					
5.525	5.525					
5.526	5.526					
5.527	5.527					
5.538	5.538					
5.540	5.540					
5.543	5.543					
30 - 31 GHz						
FIXED-SATELLITE (E/S)	FIXED-SATELLITE (S/E) (E/S)	Fixed and Mobile Satellite Service applications				For uncoordinated earth stations
MOBILE-SATELLITE (E/S)	MOBILE-SATELLITE (E/S)					Harmonised military band for satellite uplinks
Standard Frequency and Time Signal-satellite (S/E)						
	EU2					
	EU27					
31 - 31.3 GHz						
FIXED	FIXED	Fixed links			EN 301 751	
MOBILE	MOBILE	Radio astronomy applications				Continuum measurements
Space Research 5.544						
Standard Frequency and Time Signal-satellite (S/E)						
5.149	5.149					
5.545						
31.3 - 31.5 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Passive applications				Continuum measurements
RADIO ASTRONOMY	RADIO ASTRONOMY	Surface temperature and emissivity, atmospheric attenuation				
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
31.5 - 31.8 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Fixed links				
RADIO ASTRONOMY	RADIO ASTRONOMY	Passive applications				Continuum measurements
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)	Surface temperature and emissivity, atmospheric attenuation				
Fixed	Fixed					
Mobile except Aeronautical Mobile	Mobile except Aeronautical Mobile					
5.149	5.149					
5.546	5.546					
31.8 - 32 GHz						
FIXED 5.547A	FIXED 5.547A					Space research (deep space) in come countries
RADIONAVIGATION	RADIONAVIGATION	High density fixed links		ERC REC 01-02	EN 301 751	Both Point-to-Point and Point-to-Multipoint
SPACE RESEARCH (deep space) (S/E)	SPACE RESEARCH (S/E)				EN 301 753	
5.547	5.547					
5.548	5.548					
32 - 32.3 GHz						
FIXED 5.547A	FIXED 5.547A					Space research (deep space) in come countries
INTER-SATELLITE	INTER-SATELLITE	High density fixed links		ERC REC 01-02	EN 301 751	Both Point-to-Point and Point-to-Multipoint
RADIONAVIGATION	RADIONAVIGATION				EN 301 753	
SPACE RESEARCH (deep space) (S/E)	SPACE RESEARCH (S/E)					
5.547	5.547					
5.548	5.548					
32.3 - 33 GHz						
FIXED 5.547A	FIXED 5.547A	High density fixed links		ERC REC 01-02	EN 301 751	Both Point-to-Point and Point-to-Multipoint
INTER-SATELLITE	INTER-SATELLITE				EN 301 753	
RADIONAVIGATION	RADIONAVIGATION					
5.547	5.547					
5.548	5.548					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
33 - 33.4 GHz						
FIXED 5.547A RADIONAVIGATION 5.547	FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547	High density fixed links		ERC REC 01-02	EN 301 751 EN 301 753	Both Point-to-Point and Point-to-Multipoint
33.4 - 34.2 GHz						
RADIOLOCATION 5.549	RADIOLOCATION EU2 EU27	Defence systems Motion sensors Short range radar Surveying and measurement				Harmonised military band for radiolocation systems
34.2 - 34.7 GHz						
RADIOLOCATION SPACE RESEARCH (deep space) (E/S) 5.549	RADIOLOCATION SPACE RESEARCH (E/S) EU2 EU27	Defence systems Motion sensors Short range radar Surveying and measurement				Harmonised military band for radiolocation systems
34.7 - 35.2 GHz						
RADIOLOCATION Space Research 5.549 5.550	RADIOLOCATION Space Research EU2 EU27	Defence systems Motion sensors Short range radar Surveying and measurement				Harmonised military band for radiolocation systems
35.2 - 35.5 GHz						
METEOROLOGICAL AIDS RADIOLOCATION 5.549	METEOROLOGICAL AIDS RADIOLOCATION EU2 EU27	Defence systems Rain radar from satellites				Harmonised military band for radiolocation systems

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
35.5 - 36 GHz						
EARTH EXPLORATION-SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) 5.549 5.551A	EARTH EXPLORATION-SATELLITE (active) METEOROLOGICAL AIDS RADIOLOCATION SPACE RESEARCH (active) 5.551A EU2 EU27	Defence systems				Harmonised military band for Radiolocaiton systems
		Rain radar from satellites				
36 - 37 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) Radio Astronomy 5.149 EU27	Defence systems				Harmonised military band for fixed and mobile systems.
		Passive applications				EESS surface emmissivity, snow, sea ice and preception.
		Radio astronomy applications				Hydrogen cyanide and Hydroxil lines 36.43-36.5 GHz
37 - 37.5 GHz						
FIXED MOBILE SPACE RESEARCH (S/E) 5.547	FIXED SPACE RESEARCH (S/E) 5.547 EU2	High density fixed links		ERC REC T/R 12-01	EN 301 751	For civil applications
		Low and medium capacity fixed links				For military applications
		Unplaned, uncoordinated use				within the sub bands 37-37.142 GHz paired with 38.22-38.402 GHz subject to national decisions
37.5 - 38 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE SPACE RESEARCH (S/E) Earth Exploration-Satellite (S/E) 5.547 5.551AA	FIXED FIXED-SATELLITE (S/E) SPACE RESEARCH (S/E) Earth Exploration-Satellite (S/E) 5.547 EU2 5.551AA	Fixed Satellite Service applications		ERC DEC (00)02		Uncoordinated Earth stations shall not claim protection from the Fixed Service
		High density fixed links		ERC DEC (00)02 ERC REC T/R 12-01	EN 301 751	For civil applications
		Low capacity fixed links				For military applciations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
38 - 39.5 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE Earth Exploration-Satellite (S/E) 5.547 5.551AA	FIXED FIXED-SATELLITE (S/E) Earth Exploration-Satellite (S/E) 5.547 EU2 5.551AA	Fixed Satellite Service applications		ERC DEC (00)02		Uncoordinated Earth stations shall not claim protection from the Fixed Service
		High density fixed links		ERC DEC (00)02 ERC REC T/R 12-01	EN 301 751	For civil applications
		Low capacity fixed links				For military applications
		Unplaned, uncoordinated use				Within the sub bands 37-37.142 GHz apired with 38.26-38.402 GHz subject to national decisions
39.5 - 40 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) Earth Exploration-Satellite (S/E) 5.547 5.551AA	FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) Earth Exploration-Satellite (S/E) 5.547 EU2 5.551AA	Fixed Satellite Service applications		ERC DEC (00)02		Coordinated and uncoordinated earth stations
40 - 40.5 GHz						
EARTH EXPLORATION-SATELLITE (E/S) FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) SPACE RESEARCH (E/S) Earth Exploration-Satellite (S/E)	FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) SPACE RESEARCH (E/S) Earth Exploration-Satellite (S/E) EU2	Broadband mobile systems				Possible future band
		Fixed Satellite Service applications		ERC DEC (00)02		Coordinated and uncoordinated earth stations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
40.5 - 41 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) Mobile 5.547	BROADCASTING BROADCASTING-SATELLITE FIXED 5.547	Fixed Satellite Service applications				A new ECC Decision in the 40.5-42.5 GHz band is under development
		Multimedia Wireless Systems MWS		ERC DEC (99)15	EN 301 753	
41 - 42 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) Mobile 5.547 5.551G	BROADCASTING BROADCASTING-SATELLITE FIXED 5.547	Fixed Satellite Service applications				A new ECC Decision in the 40.5-42.5 GHz band is under development
		Multimedia Wireless Systems MWS		ERC DEC (99)15	EN 301 751 EN 301 753	
42 - 42.5 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) Mobile 5.547 5.551AA 5.551G	BROADCASTING BROADCASTING-SATELLITE FIXED	Fixed Satellite Service applications				A new ECC Decision in the 40.5-42.5 GHz band is under development
		Multimedia Wireless Systems MWS		ERC DEC (99)15	EN 301 751 EN 301 753	
42.5 - 43.5 GHz						
FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149 5.547	FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE except Aeronautical Mobile RADIO ASTRONOMY 5.149 5.547	Broadband mobile systems				Possible future band
		Fixed Satellite Service applications				For fixed applications Priority for civil networks
		Multimedia Wireless Systems MWS		ERC DEC (99)15	EN 301 753	
		Radio astronomy applications				Silicon monoxide lines and many other spectral lines in this band

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
43.5 - 45.5 GHz						
MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	MOBILE 5.553 MOBILE-SATELLITE Fixed-Satellite 5.554 EU27					Radionavigation envisaged in some countries
		Defence systems				Harmonised military band for satellite uplinks and mobile systems
45.5 - 47 GHz						
MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554					
47 - 47.2 GHz						
AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
47.2 - 48.5 GHz						
FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE 5.149 5.552A 5.555	FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE Amateur 5.552A 5.555	Feeder link band				For 40 GHz broadcasting satellites
		Fixed Satellite Service applications				For fixed applications Priority for civil networks
		HAPS				Within the band 47.2-47.5 and 47.9-48.2 GHz
		SAP/SAB applications		ERC REC 25-10		

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
48.5 - 50.2 GHz						
FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE 5.149 5.340 5.552A 5.555	FIXED FIXED-SATELLITE (E/S) 5.552 MOBILE RADIO ASTRONOMY 5.149 5.340 5.555	Feeder link band				For 40 GHz broadcasting satellites 48.5-49.2 GHz
		Fixed Satellite Service applications				For fixed applications Priority for civil networks
		Low and medium capacity fixed links		ERC REC 12-10	EN 301 751	
		Radio astronomy applications				Carbon monosulphide line 48.94-49.4 GHz
		SAP/SAB applications	EU17A	ERC REC 25-10		
50.2 - 50.4 GHz						
EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.555A	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	Passive applications				
50.4 - 51.4 GHz						
FIXED FIXED-SATELLITE (E/S) MOBILE Mobile-Satellite (E/S)	FIXED FIXED-SATELLITE (E/S) Mobile-Satellite (E/S) EU2	Future satellite and terrestrial systems				Shared civil and non civil allocation
51.4 - 52.6 GHz						
FIXED MOBILE 5.547 5.556	FIXED MOBILE RADIO ASTRONOMY 5.547 5.556	High density fixed links		ERC REC 12-11	EN 301 751	

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
52.6 - 54.25 GHz						
EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	Passive applications				Atmospheric temperature sounding
54.25 - 55.78 GHz						
EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	Passive applications				Atmospheric temperature sounding
55.78 - 56.9 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A SPACE RESEARCH (passive) 5.547 EU21 5.558	High density fixed links		ERC REC T/R 22-03 ERC REC 12-12	EN 301 751	
		Passive applications				
56.9 - 57 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.558A SPACE RESEARCH (passive) 5.547	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE 5.558 SPACE RESEARCH (passive) 5.547 EU21 5.558A	High density fixed links		ERC REC T/R 22-03 ERC REC 12-12	EN 301 751	
		Passive applications				Atmospheric temperature sounding

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
57 - 58.2 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547	High density fixed links		ERC REC 12-09 ERC REC T/R 22-03	EN 301 751	
		Passive applications				Atmospheric temperature sounding
58.2 - 59 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.547 5.556	EARTH EXPLORATION-SATELLITE (passive) FIXED RADIO ASTRONOMY SPACE RESEARCH (passive) 5.547 5.556	High density fixed links	EU6 EU19	ERC REC 12-09 ERC REC T/R 22-03	EN 301 751	
		Passive applications				Atmospheric temperature sounding
59 - 59.3 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	Defence systems	EU2 EU27			Frequency band 59-61 GHz is a harmonised military band for fixed, mobile and readiolocation systems
		Passive applications				Atmospheric temperature sounding

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
59.3 - 62 GHz						
FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 EU2 5.138 EU27	Cordless local area networks				
		Defence systems				Frequency band 59-61 GHz is a harmonised military band for fixed, mobile and readiolocation systems
		High density fixed links		ERC REC T/R 22-03		
		ISM				Within the band 61-61.5 GHz
		Non specific SRD		ERC REC 70-03		Within the band 61-61.5 GHz
62 - 63 GHz						
FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 EU2	Broadband mobile systems		ERC REC T/R 22-03		For connection to IBCN paired with 65-66 GHz
		Short range non civil radiolocation				
63 - 64 GHz						
FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	RTTT		ERC DEC (92)02 ERC REC 70-03		Road Transport and Traffic Telematic Vehicle to road/vehicle to vehicle
		Short range non civil radiolocation				
64 - 65 GHz						
FIXED INTER-SATELLITE MOBILE except Aeronautical Mobile 5.547 5.556	FIXED INTER-SATELLITE MOBILE except Aeronautical Mobile 5.447 5.556	High density fixed links		ERC REC T/R 22-03		

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
65 - 66 GHz						
EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except Aeronautical Mobile SPACE RESEARCH 5.547	EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except Aeronautical Mobile SPACE RESEARCH 5.547	Broadband mobile systems		ERC REC T/R 22-03		For connection to IBCN paired with 62-63 GHz
		High density fixed links		ERC REC T/R 22-03		
66 - 71 GHz						
INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	Future civil systems				
71 - 74 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E)	FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E) EU27	Defence systems				Harmonised military band. Pairing with 81-84 GHz is envisaged
74 - 75.5 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) MOBILE Space Research (S/E) 5.561	BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) MOBILE Space Research (S/E) 5.561	Future civil systems				
		Space science services				VLBI within the band 74-84 GHz

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
75.5 - 76 GHz						
BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) MOBILE Space Research (S/E) 5.559A 5.561	BROADCASTING BROADCASTING-SATELLITE FIXED FIXED-SATELLITE (S/E) MOBILE Space Research (S/E) 5.559A EU2 5.561	Amateur applications			EN 301 783	Until 2006
		Future civil systems				
		Space science services				VLBI
76 - 77.5 GHz						
RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite Space Research (S/E) 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite Space Research (S/E) 5.149 EU2	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		Civil radioloction				
		Radio astronomy applications				Spectral line and wide band continuum observations
		RTTT		ERC DEC (92)02 ERC REC 70-03		Road Transport and Traffic Telematic 76-77 GHz Radar Change of ERC Decision under development
77.5 - 78 GHz						
AMATEUR AMATEUR-SATELLITE Radio Astronomy Space Research (S/E) 5.149	AMATEUR AMATEUR-SATELLITE Radio Astronomy Space Research (S/E) 5.149	Radio astronomy applications				Spectral line and wide band continuum observations
78 - 79 GHz						
RADIOLOCATION Amateur Amateur-Satellite Radio Astronomy Space Research (S/E) 5.149 5.560	RADIOLOCATION Amateur Amateur-Satellite Radio Astronomy Space Research (S/E) 5.149 5.560	Civil and military radiolocation				
		Radio astronomy applications				Spectral line and wide band continuum observations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
79 - 81 GHz						
RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite Space Research (S/E) 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite Space Research (S/E) 5.149 EU2	Civil and military radiolocation				
		Radio astronomy applications				Spectral line and wide band continuum observations
81 - 84 GHz						
FIXED FIXED-SATELLITE (E/S) MOBILE MOBILE-SATELLITE (E/S) RADIO ASTRONOMY Space Research (S/E) 5.149 5.560A	FIXED FIXED-SATELLITE (E/S) MOBILE MOBILE-SATELLITE (E/S) RADIO ASTRONOMY Space Research (S/E) 5.149 EU27 5.560A	Defence systems				Harmonised military band. Paring with 71-74 GHz is envisaged
		Radio astronomy applications				Spectral line and wide band continuum observations
84 - 86 GHz						
FIXED FIXED-SATELLITE (E/S) 5.561A MOBILE RADIO ASTRONOMY 5.149	FIXED FIXED-SATELLITE (E/S) 5.561A MOBILE RADIO ASTRONOMY 5.149	Future civil fixed and mobile systems				
		Radio astronomy applications				Spectral line and wide band continuum observations
86 - 92 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Continuum and spectral line measurements

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
92 - 94 GHz						
FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149 EU2	Radio astronomy applications Short range radar				Diazenylium line and numerous other rspectral lines including wide band continuum observations
94 - 94.1 GHz						
EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio Astronomy 5.562 5.562A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio Astronomy 5.562 EU2 5.562A	Cloud profiler radar Short range radar				
94.1 - 95 GHz						
FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149 EU2	Radio astronomy applications Short range radar				Spectral line and wide band continuum observations
95 - 100 GHz						
FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 EU2 5.554	Radio astronomy applications				Multiple line observations including wide band continuum observations.

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
100 - 102 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	Earth Exploration Satellite systems				Limb sounding of atmospheric constituents
		Radio astronomy applications				Spectral line and wide band continuum observations
102 - 105 GHz						
FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	Radio astronomy applications				Spectral line and wide band continuum observations
105 - 109.5 GHz						
FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341					
109.5 - 111.8 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	Radio astronomy applications				Observations of CO lines at 109.8 and 110.2 GHz and for continuum observations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
111.8 - 114.25 GHz						
FIXED	FIXED					
MOBILE	MOBILE					
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B					
5.149	5.149					
5.341	5.341					
114.25 - 116 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Radio astronomy applications				Observations of the 115.3 GHz CO line
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340					
5.341	5.341					
116 - 119.98 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Passive applications				Passive sensing as part of the oxygen absorption band with peak at 118.75 GHz
INTER-SATELLITE 5.562C	INTER-SATELLITE 5.562C					
SPACE RESEARCH (passive)						
5.341	5.341					
119.98 - 120.02 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Passive applications				Passive sensing as part of the oxygen absorption band with peak at 118.75 GHz
INTER-SATELLITE 5.562C	INTER-SATELLITE 5.562C					
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.341	5.341					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
120.02 - 122.25 GHz						
EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138	Passive applications				Passive sensing as part of the oxygen absorption band with peak at 118.75 GHz
122.25 - 123 GHz						
FIXED INTER-SATELLITE MOBILE 5.558 Amateur 5.138	FIXED INTER-SATELLITE MOBILE 5.558 Amateur 5.138	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		Non specific SRD		ERC REC 70-03		
123 - 126 GHz						
FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio Astronomy 5.554	FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio Astronomy 5.554					
126 - 130 GHz						
FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E) Radio Astronomy 5.562D RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149	FIXED-SATELLITE (S/E) MOBILE-SATELLITE (S/E) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio Astronomy 5.149 5.554					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
130 - 134 GHz						
EARTH EXPLORATION-SATELLITE (active) 5.562E FIXED INTER-SATELLITE MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A	EARTH EXPLORATION-SATELLITE (active) 5.562E FIXED INTER-SATELLITE MOBILE 5.558 RADIO ASTRONOMY 5.149 5.562A	Radio astronomy applications				Spectral line and wide band continuum observations
134 - 136 GHz						
AMATEUR AMATEUR-SATELLITE Radio Astronomy	AMATEUR AMATEUR-SATELLITE Radio Astronomy	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
136 - 141 GHz						
RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite 5.149	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		Radio astronomy applications				Spectral line and wide band continuum observations
141 - 148.5 GHz						
FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	Radio astronomy applications				Spectral line and wide band continuum observations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
148.5 - 151.5 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Harmonised reference window for passive sensor observations
151.5 - 155.5 GHz						
FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	Radio astronomy applications				Spectral line and wide band continuum observations
155.5 - 158.5 GHz						
EARTH EXPLORATION-SATELLITE (passive) 5.562F FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562G	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562G	Earth Exploration Satellite systems				Protection until 1.1.2018.
		Radio astronomy applications				Spectral line and wide band continuum observations
158.5 - 164 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E)	FIXED FIXED-SATELLITE (S/E) MOBILE MOBILE-SATELLITE (S/E)					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
164 - 167 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	Passive applications				Harmonised reference window for passive sensor observations of the 183.31 GHz water vapor line. Microwave limb sounding of the 164.38 GHz CO line
167 - 168 GHz						
FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558	FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558					
168 - 170 GHz						
FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558 5.149	FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558 5.149					
170 - 174.5 GHz						
FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558 5.149	FIXED FIXED-SATELLITE (S/E) INTER-SATELLITE MOBILE 5.558 5.149					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
174.5 - 174.8 GHz						
FIXED INTER-SATELLITE MOBILE 5.558	FIXED INTER-SATELLITE MOBILE 5.558	Passive applications				Passive sensing of the water vapour absorption line whose peak is at 183.31 GHz
174.8 - 182 GHz						
EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	Passive applications				Passive sensing of the water vapour absorption line whose peak is at 183.31 GHz
182 - 185 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563	Passive applications				Passive sensing of the water vapour absorption line whose peak is at 183.31 GHz
185 - 190 GHz						
EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	Passive applications				Passive sensing of the water vapour absorption line whose peak is at 183.31 GHz
190 - 191.8 GHz						
EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	Passive applications				Passive sensing of the water vapour absorption line whose peak is at 183.31 GHz

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
191.8 - 200 GHz						
FIXED	FIXED					
INTER-SATELLITE	INTER-SATELLITE					
MOBILE 5.558	MOBILE 5.558					
MOBILE-SATELLITE	MOBILE-SATELLITE					
RADIONAVIGATION	RADIONAVIGATION					
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE					
5.149	5.149					
5.341	5.341					
5.554	5.554					
200 - 202 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Earth exploration observations				Atmospheric chemistry (limb sounding) and atmospheric remote sensing of nitrous oxide at 201 GHz.
RADIO ASTRONOMY	RADIO ASTRONOMY	Radio astronomy applications				Spectral line and wide band continuum observations
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340					
5.341	5.341					
5.563A	5.563A					
202 - 209 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Earth exploration observations				Atmospheric chemistry (limb sounding) and atmospheric remote sensing of water vapor at 203.4 GHz and ozone at 208.5 GHz.
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340					
5.341	5.341					
5.563A	5.563A					
209 - 217 GHz						
FIXED	FIXED	Radio astronomy applications				Spectral line and wide band continuum observations
FIXED-SATELLITE (E/S)	FIXED-SATELLITE (E/S)					
MOBILE	MOBILE					
RADIO ASTRONOMY	RADIO ASTRONOMY					
5.149	5.149					
5.341	5.341					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
217 - 226 GHz						
FIXED	FIXED					
FIXED-SATELLITE (E/S)	FIXED-SATELLITE (E/S)					
MOBILE	MOBILE					
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B					
5.149	5.149					
5.341	5.341					
226 - 231.5 GHz						
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	Passive applications				Passive sensors for limb sounding of atmospheric constituents. Reference window for higher frequency water vapor measurements
RADIO ASTRONOMY	RADIO ASTRONOMY					
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)					
5.340	5.340	Radio astronomy applications				Observations of the 230.5 GHz CO line
231.5 - 232 GHz						
FIXED	FIXED					
MOBILE	MOBILE					
Radiolocation	Radiolocation					
232 - 235 GHz						
FIXED	FIXED					
FIXED-SATELLITE (S/E)	FIXED-SATELLITE (S/E)					
MOBILE	MOBILE					
Radiolocation	Radiolocation					

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
235 - 238 GHz						
EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (S/E) SPACE RESEARCH (passive) 5.563A 5.563B		Passive applications				Passive sensing limited to microwave sounding .
		Radio astronomy applications				Spectral line and wide band continuum observations
238 - 240 GHz						
FIXED FIXED-SATELLITE (S/E) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE	FIXED FIXED-SATELLITE (S/E) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE					
240 - 241 GHz						
FIXED MOBILE RADIOLOCATION	FIXED MOBILE RADIOLOCATION					
241 - 248 GHz						
RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite 5.138 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-Satellite 5.138 5.149	Amateur applications			EN 301 783	
		Amateur Satellite applications			EN 301 783	
		Non specific SRD		ERC REC 70-03		
		Radio astronomy applications				Spectral line and wide band continuum observations

RR Region 1 Allocation and RR footnote relevant to CEPT and frequency band	European Common Allocation	Utilisation	EU footnote	ECC ERC Document	Standard	Note
248 - 250 GHz						
AMATEUR AMATEUR-SATELLITE Radio Astronomy 5.149	AMATEUR AMATEUR-SATELLITE Radio Astronomy 5.149	Amateur applications Amateur Satellite applications			EN 301 783 EN 301 783	
250 - 252 GHz						
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.563A	Earth exploration observations				Limb sounding of nitrous oxide near 251 GHz
252 - 265 GHz						
FIXED MOBILE MOBILE-SATELLITE (E/S) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	FIXED MOBILE MOBILE-SATELLITE (E/S) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	Radio astronomy applications				Spectral line and wide band continuum observations
265 - 275 GHz						
FIXED FIXED-SATELLITE (E/S) MOBILE RADIO ASTRONOMY 5.149 5.563A	FIXED FIXED-SATELLITE (E/S) MOBILE RADIO ASTRONOMY 5.149 5.563A					

EU-footnotes included in the European Common Allocation Table

EU-foot-number	EU-footnote text
EU1	Within the frequency band 20-108 MHz the common military tuning range is 30-87.5 MHz, however, some equipment types use the lower (20 MHz) and upper (108 MHz) limits, regulated on a national basis. The harmonised military bands are:- 30.30-30.50 MHz; 32.15-32.45 MHz; 41.00-47.00 MHz; 73.30-74.10 MHz; 79.0-79.70 MHz. When providing for additional requirements, further blocks of frequencies should be spread out over the whole common military tuning range in order to supply frequencies for frequency hopping equipment and to support a larger force (corps size, three divisions). This should be done by the national frequency management organisation(s) concerned.
EU2	Civil-military sharing
EU3	CEPT administrations are urged to take all practical steps to clear the band 47-68 MHz of assignments to the broadcasting service. The broadcasting assignments according to Stockholm Agreement 1961 shall be protected.
EU4	CEPT administrations are urged to take all practical steps to clear the band 68 - 73 MHz of assignments to the broadcasting service. The broadcasting assignments according to the Final Acts of the Special Regional Conference, Geneva, 1961 shall be protected.
EU5	In parts of this band aeronautical stations and aircraft stations may utilise 8.33 kHz channel spacing for non secure communications requirements
EU6	The mobile-satellite service is limited to low earth orbiting satellites
EU7	This band can also be used by low capacity fixed links in rural areas on a national basis. These links need to be coordinated with mobile service and require full protection.
EU8	Any use of low capacity fixed links shall be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service
EU9	This band is included in the Regional Radio Conference planned for 2004/2006 for the revision of the European Broadcasting Agreement, Stockholm 1961
EU10	The mobile service in the harmonised military band 225 - 400 MHz generally comprises land, air maritime and satellite mobile applications
EU12	The applicable RR S5 footnotes remain in force. Administrations are however urged to aim for the fullest possible harmonisation with the ITU Table of Allocations and ECA
EU13	CEPT Administrations are urged to take all practical steps to clear the band 645-960 MHz of the assignments to the aeronautical radionavigation service by the year 2008.
EU14	Radiolocation limited to military requirements for naval ship borne radars
EU15	In the frequency band 1350-2690 MHz tactical radio relay systems should be capable of tuning over the full range of this band. Requirements for tactical radio relay should be met from the following sub-bands: 1350–1400 MHz; 1427–1452 MHz; 1492–1525 MHz; 1660–1670 MHz; 1675–1710 MHz; 1785–1800 MHz; 2025–2110 MHz; 2200–2290 MHz; 2520–2575 MHz; 2615–2670 MHz. The common requirement of 2 x 45 MHz for tactical radio relay for cross/near border operations and exercises should be met from 2025-2110 MHz and 2200-2290 MHz and in particular the bands 2025-2070/2200-2245 MHz
EU15A	Use of the band by the mobile service is limited to tactical radio relay applications
EU16	On the introduction of IMT-2000, the fixed service will become secondary in appropriate parts of the band
EU16A	Use of the band by the mobile service is limited to tactical radio relay and SAP/SAB applications
EU17	In the sub-bands 3400 - 3410 MHz, 5660 - 5670 MHz, 10.36 - 10.37 GHz, 10.45 - 10.46 GHz the amateur service operates on a secondary basis. In making assignments to other services, CEPT administrations are requested wherever possible to maintain these sub-bands in such a way as to facilitate the reception of amateur emissions with minimal power flux densities.
EU17A	Use of the band by the mobile service is limited to SAP/SAB applications
EU18	This aeronautical radionavigation band shall be subject to further study to ascertain future requirements and developments.
EU19	This band is allocated to the radio astronomy service. CEPT administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from space or airborne stations in this and adjacent bands can cause serious harmful interference
EU20	This fixed service band is designated for common use by civil and non civil users. Any user priorities in respect of preferred channels or sub-bands are to be determined after discussions between interested parties
EU21	Not used
EU22	The band 5250 - 5850 MHz is utilised for a variety of radiodetermination applications falling within the radionavigation and radiolocation services. This band will be subject to further detailed consideration.

EU23	In the sub-bands 5660 - 5670 MHz (earth to space), 5830 - 5850 MHz (space to earth) and 10.45 - 10.50 GHz the amateur-satellite additionally operates on a secondary and non interference basis to other services. In making assignments to other services, CEPT administrations are requested wherever possible to maintain these allocations in such a way as to facilitate the reception of amateur emissions with minimal power flux densities.
EU24	The band 8500 - 10000 MHz is utilised for a variety of radiodetermination applications falling within the radionavigation and radiolocation services. This band will be subject to further detailed consideration in conjunction with the band 5250 - 5850 MHz (see EU20).
EU25	Not used.
EU26	The band 13.25 - 14.0 GHz is utilised for a variety of radiodetermination applications falling within the radionavigation and radiolocation services. This band will be subject to further detailed consideration
EU27	A frequency band that is in general military use in Europe and identified for major military utilisation in the ECA. Such a frequency band forms a basis for military use and planning. The band can be shared between civil and military users according to national requirements and legislation
EU28	CEPT administrations shall not deploy new fixed service systems in the band 11.7-12.5 GHz (ERC DEC (00) 08)
EU29	The frequency bands 890-915/935-960 MHz, 880-890/925-935 MHz and 1710-1785/1805-1880 MHz are reserved for public cellular mobile use only. Other services such as the fixed service should only be allowed in the above bands where coexistence with public mobile systems is possible i.e. in sparsely populated or rural areas where the frequency band is not needed for mobile cellular systems
EU30	National administrations should consider co-ordination zones around the EISCAT sites when using the band 925-935 MHz for mobile services including international planning for military services. Short Range Devices should not use this band.
EU31	The band 440-470 MHz is the tuning range for Private Wide Area Paging (PWAP)

RR-foot-no	Radio Regulation footnote text
5.053	Administrations authorizing the use of frequencies below 9 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 9 kHz are allocated
5.054	Administrations conducting scientific research using frequencies below 9 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.
5.055	Additional allocation: in Armenia, Azerbaijan, Bulgaria, the Russian Federation, Georgia, Kyrgyzstan, Tajikistan and Turkmenistan, the band 14-17 kHz is also allocated to the radionavigation service on a primary basis.
5.057	The use of the bands 14-19.95 kHz, 20.05-70 kHz and 70-90 kHz (72-84 kHz and 86-90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.
5.058	Additional allocation: in Armenia, Azerbaijan, Georgia, Kazakstan, Kyrgyzstan, the Russian Federation, Tajikistan and Turkmenistan, the band 67-70 kHz is also allocated to the radionavigation service on a primary basis.
5.060	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.
5.062	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.
5.064	Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service
5.066	Different category of service: in Germany, the allocation of the band 115-117.6 kHz to the fixed and maritime mobile services is on a primary basis (see No. 5.33) and to the radionavigation service on a secondary basis (see No.5.32).
5.067	Additional allocation: in Azerbaijan, Bulgaria, Mongolia, Kyrgyzstan, Romania and Turkmenistan, the band 130-148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate.
5.072	Norwegian stations of the fixed service situated in northern areas (north of 60° N) subject to auroral disturbances are allowed to continue operation on four frequencies in the bands 283.5-490 kHz and 510-526.5 kHz.
5.073	The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97) The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97)
5.074	Additional Allocation: in Region 1, the frequency band 285.3-285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a primary basis.
5.075	Different category of service: in Armenia, Azerbaijan, Belarus, Georgia, Moldova, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and the Black Sea areas of Bulgaria and Romania, the allocation of the band 315-325 kHz to the maritime radionavigation service is on a primary basis under the condition that in the Baltic Sea area, the assignment of frequencies in this band to new stations in the maritime or aeronautical radionavigation services shall be subject to prior consultation between the administrations concerned.
5.076	The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.
5.079	The use of the bands 415-495 kHz and 505-526.5 kHz (505-510 kHz in Region 2) by the maritime mobile service is limited to radiotelegraphy.
5.079A	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-97)). (WRC-97)
5.082	In the maritime mobile service, the frequency 490 kHz is, from the date of full implementation of the GMDSS (see Resolution 331 (Rev.WRC-97)), 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 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. (WRC-97)

5.083	The frequency 500 kHz is an international distress and calling frequency for Morse radiotelegraphy. The conditions for its use are prescribed in Articles 31 and 52, and in Appendix 13.
5.084	The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles 31 and 52 and in Appendix 13. (WRC-97)
5.090	In the band 1 605-1 705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.
5.092	Some countries in Region 1 use radiodetermination systems in the bands 1606.5-1625 kHz, 1635-1800 kHz, 1850-2160 kHz, 2194-2300 kHz, 2502-2850 kHz and 3500-3800 kHz, subject to agreement obtained under No 9.21. The radiated mean power of these stations shall not exceed 50 W.
5.093	Additional allocation: in Angola, Armenia, Azerbaijan, Belarus, Georgia, Hungary, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Nigeria, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, the Russian Federation, Tajikistan, Chad, Turkmenistan and Ukraine, the bands 1 625-1 635 kHz, 1 800-1 810 kHz and 2 160-2 170 kHz and, in Bulgaria, the bands 1 625-1 635 kHz and 1 800-1 810 kHz, are also allocated to the fixed and land mobile services on a primary basis, subject to agreement obtained under No. 9.21.
5.096	In Germany, Armenia, Austria, Azerbaijan, Belarus, Denmark, Estonia, Finland, Georgia, Hungary, Ireland, Israel, Jordan, Kazakstan, Latvia, Liechtenstein, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, the United Kingdom, the Russian Federation, Sweden, Switzerland, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the bands 1 715-1 800 kHz and 1 850-2 000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighbouring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W.
5.098	Alternative allocation: in Angola, Armenia, Azerbaijan, Belarus, Belgium, Bulgaria, Cameroon, the Congo, Denmark, Egypt, Eritrea, Spain, Ethiopia, Georgia, Greece, Italy, Kazakstan, Lebanon, Lithuania, Moldova, the Netherlands, Syria, Kyrgyzstan, the Russian Federation, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.099	Additional allocation: in Saudi Arabia, Austria, Bosnia and Herzegovina, Iraq, Libya, Uzbekistan, Slovakia, the Czech Republic, Romania, Slovenia, Chad, Togo and Yugoslavia, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.100	In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. 5.98 and 5.99 to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. S5.98 and S5.99.
5.103	In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1850-2045 kHz, 2194-2498 kHz, 2502-2 625 kHz and 2650-2850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.
5.104	In Region 1, the use of the band 2 025-2 045 kHz by the meteorological aids service is limited to oceanographic buoy stations.
5.108	The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles 31 and 52 and in Appendix 13.
5.109	The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article 31
5.110	The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article 31
5.111	The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.8 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 and in Appendix 13. 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.
5.112	Alternative allocation: in Bosnia and Herzegovina, Cyprus, Denmark, Greece, Iceland, Malta, Sri Lanka and Yugoslavia, the band 2 194-2 300 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.113	For the conditions for the use of the bands 2 300-2 495 kHz (2 498 kHz in Region 1), 3 200-3 400 kHz, 4 750-4 995 kHz and 5 005-5 060 kHz by the broadcasting service, see Nos. 5.16 to 5.20, 5.21 and 23.3 to 23.10.
5.114	Alternative allocation: in Bosnia and Herzegovina, Cyprus, Denmark, Greece, Iraq, Malta, and Yugoslavia, the band 2 502-2 625 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.115	The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Article 31 and Appendix 13 by stations of the maritime mobile service engaged in coordinated search and rescue operations.

5.116	Administrations are urged to authorize the use of the band 3 155-3 195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3 155 kHz and 3 400 kHz to suit local needs. It should be noted that frequencies in the range 3 000 kHz to 4 000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.
5.117	Alternative allocation: in Bosnia and Herzegovina, Cyprus, Côte d'Ivoire, Denmark, Egypt, Greece, Iceland, Liberia, Malta, Sri Lanka, Togo and Yugoslavia, the band 3 155-3 200 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis
5.126	In Region 3, the stations of those services to which the band 3 995-4 005 kHz is allocated may transmit standard frequency and time signals.
5.127	The use of the band 4 000-4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. 52.220 and Appendix 17).
5.128	In Afghanistan, Argentina, Armenia, Azerbaijan, Belarus, Botswana, Burkina Faso, Central African Republic, China, Georgia, India, Kazakstan, Mali, Niger, Kyrgyzstan, Russian Federation, 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 of limited power in the fixed service which are situated at least 600 km from the coast may operate on condition that harmful interference is not caused to the maritime mobile service. (WRC-97)
5.129	On condition that harmful interference is not caused to the maritime mobile service, the 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.
5.130	The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles 31 and 52 and in Appendix 13.
5.131	The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteo-rological 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).
5.133	Different category of service: in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 130-5 250 kHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. 5.33).
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 limited to single-sideband emissions with the characteristics specified in Appendix 11 or to any other spectrum-efficient modulation techniques recommended by ITU-R. Access to these bands shall be subject to the decisions of a competent conference. (WRC-97)
5.136	The band 5 900-5 950 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis, as well as to the following services: in Region 1 to the land mobile service on a primary basis, in Region 2 to the mobile except aeronautical mobile (R) service on a primary basis, and in Region 3 to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (Rev.WRC-95). After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, 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 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.
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	The following bands: 6 765 - 6 795 kHz (centre frequency 6 780 kHz), 433.05 - 434.79 MHz (centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. 5.280, 61 - 61.5 GHz (centre frequency 61.25 GHz), 122 - 123 GHz (centre frequency 122.5 GHz), and 244 - 246 GHz (centre frequency 245 GHz) 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.
5.139	Different category of service: in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 6 765-7 000 kHz to the land mobile service is on a primary basis (see No. 5.33).
5.142	The use of the band 7 100-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3.

5.143	The band 7 300-7 350 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis and to the land mobile service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (Rev.WRC-95). After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, 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.
5.145	The conditions for the use of the carrier frequencies 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles 31 and 52 and in Appendix 13.
5.146	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 are allocated to the fixed service on a primary basis until 1 April 2007, subject to application of the procedure referred to in Resolution 21 (Rev.WRC-95). After 1 April 2007, frequencies in these bands 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.
5.147	On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9 775-9 900 kHz, 11 650-11 700 kHz and 11 975-12 050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.

5.149 In making assignments to stations of other services to which the bands:
13 360-13 410 kHz,
25 550-25 670 kHz,
37.5-38.25 MHz,
73-74.6 MHz in Regions 1 and 3,
150.05-153 MHz in Region 1,
322-328.6 MHz,
406.1-410 MHz,
608-614 MHz in Regions 1 and 3,
1 330-1 400 MHz,
1 610.6-1 613.8 MHz,
1 660-1 670 MHz,
1 718.8-1 722.2 MHz,
2 655-2 690 MHz,
3 260-3 267 MHz,
3 332-3 339 MHz,
3 345.8-3 352.5 MHz,
4 825-4 835 MHz,
4 950-4 990 MHz,
4 990-5 000 MHz,
6 650-6 675.2 MHz,
10.6-10.68 GHz,
14.47-14.5 GHz,
22.01-22.21 GHz,
22.21-22.5 GHz,
22.81-22.86 GHz,
23.07-23.12 GHz,
31.2-31.3 GHz,
31.5-31.8 GHz in Regions 1 and 3,
36.43-36.5 GHz,
42.5-43.5 GHz,
42.77-42.87 GHz,
43.07-43.17 GHz,
43.37-43.47 GHz,
48.94-49.04 GHz,
76-86 GHz,
92-94 GHz,
94.1-100 GHz,
102-109.5 GHz,
111.8-114.25 GHz,
128.33-128.59 GHz,
129.23-129.49 GHz,
130-134 GHz,
136-148.5 GHz,
151.5-158.5 GHz,
168.59-168.93 GHz,
171.11-171.45 GHz,
172.31-172.65 GHz,
173.52-173.85 GHz,
195.75-196.15 GHz,
209-226 GHz,
241-250 GHz,
252-275 GHz

are allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 4.5 and 4.6 and Article 29).

5.150 The following bands:
13 553 - 13 567 kHz (centre frequency 13 560 kHz),
26 957 - 27 283 kHz (centre frequency 27 120 kHz),
40.66 - 40.70 MHz (centre frequency 40.68 MHz),
902 - 928 MHz in Region 2(centre frequency 915 MHz),
2 400 - 2 500 MHz (centre frequency 2 450 MHz),
5 725 - 5 875 MHz (centre frequency 5 800 MHz), and
24 - 24.25 GHz (centre frequency 24.125 GHz)
are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. 15.13.

5.151 The bands 13 570-13 600 kHz and 13 800-13 870 kHz are allocated, until 1 April 2007, to the fixed service on a primary basis and to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (Rev.WRC-95). After 1 April 2007, frequencies in these bands may be used by stations in the above-mentioned services, 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.

5.152	Additional allocation: in Armenia, Azerbaijan, China, Côte d'Ivoire, Georgia, Iran (Islamic Republic of), Kazakstan, Moldova, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 14 250-14 350 kHz is also allocated to the fixed service on a primary basis. Stations of the fixed service shall not use a radiated power exceeding 24 dBW.
5.154	Additional allocation: in Armenia, Azerbaijan, Georgia, Kazakstan, Moldova, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 18 068-18 168 kHz is also allocated to the fixed service on a primary basis for use within their boundaries, with a peak envelope power not exceeding 1 kW.
5.155	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 21 850-21 870 kHz is also allocated to the aeronautical mobile (R) services on a primary basis.
5.155A	In Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the use of the band 21 850-21 870 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
5.155B	The band 21 870-21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.
5.156A	The use of the band 23 200-23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety
5.157	The use of the band 23 350-24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.
5.162A	Additional allocation: in Germany, Austria, Belgium, Bosnia and Herzegovina, China, Vatican, Denmark, Spain, Estonia, Finland, France, Ireland, Iceland, Italy, Latvia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Lithuania, Luxembourg, Moldova, Monaco, Norway, the Netherlands, Poland, Portugal, Slovakia, the Czech Republic, the United Kingdom, the Russian Federation, Sweden and Switzerland the band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with Resolution 217 (WRC-97).
5.163	Additional allocation: in Armenia, Azerbaijan, Belarus, Estonia, Georgia, Hungary, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 47 - 48.5 MHz and 56.5 - 58 MHz are also allocated to the fixed and land mobile services on a secondary basis.
5.164	Additional allocation: in Albania, Germany, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Côte d'Ivoire, Denmark, Spain, Finland, France, Gabon, Greece, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Nigeria, Norway, the Netherlands, Poland, Syria, the United Kingdom, Senegal, Slovenia, Sweden, Switzerland, Swaziland, Togo, Tunisia, Turkey and Yugoslavia the band 47 - 68 MHz, in Romania the band 47 - 58 MHz and in the Czech Republic the band 66 - 68 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band.
5.174	Alternative allocation: in Bulgaria, Hungary, Poland and Romania, the band 68 - 73 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions in the Final Acts of the Special Regional Conference (Geneva, 1960).
5.175	Alternative allocation: in Armenia, Azerbaijan, Belarus, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the bands 68-73 MHz and 76-87.5 MHz are allocated to the broadcasting service on a primary basis. The services to which these bands are allocated in other countries and the broadcasting service in the countries listed above are subject to agreements with the neighbouring countries concerned.
5.176	Additional allocation: in Australia, China, Korea (Rep. of), the Philippines, the Dem. People's Rep. of Korea, Estonia (subject to agreement obtained under No. 9.21) and Western Samoa, the band 68-74 MHz is also allocated to the broadcasting service on a primary basis.
5.177	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakstan, Latvia, Moldova, Uzbekistan, Poland, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 73-74 MHz is also allocated to the broadcasting service on a primary basis, subject to agreement obtained under No. 9.21.
5.179	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, China, Georgia, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Russia, Tajikistan, Turkmenistan and Ukraine, the bands 74.6 - 74.8 MHz and 75.2 - 75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only.
5.180	The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons. Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.
5.184	Additional allocation: in Bulgaria and Romania, the band 76 - 87.5 MHz is also allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).

5.187	Alternative allocation: in Albania, the band 81 - 87.5 MHz is allocated to the broadcasting service on a primary basis and used in accordance with the decisions contained in the Final Acts of the Special Regional Conference (Geneva, 1960).
5.190	Additional allocation: in Monaco, the band 87.5 - 88 MHz is also allocated to the land mobile service on a primary basis, subject to agreement obtained under No. 9.21.
5.194	Additional allocation: in Azerbaijan, Lebanon, Syria, Kyrgyzstan, Somalia and Turkmenistan, the band 104-108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a secondary basis.
5.198	Additional allocation: the band 117.975 - 136 MHz is also allocated to the aeronautical mobile-satellite (R) service on a secondary basis, subject to agreement obtained under Article 14/No. 9.21.
5.199	The bands 121.45 - 121.55 MHz and 242.95 - 243.05 MHz are also allocated to the mobile-satellite service for the reception on board satellites of emissions from emergency position-indicating radiobeacons transmitting at 121.5 MHz and 243 MHz (see Appendix 13).
5.200	In the band 117.975 - 136 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 31 and Appendix 13 for distress and safety purposes with stations of the aeronautical mobile service.
5.201	Additional allocation: in Angola, Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Hungary, the Islamic Republic of Iran, Iraq, Japan, Kazakstan, Latvia, Moldova, Mongolia, Mozambique, Uzbekistan, Papua New Guinea, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 132-136 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service.
5.202	Additional allocation: in Saudi Arabia, Armenia, Azerbaijan, Belarus, Bulgaria, the United Arab Emirates, Georgia, Iran (Islamic Republic of), Jordan, Latvia, Moldova, Oman, Uzbekistan, Poland, Syria, Kyrgyzstan, Slovakia, the Czech Republic, Romania, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service.
5.203	In the band 136-137 MHz, existing operational meteorological satellites may continue to operate, under the conditions defined in No. 4.4 with respect to the aeronautical mobile service, until 1 January 2002. Administrations shall not authorize new frequency assignments in this band to stations in the meteorological-satellite service.
5.204	Different category of service: in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Malaysia, Oman, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Thailand, Yemen and Yugoslavia, the band 137 - 138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis (see No. 5.33).
5.206	Different category of service: in Armenia, Azerbaijan, Belarus, Bulgaria, Egypt, Finland, France, Georgia, Greece, Kazakstan, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Syria, Slovakia, the Czech Republic, Romania, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 137-138 MHz to the aeronautical mobile (OR) service is on a primary basis (see No. 5.33).
5.208	The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.208A	In making assignments to space stations in the mobile-satellite service in the bands 137 - 138 MHz, 387 - 390 MHz and 400.15 - 401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05 - 153 MHz, 322 - 328.6 MHz, 406.1 - 410 MHz and 608 - 614 MHz from harmful interference from unwanted emissions. The threshold levels of interference detrimental to the radio astronomy service are shown in Table 1 of Recommendation ITU-R RA.769-1.
5.209	The use of the bands 137-138 MHz, 148-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 454-456 MHz and 459-460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems.
5.210	Additional allocation: in France, Italy, Liechtenstein, Slovakia, the Czech Republic, the United Kingdom and Switzerland, the bands 138-143.6 MHz and 143.65-144 MHz are also allocated to the space research service (space-to-Earth) on a secondary basis.
5.211	Additional allocation: in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Bosnia and Herzegovina, Denmark, the United Arab Emirates, Spain, Finland, Greece, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Mali, Malta, Norway, the Netherlands, Qatar, the United Kingdom, Somalia, Sweden, Switzerland, Tanzania, Tunisia, Turkey and Yugoslavia, the band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis.
5.214	Additional allocation: in Bosnia and Herzegovina, Croatia, Eritrea, Ethiopia, Kenya, The Former Yugoslav Republic of Macedonia, Malta, Somalia, Sudan, Tanzania and Yugoslavia, the band 138-144 MHz is also allocated to the fixed service on a primary basis.
5.218	Additional allocation: the band 148 - 149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. 9.21. The bandwidth of any individual transmission shall not exceed ± 25 kHz.

5.219	The use of the band 148 - 149.9 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148 - 149.9 MHz.
5.220	The use of the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. The mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz.
5.221	Stations of the mobile-satellite service in the band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo, Korea (Rep. of), Croatia, Cuba, Denmark, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Ethiopia, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakstan, Kenya, Kuwait, Latvia, The Former Yugoslav Republic of Macedonia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, the Philippines, Poland, Portugal, Qatar, Syria, Kyrgyzstan, Slovakia, Romania, the United Kingdom, the Russian Federation, Senegal, Sierra Leone, Singapore, Slovenia, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Yugoslavia, Zambia, and Zimbabwe.
5.222	Emissions of the radionavigation-satellite service in the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz may also be used by receiving earth stations of the space research service.
5.222A	The emissions of the fixed service and the fixed-satellite service in the band 18.6-18.8 GHz are limited to the values given in Nos. 21.5A and 21.16.2, respectively.
5.222B	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.
5.223	Recognising that the use of the band 149.9 - 150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorise such use in application of No. 4.4.
5.224A	The use of the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz by the mobile-satellite service (Earth-to-space) is limited to the land mobile-satellite service (Earth-to-space) until 1 January 2015.
5.224B	The allocation of the bands 149.9 - 150.05 MHz and 399.9 - 400.05 MHz to the radionavigation-satellite service shall be effective until 1 January 2015.
5.226	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 are contained in Article 31 and Appendix 13. In the bands 156 - 156.7625 MHz, 156.8375 - 157.45 MHz, 160.6 - 160.975 MHz and 161.475 - 162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles 31 and 52, and Appendix 13). 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. However, the frequency 156.8 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.
5.227	In the maritime mobile VHF service the frequency 156.525 MHz is to be used exclusively for digital selective calling for distress, safety and calling (see Resolution 323 (Mob-87)). The conditions for the use of this frequency are prescribed in Articles 31 and 52, and Appendices 13 and S18.
5.235	Additional allocation: in Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Malta, Monaco, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland, the band 174 - 223 MHz is also allocated to the land mobile service on a primary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.
5.246	Alternative allocation: in Spain, France, Israel and Monaco, the band 223 - 230 MHz is allocated to the broadcasting and land mobile services on a primary basis (see No. 5.33) on the basis that, in the preparation of frequency plans, the broadcasting service shall have prior choice of frequencies; and allocated to the fixed and mobile, except land mobile, services on a secondary basis. However, the stations of the land mobile service shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations in Morocco and Algeria.
5.254	The bands 235 - 322 MHz and 335.4 - 399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. 9.21, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations.
5.255	The bands 312 - 315 MHz (Earth-to-space) and 387 - 390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.256	The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes (see Appendix 13).

5.257	The band 267 - 272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreement obtained under No. 9.21.
5.258	The use of the band 328.6 - 335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).
5.260	Recognising that the use of the band 399.9 - 400.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation satellite service, administrations are urged not to authorise such use in application of No. 4.4.
5.261	Emissions shall be confined in a band of ± 25 kHz about the standard frequency 400.1 MHz.
5.262	Additional allocation: in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Bulgaria, Colombia, Costa Rica, Cuba, Egypt, the United Arab Emirates, Ecuador, Georgia, Hungary, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakstan, Kuwait, Liberia, Malaysia, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Slovakia, Romania, the Russian Federation, Singapore, Somalia, Tajikistan, Turkmenistan, Ukraine and Yugoslavia, the band 400.05-401 MHz is also allocated to the fixed and mobile services on a primary basis.
5.263	The band 400.15 - 401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
5.264	The use of the band 400.15 - 401 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. The power flux-density limit indicated in Annex 2 of Resolution 46 (Rev. WRC-95)/Annex 1 of Appendix 5 shall apply until such time as a competent world radiocommunication conference revises it.
5.266	The use of the band 406 - 406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Article 31 and Appendix 13).
5.267	Any emission capable of causing harmful interference to the authorised uses of the band 406 - 406.1 MHz is prohibited.
5.268	Use of the band 410-420 MHz by the space research service is limited to communications within 5 km of an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced by emissions from extra-vehicular activities shall not exceed -153 dB(W/m2) for 0° ? ? ? 5°, -153 + 0.077 (? – 5) dB(W/m2) for 5° ? ? ? 70° and -148 dB(W/m2) for 70° ? ? ? 90°, where ? is the angle of arrival of the radio-frequency wave and the reference bandwidth is 4 kHz. No. 4.10 does not apply to extra-vehicular activities. In this frequency band the space research (space-to-space) service shall not claim protection from, nor constrain the use and development of, stations of the fixed and mobile services.
5.269	Different category of service: in Australia, the United States, India, Japan and the United Kingdom, the allocation of the bands 420 - 430 MHz and 440 - 450 MHz to the radiolocation service is on a primary basis (see No. 5.33).
5.271	Additional allocation: in Azerbaijan, Belarus, China, Estonia, India, Latvia, Lithuania, Kyrgyzstan and Turkmenistan, the band 420-460 MHz is also allocated to the aeronautical radionavigation service (radio altimeters) on a secondary basis.
5.272	Different category of service: in France, the allocation of the band 430 - 434 MHz to the amateur service is on a secondary basis (see No. 5.32).
5.273	Different category of service: in Denmark, Libya and Norway, the allocation of the bands 430 - 432 MHz and 438 - 440 MHz to the radiolocation service is on a secondary basis (see No. 5.32).
5.274	Alternative allocation: in Denmark, Norway and Sweden, the bands 430 - 432 MHz and 438 - 440 MHz are allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.275	Additional allocation: in Bosnia and Herzegovina, Croatia, Estonia, Finland, Latvia, The Former Yugoslav Republic of Macedonia, Libya, Slovenia and Yugoslavia, the bands 430-432 MHz and 438-440 MHz are also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.276	Additional allocation: in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Burundi, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Malaysia, Malta, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Democratic People's Republic of Korea, Singapore, Somalia, Switzerland, Tanzania, Thailand, Togo, Turkey and Yemen, the band 430-440 MHz is also allocated to the fixed service on a primary basis and the bands 430-435 MHz and 438-440 MHz are also allocated to the mobile, except aeronautical mobile, service on a primary basis.
5.277	Additional allocation: in Angola, Armenia, Azerbaijan, Belarus, Cameroon, Congo, Djibouti, Georgia, Hungary, Israel, Kazakstan, Latvia, Mali, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, the Russian Federation, Rwanda, Tajikistan, Chad, Turkmenistan and Ukraine, the band 430-440 MHz is also allocated to the fixed service on a primary basis
5.280	In Germany, Austria, Bosnia and Herzegovina, Croatia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Portugal, Slovenia, Switzerland and Yugoslavia, the band 433.05 - 434.79 MHz (centre frequency 433.92 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services of these countries operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No. 15.13.

5.281	Additional allocation: in the French Overseas Departments in Region 2 and India, the band 433.75 - 434.25 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis. In France and in Brazil, the band is allocated to the same service on a secondary basis.
5.282	In the bands 435 - 438 MHz, 1 260 - 1 270 MHz, 2 400 - 2 450 MHz, 3 400 - 3 410 MHz (in Regions 2 and 3 only) and 5 650 - 5 670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. 5.43). Administrations authorising such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. S25.11. The use of the bands 1 260 - 1 270 MHz and 5 650 - 5 670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.
5.283	Additional allocation: in Austria, the band 438 - 440 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis.
5.286	The band 449.75 - 450.25 MHz may be used for the space operation service (Earth-to-space) and the space research service (Earth-to-space), subject to agreement obtained under No. 9.21.
5.286A	The use of the bands 454 - 456 MHz and 459 - 460 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.286B	The use of the band 454-455 MHz in the countries listed in No. 5.286D, 455-456 MHz and 459-460 MHz in Region 2, and 454-456 MHz and 459-460 MHz in the countries listed in No. 5.286E, by stations in the mobile-satellite service, 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.
5.287	In the maritime mobile service, the frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Where needed, equipment designed for 12.5 kHz channel spacing using also the additional frequencies 457.5375 MHz, 457.5625 MHz, 467.5375 MHz and 467.5625 MHz may be introduced for on-board communications. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174 (see Resolution 341 (WRC-97)).
5.289	Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460 - 470 MHz and 1 690 - 1 710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.
5.290	Different category of service: in Afghanistan, Azerbaijan, Belarus, China, Japan, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 460-470 MHz to the meteorological-satellite service (space-to-Earth) is on a primary basis (see No. 5.33), subject to agreement obtained under No. 9.21.
5.291A	Additional allocation: in Germany, Austria, Denmark, Estonia, Finland, Liechtenstein, Norway, Netherlands, the Czech Republic and Switzerland, the 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 217 (WRC-97).
5.296	Additional allocation: in Germany, Austria, Belgium, Cyprus, Denmark, Spain, Finland, France, Ireland, Israel, Italy, Libya, Lithuania, Malta, Morocco, Monaco, Norway, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland, Swaziland and Tunisia, the band 470-790 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table of Frequency Allocations in countries other than those listed in this footnote
5.302	Additional allocation: in the United Kingdom, the band 590 - 598 MHz is also allocated to the aeronautical radionavigation service on a primary basis. All new assignments to stations in the aeronautical radionavigation service, including those transferred from the adjacent bands, shall be subject to coordination with the Administrations of the following countries: Germany, Belgium, Denmark, Spain, France, Ireland, Luxembourg, Morocco, Norway and the Netherlands.
5.306	Additional allocation: in Region 1, except in the African Broadcasting Area (see Nos. 5.10 to 5.13), and in Region 3, the band 608 - 614 MHz is also allocated to the radio astronomy service on a secondary basis.
5.311	Within the frequency band 620 - 790 MHz, assignments may be made to television stations using frequency modulation in the broadcasting-satellite service subject to agreement between the administrations concerned and those having services, operating in accordance with the Table, which may be affected (see Resolutions 33 and 507). Such stations shall not produce a power flux-density in excess of the value -129 dB(W/m2) for angles of arrival less than 20° (see Recommendation 705) within the territories of other countries without the consent of the administrations of those countries.
5.312	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Kazakstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russia, Tajikistan, Turkmenistan and Ukraine, the band 645 - 862 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
5.314	Additional allocation: in Austria, Italy, Moldova, Uzbekistan, the United Kingdom and Swaziland, the band 790-862 MHz is also allocated to the land mobile service on a secondary basis.
5.315	Alternative allocation: in Greece, Italy and Tunisia, the band 790-838 MHz is allocated to the broadcasting service on a primary basis.

5.316	Additional allocation: in Germany, Saudi Arabia, Bosnia and Herzegovina, Burkina Faso, Cameroon, Côte d'Ivoire, Croatia, Denmark, Egypt, Finland, Israel, Kenya, The Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Monaco, Norway, the Netherlands, Portugal, Syria, Sweden, Switzerland and Yugoslavia, the band 790-830 MHz, and in these same countries and in Spain, France, Gabon and Malta, the band 830-862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band.
5.317A	Administrations wishing to implement International Mobile Telecommunications-2000 (IMT-2000) may use those parts of the band 806-960 MHz which are allocated to the mobile service on a primary basis and are used or planned to be used for mobile systems (see Resolution 224 (WRC-2000)). This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations.
5.319	Additional Allocation: In Belarus, Russian Federation and Ukraine, the bands 806-840 MHz (E/S) and 856-890 MHz (S/E) are also allocated to the mobile-satellite, except aeronautical mobile satellite (R), service. The use of these bands by this service shal not cause harmful interference to, or claim protection from, services in other countries operating in accordance with the Table of Frequency Allocations and is subjec to spoecial agreements between the administrations concerned.
5.321	Alternative allocation: in Italy, the band 838 - 854 MHz is allocated to the broadcasting service on a primary basis as from 1 January 1995.
5.322	In Region 1, in the band 862-960 MHz stations of the broadcasting service shall be operated only in the African Broadcasting Area (See Nos 5.10 to 5.13) excluding Algeria, Egypt, Spain, Libya, Morocco, Nigeria, South Africa, Tanzania and Zimbabwe, subject to agreement obtained under No 9.21.
5.323	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Hungary, kazakstan, Latvia, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the band 862-960 MHz is also allocated to the aeronautical radionavigation service on a primary basis. Such use is subject to agreement optained under No 9.21 with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime.
5.328	The use of the band 960-1 215 MHz by the aeronautical radionavigation service is reserved on a worldwide basis for the operation and development of airborne electronic aids to air navigation and any directly associated ground-based facilities.
5.328A	Additional allocation: the band 1 164-1 215 MHz is also allocated to the radionavigation-satellite service (space-to-Earth) (space-to-space) on a primary basis. The aggregate power flux-density produced by all the space stations of all radionavigation-satellite systems at the Earth's surface shall not exceed the provisional value of -115 dB(W/m2) in any 1 MHz band for all angles of arrival. Stations in the radionavigation-satellite service shall not cause harmful interference to, nor claim protection from, stations of the aeronautical-radionavigation service. The provisions of Resolution 605 (WRC-2000) apply.
5.329	Use of the radionavigation-satellite service in the band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to, and no protection is claimed from, the radionavigation service authorized under No. 5.331. See also Resolution 606 (WRC-2000).
5.329A	Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1 215-1 300 MHz and 1 559-1 610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on other systems or services operating in accordance with the Table of Frequency Allocations.
5.330	Additional allocation: in Azerbaijan, Bulgaria, Cuba, Mongolia, Kyrgyzstan, Romania and Turkmenistan, the band 3 300-3 400 MHz is also allocated to the radionavigation service on a primary basis
5.331	Additional allocation: in Algeria, Germany, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Burundi, Cameroon, China, Croatia, Denmark, the United Arab Emirates, France, Greece, India, Iran (Islamic Republic of), Iraq, Kenya, The Former Yugoslav Republic of Macedonia, Liechtenstein, Luxembourg, Mali, Mauritania, Norway, Oman, the Netherlands, Portugal, Qatar, Senegal, Slovenia, Somalia, Sudan, Sri Lanka, Sweden, Switzerland, Turkey and Yugoslavia, the band 1 215-1 300 MHz is also allocated to the radionavigation service on a primary basis.
5.332	In the band 1 215-1 260 MHz, active spaceborne sensors in the earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis.
5.335A	In the band 1 260-1 300 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis.
5.337A	The use of the band 1 300-1 350 MHz by earth stations in the radionavigation-satellite service and by stations in the radiolocation service shall not cause harmful interference to, nor constrain the operation and development of, the aeronautical-radionavigation service.
5.338	In Azerbaijan, Bulgaria, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania and Turkmenistan, existing installations of the radionavigation service may continue to operate in the band 1 350-1 400 MHz.
5.339	The bands 1 370 - 1 400 MHz, 2 640 - 2 655 MHz, 4 950 - 4 990 MHz and 15.20 - 15.35 GHz are also allocated to the space research (passive) and earth exploration-satellite (passive) services on a secondary basis.

5.340	All emissions are prohibited in the following bands: 1 400-1 427 MHz, 2 690-2 700 MHz, except those provided for by Nos. 5.421 and 5.422, 10.68-10.7 GHz, except those provided for by No. 5.483, 15.35-15.4 GHz, except those provided for by No. 5.511, 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, except those provided for by No. 5.555A, 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, except those provided for by No. 5.563, 190-191.8 GHz, 200-209 GHz, 226-231.5 GHz, 250-252 GHz.
5.341	In the bands 1 400 - 1 727 MHz, 101 - 120 GHz and 197 - 220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.
5.342	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Uzbekistan, Kyrgystan, the Russian Federation and Ukraine, the band 1 429-1 535 MHz is also allocated to the aeronautical mobile service on a primary basis exclusively for the purposes of aeronautical telemetry within the national territory. As of 1 April 2007, the use of the band 1 452-1 492 MHz is subject to agreement between the administrations concerned
5.345	Use of the band 1 452 - 1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92).
5.347	Different category of service: in Bangladesh, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Cuba, Denmark, Egypt, Greece, Ireland, Italy, Kenya, Mozambique, Portugal, Sri Lanka, Swaziland, Yemen, Yugoslavia and Zimbabwe, the allocation of the band 1 452-1 492 MHz to the broadcasting-satellite service and the broadcasting service is on a secondary basis until 1 April 2007.
5.349	Different category of service: in Saudi Arabia, Azerbaijan, Bahrain, Bosnia and Herzegovina, Cameroon, Egypt, France, Iran (Islamic Republic of), Iraq, Israel, Kazakstan, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Morocco, Qatar, Syria, Kyrgyzstan, Romania, Turkmenistan, Yemen and Yugoslavia, the allocation of the band 1 525-1 530 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. 5.33).
5.350	Additional allocation: in Azerbaijan, Kyrgyzstan and Turkmenistan, the band 1 525-1 530 MHz is also allocated to the aeronautical mobile service on a primary basis.
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 1 525-1 544 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, 1 980-2 010 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-97) and 225 (WRC-2000).
5.352A	In the band 1 525-1 530 MHz, stations in the mobile-satellite service, except stations in the maritime mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed service in France and French overseas territories in Region 3, Algeria, Saudi Arabia, Egypt, Guinea, India, Israel, Italy, Jordan, Kuwait, Mali, Malta, Morocco, Mauritania, Nigeria, Oman, Pakistan, Philippines, Qatar, Syria, Tanzania, Viet Nam and Yemen notified prior to 1 April 1998.
5.353A	In applying the procedures of Section II of Article S9 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.)
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 Resolution 46 (Rev. WRC-97)/No. 9.11A.
5.355	Additional allocation: in Bahrain, Bangladesh, Congo, Egypt, Eritrea, Iraq, Israel, Jordan, Kuwait, Lebanon, Malta, Morocco, Qatar, Syria, Somalia, Sudan, Chad, Togo and Yemen, the bands 1 540-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a secondary basis
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 S9 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-2000) shall apply.)
5.359	Additional allocation: in Germany, Saudi Arabia, Armenia, Austria, Azerbaijan, Belarus, Benin, Bosnia and Herzegovina, Bulgaria, Cameroon, Spain, France, Gabon, Georgia, Greece, Guinea, Guinea-Bissau, Hungary, Jordan, Kazakstan, Kuwait, Latvia, Lebanon, Libya, Lithuania, Mali, Morocco, Mauritania, Moldova, Mongolia, Nigeria, Uganda, Uzbekistan, Pakistan, Poland, Syria, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, the Russian Federation, Senegal, Swaziland, Tajikistan, Tanzania, Tunisia, Turkmenistan and Ukraine, the bands 1 550-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a primary basis. Administrations are urged to make all practicable efforts to avoid the implementation of new fixed-service stations in these bands.
5.362B	Additional allocation: The band 1 559-1 610 MHz is also allocated to the fixed service on a primary basis until 1 January 2005 in Germany, Armenia, Azerbaijan, Belarus, Benin, Bosnia and Herzegovina, Bulgaria, Spain, France, Gabon, Georgia, Greece, Guinea, Guinea-Bissau, Hungary, Kazakstan, Latvia, Lithuania, Moldova, Mongolia, Nigeria, Uganda, Uzbekistan, Pakistan, Poland, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, the Russian Federation, Senegal, Swaziland, Tajikistan, Tanzania, Turkmenistan and Ukraine, and until 1 January 2010 in Saudi Arabia, Cameroon, Jordan, Kuwait, Lebanon, Libya, Mali, Morocco, Mauritania, Syria and Tunisia. After these dates, the fixed service may continue to operate on a secondary basis until 1 January 2015, at which time this allocation shall no longer be valid. Administrations are urged to take all practicable steps to protect the radionavigation-satellite service and the aeronautical radionavigation service and not authorize new frequency assignments to fixed-service systems in this band.
5.362C	Additional allocation: in Bahrain, Bangladesh, Congo, Egypt, Eritrea, Iraq, Israel, Jordan, Kuwait, Lebanon, Malta, Morocco, Qatar, Syria, Somalia, Sudan, Chad, Togo and Yemen, the band 1 559-1 610 MHz is also allocated to the fixed service on a secondary basis until 1 January 2015, at which time this allocation shall no longer be valid. Administrations are urged to take all practicable steps to protect the radionavigation-satellite service and not authorize new frequency assignments to fixed-service systems in this band.
5.363	Alternative allocation: in Sweden, the band 1 590 - 1 626.5 MHz is allocated to the aeronautical radionavigation service on a primary basis.
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 Resolution 46 (Rev.WRC-97)/No. 9.11A. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. 5.366 (to which No. 4.10 applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed -3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. 5.366 and stations in the fixed service operating in accordance with the provisions of No. 5.359. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. 5.366.
5.365	The use of the band 1 613.8 - 1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.366	The band 1 610 - 1 626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. 9.21.
5.367	Additional allocation: the bands 1 610 - 1 626.5 MHz and 5 000 - 5 150 MHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No. 9.21.
5.368	With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. 4.10 do not apply in the band 1 610 - 1 626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.
5.371	Additional allocation: in Region 1, the bands 1 610 - 1 626.5 MHz (Earth-to-space) and 2 483.5 - 2 500 MHz (space-to-Earth) are also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. 9.21.
5.372	Harmful interference shall not be caused to stations of the radio astronomy service using the band 1 610.6 - 1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. 29.13 applies).
5.374	Mobile earth stations in the mobile-satellite service operating in the bands 1 631.5 - 1 634.5 MHz and 1 656.5 - 1 660 MHz shall not cause harmful interference to the stations in the fixed service operating in the countries listed in No. 5.359.
5.375	The use of the band 1 645.5 - 1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article 31).

5.376	Transmissions in the band 1 646.5 - 1 656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorised when such transmissions are used to extend or supplement the aircraft-to-satellite links.
5.376A	Mobile earth stations operating in the band 1 660-1 660.5 MHz shall not cause harmful interference to stations in the radio astronomy service.
5.379A	Administrations are urged to give all practicable protection in the band 1 660.5 - 1 668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664.4 - 1 668.4 MHz as soon as practicable.
5.380	The bands 1 670 - 1 675 MHz and 1 800 - 1 805 MHz are intended for use, on a worldwide basis, by administrations wishing to implement aeronautical public correspondence. The use of the band 1 670 - 1 675 MHz by stations in the systems for public correspondence with aircraft is limited to transmissions from aeronautical stations and the use of the band 1 800 - 1 805 MHz is limited to transmissions from aircraft stations.
5.382	Different category of service: in Saudi Arabia, Armenia, Austria, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Bulgaria, the Congo, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guinea, Hungary, Iraq, Israel, Jordan, Kazakstan, Kuwait, the Former Yugoslav Republic of Macedonia, Lebanon, Mauritania, Moldova, Mongolia, Oman, Uzbekistan, Poland, Qatar, Syria, Kyrgyzstan, Romania, Russia, Somalia, Tajikistan, Tanzania, Turkmenistan, Ukraine, Yemen and Yugoslavia, the allocation of the band 1 690-1 700 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. 5.33), and in the Democratic People's Republic of Korea, the allocation of the band 1 690-1 700 MHz to the fixed service is on a primary basis (see No. 5.33) and to the mobile, except aeronautical mobile, service on a secondary basis.
5.384A	The bands, or portions of the bands, 1 710-1 885 MHz and 2 500-2 690 MHz, are identified for use by administrations wishing to implement International Mobile Telecommunications-2000 (IMT-2000) in accordance with Resolution 223 (WRC-2000). This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations.
5.385	Additional allocation: 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.
5.387	Additional allocation: in Azerbaijan, Belarus, Georgia, Kazakstan, Mali, Mongolia, Kyrgyzstan, Slovakia, Romania, Tajikistan and Turkmenistan, the band 1 770-1 790 MHz is also allocated to the meteorological-satellite service on a primary basis, subject to agreement obtained under No. 9.21.
5.388	The bands 1 885-2 025 MHz and 2 110-2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications-2000 (IMT-2000). Such use does not preclude the use of these bands by other services to which they are allocated. The bands should be made available for IMT-2000 in accordance with Resolution 212 (Rev.WRC-97). (See also Resolution 223 (WRC-2000).)
5.388A	In Regions 1 and 3, the bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz and, in Region 2, the bands 1 885-1 980 and 2 110-2 160 MHz may be used by high altitude platform stations as base stations to provide International Mobile Telecommunications-2000 (IMT-2000), in accordance with Resolution 221 (WRC-2000). The 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.
5.389A	The use of the bands 1 980 - 2 010 MHz and 2 170 - 2 200 MHz by the mobile-satellite service is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A and to the provisions of Resolution 716 (WRC-95). The use of these bands shall not commence before 1 January 2000; however the use of the band 1 980 - 1 990 MHz in Region 2 shall not commence before 1 January 2005.
5.391	In making assignments to the mobile service in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154, and shall take that Recommendation into account for the introduction of any other type of mobile system.
5.392	Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2 025 - 2 110 MHz and 2 200 - 2 290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.
5.392A	Additional allocation: in Russia, the band 2 160 - 2 200 MHz is also allocated to the space research service (space-to-Earth) on a primary basis until 1 January 2005. Stations in the space research service shall not cause harmful interference to, or claim protection from, stations in the fixed and mobile services operating in this frequency band.
5.395	In France, the use of the band 2 310 - 2 360 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.
5.397	Different category of service: in France, the band 2 450 - 2 500 MHz is allocated on a primary basis to the radiolocation service (see No. 5.33). Such use is subject to agreement with administrations having services operating or planned to operate in accordance with the Table of Frequency Allocations which may be affected.
5.398	In respect of the radiodetermination-satellite service in the band 2 483.5 - 2 500 MHz, the provisions of No. 4.10 do not apply.
5.399	In Region 1, in countries other than those listed in No. 5.400, harmful interference shall not be caused to, or protection shall not be claimed from, stations of the radiolocation service by stations of the radiodetermination satellite service.

5.402	The use of the band 2 483.5 - 2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5 - 2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990 -5 000 MHz band allocated to the radio astronomy service worldwide.
5.403	Subject to agreement obtained under No. 9.21, the band 2 520 - 2 535 MHz (until 1 January 2005 the band 2 500 - 2 535 MHz) may also be used for the mobile-satellite (space-to-Earth), except aeronautical mobile-satellite, service for operation limited to within national boundaries. The provisions of Resolution 46 (Rev.WRC-97)/No. 9.11A apply.
5.405	Additional allocation: in France, the band 2 500 - 2 550 MHz is also allocated to the radiolocation service on a primary basis. Such use is subject to agreement with the administrations having services operating or planned to operate in accordance with the Table which may be affected.
5.409	Administrations shall make all practicable efforts to avoid developing new tropospheric scatter systems in the band 2 500 - 2 690 MHz.
5.410	The band 2 500 - 2 690 MHz may be used for tropospheric scatter systems in Region 1, subject to agreement obtained under No. 9.21.
5.411	When planning new tropospheric scatter radio-relay links in the band 2 500 - 2 690 MHz, all possible measures shall be taken to avoid directing the antennae of these links towards the geostationary-satellite orbit.
5.412	Alternative allocation: in Azerbaijan, Bulgaria, Kyrgyzstan and Turkmenistan, the band 2 500-2 690 MHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis
5.413	In the design of systems in the broadcasting-satellite service in the bands between 2 500 MHz and 2 690 MHz, administrations are urged to take all necessary steps to protect the radio astronomy service in the band 2 690 - 2 700 MHz.
5.414	The allocation of the frequency band 2 500 - 2 520 MHz to the mobile-satellite service (space-to-Earth) shall be effective on 1 January 2005 and is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.416	The use of the band 2 520 - 2 670 MHz by the broadcasting-satellite service is limited to national and regional systems for community reception, subject to agreement obtained under No. 9.21. The power flux-density at the Earth's surface shall not exceed the values given in Article 21, Table 21-4.
5.418	Additional allocation: in Bangladesh, Belarus, China, Rep. of Korea, India, Japan, Pakistan, Russia, Singapore, Sri Lanka, Thailand and Ukraine the band 2 535 - 2 655 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to provisions of Resolution 528 (WARC-92). The provisions of No. 5.416 and Article 21, Table 21-4, do not apply to this additional allocation.
5.418A	In certain Region 3 countries listed in No. 5.418, use of the band 2 630-2 655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound) for which complete Appendix 4 coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. 9.12A, in respect of geostationary-satellite networks for which complete Appendix 4 coordination information, or notification information, is considered to have been received after 2 June 2000, and No. 22.2 does not apply. No. 22.2 shall continue to apply with respect to geostationary-satellite networks for which complete Appendix 4 coordination information, or notification information, is considered to have been received before 3 June 2000. Use of the band by non-geostationary-satellite systems in the broadcasting-satellite service (sound) is subject to the provisions of Resolution 539 (WRC-2000), and such systems shall be in accordance with Resolution 528 (WARC-92).
5.418B	Use of the band 2 630-2 655 MHz by non-geostationary-satellite systems for which complete Appendix 4 coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. 9.12. Resolution 539 (WRC-2000) applies.
5.418C	Use of the band 2 630-2 655 MHz by geostationary-satellite networks for which complete Appendix 4 coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. 9.13 with respect to non-geostationary-satellite systems in the broadcasting-satellite service (sound), and No. 22.2 does not apply. Resolution 539 (WRC-2000) applies.
5.419	The allocation of the frequency band 2 670 - 2 690 MHz to the mobile-satellite service shall be effective from 1 January 2005. When introducing systems of the mobile-satellite service in this band, administrations shall take all necessary steps to protect the satellite systems operating in this band prior to 3 March 1992. The coordination of mobile-satellite systems in the band shall be in accordance with Resolution 46 (Rev.WRC-97)/No. 9.11A.
5.420	The band 2 655 - 2 670 MHz (until 1 January 2005 the band 2 655 - 2 690 MHz) may also be used for the mobile-satellite (Earth-to-space), except aeronautical mobile-satellite, service for operation limited to within national boundaries, subject to agreement obtained under No. 9.21. The coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A applies.
5.421	Additional allocation: in Germany and Austria, the band 2 690 - 2 695 MHz is also allocated to the fixed service on a primary basis. Such use is limited to equipment in operation by 1 January 1985.

5.422	Additional allocation: in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, Brunei Darussalam, Congo, Côte d'Ivoire, Cuba, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, Iran (Islamic Republic of), Iraq, Israel, Jordan, Lebanon, Malaysia, Mali, Mauritania, Moldova, Mongolia, Nigeria, Oman, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, the Dem. Rep. of the Congo, Romania, the Russian Federation, Somalia, Tajikistan, Tunisia, Turkmenistan, Ukraine, Yemen and Yugoslavia, the band 2 690-2 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.
5.423	In the band 2 700 - 2 900 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of the aeronautical radionavigation service.
5.425	In the band 2 900 - 3 100 MHz, the use of the shipborne interrogator-transponder system (SIT) shall be confined to the sub-band 2 930 -2 950 MHz.
5.426	The use of the band 2 900 - 3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.
5.427	In the bands 2 900 - 3 100 MHz and 9 300 - 9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. 4.9 of these Regulations.
5.428	Additional allocation: in Azerbaijan, Bulgaria, Cuba, Mongolia, Kyrgyzstan, Romania and Turkmenistan, the band 3 100-3 300 MHz is also allocated to the radionavigation service on a primary basis.
5.429	Additional allocation: in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, the Congo, the Republic of Korea, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Libya, Malaysia, Oman, Pakistan, Qatar, Syria, Democratic People's Republic of Korea and Yemen, the band 3 300-3 400 MHz is also allocated to the fixed and mobile services on a primary basis. The countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service.
5.430	Additional allocation: in Azerbaijan, Bulgaria, Cuba, Mongolia, Poland, Kyrgyzstan, Romania, Turkmenistan and Ukraine, the band 3 300-3 400 MHz is also allocated to the radionavigation service on a primary basis.
5.431	Additional allocation: in Germany, Israel, Nigeria and the United Kingdom, the band 3 400 - 3 475 MHz is also allocated to the amateur service on a secondary basis.
5.438	Use of the band 4 200 - 4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the earth exploration-satellite and space research services may be authorised in this band on a secondary basis (no protection is provided by the radio altimeters).
5.440	The standard frequency and time signal-satellite service may be authorised to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of 2 MHz of these frequencies, subject to agreement obtained under No. 9.21.
5.441	The use of the bands 4 500-4 800 MHz (space-to-Earth), 6 725-7 025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix 30B. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix 30B. The use of the bands 10.7-10.95 GHz (space-to Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite system in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-GSO FSS systems and of the complete coordination or notification information, as appropriate, for the GSO networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated.
5.442	In the bands 4 825 - 4 835 MHz and 4 950 - 4 990 MHz, the allocation to the mobile service is restricted to the mobile, except aeronautical mobile, service.
5.443A	Additional allocation: The band 5 000-5 010 MHz is also allocated to the radionavigation-satellite service (Earth-to-space) on a primary basis. See Resolution 603 (WRC-2000).
5.443B	Additional allocation: The band 5 010-5 030 MHz is also allocated to the radionavigation-satellite service (space-to-Earth) (space-to-space) on a primary basis. In order not to cause harmful interference to the microwave landing system operating above 5 030 MHz, the aggregate power flux-density produced at the Earth's surface in the band 5 030-5 150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the band 5 010-5 030 MHz shall not exceed –124.5 dB(W/m2) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4 990-5 000 MHz, the aggregate power flux-density produced in the 4 990-5 000 MHz band by all the space stations within any RNSS (space-to-Earth) system operating in the 5 010-5 030 MHz band shall not exceed the provisional value of –171 dB(W/m2) in a 10 MHz band at any radio astronomy observatory site for more than 2% of the time. For the use of this band, Resolution 604(WRC-2000) applies.
5.444	The 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. The requirements of this system shall take precedence over other uses of this band. For the use of this band, No. 5.444A and Resolution 114 (WRC-95) apply.

5.444A	Additional allocation: the band 5 091 - 5 150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems and is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. In the band 5 091 - 5 150 MHz, the following conditions also apply: - prior to 1 January 2010, the use of the band 5 091 - 5 150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution 114 (WRC-95); - prior to 1 January 2010, the requirements of existing and planned international standard systems for the aeronautical radionavigation service which cannot be met in the 5 000 - 5 091 MHz band, shall take precedence over other uses of this band; - after 1 January 2008, no new assignments shall be made to stations providing feeder links of non-geostationary mobile-satellite systems; - after 1 January 2010, the fixed-satellite service will become secondary to the aeronautical radionavigation service.
5.446	Additional allocation: in the countries listed in Nos. 5.369 and 5.400, the band 5 150 - 5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. 9.21. In Region 2, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Regions 1 and 3, except those countries listed in Nos. 5.369 and 5.400, the band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1 610 - 1 626.5 MHz and/or 2 483.5 -2 500 MHz. The total power flux-density at the Earth's surface shall in no case exceed -159 dB(W/m²) in any 4 kHz band for all angles of arrival.
5.447	Additional allocation: in Germany, Austria, Belgium, Denmark, Spain, Estonia, Finland, France, Greece, Israel, Italy, Japan, Jordan, Lebanon, Liechtenstein, Lithuania, Luxembourg, Malta, Norway, Pakistan, the Netherlands, Portugal, Syria, the United Kingdom, Sweden, Switzerland and Tunisia, the band 5 150-5 250 MHz is also allocated to the mobile service, on a primary basis, subject to agreement obtained under No. 9.21
5.447A	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 Resolution 46 (Rev.WRC-97)/ No. 9.11A.
5.447B	Additional allocation: 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 Resolution 46 (Rev.WRC-97)/ No. 9.11A. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5 150 - 5 216 MHz shall in no case exceed -164 dB(W/m²) in any 4 kHz band for all angles of arrival.
5.447C	Administrations responsible for fixed-satellite service networks in the band 5 150 - 5 250 MHz operated under Nos. 5.447A and 5.447B shall coordinate on an equal basis in accordance with Resolution 46 (Rev.WRC-97)/No. 9.11A with administrations responsible for non-geostationary-satellite networks operated under No. 5.446 and brought into use prior to 17 November 1995. Satellite networks operated under No. 5.446 brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. 5.447A and 5.447B.
5.447D	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.
5.448	Additional allocation: in Austria, Azerbaijan, Bulgaria, Libya, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania and Turkmenistan, the band 5 250-5 350 MHz is also allocated to the radionavigation service on a primary basis.
5.448A	The use of the frequency band 5 250-5 350 MHz by the earth exploration-satellite (active) and space research (active) services shall not constrain the future development and deployment of the radiolocation service.
5.448B	The earth exploration-satellite (active) service operating in the band 5 350-5 460 MHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service.
5.449	The use of the band 5 350 - 5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
5.450	Additional allocation: in Austria, Azerbaijan, Bulgaria, the Islamic Republic of Iran, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, the band 5 470-5 650 MHz is also allocated to the aeronautical radionavigation service on a primary basis.
5.451	Additional allocation: in the United Kingdom, the band 5 470 - 5 850 MHz is also allocated to the land mobile service on a secondary basis. The power limits specified in Nos. 21.2, 21.3, 21.4 and 21.5 shall apply in the band 5 725 - 5 850 MHz.
5.452	Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of the maritime radionavigation service.
5.454	Different category of service: in Azerbaijan, Belarus, Georgia, Mongolia, Uzbekistan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 5 670-5 725 MHz to the space research service is on a primary basis (see No. 5.33).
5.455	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Cuba, Hungary, Kazakstan, Latvia, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, Russia, Tajikistan, Turkmenistan and Ukraine, the band 5 670 - 5 850 MHz is also allocated to the fixed service on a primary basis.

5.456	Additional allocation: in Germany and in Cameroon, the band 5 755 - 5 850 MHz is also allocated to the fixed service on a primary basis.
5.458	In the band 6 425 - 7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075 - 7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425 -7 025 MHz and 7 075 - 7 250 MHz.
5.458A	In making assignments in the band 6 700 - 7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650 - 6 675.2 MHz from harmful interference from unwanted emissions.
5.458B	The space-to-Earth allocation to the fixed-satellite service in the band 6 700 - 7 075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under Resolution 46 (Rev.WRC-97)/No. 9.11A. The use of the band 6 700 - 7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. 22.2.
5.458C	Administrations making submissions in the band 7 025 - 7 075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.
5.459	Additional allocation: in Russia, the frequency bands 7 100 - 7 155 MHz and 7 190 - 7 235 MHz are also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. 9.21.
5.460	Additional allocation: the band 7 145 - 7 235 MHz is also allocated to the space research (Earth-to-space) service on a primary basis, subject to agreement obtained under No. 9.21. The use of the band 7 145 - 7 190 MHz is restricted to deep space; no emissions to deep space shall be effected in the band 7 190 - 7 235 MHz.
5.461	Additional allocation: the bands 7 250 - 7 375 MHz (space-to-Earth) and 7 900 - 8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. 9.21.
5.461A	The use of the band 7 450-7 550 MHz by the meteorological-satellite service (space-to-Earth) is limited to geostationary-satellite systems. Non-geostationary meteorological-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime.
5.461B	The use of the band 7 750-7 850 MHz by the meteorological-satellite service (space-to-Earth) is limited to non-geostationary satellite systems.
5.462A	In Regions 1 and 3 (except for Japan), in the band 8 025-8 400 MHz, the earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following provisional values for angles of arrival (?), without the consent of the affected administration: –174 dB(W/m 2) in a 4 kHz band for 0° ? ? < 5° –174 + 0.5 (q – 5) dB(W/m 2) in a 4 kHz band for 5° ? ? < 25° –164 dB(W/m 2) in a 4 kHz band for 25° ? ? ? 90° These values are subject to study under Resolution 124 (WRC-97).
5.463	Aircraft stations are not permitted to transmit in the band 8 025 - 8 400 MHz.
5.465	In the space research service, the use of the band 8 400 - 8 450 MHz is limited to deep space.
5.467	Alternative allocation: in the United Kingdom, the band 8 400 - 8 500 MHz is allocated to the radiolocation and space research services on a primary basis.
5.469	Additional allocation: in Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Hungary, Lithuania, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, the Russian Federation, 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.
5.469A	In the band 8 550-8 650 MHz, stations in the earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service.
5.470	The use of the band 8 750 - 8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.
5.471	Additional allocation: in Algeria, Germany, Bahrain, Belgium, China, the United Arab Emirates, France, Greece, Indonesia, the Islamic Republic of Iran, Libya, the Netherlands, Qatar and Sudan, the 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.
5.472	In the bands 8 850 - 9 000 MHz and 9 200 - 9 225 MHz, the maritime radionavigation service is limited to shore-based radars.

5.473	Additional allocation: in Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Cuba, Georgia, Hungary, Moldova, Mongolia, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Republic, Romania, the Russian Federation, 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
5.474	In the band 9 200 - 9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article 31).
5.475	The use of the band 9 300 - 9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300 - 9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. In the band 9 300 - 9 500 MHz, ground-based radars used for meteorological purposes have priority over other radiolocation devices.
5.476	In the band 9 300 - 9 320 MHz in the radionavigation service, the use of shipborne radars, other than those existing on 1 January 1976, is not permitted until 1 January 2001.
5.476A	In the band 9 500-9 800 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 radio-navigation and radiolocation services.
5.477	Different category of service: in Algeria, Saudi Arabia, Austria, Bahrain, Bangladesh, Brunei, Darussalam, Cameroon, the Republic of Korea, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, the Islamic Republic of Iran, Iraq, Jamaica, Japan, Jordan Kuwait, Lebanin, Liberia, Malaysia, Negeria, Oman, Pakistan, Quatar, Democratic People's Republic of Korea, Singapore, Somalia Sudan Sweden, Trinidad and Tobago and Yemen, the allocation of the band 9800-10000 MHz to the fixed service is on a primary basis (see No. 5.33)
5.478	Additional allocation: in Azerbaijan, Bulgaria, Mongolia, Kyrgyzstan, Slovakia, the Czech Republic, Romania, Turkmenistan and Ukraine, the band 9 800-10 000 MHz is also allocated to the radionavigation service on a primary basis.
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.
5.481	Additional allocation: in Germany, Angola, Brazil, China, Costa Rica, El Salvador, Ecuador, Spain, Guatemala, Japan, Morocco, Nigeria, Oman, Uzbekistan, Paraguay, Peru, the Dem. People's Rep. of Korea, Sweden, Tanzania, Thailand and Uruguay, the band 10.45-10.5 GHz is also allocated to the fixed and mobile services on a primary basis.
5.482	In the band 10.6 - 10.68 GHz, stations of the fixed and mobile, except aeronautical mobile, services shall be limited to a maximum equivalent isotropically radiated power of 40 dBW and the power delivered to the antenna shall not exceed -3 dBW. These limits may be exceeded subject to agreement obtained under No. 9.21. However, in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, China, the United Arab Emirates, Georgia, India, Indonesia, the Islamic Republic of Iran, Iraq, Japan, Kazakstan, Kuwait, Latvia, Lebanon, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syria, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Ukraine, the restrictions on the fixed and mobile, except aeronautical mobile, services are not applicable.
5.483	Additional allocation: in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Bosnia and Herzegovina, China, Colombia, Korea (Rep. of), Costa Rica, Egypt, the United Arab Emirates, Georgia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kazakstan, Kuwait, Latvia, Lebanon, Moldova, Mongolia, Uzbekistan, Qatar, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, the Russian Federation, Tajikistan, Turkmenistan, Ukraine, Yemen and Yugoslavia, the band 10.68-10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985
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-GSO FSS systems and of the complete coordination or notification information, as appropriate, for the GSO networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated.
5.487	In the band 11.7-12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to, or claim protection from, broadcasting-satellite stations operating in accordance with the provisions of the Regions 1 and 3 Plan in Appendix 30.

5.487A	Additional allocation: in Region 1, the band 11.7-12.5 GHz, in Region 2, the band 12.2-12.7 GHz and, in Region 3, the band 11.7-12.2 GHz, are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to non-geostationary systems and subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the broadcasting-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-GSO FSS systems and of the complete coordination or notification information, as appropriate, for the GSO networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated.
5.492	Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix 30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate.
5.495	Additional allocation: in Bosnia and Herzegovina, Croatia, Denmark, France, Greece, Liechtenstein, Monaco, Uganda, Portugal, Romania, Slovenia, Switzerland, Tanzania, Tunisia and Yugoslavia, the band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis.
5.496	Additional allocation: in Austria, Azerbaijan, Kyrgyzstan and Turkmenistan, the band 12.5-12.75 GHz is also allocated to the fixed service and the mobile, except aeronautical mobile, service on a primary basis. However, stations in these services shall not cause harmful interference to fixed-satellite service earth stations of countries in Region 1 other than those listed in this footnote. Coordination of these earth stations is not required with stations of the fixed and mobile services of the countries listed in this footnote. The power flux-density limit at the Earth's surface given in Article 21, Table 21-4, for the fixed-satellite service shall apply on the territory of the countries listed in this footnote.
5.497	The use of the band 13.25 - 13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
5.498A	The earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service.
5.500	Additional allocation: in Algeria, Angola, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, Egypt, the United Arab Emirates, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Madagascar, Malaysia, Mali, Malta, Morocco, Mauritania, Nigeria, Pakistan, Qatar, Syria, Senegal, Singapore, Sudan, Chad and Tunisia, the band 13.4-14 GHz is also allocated to the fixed and mobile services on a primary basis.
5.501	Additional allocation: in Austria, Azerbaijan, Hungary, Japan, Mongolia, Kyrgyzstan, Romania, the United Kingdom and Turkmenistan, the band 13.4-14 GHz is also allocated to the radionavigation service on a primary basis.
5.501A	The allocation of the band 13.4 – 13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis.
5.501B	In the band 13.4-13.75 GHz, the earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service.
5.502	In the band 13.75-14 GHz, an earth station in the fixed-satellite service shall have a minimum antenna diameter of 4.5 m and the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. 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. The protection of assignments to receiving space stations in the fixed-satellite service operating with earth stations that, individually, have an e.i.r.p. of less than 68 dBW shall not impose constraints on the operation of the radiolocation and radionavigation stations operating in accordance with the Radio Regulations. No. 5.43A does not apply. See Resolution 733(WRC-2000).
5.503	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: □a)□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 71 dBW in the 6 MHz band from 13.772 to 13.778 GHz; □b)□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. Automatic power control may be used to increase the e.i.r.p. density in the 6 MHz band in this frequency range 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. of 71 dBW or 51 dBW, as appropriate, in the 6 MHz band in clear-sky conditions.
5.503A	Until 1 January 2000, stations in the fixed-satellite service shall not cause harmful interference to non-geostationary space stations in the space research and Earth exploration-satellite services. After that date, these non-geostationary space stations will operate on a secondary basis in relation to the fixed-satellite service. Additionally, when planning earth stations in the fixed-satellite service to be brought into service between 1 January 2000 and 1 January 2001, in order to accommodate the needs of spaceborne precipitation radars operating in the band 13.793 - 13.805 GHz, advantage should be taken of the consultation process and the information given in Recommendation ITU-R SA.1071.
5.504	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 (see Recommendation 708).

5.506	The band 14 - 14.5 GHz may be used, within the fixed-satellite service (Earth-to-space), for feeder links for the broadcasting-satellite service, subject to coordination with other networks in the fixed-satellite service. Such use of feeder links is reserved for countries outside Europe.
5.508	Additional allocation: in Germany, Bosnia and Herzegovina, France, Greece, Ireland, Iceland, Italy, The Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Portugal, the United Kingdom, Slovenia, Switzerland and Yugoslavia, the band 14.25-14.3 GHz is also allocated to the fixed service on a primary basis.
5.510	The use of the band 14.5 - 14.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. This use is reserved for countries outside Europe.
5.511	Additional allocation: in Saudi Arabia, Bahrain, Bosnia and Herzegovina, Cameroon, Egypt, the United Arab Emirates, Guinea, the Islamic Republic of Iran, Iraq, Israel, Kuwait, Lebanon, Libya, Pakistan, Qatar, Syria, Slovenia, Somalia and Yugoslavia, the band 15.35-15.4 GHz is also allocated to the fixed and mobile services on a secondary basis.
5.511A	The band 15.43-15.63 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. Use of the band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth and Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. 9.11A. The use of the frequency band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth) is limited to feeder links of non-geostationary systems in the mobile-satellite service for which advance publication information has been received by the Bureau prior to 2 June 2000. In the space-to-Earth direction, the minimum earth station elevation angle above and gain towards the local horizontal plane and the minimum coordination distances to protect an earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. In order to protect the radio astronomy service in the band 15.35-15.4 GHz, the aggregate power flux-density radiated in the 15.35-15.4 GHz band by all the space stations within any non-GSO MSS feeder-link (space-to-Earth) system operating in the 15.43-15.63 GHz band shall not exceed the level of –156 dB(W/m2) in a 50 MHz bandwidth, into any radio astronomy observatory site for more than 2% of the time.
5.511C	Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R 1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. 4.10 applies) from harmful interference from feeder link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder link earth station shall be in accordance with Recommendation ITU-R 1340.
5.511D	Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of –146 dB(W/m2/MHz) for any angle of arrival. In the band 15.63-15.65 GHz, where an administration plans emissions from a non-geostationary space station that exceed –146 dB(W/m2/MHz) for any angle of arrival, it shall coordinate under Resolution 46 (Rev.WRC-97)/No. 9.11A with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. 4.10 applies).
5.512	Additional allocation: in Algeria, Angola, Saudi Arabia, Austria, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei Darussalam, Cameroon, the Congo, Costa Rica, Egypt, El Salvador, the United Arab Emirates, Finland, Guatemala, India, Indonesia, the Islamic Republic of Iran, Jordan, Kuwait, Libya, Malaysia, Morocco, Mozambique, Nepal, Nicaragua, Oman, Pakistan, Qatar, Singapore, Slovenia, Somalia, Sudan, Swaziland, Tanzania, Chad, Yemen and Yugoslavia, the band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis.
5.513A	Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis.
5.514	Additional allocation: in Algeria, Germany, Angola, Saudi Arabia, Austria, Bahrain, Bangladesh, Bosnia and Herzegovina, Cameroon, Costa Rica, El Salvador, the United Arab Emirates, Finland, Guatemala, Honduras, India, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Libya, Nepal, Nicaragua, Oman, Pakistan, Qatar, Slovenia, Sudan and Yugoslavia, the band 17.3-17.7 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits given in Nos. 21.3 and 21.5 shall apply.
5.516	The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. The use of the band 17.3-17.8 GHz in Region 2 by systems in the fixed-satellite service (Earth-to-space) is limited to geostationary satellites. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article 11. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-GSO FSS systems and of the complete coordination or notification information, as appropriate, for the GSO networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated.
5.519	Additional allocation: the band 18.1 - 18.3 GHz is also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Its use is limited to geostationary satellites and shall be in accordance with the provisions of Article 21, Table 21-4.
5.520	The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of geostationary-satellite systems in the broadcasting-satellite service

5.521	Alternative allocation: in Germany, Denmark, the United Arab Emirates, Greece and Slovakia, the band 18.1-18.4 GHz is allocated to the fixed, fixed-satellite (space-to-Earth) and mobile services on a primary basis (see No. 5.33). The provisions of No. 5.519 also apply
5.522A	The emissions of the fixed service and the fixed-satellite service in the band 18.6-18.8 GHz are limited to the values given in Nos. 21.5A and 21.16.2, respectively
5.522B	The use of the band 18.6-18.8 GHz by the fixed-satellite service is limited to geostationary systems and systems with an orbit of apogee greater than 20 000 km.
5.523A	The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of No. 9.11A/Resolution 46 (Rev.WRC-97) and No. 22.2 does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. 9.11A/Resolution 46 (Rev.WRC-97) with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix 4 notification information is considered as having been received by the Bureau prior to 18 November 1995.
5.523B	The use of the band 19.3 - 19.6 GHz (Earth-to-space) by the FSS is limited to feeder links for non-GSO systems in the MSS. Such use is subject to the application of the provisions of Resolution 46 (Rev.WRC-97)/No. 9.11A, and No. 22.2 does not apply.
5.523C	No. 22.2 of the Radio Regulations 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.
5.523D	The use of the band 19.3-19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of Resolution 46 (Rev.WRC-97)/ No. 9.11A, but not subject to the provisions of No. 22.2. The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. 5.523C and 5.523E, is not subject to the provisions of Resolution 46 (Rev.WRC-97)/No. 9.11A and shall continue to be subject to Articles S9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2.
5.523E	No. 22.2 of the Radio Regulations 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.
5.525	In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7-20.2 GHz and 29.5-30 GHz
5.526	In the bands 19.7 - 20.2 GHz and 29.5 - 30 GHz in Region 2, and in the bands 20.1 - 20.2 GHz and 29.9 - 30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications.
5.527	In the bands 19.7-20.2 GHz and 29.5-30 GHz, the provisions of No 4.10 do not apply with respect to the mobile-satellite service
5.528	The allocation to the mobile-satellite service is intended for use by networks which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7 - 20.1 GHz in Region 2 and in the band 20.1 - 20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. 5.524.
5.530	In Regions 1 and 3, the allocation to the broadcasting-satellite service in the band 21.4 - 22 GHz shall come into effect on 1 April 2007. The use of this band by the broadcasting-satellite service after that date and on an interim basis prior to that date is subject to the provisions of Resolution 525 (WARC-92).
5.532	The use of the band 22.21 - 22.5 GHz by the earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.
5.535A	The use of the band 29.1-29.5 GHz (Earth-to-space) by the fixed-satellite service is limited to geostationary-satellite systems and feeder links to non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of Resolution 46(Rev.WRC-97)/No. 9.11A, but not subject to the provisions of No. 22.2, except as indicated in Nos. 5.523C and 5.523E where such use is not subject to the provisions of Resolution 46 (Rev.WRC-97)/No. 9.11A and shall continue to be subject to Articles S9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2.
5.536	Use of the 25.25 - 27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.
5.536A	Administrations installing earth exploration-satellite earth stations cannot claim protection from stations in the fixed and mobile services operated by neighbouring administrations. In addition, earth stations operating in the earth exploration-satellite service should take into account Recommendation ITU-R SA.1278.

5.536B	In Germany, Saudi Arabia, Austria, Belgium, Brazil, Bulgaria, China, the Republic of Korea, Denmark, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Hungary, India, Islamic Republic of Iran, Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, Syria, Slovakia, Czech Republic, Romania, the United Kingdom, Singapore, Sweden, Switzerland, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the earth exploration-satellite service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services.
5.538	Additional allocation: 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. In the band 27.500 - 27.501 GHz, such space-to-Earth transmissions shall not produce a power flux-density in excess of the values specified in Article 21, Table 21-4 on the Earth's surface.
5.539	The band 27.5 - 30 GHz may be used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting-satellite service.
5.540	Additional allocation: the band 27.501 - 29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.
5.541	In the band 28.5 - 30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not to the primary collection of information by means of active or passive sensors.
5.541A	Feeder links of non-geostationary networks in the mobile-satellite service and geostationary networks in the fixed-satellite service operating in the band 29.1-29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix 4 coordination information is considered as having been received by the Bureau after 17 May 1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix 4 information for coordination before this date are encouraged to utilize these techniques to the extent practicable.
5.543	The band 29.95 - 30 GHz may be used for space-to-space links in the earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.
5.544	In the band 31 - 31.3 GHz the power flux-density limits specified in Article 21, Table 21-4 shall apply to the space research service.
5.545	Different category of service: in Armenia, Azerbaijan, Belarus, Georgia, Mongolia, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 31-31.3 GHz to the space research service is on a primary basis (see No. 5.33).
5.546	Different category of service: in Saudi Arabia, Armenia, Azerbaijan, Belarus, Egypt, the United Arab Emirates, Spain, Estonia, Finland, Georgia, Hungary, Iran (Islamic Republic of), Israel, Jordan, Latvia, Lebanon, Moldova, Mongolia, Uzbekistan, Poland, Syria, Kyrgyzstan, Romania, the United Kingdom, the Russian Federation, Tajikistan, Turkmenistan, Turkey and Ukraine, the allocation of the band 31.5-31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. 5.33).
5.547	The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolutions 75(WRC-2000) and 79(WRC-2000)). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5-40 GHz and 40.5-42 GHz, administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate (see Resolution 84(WRC-2000)).
5.547A	Administrations should take practical measures to minimize the potential interference between stations in the fixed service and airborne stations in the radionavigation service in the 31.8-33.4 GHz band, taking into account the operational needs of the airborne radar systems
5.548	In designing systems for the inter-satellite and radionavigation services in the band 32 - 33 GHz, and for the space research service (deep space) in the band 31.8 - 32.3 GHz, administrations shall take all necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Recommendation 707 (WARC-79)).
5.549	Additional allocation: in Saudi Arabia, Bahrain, Bangladesh, Egypt, the United Arab Emirates, Gabon, Indonesia, the Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Malta, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Senegal, Singapore, Somalia, Sudan, Sri Lanka, Togo, Tunisia, Yemen and Zaire, the band 33.4-36 GHz is also allocated to the fixed and mobile services on a primary basis.
5.550	Different category of service: in Armenia, Azerbaijan, Belarus, Georgia, Mongolia, Uzbekistan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Ukraine, the allocation of the band 34.7-35.2 GHz to the space research service is on a primary basis (see No. 5.33).
5.551A	In the band 35.5 - 36.0 GHz, 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, meteorological aids and other services allocated on a primary basis.

5.551AA	In the bands 37.5-40 GHz and 42-42.5 GHz, non-GSO fixed-satellite service systems should employ power control or other methods of downlink fade compensation of the order of 10 dB, such that the satellite transmissions are at power levels required to meet the desired link performance while reducing the level of interference to the fixed service. The use of downlink fade compensation methods are under study by ITU-R (see Resolution 84(WRC-2000)).
5.551G	In order to protect the radio astronomy service in the band 42.5-43.5 GHz, the aggregate power flux-density in the 42.5-43.5 GHz band produced by all the space stations in any non-GSO FSS (space-to-Earth) or BSS (space-to-Earth) system operating in the 41.5-42.5 GHz band shall not exceed –167 dB(W/m2) in any 1 MHz band at the site of a radio astronomy station for more that 2% of the time. The power flux-density in the band 42.5-43.5 GHz produced by any GSO FSS (space-to-Earth) or BSS (space-to-Earth) station operating in the band 42.0-42.5 GHz shall not exceed –167 dB(W/m2) in any 1 MHz band at the site of a radio astronomy station. These limits are provisional and will be reviewed in accordance with Resolution 128 (Rev.WRC-2000).
5.552	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.
5.552A	The allocation to the fixed service in the bands 47.2-47.5 GHz and 47.9-48.2 GHz is designated for use by high altitude platform stations. The use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz is subject to the provisions of Resolution 122 (WRC-97).
5.553	In the bands 43.5-47 GHz and 66-71 GHz, stations in the land mobile service may be operated subject to not causing harmful interference to the space radiocommunication services to which these bands are allocated (see No. 5.43).
5.554	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
5.555	Additional allocation: the band 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis.
5.555A	The band 50.2-50.4 GHz is also allocated, on a primary basis, to the fixed and mobile services until 1 July 2000.
5.556	In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements
5.556A	Use of the bands 54.25-56.9 GHz, 57-58.2 GHz and 59-59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed -147 dB(W/m 2 /100 MHz) for all angles of arrival.
5.557A	In the band 55.78-56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to –26 dB(W/MHz).
5.558	In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 122.25-123 GHz, 130-134 GHz, 167-174.8 GHz and 191.8-200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. 5.43).
5.558A	Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/m 2 /100 MHz) for all angles of arrival.
5.559	In the band 59-64 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. 5.43).
5.559A	The band 75.5-76 GHz is also allocated to the amateur and amateur-satellite services on a primary basis until the year 2006.
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, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Republic, Russian Federation, Tajikistan, Turkmenistan and Ukraine, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same condi-tions. (WRC-97)
5.560	In the band 78 - 79 GHz radars located on space stations may be operated on a primary basis in the earth exploration-satellite service and in the space research service.
5.560A	The 81-81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis.
5.561	In the band 74-76 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the fixed-satellite service or stations of the broadcasting-satellite service operating in accordance with the decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service.
5.562	The use of the band 94 - 94.1 GHz by the earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars.

5.562A	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.
5.562B	Use of this allocation is limited to space-based radio astronomy only
5.562C	Use of the band 116-122.25 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed –148 dB(W/(m2 ? MHz)) for all angles of arrival.
5.562E	The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5-134 GHz.
5.562F	In the band 155.5-158.5 GHz, the allocation to the Earth exploration-satellite (passive) and space research (passive) services shall terminate on 1 January 2018
5.562G	The date of entry into force of the allocation to the fixed and mobile services in the band 155.5-158.5 GHz shall be 1 January 2018.
5.562H	Use of the bands 174.8-182 GHz and 185-190 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed –144 dB(W/(m2 ? MHz)) for all angles of arrival.
5.563	In United Kingdom the band 182-185 GHz is also allocated to the fixed and mobile services on a primary basis
5.563A	In the bands 200-209 GHz, 235-238 GHz, 250-252 GHz and 265-275 GHz, ground-based passive atmospheric sensing is carried out to monitor atmospheric constituents.
5.563B	The band 237.9-238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only.
5.565	The frequency band 275-1 000 GHz may be used by administrations for experimentation with, and development of, various active and passive services. In this band a need has been identified for the following spectral line measurements for passive services: - radio astronomy service: 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz and 926-945 GHz; – Earth exploration-satellite service (passive) and space research service (passive): 275-277 GHz, 294-306 GHz, 316-334 GHz, 342-349 GHz, 363-365 GHz, 371-389 GHz, 416-434 GHz, 442-444 GHz, 496-506 GHz, 546-568 GHz, 624-629 GHz, 634-654 GHz, 659-661 GHz, 684-692 GHz, 730-732 GHz, 851-853 GHz and 951-956 GHz. Future research in this largely unexplored spectral region may yield additional spectral lines and continuum bands of interest to the passive services. Administrations are urged to take all practicable steps to protect these passive services from harmful interference until the date when the allocation table is established in the above-mentioned frequency band.

ERC document	*ERC document title*
ERC DEC (00)01	Frequency bands for UMTS extending ERC DEC (97)07
ERC DEC (00)02	37.5-40.5 GHz for Fixed and Fixed Satellite Service
ERC DEC (00)07	Shared use of 17.7-19.7 GHz for Fixed and Fixed Satellite Service
ERC DEC (00)08	Use of 10.7-12.5 GHz by the Fixed and Broadcasting-satellite/Fixed-satellite service
ERC DEC (00)09	Use of 27.5-29.5 GHz by the Fixed and Fixed Satellite Service
ERC DEC (01)01	Non-specific SRD in 6765-6795 kHz and 13.553-13.567 MHz
ERC DEC (01)02	Non-specific SRD in 26.957-27.283 MHz
ERC DEC (01)03	Non-specific SRD in 40.660-40.700 MHz
ERC DEC (01)04	Non-specific SRD in 868-868.6 MHz, 868.7-869.2 MHz, 869.4-869.65 MHz and 869.7-870 MHz
ERC DEC (01)05	Non-specific SRD in 2400-2483.5 MHz
ERC DEC (01)06	Non-specific SRD in 5725-5875 MHz
ERC DEC (01)07	Radio-LAN SRDs in 2400-2483.5 MHz
ERC DEC (01)08	Movement Detection and Alert SRDs in 2400-2483.5 MHz
ERC DEC (01)09	Alarm SRDs in 868.6-868.7 MHz,
ERC DEC (01)10	Model control sRDs in 26.995, 27.045, 27.095, 27.145 and 27.195 MHz
ERC DEC (01)11	Flying Model control in 34.995-35.225 MHz
ERC DEC (01)12	Model control in 40.665, 40.675, 40.685 and 40.695 MHz
ERC DEC (01)17	Medical implant SRDs in 402-405 MHz
ERC DEC (01)18	Wireless Audio SRD Applications in 863-865 MHz
ERC DEC (01)19	DMO frequencies for emergency services
ERC DEC (01)20	Air-ground-Air (AGA) frequencies for emergency services
ERC DEC (01)21	DMO frequencies for digital land mobile systems
ERC DEC (92)01	Frequencies for TFTS
ERC DEC (92)02	Frequency bands for RTTT systems
ERC DEC (94)01	Frequency bands for GSM systems
ERC DEC (94)02	Frequencies for ERMES
ERC DEC (94)03	Frequencies for DECT
ERC DEC (95)03	Frequency bands for DCS 1800
ERC DEC (96)01	Frequency bands for Emergency Services
ERC DEC (96)02	Frequency bands and implementation of standard for CEPT PR27 equipment
ERC DEC (96)04	Frequency bands for TETRA
ERC DEC (96)06	Harmonised frequency bands for Social Alarms
ERC DEC (97)02	Extended frequency bands for GSM
ERC DEC (97)03	S-PCS in 1610-1626.5 MHz, 2483.5-2500 MHz, 1980-2010 MHz and 2170-2200 MHz
ERC DEC (97)04	Transitional arrangements for Fixed and Mobile-satellite service in 1980-2010 MHz and 2170-2200 MHz
ERC DEC (97)06	Harmonised frequency bands for Social Alarms
ERC DEC (97)07	Frequency bands for UMTS

ERC document	ERC document title
ERC DEC (98)25	Harmonised frequency band for PMR446
ERC DEC (99)06	Harmonised introduction of S-PCS <1GHz
ERC DEC (99)15	Harmonised frequency band 40.5-43.5 GHz for MWS including MVDS
ERC DEC (99)17	Frequencies for Shipborne Automatic Identification System (AIS)
ERC DEC (99)23	Harmonised frequency bands for HIPERLANs
ERC DEC (99)25	Harmonised spectrum for UMTS in 1900-1980 MHz, 2010-2025 MHz and 2110-2170 MHz
ERC REC 00-04	Meteor scatter applications
ERC REC 00-05	Fixed wireless access in 24.5-26.5 GHz
ERC REC 01-01	Border coordination of UMTS/IMT-2000 systems
ERC REC 01-02	Channel arrangement for digital fixed service in 31.8-33.4 GHz
ERC REC 12-02	Channel arrangement for 12.75-13.25 GHz
ERC REC 12-03	Channel arrangement for 17.7-19.7 GHz
ERC REC 12-05	Channel arrangement for 10.0-10.68 GHz
ERC REC 12-06	Channel arrangement for 10.7-11.7 GHz
ERC REC 12-07	Channel arrangement for 15.23-15.35 GHz
ERC REC 12-08	Channel arrangement for 3600-4200 MHz
ERC REC 12-09	Channel arrangement for 57.0-59.0 GHz
ERC REC 12-10	Channel arrangement for 48.5-50.2 GHz
ERC REC 12-11	Channel arrangement for 51.4-52.6 GHz
ERC REC 12-12	Channel arrangement for 55.78-57.0 GHz
ERC REC 13-03	Use of the band 14.0-14.5 GHz for VSAT and SNG
ERC REC 13-04	Fixed Wireless Access in 3-29.5 GHz
ERC REC 14-01	Channel arrangement for 5925-6425 MHz
ERC REC 14-02	Channel arrangement for 6425-7125 MHz
ERC REC 14-03	Channel arrangement for 3400-3600 MHz
ERC REC 25-10	Frequencies for ENG/OB video links
ERC REC 62-01	135.7-137.8 kHz for the Amateur Service
ERC REC 62-02	Civil and Military Airborne Telemetry applications
ERC REC 70-03	ERC Recommendation relating to the use of Short Range Devices (SRD)
ERC REC T/R 02-02	Harmonised frequency band for the emergency services
ERC REC T/R 12-01	Channel arrangements for analogue and digital terrestrial fixed systems in 37-39.5 GHz
ERC REC T/R 13-01	Channel arrangement for fixed services in the range 1-3 GHz
ERC REC T/R 13-02	Channel arrangement for fixed services in the range 22.0-29.5 GHz
ERC REC T/R 22-01	Frequencies likely to be allocated to international railways
ERC REC T/R 22-03	Terrestrial fixed and mobile systems in 54.25-66 GHz
ERC REC T/R 22-05	Frequencies for mobile digital trunked radio systems
ERC REC T/R 22-06	HIPERLANs in the 5 GHz and 17 GHz frequency range
ERC REC T/R 22-07	Frequency bands for DCS1800

ERC document	*ERC document title*
ERC REC T/R 25-05	Broadcasting and Land Mobile Service planning parameters for TV band I and III
ERC REC T/R 25-06	Broadcasting and Land Mobile Service planning parameters for TV band I and III
ERC REC T/R 25-08	Land Mobile Service in the range 29.7 - 960 MHz
ERC REC T/R 25-09	Frequencies in the 900 MHz band for railways
ERC REC T/R 32-02	On-board communication stations
ERC REC T/R 42-01	Frequencies for TFTS
ERC REC T/R 52-02	Introduction of terrestrial digital audio broadcasting (T-DAB)

Standard name	*Short Standard title*	*Harmonised Standard Art 3.2 of RTTE Directive*
EN 300 065	Navtex	EN 300 065-2
EN 300 086	PMR analogue speech	EN 300 082-2
EN 300 113	PMR Data and speech	EN 300 113-2
EN 300 135	CB - FM	EN 300 135-2
EN 300 152	EPIRB	EN 300 152-2
EN 300 162	Maritime mobile VHF	EN 300 162-2
EN 300 219	PMR internal antenna analogue speech	EN 300 219-2
EN 300 220	SRD 25 - 1000 MHz	EN 300 220-3
EN 300 224	On site paging	EN 300 224-2
EN 300 296	PMRintegral antenna analogue speech	EN 300 296-2
EN 300 328	RLANs	EN 300 328-2
EN 300 330	SRD 9 kHz - 25 MHz	EN 300 330-2
EN 300 341	PMR specific response	EN 300 341-2
EN 300 390	PMR data and speech integral antenna	EN 300 390-2
EN 300 422	Radio microphones	EN 300 442-2
EN 300 433	CB DSB and SSB	EN 300 433-2
EN 300 440	SRD 1-40 GHz	EN 300 440-2
EN 300 471	Access protocol	EN 300 471-2
EN 300 674	RTTT in 5.8 GHz	EN 300 674-2
EN 300 698	Maritime inland waterways	EN 300 698-3
EN 300 718	Avalanche Beacons	EN 300 718-2
EN 300 720	UHF on bord communication	EN 300 720-2
EN 300 761	AVI for railways	EN 300 761-2
EN 300 836	HIPERLANs	EN 300 836
EN 301 025	DCS VHF bands	EN 301 025-2
EN 301 091	RTTT in 76-77 GHz	EN 301 091-2
EN 301 178	Portable maritime non GMDSS	EN 301 178-2
EN 301 357	SRD Audio in 863-865 MHz	EN 301 357-2
EN 301 360	FSS - SIT	EN 301 360-2
EN 301 406	DECT	EN 301 406
EN 301 419	GSM	EN 301 419-1, EN 301 419-2, EN 301 419-3

Standard name	*Short Standard title*	*Harmonised Standard Art 3.2 of RTTE Directive*
EN 301 423	TFTS	EN 301 423
EN 301 426	LMES in 1.5/1.6 GHz	EN 301 426
EN 301 427	LMES in 11/12/14 GHz	EN 301 427
EN 301 428	VSAT in 11/12/14 GHz	EN 301 428
EN 301 430	SNG in 11/12/14 GHz	EN 301 430
EN 301 441	S-PCN in 1.6/2.4 GHz	EN 301 441
EN 301 442	S-PCN in 2 GHz	EN 301 442
EN 301 443	VSAT in 4 and 6 GHz	EN 301 443
EN 301 444	LMES in 1.5/1.6 GHz	EN 301 444
EN 301 459	SIT/SUT in 29.5-30 GHz	EN 301 459
EN 301 502	GSM base stations an repeater	EN 301 502
EN 301 511	GSM/DCS mobile stations	EN 301 511
EN 301 681	mobile earth st S-PCN 1.5/1.6 GHz	EN 301 681
EN 301 721	MES LEO below 1 GHz	EN 301 721
EN 301 751	Point to point digital fixed links	EN 301 751
EN 301 753	Point to multipoint digital fixed links	EN 301 753
EN 301 783	Amateur radio equipment	EN 301 783-2
EN 301 796	CT1 and CT1+	EN 301 796
EN 301 797	CT2	EN 301 797
EN 301 840	Radio microphones in 1785-1800 MHz	EN 301 840
EN 303 035	TETRA	EN 303 035-2

LIST OF ABBREVIATIONS AS USED IN THIS DOCUMENT

AGA	- Air Ground Air
BSS	- Broadcasting Satellite Service
CEPT	- European Conference of Postal and Telecommunications Administrations
CRS	- Central Radio Station
DCS 1800	- Digital Communication System
DEC	- ERC Decision
DECT	- Digital European Cordless Telecommunication System
DME	- Distance Measuring Equipment
DMO	- Direct Mode Operation
DSI	- Detailed Spectrum Investigation
DVB-T	- Terrestrial Digital Video Broadcasting
ECA	- European Common Allocation
ECC	- Electronic Communications Committee
ECP	- European Common Proposal
EESS	- Earth Exploration-Satellite Service
EGSM	- Extended GSM
ENG	- Electronic News Gathering
EPIRB	- Emergency Position-Indicating Radiobeacon
ERC	- European Radiocommunications Committee
ERMES	- European Radio Messaging System
ERO	- European Radiocommunications Office
FB	- Base station (in a mobile radio system)
FDD	- Frequency Division Duplex
FM	- Frequency modulation
FSS	- Fixed Satellite Service
FWA	- Fixed Wireless Access
GMDSS	- Global Maritime Distress and Safety System
GNSS	- Global Navigation Satellite System
GSM	- Global System for Mobile Communications
HAPS	- High Altitude Platform Systems
HDTV	- High Definition Television
HIPERLAN	- High Performance Radio Local Area Network
IBCN	- Integrated Broadband Communications Network
ILS	- Instrument Landing System
UMTS/IMT-2000	- International Mobile Telecommunications
ISM	- Industrial, Scientific and Medical applications
ITU	- International Telecommunication Union
JTIDS	- Joint Tactical Information Distribution System
MIDS	- Multifunctional Information Distribution System

ML	- Mobile station (in a mobile radio system)
MLS	- Microwave Landing System
MSI	- Maritime Safety Information
MSS	- Mobile Satellite Service
MWS	- Multimedia Wireless Systems
NATO	- North Atlantic Treaty Organisation
NGSO	- Non-geostationary Satellite Orbit
OB	- Outside Broadcasting
OR	- Off-Route
PAMR	- Public Access Mobile Radio (PMR)
PMR	- Professional Mobile Radio, Private Mobile Radio
R	- Route
RA	- Radio Astronomy
SAB	- Services Ancillary to Broadcasting
SAP	- Services Ancillary to Programming
S-PCS	- Satellite Personal Communication System
TETRA	- Trans European Trunked Radio
RFID	- Radio Frequency Identification systems
RLAN	- Radio Local Area Network
RR	- Radio Regulations
RTTT	- Road Transport & Traffic Telematics
SNG	- Satellite News Gathering
SRD	- Short Range Devices
SSR	- Secondary Surveillance Radar
T-DAB	- Terrestrial Digital Audio Broadcasting
TACAN	- Tactical Air Navigation System
TFTS	- Terrestrial Flight Telecommunications System
TS	- Terminal Station
UMTS/IMT-2000	- International Mobile Telecommunications
VLBI	- Very Long Baseline Interferometry (Radio Astronomy)
VOR	- VHF Omni-directional Range
VTS	- Vessel Traffic System (radar)
VSAT	- Very Small Aperture Terminal
WARC-92	- World Administrative Radio Conference 1992
WRC(95)	- World Radiocommunication Conference 1995 (or other year)