



Ministry for  
the Economy,  
Investment and Small  
Business



# **National Frequency Plan**

**Edition 5.1**

**MCA/O/15-2359**

**September 2015**

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## Introduction

This fifth edition of the National Frequency Plan (hereinafter referred to as 'the Plan') is adopted and published in accordance with the provisions of the Electronic Communications (Regulation) Act (Chapter 399 of the Laws of Malta)<sup>1</sup>.

The Plan contains a number of tables, which list the allocations made for radio frequency spectrum for Malta. These tables, which are based on the Radio Regulations of the International Telecommunication Union (ITU) (edition of 2012)<sup>2</sup>, cover the frequency range between 9 kilohertz (kHz) and 3000 gigahertz (GHz) and lists for each frequency range the types of radiocommunications services that are permitted and those applications which are mainly in use in Malta. Information is also given on possible future uses or change in use of particular frequency bands.

Besides the ITU Radio Regulations, the tables are also based on the European table of frequency allocations and applications, the ERC Report 025<sup>3</sup>. The report is considered as a useful tool when considering and planning harmonization within the context of the European frequency spectrum.

The tables contained in this Plan are structured as follows:

**Column 1**

*Frequency band*

Values in this column denote the frequency band. Units used in the header are in kHz (kilohertz), MHz (megahertz) and GHz (gigahertz).

**Column 2**

*ITU allocations and footnotes (relevant to Malta)*

This column shows the type of service allocated to the band on an international basis, together with some footnotes which are relevant to Malta. These allocations are defined in the ITU Radio Regulations and also in Annex 1 of this Plan.

Entries in *upper case* denote primary services. Entries in *lower case* denote secondary services (as defined in the Radio Regulations). The footnotes are the footnotes to the Table of Frequency Allocations in the Radio Regulations. Only footnotes relevant to Malta are included in this table. The full text of these footnotes appears in Annex 2.

**Column 3**

*National allocations and Footnotes*

This column shows the type of service allocated to the band in Malta. The ITU footnotes which are of relevance to the band are also included.

This column also includes a number of national footnotes. Their full text appears in Annex 3.

**Column 4**

*Major utilisation*

This column indicates the current major national usage of the frequency band.

**Column 5**

*National and European Legislation*

This column lists the national and European legislation relevant to the band. The full title of this legislation is at Annex 4.

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<sup>1</sup> <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=8866&l=1>.

<sup>2</sup> The 2012 edition of the Radio Regulations was updated by the World Radiocommunication Conference held in 2012 (WRC-12).

<sup>3</sup> <http://www.erodocdb.dk/Docs/doc98/official/pdf/ERCREP025.PDF>.

## Introduction

### **Column 6**

*Relevant CEPT and ITU deliverables and Notes*

This column contains additional information, such as relevant documentation, limitations / restrictions, etc. It also establishes the technical specifications relevant to the frequency band, and these are generally derived from CEPT and ITU deliverables.

The National Frequency Plan will be updated regularly. The allocations are not static and will change in time as new radio systems are introduced and old ones phased out. Changes will also be made to reflect agreements on spectrum utilisation at international level or as a consequence of national decisions made to meet specific national requirements.

Reference to a European Directive or Decision, as the case may be, in any of the tables of the Plan or its annexes, indicates full implementation of that specific Directive or Decision. Therefore, by virtue of this Plan, all the provisions contained in the referred European instruments are considered to be adopted. In this context, where European legislation is amended, the Plan only contains a reference to the original legislation. The details of the amending legal instrument are only contained in Annex 4 of the Plan.

The Malta Communications Authority (MCA) is the body responsible for spectrum management in Malta. Accordingly, unless otherwise indicated in national footnotes (Annex 3 of the Plan), or stipulated otherwise in law, management of the radio frequency spectrum contained in this radio frequency plan, is to be carried out by the said Authority.

# **Part A**

## **The Radio Spectrum in kHz**

**9 kHz to 27 500 kHz**

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
Below 8.3	(Not allocated) 5.53 5.54	(Not allocated) 5.53 5.54			
8.3 – 9	METEOROLOGICAL AIDS 5.54A	METEOROLOGICAL AIDS 5.54A  MLT01	UWB	National Legislation: S.L.399.40.  European Legislation: EC Decision 2007/131/EC as amended.	
9 – 11.3	METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	METEOROLOGICAL AIDS 5.54A RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
11.3 – 14	RADIONAVIGATION	RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
14 – 19.95	FIXED MARITIME MOBILE 5.57  5.56	FIXED MARITIME MOBILE 5.57  5.56	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
19.95 – 20.05	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
20.05 – 70	FIXED	FIXED	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	MARITIME MOBILE 5.57	MARITIME MOBILE 5.57			
	5.56	5.56			
70 – 72	RADIONAVIGATION 5.60	RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
72 – 84	FIXED	FIXED	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	MARITIME MOBILE 5.57 RADIONAVIGATION 5.60	MARITIME MOBILE 5.57 RADIONAVIGATION 5.60			
	5.56	5.56			
84 – 86	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
86 – 90	FIXED	FIXED	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	MARITIME MOBILE 5.57 RADIONAVIGATION	MARITIME MOBILE 5.57 RADIONAVIGATION			
	5.56	5.56			

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
90 – 110	RADIONAVIGATION 5.62 Fixed  5.64	RADIONAVIGATION 5.62 Fixed  5.64	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	LORAN-C system
110 – 112	FIXED MARITIME MOBILE RADIONAVIGATION  5.64	FIXED MARITIME MOBILE RADIONAVIGATION  5.64	Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
112 – 115	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
115 – 117.6	RADIONAVIGATION 5.60 Fixed Maritime Mobile  5.64	RADIONAVIGATION 5.60 Fixed Maritime Mobile  5.64	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
117.6 – 126	FIXED MARITIME MOBILE RADIONAVIGATION 5.60  5.64	FIXED MARITIME MOBILE RADIONAVIGATION 5.60  5.64	Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	



Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
126 – 129	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
129 – 130	FIXED MARITIME MOBILE RADIONAVIGATION 5.60  5.64	FIXED MARITIME MOBILE RADIONAVIGATION 5.60  5.64	Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
130 – 135.7	FIXED MARITIME MOBILE  5.64	FIXED MARITIME MOBILE  5.64	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
135.7 – 137.8	FIXED MARITIME MOBILE Amateur 5.67A  5.64	FIXED MARITIME MOBILE Amateur 5.67A  5.64	Maritime communications Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
137.8 – 148.5	FIXED MARITIME MOBILE  5.64	FIXED MARITIME MOBILE  5.64	SRDs Maritime communications	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
148.5 – 255	BROADCASTING	BROADCASTING	Broadcasting	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1975 plan.
		MLT02	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
255 – 283.5	BROADCASTING	BROADCASTING	Broadcasting	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1975 plan.
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
283.5 – 315	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	MARITIME RADIONAVIGATION (radiobeacons) 5.73	MARITIME RADIONAVIGATION (radiobeacons) 5.73	Radiobeacons		ITU Geneva 1985 plan. ITU-R M.823.
315 – 325	5.74	5.74	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
325 – 405	Maritime radionavigation (radiobeacons) 5.73	Maritime radionavigation (radiobeacons) 5.73	Radiobeacons		IALA Plan to allow differential GPS.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
325 – 405	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Radiobeacons		
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
405 – 415	RADIONAVIGATION 5.76	RADIONAVIGATION 5.76	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	IALA Plan to allow differential GPS.
415 – 435	MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION	MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION	Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU Geneva 1985 plan. ITU Geneva 1985 plan.
435 – 472	MARITIME MOBILE 5.79 Aeronautical Radionavigation	MARITIME MOBILE 5.79 Aeronautical Radionavigation	Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU Geneva 1985 plan.
472 - 479	MARITIME MOBILE 5.79 Amateur 5.80A  Aeronautical Radionavigation	MARITIME MOBILE 5.79 Amateur 5.80A  Aeronautical Radionavigation	Maritime communications Amateur applications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU Geneva 1985 plan. The equivalent isotropically radiated power of any amateur station shall not exceed 1 Watt.
479 – 495	MARITIME MOBILE 5.79 5.79A  Aeronautical Radionavigation	MARITIME MOBILE 5.79 5.79A  Aeronautical Radionavigation	Maritime communications NAVTEX  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU Geneva 1985 plan. 490 kHz (national language NAVTEX channel).
	5.82	5.82			
	5.82	MLT03 5.82			
	5.82	5.82			

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
495 – 505	MARITIME MOBILE	MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
505 – 526.5	MARITIME MOBILE 5.79 5.79A 5.84	MARITIME MOBILE 5.79 5.79A 5.84	Maritime communications  NAVTEX		ITU Geneva 1985 plan.  518 kHz (International NAVTEX channel).
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU Geneva 1985 plan.
526.5 – 1606.5	BROADCASTING	BROADCASTING	Broadcasting	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1975 plan.
		MLT02	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
1606.5 – 1625	FIXED	FIXED			
	MARITIME MOBILE 5.90 LAND MOBILE	MARITIME MOBILE 5.90 LAND MOBILE Radiolocation	Maritime communications		ITU Geneva 1985 plan.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	5.92	5.92			
1625 – 1635	RADIOLOCATION	RADIOLOCATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

TABLE OF FREQUENCY ALLOCATIONS FOR MALTA

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1635 – 1800	FIXED MARITIME MOBILE 5.90 LAND MOBILE	FIXED MARITIME MOBILE 5.90 LAND MOBILE	Maritime communications		ITU Geneva 1985 plan.
	5.92 5.96	5.92 5.96	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
1800 – 1810	RADIOLOCATION	RADIOLOCATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
1810 – 1850	AMATEUR  5.100	AMATEUR  5.100	Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
1850 – 2000	FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile Amateur	Maritime communications Amateur applications		The mean power of any amateur station shall not exceed 10 W.
	5.92 5.96 5.103	5.92 5.96 5.103	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2000 – 2025	FIXED MOBILE except aeronautical mobile (R)	FIXED MOBILE except aeronautical mobile (R)	Maritime communications		
	5.92 5.103	5.92 5.103	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

TABLE OF FREQUENCY ALLOCATIONS FOR MALTA

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2025 – 2045	FIXED MOBILE except aeronautical mobile (R) Meteorological Aids 5.104	FIXED MOBILE except aeronautical mobile (R)	Maritime communications		
	5.92 5.103	5.92 5.103	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2045 – 2160	FIXED MARITIME MOBILE LAND MOBILE	FIXED MARITIME MOBILE LAND MOBILE	Maritime communications		ITU Geneva 1985 plan.
	5.92	5.92	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2160 – 2170	RADIOLOCATION	RADIOLOCATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2170 – 2173.5	MARITIME MOBILE	MARITIME MOBILE	Maritime communications	ITU Geneva 1985 plan.	
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2173.5 – 2190.5	MOBILE (distress and calling)	MOBILE (distress and calling)	Maritime communications (GMDSS)		Radiotelephony distress and calling (2182 kHz). DSC distress and calling (2187.5 kHz). Telex distress traffic (2174.5 kHz).
	5.108 5.109 5.110 5.111	5.108 5.109 5.110 5.111	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2190.5 – 2194	MARITIME MOBILE	MARITIME MOBILE	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2194 – 2300	FIXED MOBILE except aeronautical mobile (R)  5.92 5.103	FIXED MOBILE except aeronautical mobile (R)  5.92 5.103	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2300 – 2498	FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113  5.103	FIXED MOBILE except aeronautical mobile (R)  5.103	Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2498 – 2501	STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2501 – 2502	STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2502 – 2625	FIXED MOBILE except aeronautical mobile (R)  5.92 5.103	FIXED MOBILE except aeronautical mobile (R)  5.92 5.103	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2625 – 2650	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	MARITIME RADIONAVIGATION	MARITIME RADIONAVIGATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2650 – 2850	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
2850 – 3025	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27. Radiotelephony distress traffic and calling frequency by rescue centres (3023 kHz).
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3025 – 3155	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		ITU RR Appendix 26.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3155 – 3200	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications		
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	5.92	5.92			
	5.92 5.103	5.92 5.103			
	5.111 5.115	5.111 5.115			
	5.116	5.116			



# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
3200 – 3230	FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113	FIXED MOBILE except aeronautical mobile (R)	Maritime communications		
	5.116	5.116	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3230 – 3400	FIXED MOBILE except aeronautical mobile BROADCASTING 5.113	FIXED MOBILE except aeronautical mobile	Maritime communications		
	5.116	5.116	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3400 – 3500	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3500 – 3800	AMATEUR FIXED	AMATEUR FIXED	Amateur applications		
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications		
	5.92	5.92	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
3800 – 3900	FIXED AERONAUTICAL MOBILE (OR)	FIXED AERONAUTICAL MOBILE (OR)	Aeronautical communications		
	LAND MOBILE	LAND MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
3900 – 3950	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 26.
3950 – 4000	FIXED BROADCASTING	FIXED BROADCASTING  MLT02	SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4000 – 4063	FIXED MARITIME MOBILE 5.127	FIXED MARITIME MOBILE 5.127	Fixed links Maritime communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 17. ITU RR Appendix 25.
4063 – 4438	MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132  5.128	MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	Maritime communications  NAVTEX  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (4208, 4208.5, 4209, 4219.5, 4220, 4220.5 kHz). DSC distress traffic (4207.5 kHz). MSI (4210 kHz). Meteorological and navigation warnings (4209.5 kHz). Radiotelephony distress and safety traffic (4125 kHz). Telex distress traffic (4177.5 kHz).

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
4438 – 4488	FIXED	FIXED	Fixed links		
	MOBILE except aeronautical mobile (R) Radiolocation 5.132A	MOBILE except aeronautical mobile (R) Radiolocation 5.132A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4488 – 4650	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4650 – 4700	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4700 – 4750	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		ITU RR Appendix 26.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4750 – 4850	FIXED	FIXED	Fixed links		
	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		
	LAND MOBILE	LAND MOBILE			
	BROADCASTING 5.113		SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
4850 – 4995	FIXED	FIXED			
	LAND MOBILE BROADCASTING 5.113	LAND MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
4995 - 5003	STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	STANDARD FREQUENCY AND TIME SIGNAL Space research	STANDARD FREQUENCY AND TIME SIGNAL Space research	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5005 – 5060	FIXED	FIXED			
	BROADCASTING 5.113		SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5060 – 5250	FIXED	FIXED	Fixed links		
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	SRDS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5250 – 5275	FIXED	FIXED			
	MOBILE except aeronautical mobile Radiolocation 5.132A	MOBILE except aeronautical mobile Radiolocation 5.132A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5275 – 5450	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5450 – 5480	FIXED	FIXED			
	AERONAUTICAL MOBILE (OR) LAND MOBILE	AERONAUTICAL MOBILE (OR) LAND MOBILE	Aeronautical communications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5480 – 5680	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27. Telephony distress traffic and calling by rescue centers (5680 kHz).
	5.111 5.115	5.111 5.115	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5680 – 5730	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		ITU RR Appendix 26. Telephony distress traffic and calling by rescue centers (5680 kHz)
	5.111 5.115	5.111 5.115	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5730 – 5900	FIXED	FIXED	Fixed links		
	LAND MOBILE	LAND MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5900 – 5950	BROADCASTING 5.134	BROADCASTING 5.134		National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
	5.136	MLT02 5.136	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5950 – 6200	BROADCASTING	BROADCASTING		National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
		MLT02	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
6200 – 6525	MARITIME MOBILE 5.109 5.110 5.130 5.132	MARITIME MOBILE 5.109 5.110 5.130 5.132	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (6312.5, 6313, 6313.5, 6331, 6331.5, 6332 kHz). DSC distress traffic (6312 kHz). MSI (6314 kHz). Radiotelephony distress and safety traffic (6215 kHz). Telex distress traffic (6268 kHz).
	5.137	5.137	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
6525 – 6685	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
6685 – 6765	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 26.
6765 – 7000	FIXED MOBILE except aeronautical mobile (R)  5.138	FIXED Land mobile  5.138	Fixed links  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (6765-6795 kHz).
7000 – 7100	AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
7100 – 7200	AMATEUR	AMATEUR	Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
7200 – 7300	BROADCASTING	BROADCASTING  MLT02	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
7300 – 7400	BROADCASTING 5.134  5.143 5.143B	BROADCASTING 5.134  MLT02 5.143 5.143B	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
7400 – 7450	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
	5.143B	MLT02 5.143B	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
7450 – 8100	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
8100 – 8195	FIXED	FIXED	Fixed links		
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		ITU RR Appendix 17.
8195 – 8815			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (8415, 8415.5, 8416, 8436.5, 8437, 8437.5 kHz). DSC distress traffic (8414.5 kHz). MSI (8416.5 kHz). Radiotelephony distress and safety (8291 kHz). Telex distress traffic (8376.5 kHz).
8815 – 8965			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	5.111	5.111			
8815 – 8965	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	



# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
8965 – 9040	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 26.
9040 – 9305	FIXED	FIXED	Fixed links SRDs	Fixed links  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9305 – 9355	FIXED Radiolocation 5.145A	FIXED Radiolocation 5.145A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9355 – 9400	FIXED	FIXED	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9400 – 9500	BROADCASTING 5.134  5.146	BROADCASTING 5.134  MLT02 5.146	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
9500 – 9900	BROADCASTING  5.147	BROADCASTING  MLT02 5.147	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
9900 – 9995	FIXED	FIXED	Fixed links SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9995 – 10003	STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)  5.111	STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)  5.111	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10003 – 10005	STANDARD FREQUENCY AND TIME SIGNAL  Space Research  5.111	STANDARD FREQUENCY AND TIME SIGNAL  Space Research  5.111	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10005 – 10100	AERONAUTICAL MOBILE (R)  5.111	AERONAUTICAL MOBILE (R)  5.111	Aeronautical communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 27.
10100 – 10150	FIXED Amateur	FIXED Amateur	Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10150 – 11175	FIXED MOBILE except aeronautical mobile (R)	FIXED MOBILE except aeronautical mobile (R)	Fixed links  SRDs	:  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
11175 – 11275	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 26.
11275 – 11400	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 27.
11400 – 11600	FIXED	FIXED	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
11600 – 11650	BROADCASTING 5.134  5.146	BROADCASTING5 134  MLT02 5.146	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
11650 – 12050	BROADCASTING  5.147	BROADCASTING  MLT02 5.147	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
12050 – 12100	BROADCASTING 5.134  5.146	BROADCASTING 5.134  MLT02 5.146	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
12100 – 12230	FIXED	FIXED	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
12230 – 13200	MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (12577.5, 12578, 12578.5, 12657, 12657.5, 12658 kHz). DSC distress traffic (12577 kHz). MSI (12579 kHz). Radiotelephony distress and safety traffic (12290 kHz). Telex distress traffic (12520 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13200 – 13260	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		ITU RR Appendix 26.
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13260 – 13360	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13360 – 13410	FIXED RADIO ASTRONOMY	FIXED RADIO ASTRONOMY	Fixed links		
	5.149	5.149	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13410 – 13450	FIXED	FIXED			
	Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
13450 – 13550	FIXED Mobile except aeronautical mobile (R) Radiolocation 5.132A	FIXED Mobile except aeronautical mobile (R) Radiolocation 5.132A	Oceanographic radars SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13550 – 13570	FIXED Mobile except aeronautical mobile (R)  5.150	FIXED Mobile except aeronautical mobile (R)  5.150	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM band (13553-13567 kHz)
13570 – 13600	BROADCASTING 5.134  5.151	BROADCASTING 5.134  MLT02 5.151	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
13600 – 13800	BROADCASTING	BROADCASTING  MLT02	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
13800 – 13870	BROADCASTING 5.134  5.151	BROADCASTING 5.134  MLT02 5.151	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
13870 – 14000	FIXED Mobile except aeronautical mobile (R)	FIXED Mobile except aeronautical mobile (R)	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
14000 – 14250	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE	Amateur applications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
14250 – 14350	AMATEUR	AMATEUR	Amateur applications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
14350 – 14990	FIXED	FIXED	Fixed links		
	Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
14990 – 15005	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)			
	5.111	5.111	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
15005 – 15010	STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL			
	Space Research	Space Research	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
15010 – 15100	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		ITU RR Appendix 26.
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
15100 – 15600	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
		MLT02	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
15600 – 15800	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.	ITU RR Article 12.
	5.146	MLT02 5.146		European Legislation: EC Decision 2006/771/EC as amended.	
15800 – 16360	FIXED	FIXED	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
16360 – 17410	MARITIME MOBILE 5.109 5.110 5.132 5.145	MARITIME MOBILE 5.109 5.110 5.132 5.145	Maritime communications  SRDs	  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (16805, 16805.5, 16806, 16903, 16903.5, 16904 kHz). DSC distress traffic (16804.5 kHz). MSI (16806.5 kHz). Radiotelephony distress and safety traffic (16420 kHz). Telex distress traffic (16695 kHz).
17410 – 17480	FIXED	FIXED	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
17480 – 17550	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.	ITU RR Article 12.
	5.146	MLT02 5.146		European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
17550 – 17900	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350). National Legislation S.L.399.40.	ITU RR Article 12.
		MLT02		European Legislation: EC Decision 2006/771/EC as amended.	
17900 – 17970	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 27.
17970 – 18030	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 26.
18030 – 18052	FIXED	FIXED	Fixed links SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
18052 – 18068	FIXED Space Research	FIXED Space Research	Fixed links  SRDs	  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
18068 – 18168	AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications  SRDs	  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
18168 – 18780	FIXED Mobile except aeronautical mobile	FIXED Mobile except aeronautical mobile	Fixed links Maritime communications SRDs	  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	



# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
18780 – 18900	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		ITU RR Appendix 17. DSC calling (18898.5, 18899, 18899.5 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
18900 – 19020	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
	5.146	MLT02 5.146	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
19020 – 19680	FIXED	FIXED	Fixed links		
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
19680 – 19800	MARITIME MOBILE 5.132	MARITIME MOBILE 5.132	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (19703.5, 19704, 19704.5 kHz). MSI (19680.5 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
19800 – 19990	FIXED	FIXED	Fixed links		
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
19990 – 19995	STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research			
	5.111	5.111	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
19995 – 20010	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)  5.111	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)  5.111	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
20010 – 21000	FIXED Mobile	FIXED Mobile	Fixed links  SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
21000 – 21450	AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications Amateur applications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
21450 – 21850	BROADCASTING	BROADCASTING  MLT02	Shortwave broadcasting (reception only) SRDs	National Legislation: Broadcasting Act (Chapter 350).  National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Article 12.
21850 – 21870	FIXED	FIXED	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
21870 – 21924	FIXED 5.155B	FIXED 5.155B	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
21924 – 22000	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ITU RR Appendix 27.

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
22000 – 22855	MARITIME MOBILE 5.132	MARITIME MOBILE 5.132	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (22374.5, 22375, 22375.5, 22444, 22444.5, 22445 kHz). MSI (22376 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
22855 – 23000	FIXED	FIXED	Fixed links		
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
23000 – 23200	FIXED	FIXED			
	Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
23200 – 23350	FIXED 5.156A	FIXED 5.156A			
	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
23350 – 24000	FIXED	FIXED	Fixed links		
	MOBILE except aeronautical mobile 5.157	MOBILE except aeronautical mobile 5.157	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
24000 – 24450	FIXED	FIXED			
	LAND MOBILE	LAND MOBILE	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

TABLE OF FREQUENCY ALLOCATIONS FOR MALTA

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
24450 – 24600	FIXED LAND MOBILE Radiolocation 5.132A	FIXED LAND MOBILE Radiolocation 5.132A	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
24600 – 24890	FIXED LAND MOBILE	FIXED LAND MOBILE	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
24890 – 24990	AMATEUR AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications Amateur applications SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
24990 – 25005	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
25005 – 25010	STANDARD FREQUENCY AND TIME SIGNAL Space Research	STANDARD FREQUENCY AND TIME SIGNAL Space Research	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
25010 – 25070	FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
25070 – 25210	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		ITU RR Appendix 17. DSC calling (25208.5, 25209, 25209.5 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
25210 – 25550	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
25550 – 25670	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149	5.149	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
25670 – 26100	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
		MLT02	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
26100 – 26175	MARITIME MOBILE 5.132	MARITIME MOBILE 5.132	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25. DSC calling (26121, 26121.5, 26122 kHz). MSI (26100.5 kHz).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
26175 – 26200	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part A ~ The Radio Spectrum in kHz

9 kHz to 27 500 kHz

Frequency Band (kHz)	ITU Allocation and Footnotes (Relevant to Malta)	National Allocation and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
26200 – 26350	FIXED	FIXED			
	MOBILE except aeronautical mobile Radiolocation 5.132A	MOBILE except aeronautical mobile Radiolocation 5.132A			
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
26350 – 27500	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	CB radio (26960-27410 kHz) Paging (private, on-site, 26975-27225 kHz)	National Legislation S.L.399.40.	ECC Dec(11)03.
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM band (26957-27283 kHz)
	5.150	5.150			

## **Part B**

### **The Radio Spectrum in MHz**

**27.5 MHz to 10 000 MHz**

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
27.5 – 28	METERELOGICAL AIDS	METERELOGICAL AIDS			
	FIXED	FIXED			
	MOBILE	MOBILE			
			SRDs	National Legislation: S.L.399.40.	
			UWB	European Legislation: EC Decision 2006/771/EC as amended.	
		MLT01		National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2007/131/EC as amended.	
28 – 29.7	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE	Amateur applications		
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
29.7 – 30.005	FIXED				
	MOBILE	MOBILE			
			SRDs	National Legislation: S.L.399.40.	ECC Dec (06)08.
			Wireless audio PMSE equipment	European Legislation: EC Decision 2006/771/EC as amended.	
		MLT04			
30.005 – 30.01	SPACE OPERATION (satellite identification)				
	FIXED				
	MOBILE	MOBILE			
	SPACE RESEARCH				
			SRDs	National Legislation: S.L.399.40.	
			Wireless audio PMSE equipment	European Legislation: EC Decision 2006/771/EC as amended.	



# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
30.01 – 37.5	FIXED				
	MOBILE	MOBILE	Paging (private, on-site, 31.3-31.9 MHz)		
37.5 – 38.25	MOBILE	MOBILE	SRDs	National Legislation: S.L.399.40.	ERC Rec 70-03. ECC Dec (01)11 (limited to the band 34.995-35.225 MHz).
	Radio astronomy	Radio astronomy	Wireless audio PMSE equipment	European Legislation: EC Decision 2006/771/EC as amended.	
	5.149	5.149	Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
38.25 – 39	FIXED				
	MOBILE		Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
39 – 39.5	FIXED				
	MOBILE	MOBILE			
39.5 – 39.986	Radio location 5.132A	Radio location 5.132A	Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
	FIXED				
39.5 – 39.986	MOBILE	MOBILE	Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
	FIXED				
39.986 – 40.02	MOBILE	MOBILE			
	Space research	Space research	Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
40.02 – 40.98	FIXED				
	MOBILE	MOBILE	SRDs	National Legislation: S.L.399.40.	ISM band (40.66-40.7 MHz). ECC Dec (01)12. ERC Rec 70-03.
5.150	5.150	Wireless audio PMSE equipment	European Legislation: EC Decision 2006/771/EC as amended.		

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
40.98 – 41.015	FIXED				
	MOBILE Space research	MOBILE Space research	SRDs	National Legislation: S.L.399.40.	In the band 40.995-41.015 MHz.
41.015 – 44	FIXED				
	MOBILE	MOBILE	SRDs	National Legislation: S.L.399.40.	In the band 41.015-41.205 MHz.
44 – 47	FIXED				
	MOBILE	MOBILE			
47 – 50	BROADCASTING	LAND MOBILE			ERC Rec T/R 25-08. On -site paging systems in the band 47-47.25 MHz.
	5.164	5.164			
50 – 52	BROADCASTING	LAND MOBILE			
	5.164	Amateur 5.164	Amateur applications		
52 – 54	BROADCASTING	LAND MOBILE			ERC Rec T/R 25-08 (single frequency applications).
	5.164	5.164			
54 – 61	BROADCASTING	LAND MOBILE			ERC Rec T/R 25-08 (paired with 61-68 MHz).
	5.164	5.164			
61 – 68	BROADCASTING	LAND MOBILE			ERC Rec T/R 25-08 (paired with 54-61 MHz).
	5.164	5.164			
68 – 74.8	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	PMR		Government services. ERC Rec T/R 25-08 (paired with 77.8-84.6 MHz).
74.8 – 75.2		Amateur			Limited to the band 70-70.5 MHz.
		5.149			
74.8 – 75.2	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.180	5.180			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
75.2 – 77.7	FIXED MOBILE except aeronautical mobile	MOBILE	PMR		Government services. ERC Rec T/R 25-08 (paired with 85-87.5 MHz).
77.7 – 77.8	FIXED MOBILE except aeronautical mobile	MOBILE			ERC Rec T/R 25-08 (single frequency operation).
77.8 – 84.6	FIXED MOBILE except aeronautical mobile	MOBILE			Government services. ERC Rec T/R 25-08 (paired with 68-74.8 MHz).
84.6 - 85	FIXED MOBILE except aeronautical mobile	MOBILE			Government services. ERC Rec T/R 25-08 (single frequency operation).
85 – 87.5	FIXED MOBILE except aeronautical mobile	MOBILE			ERC Rec T/R 25-08 (paired with 75.2-77.7 MHz).
87.5 – 100	BROADCASTING	BROADCASTING	Broadcasting (FM Sound)	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1984 Agreement.
		MLT02	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
100 – 108	BROADCASTING	BROADCASTING	Broadcasting (FM Sound)	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1984 Agreement.
		MLT02	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
108 – 117.975	AERONAUTICAL RADIONAVIGATION  5.197A	AERONAUTICAL RADIONAVIGATION  5.197A	Radionavigation applications		ILS / Localiser (108-112 MHz). VOR (108-117.975 MHz). Safety and regularity of flights, below 112 MHz limited to ground based data link transmitters.
117.975 – 121.45	AERONAUTICAL MOBILE (R)  5.111 5.200	AERONAUTICAL MOBILE (R)  5.111 5.200	Aeronautical communications		Aeronautical mobile communications for safety and regulatory of flights.
121.45 – 121.55	AERONAUTICAL MOBILE (R)  5.111 5.200	AERONAUTICAL MOBILE (R)  5.111 5.200	Aeronautical communications		Band only available for distress and safety. Aeronautical emergency frequency 121.5 MHz.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
121.55 – 137	AERONAUTICAL MOBILE (R)  5.111 5.200	AERONAUTICAL MOBILE (R)  5.111 5.200	Aeronautical communications		Aeronautical emergency frequency 121.5 MHz. Auxiliary frequency to emergency frequency 123.1 MHz.
137 – 137.025	SPACE OPERATION (s-E)	Space operation (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)			
	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209	S-PCS.		ERC Dec (99)06.
	SPACE RESEARCH (s-E) Fixed	Space research (s-E)			
137.025 – 137.175	Mobile except aeronautical mobile (R)  5.208	MOBILE  5.208			Restricted to Aeronautical mobile (OR), including air sport.
	SPACE OPERATION (s-E)	Space operation (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)			
	SPACE RESEARCH (s-E) Fixed	Space research (s-E)			
137.175 – 137.825	Mobile except aeronautical mobile (R)  5.208	MOBILE  5.208			Mobile restricted to Aeronautical mobile (OR), including air sport.
	Mobile-satellite (s-E) 5.208A 5.208B 5.209	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209	S-PCS.		ERC Dec (99)06.
	SPACE OPERATION (s-E)	Space operation (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)	Meteorological satellite reception		
137.825 – 138	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209	S-PCS.		ERC Dec (99)06.
	SPACE RESEARCH (s-E) Fixed	Space research (s-E)			
	Mobile except aeronautical mobile (R)  5.208	MOBILE  5.208			Mobile restricted to Aeronautical mobile (OR), including air sport.
	Mobile-satellite (s-E) 5.208A 5.208B 5.209	Mobile-satellite (s-E) 5.208A 5.208B 5.209	S-PCS.		ERC Dec (99)06.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
138 – 143.6	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical applications		
	5.211	5.211	SRDs	National Legislation: S.L.399.40.	In the band 138.2-138.45 MHz (ERC Rec 70-03).
143.6 – 143.65	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		
	5.211	5.211			
143.65 – 144	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		
	5.211	5.211			
144 – 146	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE	Amateur applications		
146 – 148	FIXED				
	MOBILE except aeronautical mobile (R)	MOBILE	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
148 – 149.9	FIXED				
	MOBILE except aeronautical mobile (R)	MOBILE	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	MOBILE-SATELLITE (E-s) 5.209	MOBILE-SATELLITE (E-s) 5.209	S-PCS		ERC Dec (99)06.
149.9 – 150.05	5.218 5.219 5.221	5.218 5.219 5.221			
	MOBILE-SATELLITE (E-s) 5.209 5.224A	MOBILE-SATELLITE (E-s) 5.209 5.224A	S-PCS		ERC Dec (99)06.
	RADIONAVIGATION-SATELLITE 5.224 B	RADIONAVIGATION-SATELLITE 5.224 B	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08.ECC Dec (06)06.
150.05 – 153	5.220 5.222 5.223	5.220 5.222 5.223			
	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
153 – 154	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149	5.149			
153 – 154	FIXED				
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	Meteorological Aids				

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
154 – 156	FIXED MOBILE except aeronautical mobile (R) 5.226	MOBILE except aeronautical mobile (R) 5.226	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
156 – 156.4875	FIXED MOBILE except aeronautical mobile (R) 5.226	MOBILE except aeronautical mobile (R) 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
156.4875 – 156.5375	MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18. DSC distress, safety and calling (156.525 MHz).
156.5375 – 156.5625	MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	MARITIME MOBILE (distress and calling via DSC) MOBILE except aeronautical mobile (R) 5.111 5.226 5.227	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
156.5625 – 156.7625	FIXED MOBILE except aeronautical mobile (R) 5.226	MOBILE except aeronautical mobile (R) 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
156.7625 – 156.7875	MARITIME MOBILE Mobile-satellite (E-s) 5.111 5.226 5.228	MARITIME MOBILE Mobile-satellite (E-s) 5.111 5.226 5.228	Maritime communications Satellite AIS	National Legislation: S.L.399.40. National Legislation: S.L.399.40.	ITU RR Appendix 18. ITU RR Appendix 18.
156.7875 – 156.8125	MARITIME MOBILE (distress and calling) 5.111 5.226	MARITIME MOBILE (distress and calling) 5.111 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18. International distress, safety and calling (156.8 MHz).
156.8125 – 156.8375	MARITIME MOBILE Mobile-satellite (E-s) 5.111 5.226 5.228	MARITIME MOBILE Mobile-satellite (E-s) 5.111 5.226 5.228	Maritime communications Satellite AIS	National Legislation: S.L.399.40. National Legislation: S.L.399.40.	ITU RR Appendix 18. ITU RR Appendix 18.
156.8375 – 157.45	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
157.45 – 160.6	FIXED MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08, ECC Dec (06)06.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
160.6 – 160.975	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
160.975 – 161.475	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	PMR (12.5 kHz channel spacing) Maritime communications		ERC Rec T/R 25-08, ECC Dec (06)06. Private maritime mobile channels.
161.475 – 161.9625	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
161.9625 – 161.9875	FIXED MOBILE except aeronautical mobile Mobile-satellite (E-s) 5.228F 5.226 5.228A 5.228B	MOBILE except aeronautical mobile 5.226 5.228A 5.228B	Maritime communications AIS	National Legislation: S.L.399.40.	ITU RR Appendix 18, ERC Dec (99)17. AIS (161.975 MHz).
161.9875 – 162.0125	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
162.0125 – 162.0375	FIXED MOBILE except aeronautical mobile Mobile-satellite (E-s) 5.228F 5.226 5.228A 5.228B	MOBILE except aeronautical mobile 5.226 5.228A 5.228B	Maritime communications AIS	National Legislation: S.L.399.40.	ITU RR Appendix 18, ERC Dec (99)17. AIS (162.025 MHz).
162.0375 – 174	FIXED MOBILE except aeronautical mobile 5.226	MOBILE except aeronautical mobile 5.226	PMR (12.5 kHz channel spacing) Maritime communications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ERC Rec T/R 25-08, ECC Dec (06)06. Private maritime mobile channels.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
174 – 223	BROADCASTING	BROADCASTING	Digital Television Broadcasting Digital Sound Broadcasting		ITU Geneva 2006 Agreement. Wiesbaden 1995 Special Arrangement as revised in Constanta 2007.
		Land mobile			
223 – 230	BROADCASTING	BROADCASTING	Digital Sound Broadcasting		ITU Geneva 2006 Agreement. Wiesbaden 1995 Special Arrangement as revised in Constanta 2007.
	Fixed Mobile	MLT06			
230 – 235	FIXED				
	MOBILE	MOBILE			
235 – 240	FIXED				
	MOBILE	MOBILE	SAB / SAP applications		
240 – 242.95	FIXED				
	MOBILE	MOBILE			
242.95 – 243.05	FIXED				
	MOBILE	AERONAUTICAL MOBILE	EPIRBs		Band only available for distress and safety purposes.
243.05 – 267	FIXED				
	MOBILE	MOBILE	Mobile applications		Government services.
267 – 272	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE			
	Space Operation (s-E)				
	5.254 5.257	5.254 5.257			



# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
272 – 273	SPACE OPERATION (s-E) FIXED MOBILE 5.254	FIXED MOBILE 5.254	Fixed links		
273 –312	FIXED MOBILE 5.254	FIXED MOBILE	Fixed links Mobile applications Aeronautical UHF communications		Government services.
312 – 315	FIXED MOBILE Mobile-Satellite (E-s) 5.254 5.255	MOBILE 5.254 5.255	SAB / SAP applications		
315 – 322	FIXED MOBILE 5.254	MOBILE 5.254	SAB / SAP applications		
322 – 328.6	FIXED MOBILE RADIO ASTRONOMY 5.149	FIXED MOBILE RADIO ASTRONOMY 5.149	Fixed links		
328.6 – 335.4	AERONAUTICAL RADIONAVIGATION 5.258	AERONAUTICAL RADIONAVIGATION 5.258	ILS / Glide path		
335.4 – 380	FIXED MOBILE 5.254	FIXED MOBILE 5.254	Fixed links SAB / SAP applications		
380 – 385	FIXED MOBILE          5.254	MOBILE          5.254	SAB / SAP applications (380-381.3, 381.7-384.3 MHz)		No future assignments for SAB / SAP applications in this band. Spectrum within this band is earmarked for PPDR applications. ECC Dec (08)05, ERC Rec T/R 25-08 (paired with 391.475-391.6 MHz). DMO (Emergency services, ERC Dec (01)19, 380-380.15 MHz, paired with 390-390.15 MHz). AGA (Emergency services, ECC Dec (06)05, 384.8-385 MHz, paired with 394.8-395 MHz).

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
385 – 387	FIXED	FIXED			
	MOBILE 5.254	MOBILE 5.254	SAB / SAP applications		
387 – 390	FIXED	FIXED			
	MOBILE Mobile-Satellite (s-E) 5.208A 5.208B 5.254 5.255	MOBILE	SAB /SAP applications		
390 – 395	FIXED				
	MOBILE 5.254	MOBILE 5.254	SAB / SAP applications (390-391.1 MHz, 392.1-394.1 MHz)		No future assignments for SAB / SAP applications in this band. Spectrum within this band is earmarked for PPDR applications. ECC Dec (08)05, ERC Rec T/R 25-08 (paired with 381.475-381.6 MHz). DMO (Emergency services, ERC Dec (01)19, 390-390.15 MHz, paired with 380-380.15 MHz). AGA (Emergency services, ECC Dec (06)05, 394.8-395 MHz, paired with 384.8-385 MHz).
395 – 399.9	FIXED	FIXED	Fixed links		
	MOBILE 5.254	MOBILE 5.254	SAB/ SAP applications		
399.9 – 400.05	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	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261			
400.15 – 401	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)			
	MOBILE-SATELLITE (s-E) 5.208A 5.208B 5.209	MOBILE-SATELLITE (s-E) 5.208A 5.208B 5.209			LEO satellites (ERC Dec (99)06).
	SPACE RESEARCH (s-E) 5.263 Space operation (s-E) 5.264	SPACE RESEARCH (s-E) 5.263 SPACE OPERATION (s-E) 5.264			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
401 – 402	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	SPACE OPERATION (s-E)				
	EARTH EXPLORATION-SATELLITE (E-s)	EARTH EXPLORATION-SATELLITE (E-s)			
	METEOROLOGICAL-SATELLITE (E-s)	METEOROLOGICAL-SATELLITE (E-s)			
	Fixed				
Mobile except aeronautical mobile			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
402 – 403	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	EARTH EXPLORATION-SATELLITE (E-s)	EARTH EXPLORATION-SATELLITE (E-s)			
	METEOROLOGICAL-SATELLITE (E-s)	METEOROLOGICAL-SATELLITE (E-s)			
	Fixed				
	Mobile except aeronautical mobile			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.
403 – 406	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	Fixed				
	Mobile except aeronautical mobile			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.
406 – 406.1	MOBILE-SATELLITE (E-s)	MOBILE-SATELLITE (E-s)	Sat-EPIRBs (Emergency beacons)	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/631/EC	Band only available for distress and safety purposes
406.1 – 410	5.266 5.267	5.266 5.267			
	FIXED	LAND MOBILE	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	MOBILE except aeronautical mobile				
406.1 – 410	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149	5.149			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
410 – 420	FIXED MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	PMR (12.5 / 25 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	SPACE RESEARCH (s-s) 5.268				
420 – 430	FIXED MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	PMR (12.5 / 25 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	Radiolocation	Radiolocation			
430 – 432	AMATEUR RADIOLOCATION	AMATEUR RADIOLOCATION	Amateur applications		
	432 – 433.05	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	Amateur applications	
433.05 – 434.79	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	Amateur applications		
	5.138	5.138 Land Mobile	SRDs ISM applications	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
434.79 – 438	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	Amateur applications		
	438 – 440	AMATEUR RADIOLOCATION	AMATEUR RADIOLOCATION	Amateur applications	
440 – 450	FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	Links (440.22-441 MHz) PMR 446	National Legislation: S.L.399.40.	Analogue PMR 446 in the band 446-446.1 MHz (ERC Dec (98)25) & digital PMR 446 in the band 446.1-446.2 MHz (ECC Dec (05)12).
	Radiolocation 5.286	5.286	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
450 – 455	FIXED MOBILE 5.286AA	FIXED MOBILE 5.286AA	Links (450.22-451 MHz) PMR (12.5 kHz channel spacing) Paging (private, on-site)		ERC Rec T/R 25-08. ECC Dec (06)06.
	5.209 5.286 5.286A	5.209 5.286 5.286A			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
455 – 456	FIXED MOBILE 5.286AA 5.209 5.286A	MOBILE 5.286AA 5.209 5.286A	PMR (12.5 kHz channel spacing) Paging (private, on-site)		ERC Rec T/R 25-08. ECC Dec (06)06.
456 – 459	FIXED MOBILE 5.286AA 5.287	MOBILE 5.286AA 5.287	On-board ship communications (457.525, 457.550, 457.575 MHz) PMR (12.5 kHz channel spacing) Telemetry		ERC Rec T/R 32-02.
459 – 460	FIXED MOBILE 5.286AA 5.209 5.286A	MOBILE 5.286AA 5.209 5.286A	PMR Paging (private, on-site)		ERC Rec T/R 25-08. ECC Dec (06)06.
460 – 470	FIXED MOBILE 5.286AA  Meteorological-satellite (s-E) 5.287 5.289	MOBILE 286AA  5.287 5.289	On-board ship communications (467.525, 467.550, 467.575 MHz) PMR (12.5 kHz channel spacing) Telemetry Paging (private, on-site)		ERC Rec T/R 32-02. Rec T/R 25-08. ECC Dec (06)06.
470 - 790	BROADCASTING          5.149 5.296 5.306 5.311A	BROADCASTING  Mobile          MLT02 MLT06 MLT08 5.149 5.296 5.306 5.311A	Television broadcasting (DTT)  Wireless audio PMSE equipment	National Legislation: S.L.399.40.  European Legislation: EC Decision 2014/641/EU.	ITU Geneva 2006 plan.  ERC Rec 70-03.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
790 – 862	FIXED BROADCASTING MOBILE except aeronautical mobile 5.316B 5.317A	BROADCASTING MOBILE except aeronautical mobile 5.316B 5.317A	Television broadcasting (DTT)		ITU Geneva 2006 plan. MCA/D/14-1933. This band is earmarked for terrestrial systems capable of providing electronic communication services in accordance with EC Decisions 243/2012/EU and C(2013)4590.
	5.316 5.316A	MLT05 MLT06 MLT07 MLT08 5.316 5.316A	Wireless audio PMSE equipment	National Legislation: S.L.399.40.  European Legislation: EC Decision 2014/641/EU.	Wireless audio PMSE equipment operating in the band 854-862 MHz is permitted until 30 June 2015. Wireless audio PMSE equipment can make use of the band 823-832 MHz from a date to be announced by the Malta Communications Authority in its official website.
862 – 890	FIXED MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ERC Rec 70-03.
			RFIDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/804/EC.	In the band 865-868 MHz.
			TRA-ECS	European Legislation: EC Directive 87/372/EC as amended. EC Decision 2009/766/EC as amended.	MCA/10/44/D. In the band 880-890 MHz.
			MCV services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2010/166/EU.	In the band 880-890 MHz.
		BROADCASTING			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
890 – 942	FIXED				
	MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A	TRA-ECS	European Legislation: EC Directive 87/372/EC as amended. EC Decision 2009/766/EC as amended.	MCA/10/44/D. In the bands 890-915 MHz and 925-942 MHz.
			MCV services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2010/166/EU.	In the bands 890-915 MHz and 925-942 MHz.
	BROADCASTING Radiolocation	Radiolocation			
942 – 960	FIXED				
	MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A	TRA-ECS	European Legislation: EC Directive 87/372/EC as amended. EC Decision 2009/766/EC as amended.	MCA/10/44/D.
			MCV services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2010/166/EU.	
	BROADCASTING				
960 – 1164	AERONAUTICAL RADIONAVIGATION 5.328	AERONAUTICAL RADIONAVIGATION 5.328	Aeronautical radionavigation applications		Flight safety, navigation and information distribution systems (DME, JTIDS, TACAN, SSR, MIDS).
	AERONAUTICAL MOBILE (R) 5.327A	AERONAUTICAL MOBILE (R) 5.327A			
1164 – 1215	AERONAUTICAL RADIONAVIGATION 5.328	AERONAUTICAL RADIONAVIGATION 5.328	Aeronautical radionavigation applications		Flight safety, navigation and information distribution systems (DME, JTIDS, TACAN, SSR, MIDS).
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B	Radionavigation applications		Satellite navigation: (Galileo (1164-1214 MHz) & GLONASS (1190.3-1213.8 MHz)).
	5.328A	5.328A			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1215 – 1240	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			Active sensors (satellite).
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		Radars.
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	Radionavigation applications		Satellite navigation (GLONASS (1237.8-1253.8 MHz & GPS (1215.6-1239.6 MHz)).
	SPACE RESEARCH (active) 5.332	SPACE RESEARCH (active) 5.332			
1240 – 1260	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			Active sensors (satellite).
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		Radars.
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	Radionavigation applications		Satellite navigation (GLONASS (1237.8-1253.8 MHz)).
	SPACE RESEARCH (active) Amateur 5.332 5.335A	SPACE RESEARCH (active) Amateur 5.332 5.335A	Amateur applications		
1260 - 1270	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			Active sensors (satellite).
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	Radionavigation applications		Satellite navigation (Galileo (1260-1300 MHz)).
	SPACE RESEARCH (active) Amateur 5.282 5.335A	SPACE RESEARCH (active) Amateur 5.282 5.335A	Amateur applications Amateur applications		
1270 - 1300	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			Active sensors (satellite).
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		Wind profiler radar (1270-1295 MHz).
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.329 5.329A	Radionavigation applications		Satellite navigation (Galileo (1260-1300 MHz)).
	SPACE RESEARCH (active) Amateur 5.335A	SPACE RESEARCH (active) Amateur 5.335A	Amateur applications		
1300 – 1350	AERONAUTICAL RADIONAVIGATION 5.337	AERONAUTICAL RADIONAVIGATION 5.337	Radionavigation applications		
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	RADIONAVIGATION-SATELLITE (E-s) 5.149 5.337A	RADIONAVIGATION-SATELLITE (E-s) 5.149 5.337A			Satellite navigation systems.



# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1350 – 1400	FIXED	FIXED			1350-1375 MHz and 1375-1400 MHz reserved for low capacity fixed links (paired with 1492-1517 MHz and 1427-1452 MHz, ERC Rec T/R 13-01).
	MOBILE	MOBILE	Mobile applications (tactical radio relay)		
	RADIOLOCATION 5.149 5.338A 5.339	RADIOLOCATION 5.149 5.338A 5.339			
1400 – 1427	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			Passive sensors (satellite). All emissions prohibited, ECC Dec (11)01.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.340 5.341	SPACE RESEARCH (passive) 5.340 5.341			
1427 – 1429	SPACE OPERATIONS (E-s)	SPACE OPERATIONS (E-s)	Fixed links		1427-1452 MHz reserved for low capacity fixed links (paired with 1375-1400 MHz, ERC Rec T/R 13-01).
	FIXED	FIXED			
1429 – 1452	MOBILE except aeronautical mobile 5.338A 5.341	MOBILE except aeronautical mobile 5.338A 5.341			1427-1452 MHz reserved for low capacity fixed links (paired with 1375-1400 MHz, ERC Rec T/R 13-01).
	FIXED	FIXED			
1429 – 1452	MOBILE except aeronautical mobile 5.338A 5.341	MOBILE except aeronautical mobile 5.338A 5.341			1427-1452 MHz reserved for low capacity fixed links (paired with 1375-1400 MHz, ERC Rec T/R 13-01).
	FIXED	FIXED			
1452 – 1492	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			This band is being considered for the supplementary downlink of TRA-ECS in accordance with ECC Dec (13)03.  No future assignments for broadcasting services in this band shall be considered.  Maastricht 2002 special arrangement, as revised in Constanta, 2007.  S-DAB (1479.5-1492 MHz),
	BROADCASTING 5.345	BROADCASTING 5.345			
	BROADCASTING-SATELLITE 5.208B 5.341 5.345	BROADCASTING-SATELLITE 5.208B 5.341 5.345			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1492 – 1518	FIXED	FIXED			1492-1517 MHz reserved for low capacity fixed links (paired with 1350-1375 MHz, ERC Rec T/R 13-01).
	MOBILE except aeronautical mobile 5.341	MOBILE except aeronautical mobile 5.341			
1518 – 1525	FIXED				IMT (satellite component), ECC Dec (04)09.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	MOBILE-SATELLITE (s-E) 5.348 5.348A 5.351A 5.341	MOBILE-SATELLITE (s-E) 5.348 5.348A 5.351A 5.341			
1525 – 1530	SPACE OPERATION (s-E)	SPACE OPERATION (s-E)			IMT (satellite component).
	FIXED				
	MOBILE-SATELLITE (s-E) 5.208B 5.351A	MOBILE-SATELLITE (s-E) 5.208B 5.351A	Mobile-satellite applications		
	Earth exploration-satellite Mobile except aeronautical mobile 5.341 5.351 5.354	5.341 5.351 5.354			
1530 – 1535	SPACE OPERATION (s-E)	SPACE OPERATION (s-E)			IMT (satellite component). Priority for GMDSS distress, urgency and safety and for aeronautical mobile-satellite (R) service categories 1 to 6 communications.
	MOBILE-SATELLITE (s-E) 5.208B 5.351A 5.353A	MOBILE-SATELLITE (s-E) 5.208B 5.351A 5.353A	Mobile-satellite applications		
	Earth exploration-satellite				
	Fixed				
	Mobile except aeronautical mobile 5.341 5.351 5.354	5.341 5.351 5.354			
1535 – 1559	MOBILE-SATELLITE (s-E) 5.208B 5.351A	MOBILE-SATELLITE (s-E) 5.208B 5.351A	Mobile-satellite applications		IMT (satellite component). Priority for GMDSS distress, urgency and safety and for aeronautical mobile-satellite (R) service categories 1 to 6 communications within the band 1544-1545 MHz.
	5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A	5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A			
1559 – 1610	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Radionavigation applications		Satellite navigation (Galileo (1559.42-1591.42 MHz), GLONASS (1592.9-1610.5 MHz) & GPS (1563.42-1587.42 MHz)).
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.208B, 5.328B 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.208B, 5.328B 5.329A			
	5.341	5.341			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1610 – 1610.6	MOBILE-SATELLITE (E-s) 5.351A AERONAUTICAL RADIONAVIGATION  5.341 5.364 5.366 5.367 5.368 5.371 5.372	MOBILE-SATELLITE (E-s) 5.351A AERONAUTICAL RADIONAVIGATION  5.341 5.364 5.366 5.367 5.368 5.371 5.372	Mobile-satellite applications Radionavigation applications		ECC Dec (09)02. Satellite navigation (GLONASS (1592.9-1610.5 MHz)).
1610.6 – 1613.8	MOBILE-SATELLITE (E-s) 5.351A RADIO ASTRONOMY AERONAUTICAL NAVIGATION  5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372	MOBILE-SATELLITE (E-s) 5.351A AERONAUTICAL RADIONAVIGATION  5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372	Mobile-satellite applications		ECC Dec (09)02.
1613.8 – 1626.5	MOBILE-SATELLITE (E-s) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (s-E) 5.208B  5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372	MOBILE-SATELLITE (E-s) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (s-E) 5.208B  5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372	Mobile-satellite applications		ECC Dec (09)02.
1626.5 – 1660	MOBILE-SATELLITE (E-s) 5.351A   5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376	MOBILE-SATELLITE (E-s) 5.351A   5.341 5.351 5.353A 5.354 5.357A 5.374 5.375 5.376	Mobile-satellite applications		IMT (satellite component). Priority for GMDSS distress, urgency and safety and for aeronautical mobile-satellite (R) service categories 1 to 6 communications within the band 1645.5-1646.5 MHz.
1660 – 1660.5	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 5.341 5.351 5.354 5.376A	Mobile-satellite applications		IMT (satellite component).
1660.5 – 1668	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 5.341 5.379A			
1668 – 1668.4	MOBILE-SATELLITE (E-s) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile  5.149 5.341 5.379A	MOBILE-SATELLITE (E-s) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile  5.149 5.341 5.379A			IMT (satellite component).

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1668.4 – 1670	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	MOBILE-SATELLITE (E-s) 5.351A 5.379B 5.379C	MOBILE-SATELLITE (E-s) 5.351A 5.379B 5.379C			IMT (satellite component).
	RADIO ASTRONOMY	RADIO ASTRONOMY			
5.149 5.341 5.379D 5.379E	5.149 5.341 5.379D 5.379E				
1670 – 1675	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	FIXED	FIXED			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (E-s) 5.351A 5.379B	MOBILE-SATELLITE (E-s) 5.351A 5.379B			IMT (satellite component). ECC Dec (04)09.
5.341 5.379D 5.379E 5.380A	5.341 5.379D 5.379E 5.380A				
1675 – 1690	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	FIXED	FIXED			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)	Meteorological applications		
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.341	5.341			
1690 – 1700	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)	Meteorological applications		
	Fixed	Fixed			
	Mobile except aeronautical mobile	Mobile except aeronautical mobile			
	5.289 5.341	5.289 5.341			
1700 – 1710	FIXED	FIXED			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)			
	MOBILE except aeronautical mobile	Mobile except aeronautical mobile			
	5.289 5.341	5.289 5.341			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1710 – 1785	FIXED	FIXED	TRA-ECS	European Legislation: EC Decision 2009/766/EC as amended.	MCA/10/44/D.
	MOBILE 5.384A	MOBILE 5.384A	MCA services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	
	5.149 5.341 5.385	5.149 5.341 5.385	MCV services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2010/166/EU.	
1785 – 1800	FIXED	FIXED			This band is not planned for IMT.
	MOBILE 5.384A	MOBILE 5.384A	Wireless audio PMSE equipment	National Legislation: S.L.399.40.  European Legislation: EC Decision 2014/641/EU.	
1800 – 1805	FIXED	Fixed			This band is not planned for IMT.
	MOBILE 5.384A	MOBILE 5.384A	Wireless audio PMSE equipment	National Legislation: S.L.399.40.  European Legislation: EC Decision 2014/641/EU.	
1805 – 1880	FIXED	FIXED	TRA-ECS	European Legislation: EC Decision 2009/766/EC as amended.	MCA/10/44/D.
	MOBILE 5.384A	MOBILE 5.384A	MCA services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	
			MCV services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2010/166/EU.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1880 – 1885	FIXED MOBILE 5.384A	Fixed MOBILE 5.384A	DECT	National Legislation: S.L.399.40.  European Legislation: EC Directive 91/287/EEC.	ERC Dec (94)03.
1885 – 1900	FIXED MOBILE 5.388A  5.388	Fixed MOBILE 5.388A  5.388	DECT	National Legislation: S.L.399.40.  European Legislation: EC Directive 91/287/EEC.	ERC Dec (94)03.
1900 – 1930	FIXED MOBILE 5.388A  5.388	Fixed MOBILE 5.388A  5.388	TRA-ECS  MCA services	European Legislation: EC Decision 2012/688/EU.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz). TDD-Unpaired (1900-1920 MHz), ERC Rec (01)01.  In the band 1920-1930 MHz.
1930 – 1970	FIXED MOBILE 5.388A  5.388	Fixed MOBILE 5.388A  5.388	TRA-ECS  MCA services	European Legislation: EC Decision 2012/688/EU.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz). ERC Rec (01)01.
1970 – 1980	FIXED MOBILE 5.388A  5.388	Fixed MOBILE 5.388A  5.388	TRA-ECS  MCA services	European Legislation: EC Decision 2012/688/EU.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz). ERC Rec (01)01.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
1980 – 2010	FIXED	Fixed			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (E-s) 5.351A	MOBILE-SATELLITE (E-s) 5.351A	MSS	National Legislation: S.L.399.44.	IMT (satellite component).
	5.388 5.389A	5.388 5.389A		European Legislation: EC Decision 2007/98/EC.	
2010 – 2025	FIXED	Fixed			
	MOBILE 5.388A	MOBILE 5.388A			Band identified for terrestrial IMT (TDD-unpaired). Alternative usage is under study.
	5.388	5.388			
2025 – 2110	SPACE OPERATION (E-s) (s-s)				
	EARTH EXPLORATION-SATELLITE (E-s) (s-s)				
	FIXED	FIXED			ERC Rec T/R 13-01.
	MOBILE 5.391	MOBILE 5.391	SAB applications		Designated for SAP / SAB applications (ERC Rec 25-10).
	SPACE RESEARCH (E-s) (s-s)				
	5.392	5.392			
2110 – 2120	FIXED	Fixed			
	MOBILE 5.388A	MOBILE 5.388A	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (2110-2170 MHz / 1920-1980 MHz). ERC Rec (01)01.
			MCA services	National Legislation: S.L.399.40.	
	SPACE RESEARCH (deep space) (E-s)			European Legislation: EC Decision 2008/294/EC as amended.	
	5.388	5.388			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2120 – 2160	FIXED	Fixed	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (2110-2170 MHz / 1920-1980 MHz). ERC Rec (01)01.
	MOBILE 5.388A	MOBILE 5.388A	MCA services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	
2160 – 2170	FIXED	Fixed	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (2110-2170 MHz / 1920-1980 MHz). ERC Rec (01)01.
	MOBILE 5.388A	MOBILE 5.388A	MCA services	National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/294/EC as amended.	
2170 – 2200	FIXED	Fixed			IMT (satellite component).
	MOBILE MOBILE-SATELLITE (s-E) 5.351A	MOBILE MOBILE-SATELLITE (s-E) 5.351A	MSS	National Legislation: S.L.399.44.  European Legislation: EC Decision 2007/98/EC.	
2200 – 2290	SPACE OPERATION (s-E) (s-s)				ERC Rec T/R 13-01. Designated for SAP / SAB applications (ERC Rec 25-10).
	EARTH EXPLORATION-SATELLITE (s-E) (s-s)				
2290 – 2300	FIXED	FIXED	SAB applications		Designated for SAP / SAB applications (ERC Rec 25-10).
	MOBILE 5.391	MOBILE 5.391			
2290 – 2300	SPACE RESEARCH (s-E) (s-s)				Designated for SAP / SAB applications (ERC Rec 25-10).
	5.392	5.392			
2290 – 2300	FIXED	FIXED			Designated for SAP / SAB applications (ERC Rec 25-10).
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
2290 – 2300	SPACE RESEARCH (deep space) (s-E)				Designated for SAP / SAB applications (ERC Rec 25-10).



# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2300 – 2400	FIXED	FIXED			
	MOBILE 5.384A Amateur Radiolocation	MOBILE 5.384A Amateur Radiolocation	SAB applications Amateur applications		
2400 – 2450	FIXED	FIXED			
	MOBILE Amateur Radiolocation	MOBILE Amateur Amateur-satellite Radiolocation	Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications.
2450 – 2483.5	FIXED	FIXED			
	MOBILE Radiolocation	MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications
2483.5 – 2500	FIXED	FIXED			
	MOBILE MOBILE-SATELLITE (s-E) 5.351A RADIODETERMINATION-SATELLITE (s-E) 5.398 Radiolocation 5.398A	MOBILE MOBILE-SATELLITE (s-E) 5.351A	Mobile-satellite applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec (09)02. ISM applications ERC Rec 70-03.
2500 – 2520	FIXED 5.410	FIXED 5.410			
	MOBILE except aeronautical mobile 5.384A	MOBILE except aeronautical mobile 5.384A		European Legislation: EC Decision 2008/477/EC.	Band earmarked for terrestrial systems capable of providing electronic communications systems.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
2520 – 2655	FIXED 5.410 MOBILE except aeronautical mobile 5.384A	FIXED 5.410 MOBILE except aeronautical mobile 5.384A		European Legislation: EC Decision 2008/477/EC.	Band earmarked for terrestrial systems capable of providing electronic communications systems.
	BROADCASTING-SATELLITE 5.413 5.416 5.339 5.417C 5.417D 5.418B 5.418C	5.339 5.418B 5.418C			
2655 – 2670	FIXED 5.410 MOBILE except aeronautical mobile 5.384A	FIXED 5.410 MOBILE except aeronautical mobile 5.384A		European Legislation: EC Decision 2008/477/EC.	Band earmarked for terrestrial systems capable of providing electronic communications systems.
	BROADCASTING-SATELLITE 5.208B 5.413 5.416				
	Earth exploration-satellite (passive)	Earth exploration-satellite (passive)			
	Radio astronomy	Radio astronomy			
	Space research (passive)	Space research (passive)			
5.149 5.420	5.149				
2670 – 2690	FIXED 5.410 MOBILE except aeronautical mobile 5.384A	FIXED MOBILE except aeronautical mobile 5.384A		European Legislation: EC Decision 2008/477/EC.	Band earmarked for terrestrial systems capable of providing electronic communications systems.
	Earth exploration-satellite (passive)				
	Radio astronomy	Radio astronomy			
	Space research (passive)				
5.149	5.149				
2690 – 2700	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			All emissions prohibited.
	5.340	5.340			
2700 – 2900	AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	Radionavigation applications		
	5.423	5.423			
2900 – 3100	RADIOLOCATION 5.424A RADIONAVIGATION 5.426	RADIOLOCATION 5.424A RADIONAVIGATION 5.426			
	5.425 5.427	5.425 5.427			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
3100 – 3300	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active)	Earth exploration-satellite (active)			
	Space research (active)	Space research (active)			
	5.149	5.149			
3300 – 3400	RADIOLOCATION	RADIOLOCATION			
	5.149	5.149			
3400 – 3600	FIXED	FIXED	Fixed links (3494.875-3496.625 MHz & 3594.875-3596.625 MHz).		ERC Rec 14-03. No future assignments for fixed links in this band shall be considered. Existing links to be migrated to other frequency bands if and when deemed necessary.
	FIXED-SATELLITE (s-E)				
	Mobile 5.340A	MOBILE 5.340A	BWA	European Legislation: EC Decision 2008/411/EC.	MCA/D/12-0754.
	Radiolocation				
3600 – 3800	FIXED	FIXED	Fixed links		ERC Rec 12-08. No future assignments for fixed links in this band shall be considered.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)	ESVs	National Legislation: S.L.399.40.	
	Mobile	MOBILE		European Legislation: EC Decision 2008/411/EC.	MCA/D/12-0754. Band earmarked for terrestrial systems capable for providing electronic communications services.
3800 – 4200	FIXED	FIXED	Fixed links		ERC Rec 12-08.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)	FSS		
	Mobile				
4200 – 4400	AERONAUTICAL RADIONAVIGATION 5.438	AERONAUTICAL RADIONAVIGATION 5.438	Radionavigation applications		Altimeters.
	5.440	5.440			
4400 – 4500	FIXED	FIXED			
	MOBILE	MOBILE			
4500 – 4800	FIXED	FIXED			
	FIXED-SATELLITE (s-E) 5.441	FIXED-SATELLITE (s-E) 5.441			ITU RR Appendix 30B.
	MOBILE	MOBILE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
4800 – 4990	FIXED MOBILE 5.442	FIXED MOBILE except aeronautical mobile 5.442	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	Radio astronomy 5.149 5.339	Radio astronomy 5.149 5.339			
4990 – 5000	FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	RADIO ASTRONOMY Space research (passive)	RADIO ARTRONOMY			
	5.149	5.149			
5000 – 5010	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA			
	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (E-s)	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (E-s)	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	For future use by Galileo,
5010 – 5030	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA			
	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.443B	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.443B	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	Satellite navigation (Galileo C1),

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5030 – 5091	AERONAUTICAL MOBILE (R) 5.443C AERONAUTICAL MOBILE-SATELLITE (R) 5.443D AERONAUTICAL RADIONAVIGATION	AERONAUTICAL MOBILE (R) 5.443C AERONAUTICAL MOBILE-SATELLITE (R) 5.443D AERONAUTICAL RADIONAVIGATION			
	5.444	5.444	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5091 – 5150	AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION	AERONAUTICAL MOBILE 5.444B AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA AERONAUTICAL RADIONAVIGATION			
	5.444 5.444A	5.444 5.444A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5150 – 5250	AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (E-s) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B	FIXED-SATELLITE (E-s) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B			The band 5150-5200 MHz is reserved for BBDR radio applications (ECC Rec (08)04).
	5.446 5.446C 5.447B 5.447C	5.446 5.446C 5.447B 5.447C	SRDs  WAS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/513/EC as amended.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5250 – 5255	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D	RADIOLOCATION			
	MOBILE except aeronautical mobile 5.446A 5.447F	MOBILE except aeronautical mobile 5.446A 5.447F	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5255 – 5350	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	RADIOLOCATION			
	MOBILE except aeronautical mobile 5.446A 5.447F	MOBILE except aeronautical mobile 5.446A 5.447F	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5350 – 5460	EARTH EXPLORATION-SATELLITE (active) 5.448B				
	SPACE RESEARCH (active) 5.448C AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D	AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5460 – 5470	RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D	RADIONAVIGATION 5.449   RADIOLOCATION 5.448D			
	5.448B	5.448B	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5470 – 5570	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended. EC Decision 2005/513/EC as amended.	
	EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.450B	   RADIOLOCATION 5.450B			
	5.448B	5.448B			
	5570 – 5650	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B	MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B	Meteorological radars SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.
	5.452	5.452	WAS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/513/EC as amended.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5650 – 5725	RADIOLOCATION	RADIOLOCATION			
	MOBILE except aeronautical mobile 5.446A 5.450A	MOBILE except aeronautical mobile 5.446A 5.450A			
	Space research (deep space)				
	Amateur	Amateur Amateur-satellite (E-s)	Amateur applications		Amateur-satellite applications limited within the band 5650-5670 MHz.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
			WAS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/513/EC as amended.	
	5.282	5.282			
5725 – 5830	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur Mobile	Amateur applications		Earmarked for BFWA applications within the band 5725-5855 MHz (ECC Rec (06)04).
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (5725-5875 MHz).
	5.150	5.150			
5830 – 5850	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite (s-E)	Amateur-satellite (s-E) Mobile	Amateur applications		Earmarked for BFWA applications within the band 5725-5855 MHz (ECC Rec (06)04).
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	SM applications (5725-5875 MHz).
	5.150	5.150			



# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
5850 – 5925	FIXED FIXED-SATELLITE (E-s) MOBILE	FIXED FIXED-SATELLITE (E-s) MOBILE			Earmarked for BFWA applications within the band 5725-5855 MHz (ECC Rec (06)04).
			SRDs  ITS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2008/671/EC.	ISM applications (5725-5875 MHz).  Safety related applications of ITS within the band 5875-5905 MHz. The band 5855-5875 MHz is earmarked for the non-safety related applications of ITS (ECC Rec (08)01).
5925 – 6700	5.150	5.150			
	FIXED FIXED-SATELLITE (E-s) 5.457A 5.457B MOBILE	FIXED FIXED-SATELLITE (E-s) 5.457A 5.457B  Earth exploration-satellite (passive)	Fixed links ESVs	National Legislation: S.L.399.40.	ERC Rec 14-01 & ERC Rec 14-02.
	5.149 5.440 5.458	5.149 5.440 5.458	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02 (limited to the band 6000-6700 MHz).
6700 – 7075	FIXED FIXED-SATELLITE (E-s) (s-E) 5.441 MOBILE	FIXED FIXED-SATELLITE (E-s) (s-E) 5.441  Earth exploration-satellite (passive)	Fixed links		ERC Rec 14-02. ITU RR Appendix 30B.
	5.458 5.458A 5.458B 5.458C	5.458 5.458A 5.458B 5.458C	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
7075 – 7145	FIXED	FIXED	Fixed links		ECC Rec (02)06 & ERC Rec 14-02.
	MOBILE				
		Earth exploration-satellite (passive)			
	5.458	5.458	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7145 – 7235	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	MOBILE	MOBILE			
	SPACE RESEARCH (E-s) 5.460				
		Earth exploration-satellite (passive)			
	5.458	5.458	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7235 – 7250	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	MOBILE				
		Earth exploration-satellite (passive)			
	5.458	5.458	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7250 – 7300	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.461	5.461			

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
7300 – 7450	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E) MOBILE except aeronautical mobile	FIXED-SATELLITE (s-E) MOBILE except aeronautical mobile			
7450 – 7550	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E) METEOROLOGICAL-SATELLITE (s-E) MOBILE except aeronautical mobile	FIXED-SATELLITE (s-E) METEOROLOGICAL-SATELLITE (s-E) MOBILE except aeronautical mobile			
7550 – 7750	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E) MOBILE except aeronautical mobile	FIXED-SATELLITE (s-E) MOBILE except aeronautical mobile			
7750 – 7900	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	METEOROLOGICAL-SATELLITE (s-E) 5.461B MOBILE except aeronautical mobile	METEOROLOGICAL-SATELLITE (s-E) 5.461B MOBILE except aeronautical mobile			
7900 – 8025	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (E-s) MOBILE	FIXED-SATELLITE (E-s) MOBILE			
	5.461	5.461		National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.461A	5.461A		National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.461	5.461		National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
8025 – 8175	EARTH EXPLORATION-SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s) MOBILE 5.463	EARTH EXPLORATION-SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s) MOBILE 5.463	Fixed links		ECC Rec (02)06.
	5.462A	5.462A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
8175 – 8215	EARTH EXPLORATION-SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s) METEOROLOGICAL-SATELLITE (E-s) MOBILE 5.463	EARTH EXPLORATION-SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s) METEOROLOGICAL-SATELLITE (E-s) MOBILE 5.463	Fixed links		ECC Rec (02)06.
	5.462A	5.462A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
8215 – 8400	EARTH EXPLORATION SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s) MOBILE 5.463	EARTH EXPLORATION SATELLITE (s-E) FIXED FIXED-SATELLITE (E-s)	Fixed links		ECC Rec (02)06.
	5.462A	5.462A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
8400 – 8500	FIXED MOBILE except aeronautical mobile	FIXED	Fixed links		ECC Rec (02)06.
	SPACE RESEARCH (s-E) 5.465	SPACE RESEARCH (s-E) 5.465	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
8500 – 8550	RADIOLOCATION	RADIOLOCATION	Radiolocation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
8550 – 8650	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)  5.469A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)  5.469A	Radiolocation applications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
8650 – 8750	RADIOLOCATION	RADIOLOCATION	Radiolocation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
8750 – 8850	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470	Radiolocation applications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
8850 – 9000	RADIOLOCATION MARITIME RADIONAVIGATION 5.472	RADIOLOCATION MARITIME RADIONAVIGATION 5.472	Radiolocation applications Radionavigation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9000 – 9200	AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION	AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION	Radionavigation applications Radiolocation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

# Part B ~ The Radio Spectrum in MHz

27.5 MHz to 10 000 MHz

Frequency Band (MHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Relevant CEPT and ITU deliverables and Notes
9200 – 9300	RADIOLOCATION MARITIME RADIONAVIGATION 5.472  5.474	RADIOLOCATION MARITIME RADIONAVIGATION 5.472  5.474	Radiolocation applications Radionavigation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9300 – 9500	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION  5.427 5.474 5.475 5.475A 5.475B 5.476A	RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION  5.427 5.474 5.475 5.475A 5.475B 5.476A	Radionavigation applications   Radiolocation applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	Weather radars.
9500 – 9800	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)  5.476A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)  5.476A	Radiolocation applications   SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9800 - 9900	RADIOLOCATION Earth exploration-satellite (active) Space research (active) Fixed  5.478A 5.478B	RADIOLOCATION Earth exploration-satellite (active) Space research (active)  5.478A 5.478B	   SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
9900 – 10000	RADIOLOCATION Fixed  5.479	RADIOLOCATION Fixed  5.479	  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	

## **Part C**

### **The Radio Spectrum in GHz**

**10 GHz to 1 000 GHz**

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
10 – 10.45	FIXED	FIXED	Fixed links		ERC Rec 12-05.
	MOBILE	MOBILE			The band 10.3-1045 GHz is designated for SAP / SAB applications (ERC Rec 25-10).
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
	5.479	MLT01 MLT04 5.479	UWB	National Legislation: S.L.399.40.  European Legislation: EC Decision 2007/131/EC as amended.	ECC Dec (06)08.
10.45 – 10.5	RADIOLOCATION	RADIOLOCATION			
	Amateur Amateur-satellite	Amateur Amateur-satellite	Amateur applications  SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10.5 – 10.55	FIXED	FIXED	Fixed links		ERC Rec 12-05.
	MOBILE	MOBILE			ERC Rec 25-10.
	Radiolocation	Radiolocation	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10.55 – 10.6	FIXED	FIXED	Fixed links		ERC Rec 12-05.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	Radiolocation	Radiolocation	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	



# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes	
10.6 – 10.68	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)				
	FIXED	FIXED	Fixed links		ERC Rec 12-05.	
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			ERC Rec 25-10.	
	RADIO ASTRONOMY	RADIO ASTRONOMY				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)				
	Radiolocation	Radiolocation				
	5.149 5.482 5.482A	5.149 5.482 5.482A				
10.68 – 10.7	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.	
	RADIO ASTRONOMY	RADIO ASTRONOMY				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)				
	5.340	5.340				
10.7 – 11.7	FIXED	FIXED	Fixed links		Fixed service limited to high capacity fixed links (ERC Rec 12-06).	
	FIXED-SATELLITE (s-E) 5.441 5.484A (E-s) 5.484	FIXED-SATELLITE (s-E) 5.441 5.484A (E-s) 5.484	FSS	National Legislation: S.L.399.40.		ITU RR Appendix 30B (10.7-10.95 GHz / 11.2-11.45 GHz). ERC Dec(00)08.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile				
11.7 – 12.5	FIXED	FIXED	Fixed links			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile				
	BROADCASTING					
	BROADCASTING-SATELLITE 5.492	BROADCASTING-SATELLITE 5.492	Satellite broadcasting		ITU RR Appendix 30. ERC Dec(00)08.	
	5.487 5.487A	5.487 5.487A	FSS	National Legislation: S.L.399.40.		
12.5 – 12.75	FIXED-SATELLITE (s-E) 5.484A (E-s)	FIXED-SATELLITE (s-E) 5.484A (E-s)	FSS	National Legislation: S.L.399.40.		
12.75 – 13.25	FIXED	FIXED	Fixed links		ERC Rec 12-02.	
	FIXED-SATELLITE (E-s) 5.441	FIXED-SATELLITE (E-s)			ITU RR Appendix 30B.	
	MOBILE					
	Space research (deep space) (s-E)					
13.25 – 13.4	EARTH EXPLORATION-SATELLITE (active)					
	AERONAUTICAL RADIONAVIGATION 5.497	AERONAUTICAL RADIONAVIGATION 5.497			Aeronautical radionavigation service limited to Doppler navigation aids.	
	SPACE RESEARCH (active)	SPACE RESEARCH (active)				
	5.498A	5.498A				

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
13.4 – 13.75	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (E-s) 5.501B	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A 5.501B	SRDs	National Legislation: S.L.399.40.	ERC Rec 70-03.
13.75 – 14.0	FIXED-SATELLITE (E-s) 5.484A RADIOLOCATION Earth exploration-satellite Standard frequency and time signal-satellite (E-s) Space research 5.502 5.503	FIXED-SATELLITE (E-s) 5.484A RADIOLOCATION Space research 5.502 5.503	FSS SRDs	National Legislation: S.L.399.40.	ERC Rec 70-03.
14.0 – 14.25	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (E-s) 5.504B 5.504C 5.506A Space research 5.504A	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B Mobile-satellite (E-s) 5.504B 5.504C 5.506A Space research 5.504A	FSS	National Legislation: S.L.399.40.	ERC Rec 13-03.
14.25 – 14.3	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (E-s) 5.504B 5.506A 5.508A Space research 5.504A	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B Mobile-satellite (E-s) 5.504B 5.506A 5.508A Space research 5.504A	FSS	National Legislation: S.L.399.40.	ERC Rec 13-03.
14.3 – 14.4	FIXED FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (E-s) 5.504B 5.506A 5.509A Radionavigation-satellite 5.504A	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B Mobile-satellite (E-s) 5.504B 5.506A 5.509A 5.504A	FSS	National Legislation: S.L.399.40.	ERC Rec 13-03.

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
14.4 – 14.47	FIXED				
	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B	FSS	National Legislation: S.L.399.40.	ERC Rec 13-03.
	MOBILE except aeronautical mobile				
	Mobile-satellite (E-s) 5.504B 5.506A 5.509A Space research (s-E) 5.504A	Mobile-satellite (E-s) 5.504B 5.506A 5.509A 5.504A			
14.47 – 14.5	FIXED				
	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B	FIXED-SATELLITE (E-s) 5.457A 5.457B 5.484A 5.506 5.506B	FSS	National Legislation: S.L.399.40.	ERC Rec 13-03.
	MOBILE except aeronautical mobile				
	Mobile-satellite (E-s) 5.504B 5.506A 5.509A Radio astronomy 5.149 5.504A	Mobile-satellite (E-s) Radio astronomy 5.149 5.504A			
14.5 – 14.8	FIXED	FIXED	Fixed links		ITU-R F.636-4.
	FIXED-SATELLITE (E-s)				
	MOBILE Space research	MOBILE			
14.8 – 15.35	FIXED	FIXED	Fixed links		ITU-R F.636-4.
	MOBILE	MOBILE			
	Space research 5.339	5.339			
15.35 – 15.4	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.340	SPACE RESEARCH (passive) 5.340			
15.4 – 15.43	RADIOLOCATION 5.511E 5.511F	RADIOLOCATION 5.511E 5.511F			
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.511D	5.511D			
15.43 – 15.63	FIXED-SATELLITE (E-s) 5.511A	FIXED-SATELLITE (E-s) 5.511A			
	RADIOLOCATION 5.511E 5.511F	RADIOLOCATION 5.511E 5.511F			
	AERONAUTICAL RADIONAVIGATION 5.511C	AERONAUTICAL RADIONAVIGATION 5.511C			
15.63 – 15.7	RADIOLOCATION 5.511E 5.511F	RADIOLOCATION 5.511E 5.511F			
	AERONAUTICAL RADIONAVIGATION 5.511D	AERONAUTICAL RADIONAVIGATION 5.511D			

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
15.7 – 16.6	RADIOLOCATION	RADIOLOCATION			
16.6 – 17.1	RADIOLOCATION Space research (deep space) (E-s)	RADIOLOCATION			
17.1 – 17.2	RADIOLOCATION	RADIOLOCATION	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
17.2 – 17.3	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)  5.513A	EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)  5.513A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
17.3 – 17.7	FIXED-SATELLITE (E-s) 5.516 (s-E) 5.516A 5.516B Radiolocation	FIXED-SATELLITE (E-s) 5.516 (s-E) 5.516A 5.516B Radiolocation		National Legislation: S.L.399.40.	ITU RR Appendix 30A. ECC Dec(13)01.
17.7 – 18.1	FIXED FIXED-SATELLITE (s-E) 5.484A (E-s) 5.516  MOBILE	FIXED FIXED-SATELLITE (s-E) 5.484A (E-s) 5.516	Fixed links	National Legislation: S.L.399.40.	ERC Rec 12-03 & ERC Dec(00)07. ITU RR Appendix 30A. ERC Dec(00)07. ECC Dec(13)01.
18.1 – 18.4	FIXED FIXED-SATELLITE (s-E) 5.484A 5.516B (E-s) 5.520 MOBILE  5.519	FIXED FIXED-SATELLITE (s-E) 5.484A 5.516B (E-s) 5.520  METEOROLOGICAL-SATELLITE (s-E)  5.519	Fixed links	National Legislation: S.L.399.40.	ERC Rec 12-03 & ERC Dec(00)07. ERC Dec(00)07. ECC Dec(13)01.
18.4 – 18.6	FIXED FIXED-SATELLITE (s-E) 5.484A 5.516B  MOBILE	FIXED FIXED-SATELLITE (s-E) 5.484A 5.516B	Fixed links	National Legislation: S.L.399.40.	ERC Rec 12-03 & ERC Dec(00)07. ERC Dec(00)07. ECC Dec(13)01.

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
18.6 – 18.8	EARTH EXPLORATION-SATELLITE (passive) FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) 5.522B	FIXED-SATELLITE (s-E) 5.522B		National Legislation: S.L.399.40.	ERC Dec(00)07. ECC Dec(13)01.
	MOBILE except aeronautical mobile Space research (passive)				
	5.522A	5.522A			
18.8 – 19.3	FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) 5.516B 5.523A	FIXED-SATELLITE (s-E) 5.516B 5.523A		National Legislation: S.L.399.40.	ERC Dec(00)07. ECC Dec(13)01.
	MOBILE				
19.3 – 19.7	FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) (E-s) 5.523B 5.523C 5.523D 5.523E	FIXED-SATELLITE (s-E) (E-s) 5.523B 5.523C 5.523D 5.523E		National Legislation: S.L.399.40.	ERC Dec(00)07. ECC Dec(13)01.
	MOBILE				
19.7 – 20.1	FIXED-SATELLITE (s-E) 5.484A 5.516B	FIXED-SATELLITE (s-E) 5.484A 5.516B	FSS	National Legislation: S.L.399.40.	ECC Dec(13)01.
	Mobile-satellite (s-E)	Mobile-satellite (s-E)			
20.1 – 20.2	FIXED-SATELLITE (s-E) 5.484A 5.516B	FIXED-SATELLITE (s-E) 5.484A 5.516B	FSS	National Legislation: S.L.399.40.	ECC Dec(13)01.
	MOBILE-SATELLITE (s-E) 5.525 5.526 5.527 5.528	MOBILE-SATELLITE (s-E) 5.525 5.526 5.527 5.528			
20.2 – 21.2	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
	Standard frequency and time signal-satellite (s-E)				
21.2 – 21.4	EARTH EXPLORATION-SATELLITE (passive) FIXED	EARTH EXPLORATION-SATELLITE (passive) FIXED			
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
21.4 – 22	FIXED				
	MOBILE BROADCASTING-SATELLITE 5.208B	BROADCASTING-SATELLITE	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	In the band 21.65 – 22 GHz.
22 – 22.21	5.530A 5.530B 5.530C 5.530D	MLT09 5.530A 5.530B 5.530C 5.530D	Fixed links		ERC Rec T/R 13-02.
	FIXED MOBILE except aeronautical mobile	FIXED MOBILE except aeronautical mobile	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
22.21 – 22.5	5.149	MLT09 5.149	Fixed links		ERC Rec T/R 13-02.
	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	FIXED MOBILE except aeronautical mobile	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
22.5 – 22.55	5.149 5.532	MLT09 5.149 5.532	Fixed links		ERC Rec T/R 13-02.
	FIXED MOBILE	FIXED MOBILE	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
22.55 – 23.15	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	INTER-SATELLITE 5.338A				
	MOBILE	MOBILE			The band 22.6-23 GHz is designated for SAP / SAB applications (ERC Rec 25-10).
23.15 – 23.55	SPACE RESEARCH (E-s) 5.532A	SPACE RESEARCH (passive)	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
	5.149	MLT09 5.149			
23.55 – 23.6	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	INTER-SATELLITE 5.338A	INTER-SATELLITE 5.338A			
	MOBILE	MOBILE			
23.6 – 24		MLT09	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			All emissions prohibited.
24 – 24.05	5.340	MLT09 5.340			
	AMATEUR	AMATEUR	Amateur applications		
24 – 24.05	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
			SRDs	National Legislation: S.L.399.40.	ISM applications. ERC Rec 70-03.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
	5.150	MLT09 5.150			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
24.05 – 24.25	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Earth exploration-satellite (active)	Earth exploration-satellite (active)			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications. ERC Rec 70-03. ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
	5.150	MLT09 5.150			
24.25 – 24.45	FIXED	FIXED			Designated for SAP / SAB applications (ERC Rec 25-10).
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09			
24.45 – 24.5	FIXED	FIXED			Designated for SAP / SAB applications (ERC Rec 25-10).
	INTER-SATELLITE		SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09			



# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
24.5 – 24.65	FIXED	FIXED			ERC Rec T/R 13-02.
	INTER-SATELLITE		SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
24.65 – 24.75	FIXED	FIXED			ERC Rec T/R 13-02.
	INTER-SATELLITE FIXED-SATELLITE (E-s) 5.532B	MLT09 FIXED-SATELLITE (E-s) 5.532B	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
24.75 – 25.25	FIXED	FIXED			ERC Rec T/R 13-02.
	FIXED-SATELLITE (E-s) 5.532B	FIXED-SATELLITE (E-s) 5.532B	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
		MLT09	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09			

TABLE OF FREQUENCY ALLOCATIONS FOR MALTA

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
25.25 – 25.5	FIXED	FIXED			ERC Rec T/R 13-02.
	INTER-SATELLITE 5.536	INTER-SATELLITE 5.536			
	MOBILE	MOBILE			
	Standard frequency and time signal-satellite (E-s)				
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09			
25.5 – 26.5	EARTH EXPLORATION-SATELLITE (s-E)	Earth exploration-satellite (s-E)			
	FIXED	FIXED			ERC Rec T/R 13-02.
	INTER-SATELLITE 5.536	INTER-SATELLITE 5.536			
	MOBILE	MOBILE			
	SPACE RESEARCH (s-E)	SPACE RESEARCH (s-E)			
	Standard frequency and time signal-satellite (E-s)				
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
		MLT09 5.536A			

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
26.5 – 27	EARTH EXPLORATION-SATELLITE (s-E) FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (s-E) Standard frequency and time signal-satellite (E-s)	Earth exploration-satellite (s-E) FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (s-E)			
	5.536A	MLT09 5.536A	SRDs  SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	In the range 26.5 – 26.65 GHz.
27 – 27.5	FIXED INTER-SATELLITE 5.536 MOBILE	FIXED INTER-SATELLITE 5.536 MOBILE Earth exploration-satellite (s-E)			
	5.538 5.540	5.538 5.540			
27.5 – 28.5	FIXED FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539 MOBILE	FIXED FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539		National Legislation: S.L.399.40.	ECC Dec (05)01 & ERC Rec T/R 13-02.  ECC Dec(13)01 (limited to the bands 27.5-27.8285 GHz and 28.4445-28.5 GHz).
	5.538 5.540	5.538 5.540			
28.5 – 29.1	FIXED FIXED-SATELLITE (E-s) 5.484A 5.516B 5.523A 5.539 MOBILE Earth exploration-satellite (E-s) 5.541	FIXED FIXED-SATELLITE (E-s) 5.484A 5.516B 5.523A 5.539 Earth exploration-satellite (E-s) 5.541		National Legislation: S.L.399.40.	ECC Dec (05)01 & ERC Rec T/R 13-02.  ECC Dec(13)01 (limited to the band 28.5-28.8365 GHz).
	5.540	5.540			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
29.1 – 29.5	FIXED	FIXED			ECC Dec (05)01 & ERC Rec T/R 13-02.
	FIXED-SATELLITE (E-s) 5.516B 5.523C 5.523E 5.535A 5.539 5.541A	FIXED-SATELLITE (E-s) 5.516B 5.523C 5.523E 5.535A 5.539 5.541A		National Legislation: S.L.399.40.	ECC Dec(13)01 (limited to 29.4525-29.5 GHz).
	MOBILE Earth exploration-satellite (E-s) 5.541  5.540	Earth exploration-satellite (E-s) 5.541  5.540			
29.5 – 29.9	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539		National Legislation: S.L.399.40.	ECC Dec(13)01.
	Earth exploration-satellite (E-s) 5.541	Earth exploration-satellite (E-s) 5.541			
	Mobile-satellite (E-s)  5.540	Mobile-satellite (E-s)  5.540			
29.9 – 30	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.539		National Legislation: S.L.399.40.	ECC Dec(13)01.
	MOBILE-SATELLITE (E-s) Earth exploration-satellite (E-s) 5.541 5.543	MOBILE-SATELLITE (E-s) Earth exploration-satellite (E-s) 5.541 5.543			
	5.525 5.526 5.527 5.538 5.540	5.525 5.526 5.527 5.538 5.540			
30 – 31	FIXED-SATELLITE (E-s) 5.338A	FIXED-SATELLITE (E-s)			ECC Dec (10)02.
	MOBILE-SATELLITE (E-s)	MOBILE-SATELLITE (E-s)			
	Standard frequency and time signal-satellite (s-E)				
31 – 31.3	FIXED 5.338A	FIXED 5.338A			
	MOBILE Standard frequency and time signal-satellite (s-E)	MOBILE			
	Space research 5.544  5.149	  5.149			
31.3 – 31.5	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited,
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)  5.340	SPACE RESEARCH (passive)  5.340			
31.5 – 31.8	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	Fixed Mobile except aeronautical mobile  5.149	Fixed Mobile except aeronautical mobile  5.149			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
31.8 – 32	FIXED 5.547A	FIXED 5.547A			ERC Rec (01)02 & ECC Rec (04)06.
	RADIONAVIGATION	RADIONAVIGATION			
	SPACE RESEARCH (deep space) (s-E) 5.547 5.548	SPACE RESEARCH (deep space) (s-E) 5.547 5.548			
32 – 32.3	FIXED 5.547A	FIXED 5.547A			ERC Rec (01)02.
	RADIONAVIGATION	RADIONAVIGATION			
	SPACE RESEARCH (deep space) (s-E) 5.547 5.548	SPACE RESEARCH (deep space) (s-E) 5.547 5.548			
32.3 – 33	FIXED 5.547A	FIXED 5.547A			ERC Rec (01)02.
	INTER-SATELLITE	INTER-SATELLITE			
	RADIONAVIGATION 5.547 5.548	RADIONAVIGATION 5.547 5.548			
33 – 33.4	FIXED 5.547A	FIXED 5.547A			ERC Rec (01)02.
	RADIONAVIGATION	RADIONAVIGATION			
	5.547	5.547			
33.4 – 34.2	RADIOLOCATION	RADIOLOCATION			
34.2 – 34.7	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH (deep space) (E-s)	SPACE RESEARCH (deep space) (E-s)			
	5.549	5.549			
34.7 – 35.2	RADIOLOCATION Space research	RADIOLOCATION Space research			
35.2 – 35.5	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	RADIOLOCATION	RADIOLOCATION			
35.5 – 36	METEOROLOGICAL AIDS	METEOROLOGICAL AIDS			
	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH (active) 5.549A	SPACE RESEARCH (active) 5.549A			
36 – 37	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			
	MOBILE	MOBILE			
	SPACE RESEARCH (passive) 5.149 5.550A	SPACE RESEARCH (passive) 5.149 5.550A			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
37 – 37.5	FIXED	FIXED	Fixed links		ERC Rec T/R 12-01
	MOBILE except aeronautical mobile SPACE RESEARCH (s-E) 5.547	SPACE RESEARCH (s-E) 5.547			
37.5 – 38	FIXED	FIXED			ERC Rec T/R 12-01 & ERC Dec (00)02. ERC Dec (00)02.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE except aeronautical mobile SPACE RESEARCH (s-E)	SPACE RESEARCH (s-E)			
	Earth exploration-satellite (s-E) 5.547	5.547			
38 – 39.5	FIXED	FIXED	Fixed links		ERC Rec T/R 12-01 & ERC Dec (00)02. ERC Dec (00)02.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE				
	Earth exploration-satellite (s-E) 5.547	5.547			
39.5 – 40	FIXED	FIXED			ERC Dec (00)02.
	FIXED-SATELLITE (s-E) 5.516B	FIXED-SATELLITE (s-E) 5.516B			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
	Earth exploration-satellite (s-E) 5.547	Earth exploration-satellite (s-E) 5.547			
40 – 40.5	EARTH EXPLORATION-SATELLITE (E-s)				ERC Dec (00)02.
	FIXED	FIXED			
	FIXED-SATELLITE (s-E) 5.516B	FIXED-SATELLITE (s-E) 5.516B			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
	SPACE RESEARCH (E-s)	SPACE RESEARCH (E-s)			
Earth exploration-satellite (s-E)	Earth exploration-satellite (s-E)				
40.5 – 41	FIXED	FIXED			ECC Rec (01)04. ECC Dec (02)04.
	FIXED-SATELLITE (s-E)				
	BROADCASTING	BROADCASTING			
	BROADCASTING-SATELLITE	BROADCASTING-SATELLITE			
	Mobile 5.547	5.547			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
41 – 42.5	FIXED	FIXED			ECC Rec (01)04).
	FIXED-SATELLITE (s-E) 5.516B				
	BROADCASTING	BROADCASTING			
	BROADCASTING-SATELLITE	BROADCASTING-SATELLITE			ECC Dec (02)04.
	Mobile				
	5.547 5.551H 5.551I	5.547			
42.5 – 43.5	FIXED	FIXED			ECC Rec (01)04.
	FIXED-SATELLITE (E-s) 5.552	FIXED-SATELLITE (E-s) 5.552			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149 5.547	5.149 5.547			
43.5 – 45.5	MOBILE 5.553	MOBILE 5.553			
	MOBILE-SATELLITE	MOBILE-SATELLITE			
	RADIONAVIGATION				
	RADIONAVIGATION-SATELLITE				
	5.554	5.554			
45.5 – 47	MOBILE 5.553	MOBILE 5.553			
	MOBILE-SATELLITE	MOBILE-SATELLITE			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.554	5.554			
47 – 47.2	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
47.2 – 47.5	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.552	FIXED-SATELLITE (E-s) 5.552			
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
	5.552A	5.552A			
47.5 – 47.9	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.552 (s-E) 5.516B 5.554A	FIXED-SATELLITE (E-s) 5.552 (s-E) 5.516B 5.554A			
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
47.9 – 48.2	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.552	FIXED-SATELLITE (E-s) 5.552			
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
	5.552A	5.552A			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
48.2 – 48.54	FIXED	FIXED			ERC Rec 12-10.
	FIXED-SATELLITE (E-s) 5.552 (s-E) 5.516B 5.554A 5.555B	FIXED-SATELLITE (E-s) 5.552 (s-E) 5.516B 5.554A 5.555B			
	MOBILE	MOBILE			ERC Rec 12-10. Designated for SAP / SAB applications (ERC Rec 25-10).
48.54 – 49.44	FIXED	FIXED			ERC Rec 12-10.
	FIXED-SATELLITE (E-s) 5.552	FIXED-SATELLITE (E-s) 5.552			
	MOBILE	MOBILE			All emissions prohibited from airborne stations in the band 48.94-49.04. Designated for SAP / SAB applications (ERC Rec 25-10).
49.44 – 50.2	5.149 5.340 5.555	5.149 5.340 5.555			
	FIXED	FIXED			ERC Rec 12-10.
	FIXED-SATELLITE (E-s) 5.338A 5.552 (s-E) 5.516B 5.554A 5.555B	FIXED-SATELLITE (E-s) 5.338A 5.552 (s-E) 5.516B 5.554A 5.555B			Designated for SAP / SAB applications (ERC Rec 25-10).
50.2 – 50.4	MOBILE	MOBILE			
	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
50.4 – 51.4	5.340	5.340			
	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.338A	FIXED-SATELLITE (E-s) 5.338A			
51.4 – 52.6	MOBILE	MOBILE			
	Mobile-satellite (E-s)	Mobile-satellite (E-s)			
	FIXED 5.338A	FIXED 5.338A			ERC Rec 12-11.
52.6 – 54.25	MOBILE	MOBILE			
	5.547 5.556	5.547 5.556			
	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
54.25 – 55.78	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.556	5.340 5.556			
	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.556A				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			



# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
55.78 – 56.9	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED 5.557A	FIXED 5.557A			ERC Rec 12-12.
	INTER-SATELLITE 5.556A	INTER-SATELLITE 5.556A			
	MOBILE 5.558				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.547	5.547			
56.9 – 57	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			ERC Rec 12-12.
	INTER-SATELLITE 5.558A				
	MOBILE 5.558	MOBILE 5.558			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.547	5.547			
57 – 58.2	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED	Fixed links		ECC Rec (09)01.
	INTER-SATELLITE 5.556A	INTER-SATELLITE 5.556A			
	MOBILE 5.558	MOBILE 5.558			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.547	5.547	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
58.2 – 59	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			ECC Rec (09)01.
	MOBILE				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
		5.547 5.556	5.547 5.556	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
59 – 59.3	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)			ECC Rec (09)01.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
59.3 – 62	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559			ECC Rec (09)01.
	5.138	5.138	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (61-61.5 GHz) ECC Dec(11)02.
62 – 63	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559			ECC Rec (09)01.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
63 – 64	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559	FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559			ECC Rec (09)01.
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02. ECC Dec(09)01.

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
64 – 65	FIXED	FIXED	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Rec (05)02.
	INTER-SATELLITE MOBILE except aeronautical mobile	INTER-SATELLITE MOBILE except aeronautical mobile			
	5.547 5.556	5.547 5.556			
65 – 66	EARTH EXPLORATION-SATELLITE	EARTH EXPLORATION-SATELLITE	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Rec (05)02.
	FIXED	FIXED			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	SPACE RESEARCH	SPACE RESEARCH			
	5.547	5.547			
66 – 71	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.553 5.558	MOBILE 5.553 5.558			
	MOBILE-SATELLITE	MOBILE-SATELLITE			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.554	5.554			
71 – 74	FIXED	FIXED			ECC Rec (05)07.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
74 – 76	FIXED	FIXED	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Rec (05)07.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	BROADCASTING	BROADCASTING			
	BROADCASTING-SATELLITE	BROADCASTING-SATELLITE			
	Space research (s-E)	Space research (s-E)			
	5.561	5.561			ECC Dec(11)02 (limited to the band 75-76 GHz).

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
76 – 77.5	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite			
	Space research (s-E)	Space research (s-E)			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2004/545/EC.	In the band 77-77.5 GHz.
	5.149	5.149			
77.5 – 78	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
	Radio astronomy	Radio astronomy			
	Space research (s-E)	Space research (s-E)			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2004/545/EC.	
	5.149	5.149			
78 – 79	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite			
	Radio astronomy	Radio astronomy			
	Space research (s-E)	Space research (s-E)			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
			SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2004/545/EC.	
	5.149 5.560	5.149 5.560			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
79 – 81	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (s-E)	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite	Amateur applications		
	5.149	5.149	SRDs SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2004/545/EC.	ECC Dec(11)02.
81 – 84	FIXED 5.338A FIXED-SATELLITE (E-s) MOBILE MOBILE-SATELLITE (E-s) RADIO ASTRONOMY Space research (s-E)	FIXED 5.338A FIXED-SATELLITE (E-s) MOBILE MOBILE-SATELLITE (E-s) RADIO ASTRONOMY Space research (s-E) Amateur Amateur-satellite			ECC Rec (05)07.
	5.149 5.561A	5.149 5.561A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	Amateur applications are limited within the band 81 – 81.5 MHz. ECC Dec(11)02.
84 – 86	FIXED 5.338A FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY	FIXED 5.338A FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY			ECC Rec (05)07.
	5.149	5.149	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02 (limited to 85 GHz).

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
86 – 92	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			All emissions prohibited.
92 – 94	FIXED 5.338A MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED 5.338A MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149			ECC Rec(14)01.
94 – 94.1	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 5.562A			
94.1 – 95	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149			ECC Rec(14)01.
95 – 100	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554			
100 – 102	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			All emissions prohibited.
102 – 105	FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	FIXED MOBILE RADIO ASTRONOMY 5.149 5.341			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
105 – 109.5	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	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			All emissions prohibited.
111.8 – 114.25	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			
114.25 – 116	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			All emissions prohibited.
116 – 119.98	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.341	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C 5.341			
119.98 – 120.02	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.341	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C 5.341			
120.02 – 122.25	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138 5.341	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562C SPACE RESEARCH (passive) 5.138 5.341	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (122-123 GHz)

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
122.25 – 123	FIXED INTER-SATELLITE MOBILE 5.558 Amateur  5.138	FIXED INTER-SATELLITE MOBILE 5.558 Amateur  5.138	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (122-123 GHz)
123 – 130	FIXED-SATELLITE (s-E) MOBILE-SATELLITE (s-E) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.149 5.554	FIXED-SATELLITE (s-E) MOBILE-SATELLITE (s-E) RADIONAVIGATION RADIONAVIGATION-SATELLITE Radio astronomy 5.149 5.554			
130 – 134	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			
134 – 136	AMATEUR AMATEUR-SATELLITE Radio astronomy	AMATEUR AMATEUR-SATELLITE Radio astronomy	Amateur applications		
136 – 141	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.149	RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite 5.149	Amateur applications		
141 – 148.5	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION  5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION  5.149			



# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
148.5 – 151.5	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			All emissions prohibited.
151.5 – 155.5	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149			
155.5 – 158.5	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562F 5.562G	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.562F 5.562G			
158.5 – 164	FIXED FIXED-SATELLITE (s-E) MOBILE MOBILE-SATELLITE (s-E)	FIXED FIXED-SATELLITE (s-E) MOBILE MOBILE-SATELLITE (s-E)			
164 – 167	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			All emissions prohibited.
167 – 174.5	FIXED FIXED-SATELLITE (s-E) INTER-SATELLITE MOBILE 5.558 5.149	FIXED FIXED-SATELLITE (s-E) INTER-SATELLITE MOBILE 5.558 5.149			
174.5 – 174.8	FIXED INTER-SATELLITE MOBILE 5.558	FIXED INTER-SATELLITE MOBILE 5.558			
174.8 – 182	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
182 – 185	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESARCH (passive) 5.340			All emissions prohibited.
185 – 190	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)	EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)			
190 – 191.8	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340			All emissions prohibited.
191.8 – 200	FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554	FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554			
200 – 209	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A			All emissions prohibited.
209 – 217	FIXED FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY 5.149 5.341	FIXED FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY 5.149 5.341			
217 – 226	FIXED FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	FIXED FIXED-SATELLITE (E-s) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341			
226 – 231.5	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			All emissions prohibited.

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
231.5 – 232	FIXED	FIXED			
	MOBILE	MOBILE			
	Radiolocation	Radiolocation			
232 – 235	FIXED	FIXED			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	Radiolocation	Radiolocation			
235 – 238	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.563A 5.563B	5.563A 5.563B			
238 – 240	FIXED	FIXED			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	RADIOLOCATION	RADIOLOCATION			
	RADIONAVIGATION	RADIONAVIGATION			
240 – 241	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIOLOCATION	RADIOLOCATION			
241 – 248	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite			
			SRDs	National Legislation: S.L.399.40.	ISM applications (244-246 GHz)
	5.138 5.149	5.138 5.149		European Legislation: EC Decision 2006/771/EC as amended.	
248 – 250	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
	Radio astronomy	Radio astronomy			
	5.149	5.149			
250 – 252	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.563A	5.340 5.563A			

# Part C ~ The Radio Spectrum in GHz

10 GHz to 3 000 GHz

Frequency Band (GHz)	ITU Allocations and Footnotes (Relevant to Malta)	National Allocations and Footnotes	Major Utilisation	National and European Legislation	Notes
252 – 265	FIXED	FIXED			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (E-s)	MOBILE-SATELLITE (E-s)			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.149 5.554	5.149 5.554			
265 – 275	FIXED	FIXED			
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149 5.563A	5.149 5.563A			
275 – 3000	(Not allocated) 5.565	(Not allocated) 5.565			

# **Annex 1**

## **Glossary of Acronyms, terms and definitions**

# Annex 1 ~ Glossary of Acronyms, Terms and Definitions

## Part 1 : Glossary of Acronyms

<b>AGA</b>	Air-Ground-Air
<b>AIS</b>	Universal Shipborne Automatic Identification System
<b>Appendix 17</b>	Appendix 17 of the Radio Regulations: Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service.
<b>Appendix 18</b>	Appendix 18 of the Radio Regulations: Table of transmitting frequencies in the VHF maritime mobile band
<b>Appendix 25</b>	Appendix 25 of the Radio Regulations: Provisions and associated frequency allotment plan for coast radiotelephone stations operating in the exclusive maritime mobile bands between 4 000 kHz and 27 500 kHz
<b>Appendix 26</b>	Appendix 26 of the Radio Regulations: Provisions and associated frequency allotment plan for the Aeronautical Mobile (OR) service in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz
<b>Appendix 27</b>	Appendix 27 of the Radio Regulations: Frequency allotment plan for the Aeronautical Mobile (R) service and related information

<b>Appendix 30</b>	Appendix 30B of the Radio Regulations: Provisions for all services and associated plans and list for the broadcasting-satellite service in the frequency bands 11.7-12.2 GHz (in Region 3), 11.7-12.5 GHz (in Region 1) and 12.2-12.7 GHz (in Region 2)
<b>Appendix 30A</b>	Appendix 30A of the Radio Regulations: Provisions and associated plans and list for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands 14.5-14.8 GHz and 17.3-18.1 GHz in Regions 1 and 3, and 17.3-17.8 GHz in Region 2
<b>Appendix 30B</b>	Appendix 30B of the Radio Regulations: Provisions and associated plan for the fixed-satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz
<b>Article 12</b>	Article 12 of the Radio Regulations: Seasonal planning of the high frequency bands allocated to the broadcasting service between 5 900 kHz and 26 100 kHz
<b>BBDR</b>	Broad Band Disaster Relief
<b>BFWA</b>	Broadband Fixed Wireless Access
<b>BWA</b>	Broadband Wireless Access
<b>CB</b>	Citizens' Band
<b>CEPT</b>	European Conference of Postal and Telecommunications Administrations

<b>DECT</b>	Digital Enhanced Cordless Telecommunications
<b>DME</b>	Distance Measuring Equipment
<b>DMO</b>	Direct Mode Operation
<b>DSC</b>	Digital Selective Calling
<b>DTT</b>	Digital Terrestrial Television
<b>e.i.r.p.</b>	Equivalent isotropically radiated power - the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain)
<b>e.r.p.</b>	Equivalent radiated power - (in a given direction) the product of the power supplied to the antenna and its <i>gain relative to a half-wave dipole</i> in a given direction
<b>ECC</b>	Electronic Communications Committee: A committee of CEPT responsible for radio and telecommunication matters
<b>ECC Dec</b>	ECC Decision
<b>ECC Rec</b>	ECC Recommendation
<b>ENG</b>	Electronic News Gathering
<b>epfd</b>	Equivalent power flux-density
<b>EPIRB</b>	Emergency Position-Indicating Radio Beacon
<b>ERC</b>	European Radiocommunications Committee: A committee of CEPT responsible for radio matters - ERC merged into the ECC and no longer in existence

## Annex 1 ~ Glossary of Acronyms, Terms and Definitions

<b>ERC Dec</b>	ERC Decision	<b>ITU Geneva 1985 plan</b>	Regional agreements concerning: - the planning of the maritime radionavigation service (Radiobeacons) in the European maritime area, and - the medium frequency maritime mobile and aeronautical radionavigation services (Region 1)	<b>PMR</b>	Private Mobile Radio
<b>ERC Rec</b>	ERC Recommendation			<b>PMSE</b>	Programme Making and Special Events
<b>E-s</b>	Earth-to-space direction of transmission			<b>RACON</b>	Radar Beacon
<b>FDD</b>	Frequency Division Duplex			<b>RFID</b>	Radio Frequency Identification Devices
<b>FM</b>	Frequency Modulation	<b>ITU Geneva 2006 Agreement</b>	Regional agreement concerning the planning of terrestrial broadcasting services	<b>R-LAN</b>	Radio Local Area Network
<b>FWA</b>	Fixed Wireless Access			<b>SAB</b>	Services Ancillary to Broadcasting
<b>GHz</b>	Gigahertz (1 000 000 000 Hz)	<b>ITU RR</b>	The Radio Regulations of the International Telecommunication Union	<b>SAP</b>	Services Ancillary to Programming
<b>GMDSS</b>	Global Maritime Distress and Safety System			<b>S-DAB</b>	Satellite Digital Audio Broadcasting
<b>Hz</b>	Hertz, the unit of frequency measurement	<b>ITU-R</b>	The Radiocommunication Sector of the ITU	<b>s-E</b>	Space-to-Earth direction of transmission
<b>ILS</b>	Instrument Landing System	<b>JTIDS</b>	Joint Technical Information Distribution System	<b>S-PCS</b>	Satellite Personal Communications System
<b>IMT</b>	International Mobile Telecommunications	<b>kHz</b>	Kilohertz (1 000 Hz)	<b>SRD</b>	Short Range Device
<b>ISM</b>	Industrial, Scientific and Medical applications	<b>MCA services</b>	Mobile communication services on aircraft	<b>SRR</b>	Short Range Radar
		<b>MCV services</b>	Mobile communication services on board vessels	<b>s-s</b>	Space-space direction of transmission
<b>ITU</b>	International Telecommunication Union	<b>MHz</b>	Megahertz (1 000 000 Hz)	<b>SSR</b>	Secondary Surveillance Radar
<b>ITU Geneva 1975 plan</b>	Plan for the assignment of frequencies to broadcasting stations in the medium frequency bands in Regions 1 and 3 and in the low frequency bands in Region 1	<b>MIDS</b>	Multifunctional Information Distribution System	<b>TACAN</b>	Tactical Air Navigation System
		<b>MSI</b>	Maritime Service Identity	<b>TDD</b>	Time Division Duplex
		<b>MWS</b>	Multimedia Wireless system	<b>TRA-ECS</b>	Terrestrial Radio Applications capable of providing Electronic Communications Services
<b>ITU Geneva 1984 plan</b>	Frequency assignment plan for FM sound broadcasting stations in Region 1 and part of Region 3 in the band 87.5-108 MHz	<b>NAVTEX</b>	Navigation Text Messaging system	<b>UMTS</b>	Universal Mobile Telecommunications Systems
		<b>OB</b>	Outside Broadcasting	<b>UWB</b>	Ultra-Wideband
		<b>PAMR</b>	Public Access Mobile Radio		

# Annex 1 ~ Glossary of Acronyms, Terms and Definitions

<b>VOR</b>	VHF Omnidirectional Range
<b>VSAT</b>	Very Small Aperture Terminal
<b>WARC</b>	World Administrative Radio Conference
<b>WAS</b>	Wireless Access System
<b>WRC</b>	World Radiocommunication Conference

## Part 2 : Glossary of Terms and Definitions

### Allocation

Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space radiocommunication services or the radio astronomy service under specified conditions. This term shall also be applied to the frequency band concerned.

### Aeronautical mobile (OR)\*\* service

An aeronautical mobile service intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.

### Aeronautical mobile (R)\* service

An aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes.

### Aeronautical mobile service

A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radiobeacon stations may also

\*\* (OR): off-route.

\* (R): route.

participate in this service on designated distress and emergency frequencies.

### Aeronautical mobile-satellite (OR)\*\* service

An aeronautical mobile-satellite service intended for communications, including those relating to flight coordination, primarily outside national and international civil air routes.

### Aeronautical mobile-satellite (R)\* service

An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.

### Aeronautical mobile-satellite service

A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

### Aeronautical radionavigation service

A radionavigation service intended for the benefit and for the safe operation of aircraft.

### Aeronautical radionavigation-satellite service

A radionavigation-satellite service in which earth stations are located on board aircraft.

### Amateur service

A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

### Amateur-satellite service

A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.

### Broadcasting service

A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission.

### Broadcasting-satellite service

A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public.

In the broadcasting-satellite service, the term “direct reception” shall encompass both individual reception and community reception.

### Deep space

Space at distances from the Earth equal to, or greater than,  $2 \times 10^6$  km.

### Earth exploration-satellite service

A radiocommunication service between earth stations and one or more space stations, which may include links between space stations, in which:

- information relating to the characteristics of the Earth and its natural phenomena, including data relating to the state of the environment, is obtained from active sensors or passive sensors on Earth satellites;
- similar information is collected from airborne or Earth-based platforms;
- such information may be distributed to earth stations within the system concerned;
- platform interrogation may be included.

This service may also include feeder links necessary for its operation.

### Fixed service

A radiocommunication service between specified fixed points.

### Fixed-satellite service

A radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the fixed-satellite service may also include feeder links for other space radiocommunication services.



# Annex 1 ~ Glossary of Acronyms, Terms and Definitions

## **Harmful interference**

Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with Radio Regulations.

## **Industrial, scientific and medical (ISM) applications (of radio frequency energy)**

Operation of equipment or appliances designed to generate and use locally radio frequency energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunications.

## **Instrument landing system**

A radionavigation system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing.

## **Instrument landing system glide path**

A system of vertical guidance embodied in the instrument landing system which indicates the vertical deviation of the aircraft from its optimum path of descent.

## **Interference**

The effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.

## **Inter-satellite service**

A radiocommunication service providing links between artificial satellites.

## **Land mobile service**

A mobile service between base stations and land mobile stations, or between land mobile stations.

## **Land mobile-satellite service**

A mobile-satellite service in which mobile earth stations are located on land.

## **Maritime mobile service**

A mobile service between coast stations and ship stations, or between ship stations, or between associated on-board communication stations; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

## **Maritime mobile-satellite service**

A mobile-satellite service in which mobile earth stations are located on board ships; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

## **Maritime radionavigation service**

A radionavigation service intended for the benefit and for the safe operation of ships.

## **Maritime radionavigation-satellite service**

A radionavigation-satellite service in which earth stations are located on board ships.

## **Meteorological aids service**

A radiocommunication service used for meteorological, including hydrological, observations and exploration.

## **Meteorological-satellite service**

An earth exploration-satellite service for meteorological purposes.

## **Mobile service**

A radiocommunication service between mobile and land stations, or between mobile stations.

## **Mobile-satellite service**

A radiocommunication service:

- between mobile earth stations and one or more space stations, or between space stations used by this service; or
- between mobile earth stations by means of one or more space stations.

This service may also include feeder links necessary for its operation.

## **Port operations service**

A maritime mobile service in or near a port, between coast stations and ship stations, or between ship stations, in which messages are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons.

Messages which are of a public correspondence nature shall be excluded from this service.

## **Public correspondence**

Any telecommunication which the offices and stations must, by reason of their being at the disposal of the public, accept for transmission.

## **Radar**

A radiodetermination system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.

## **Radar beacon (racon)**

A transmitter-receiver associated with a fixed navigational mark which, when triggered by a radar, automatically returns a distinctive signal which can appear on the display of the triggering radar, providing range, bearing and identification information.

## **Radio astronomy**

Astronomy based on the reception of radio waves of cosmic origin.

## **Radio astronomy service**

A service involving the use of radio astronomy.

## **Radio waves or Hertzian waves**

Electromagnetic waves of frequencies arbitrarily lower than 3 000 GHz, propagated in space without artificial guide.

## **Radiocommunication service**

A service involving the transmission, emission and/or reception of radio waves for specific telecommunication purposes.

## Annex 1 ~ Glossary of Acronyms, Terms and Definitions

### **Radiodetermination**

The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

### **Radiodetermination service**

A radiocommunication service for the purpose of radiodetermination.

### **Radiodetermination-satellite service**

A radiocommunication service for the purpose of radiodetermination involving the use of one or more space stations.

This service may also include feeder links necessary for its own operation.

### **Radiolocation**

Radiodetermination used for purposes other than those of radionavigation.

### **Radiolocation service**

A radiodetermination service for the purpose of radiolocation.

### **Radiolocation-satellite service**

A radiodetermination-satellite service used for the purpose of radiolocation.

This service may also include the feeder links necessary for its operation.

### **Radionavigation**

Radiodetermination used for the purposes of navigation, including obstruction warning.

### **Radionavigation service**

A radiodetermination service for the purpose of radionavigation.

### **Radionavigation-satellite service**

A radiodetermination-satellite service used for the purpose of radionavigation.

This service may also include feeder links necessary for its operation.

### **Safety service**

Any radiocommunication service used permanently or temporarily for the safeguarding of human life and property.

### **Ship movement service**

A safety service in the maritime mobile service other than a port operations service, between coast stations and ship stations, or between ship stations, in which messages are restricted to those relating to the movement of ships.

Messages which are of a public correspondence nature shall be excluded from this service.

### **Space research service**

A radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.

### **Space telemetry**

The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.

### **Special service**

A radiocommunication service, not otherwise defined in this Section, carried on exclusively for specific needs of general utility, and not open to public correspondence.

### **Standard frequency and time signal service**

A radiocommunication service for scientific, technical and other purposes, providing the transmission of specified frequencies, time signals, or both, of stated high precision, intended for general reception.

### **Standard frequency and time signal-satellite service**

A radiocommunication service using space stations on earth satellites for the same purposes as those of the standard frequency and time signal service.

This service may also include feeder links necessary for its operation.

### **Telecommand**

The use of telecommunication for the transmission of signals to initiate, modify or terminate functions of equipment at a distance.

### **Telecommunication**

Any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

### **Telemetry**

The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.

## **Annex 2**

### **Relevant footnotes from the ITU Radio Regulations**

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

- 5.10** For the purposes of these Regulations, the term “African Broadcasting Area” means:
- 5.11** a) African countries, parts of countries, territories and groups of territories situated between the parallels 40° South and 30° North;
- 5.12** b) islands in the Indian Ocean west of meridian 60° East of Greenwich, situated between the parallel 40° South and the great circle arc joining the points 45° East, 11° 30' North and 60° East, 15° North;
- 5.13** c) islands in the Atlantic Ocean east of line B defined in No. 5.8 of these Regulations, situated between the parallels 40° South and 30° North.
- 5.16** 1) The “Tropical Zone” (see map in No. 5.2) is defined as:
- 5.17** a) the whole of that area in Region 2 between the Tropics of Cancer and Capricorn;
- 5.18** b) the whole of that area in Regions 1 and 3 contained between the parallels 30° North and 35° South with the addition of:
- 5.19** i) The area contained between the meridians 40° East and 80° East of Greenwich and the parallels 30° North and 40° North;
- 5.20** ii) that part of Libya north of parallel 30° North.
- 5.21** 2) In Region 2, the Tropical Zone may be extended to parallel 33° North, subject to special agreements between the countries concerned in that Region (see Article 6).
- 5.28** ii) that part of Libya north of parallel 30° North.
- 5.29** 3) Stations of a secondary service:
- 5.30** a) shall not cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date;
- 5.31** c) can claim protection, however, from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.
- 5.32** 4) Where a band is indicated in a footnote of the Table as allocated to a service “on a secondary basis” in an area smaller than a Region, or in a particular country, this is a secondary service (see Nos. 5.28 to 5.31).
- 5.33** 5) Where a band is indicated in a footnote of the Table as allocated to a service “on a primary basis”, in an area smaller than a Region, or in a particular country, this is a primary service only in that area or country.
- 5.43A** 1bis) Where it is indicated in these Regulations that a service or stations in a service may operate in a specific frequency band subject to not claiming protection from another service or from another station in the same service, this means also that the service which is subject to not claiming protection shall not cause harmful interference to the other service or other station in the same service. (WRC-2000)
- 5.53** Administrations authorizing the use of frequencies below 8.3 kHz shall ensure that no harmful interference is caused to services to which the bands above 8.3 kHz are allocated. (WRC-12)

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.54** Administrations conducting scientific research using frequencies below 8.3 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference. (WRC-12)

**5.54A** Use of the 8.3-11.3 kHz frequency band by stations in the meteorological aids service is limited to passive use only. In the band 9-11.3 kHz, meteorological aids stations shall not claim protection from stations of the radionavigation service submitted for notification to the Bureau prior to 1 January 2013. For sharing between stations of the meteorological aids service and stations in the radionavigation service submitted for notification after this date, the most recent version of Recommendation ITU-R RS.1881 should be applied. (WRC-12)

**5.56** The stations of services to which the bands 14-19.95 kHz and 20.05-70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-12)

**5.57** 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.

**5.60** In the bands 70-90 kHz (70-86 kHz in Region 1) and 110-130 kHz (112-130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

**5.62** Administrations which operate stations in the radionavigation service in the band 90-110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.

**5.64** Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.

**5.67** *Additional allocation:* in Mongolia, Kyrgyzstan 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. (WRC-07)

**5.67A** Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07)

**5.73** 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)

**5.74** *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.

**5.76** The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.79** 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.

**5.79A** When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4 209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution **339 (Rev.WRC-07)**). (WRC-07)

**5.80A** The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

**5.82** In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles **31** and **52**. In using the frequency band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. In using the frequency band 472-479 kHz for the amateur service, administrations shall ensure that no harmful interference is caused to the frequency 490 kHz. (WRC-12)

**5.82B** Administrations authorizing the use of frequencies in the band 495-505 kHz by services other than the maritime mobile service shall ensure that no harmful interference is caused to the maritime mobile service in this band or to the services having allocations in the adjacent bands, noting in particular the conditions of use of the frequencies 490 kHz and 518 kHz, as prescribed in Articles 31 and 52. (WRC-07)

**5.84** The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles **31** and **52**. (WRC-07)

**5.90** In the band 1 605-1 705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground-wave propagation.

**5.92** Some countries of Region 1 use radiodetermination systems in the bands 1 606.5-1 625 kHz, 1 635-1 800 kHz, 1 850-2 160 kHz, 2 194-2 300 kHz, 2 502-2 850 kHz and 3 500-3 800 kHz, subject to agreement obtained under No. **9.21**. The radiated mean power of these stations shall not exceed 50 W.

**5.96** In Germany, Armenia, Austria, Azerbaijan, Belarus, Denmark, Estonia, the Russian Federation, Finland, Georgia, Hungary, Ireland, Iceland, Israel, Kazakhstan, Latvia, Liechtenstein, Lithuania, Malta, Moldova, Norway, Uzbekistan, Poland, Kyrgyzstan, Slovakia, the Czech Rep., the United Kingdom, Sweden, Switzerland, Tajikistan, Turkmenistan and Ukraine, administrations may allocate up to 200 kHz to their amateur service in the bands 1 715-1 800 kHz and 1 850-2 000 kHz. However, when allocating the bands within this range to their amateur service, administrations shall, after prior consultation with administrations of neighboring countries, take such steps as may be necessary to prevent harmful interference from their amateur service to the fixed and mobile services of other countries. The mean power of any amateur station shall not exceed 10 W. (WRC-03)

**5.98** *Alternative allocation:* in Angola, Armenia, Azerbaijan, Belarus, Belgium, Cameroon, Congo (Rep. of the), Denmark, Egypt, Eritrea, Spain, Ethiopia, the Russian Federation, Georgia, Greece, Italy, Kazakhstan, Lebanon, Lithuania, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Tunisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)

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**5.99** *Additional allocation:* in Saudi Arabia, Austria, Iraq, Libya, Uzbekistan, Slovakia, Romania, Slovenia, Chad, and Togo, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)

**5.100** In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. **5.98** and **5.99** to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. **5.98** and **5.99**.

**5.103** In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1 850-2 045 kHz, 2 194-2 498 kHz, 2 502-2 625 kHz and 2 650-2 850 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**. (WRC-07)

**5.109** The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article **31**.

**5.110** The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article **31**.

**5.111** The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.525 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article **31**.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of  $\pm 3$  kHz about the frequency. (WRC-07)

**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**.

**5.115** The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Article **31**, by stations of the maritime mobile service engaged in coordinated search and rescue operations. (WRC-07)

**5.116** Administrations are urged to authorize the use of the band 3 155-3 195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3 155 kHz and 3 400 kHz to suit local needs.

It should be noted that frequencies in the range 3 000 kHz to 4 000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.

**5.127** The use of the band 4 000-4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. **52.220** and Appendix **17**).

**5.128** Frequencies in the bands 4 063-4 123 kHz and 4 130-4 438 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W, on condition that harmful interference is not caused to the maritime

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mobile service. In addition, in Afghanistan, Argentina, Armenia, Azerbaijan, Belarus, Botswana, Burkina Faso, the Central African Rep., China, the Russian Federation, Georgia, India, Kazakhstan, Mali, Niger, Pakistan, Kyrgyzstan, Tajikistan, Chad, Turkmenistan and Ukraine, in the bands 4 063-4 123 kHz, 4 130-4 133 kHz and 4 408-4 438 kHz, stations in the fixed service, with a mean power not exceeding 1 kW, can be operated on condition that they are situated at least 600 km from the coast and that harmful interference is not caused to the maritime mobile service. (WRC-12)

**5.130** The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles **31** and **52**. (WRC-07)

**5.131** The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)

**5.132** The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix **17**).

**5.132A** Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612 (Rev.WRC-12)**. (WRC-12)

**5.134** The use of the bands 5 900-5 950 kHz, 7 300-7 350 kHz, 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 13 570-13 600 kHz, 13 800-13 870 kHz, 15 600-15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz by the broadcasting service is subject to the application of the procedure of Article **12**. Administrations are encouraged to use these bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of Resolution **517 (Rev.WRC-07)**. (WRC-07)

**5.136** *Additional allocation:* frequencies in the band 5 900-5 950 kHz may be used by stations in the following services, communicating only within the boundary of the country in which they are located: fixed service (in all three Regions), land mobile service (in Region 1), mobile except aeronautical mobile (R) service (in Regions 2 and 3), on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)

**5.137** On condition that harmful interference is not caused to the maritime mobile service, the bands 6 200-6 213.5 kHz and 6 220.5-6 525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.

**5.138** 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. <b>5.280</b> ,
61-61.5 GHz	(centre frequency 61.25 GHz),
122-123 GHz	(centre frequency 122.5 GHz), and
244-246 GHz	(centre frequency 245 GHz)



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are designated for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorization 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.

**5.143** In Region 1, frequencies in the band 7 350-7 450 kHz may be used by stations in the fixed and land mobile services communicating only within the boundary of the country in which they are located on condition that harmful interference is not caused to the broadcasting service. The total radiated power of each station shall not exceed 24 dBW. (WRC-12)

**5.143B** In Region 1, the band 7 350-7 450 kHz is allocated, until 29 March 2009, to the fixed service on a primary basis and to the land mobile service on a secondary basis. After 29 March 2009, on condition that harmful interference is not caused to the broadcasting service, frequencies in the band 7 350-7 450 kHz may be used by stations in the fixed and land mobile services communicating only within the boundary of the country in which they are located, each station using a total radiated power that shall not exceed 24 dBW. (WRC-03)

**5.145** The conditions for the use of the carrier frequencies 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles **31** and **52**. (WRC-07)

**5.145A** Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed service. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612 (Rev.WRC-12)**. (WRC-12)

**5.146** *Additional allocation:* frequencies in the bands 9 400-9 500 kHz, 11 600-11 650 kHz, 12 050-12 100 kHz, 15 600-15 800 kHz, 17 480-17 550 kHz and 18 900-19 020 kHz may be used by stations in the fixed service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)

**5.147** On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9 775-9 900 kHz, 11 650-11 700 kHz and 11 975-12 050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.

**5.149** In making assignments to stations of other services to which the bands:

13 360-13 410 kHz,	4 950-4 990 MHz,	102-109.5 GHz,
25 550-25 670 kHz,	4 990-5 000 MHz,	111.8-114.25 GHz,
37.5-38.25 MHz,	6 650-6 675.2 MHz,	128.33-128.59 GHz,
73-74.6 MHz in Regions 1 and 3,	10.6-10.68 GHz,	129.23-129.49 GHz,
150.05-153 MHz in Region 1,	14.47-14.5 GHz,	130-134 GHz,
322-328.6 MHz,	22.01-22.21 GHz,	136-148.5 GHz,
406.1-410 MHz,	22.21-22.5 GHz,	151.5-158.5 GHz,
608-614 MHz in Regions 1 and 3,	22.81-22.86 GHz,	168.59-168.93 GHz,

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1 330-1 400 MHz,	23.07-23.12 GHz,	171.11-171.45 GHz,
1 610.6-1 613.8 MHz,	31.2-31.3 GHz,	172.31-172.65 GHz,
1 660-1 670 MHz,	31.5-31.8 GHz in Regions 1 and 3,	173.52-173.85 GHz,
1 718.8-1 722.2 MHz,	36.43-36.5 GHz,	195.75-196.15 GHz,
2 655-2 690 MHz,	42.5-43.5 GHz,	209-226 GHz,
3 260-3 267 MHz,	48.94-49.04 GHz,	241-250 GHz,
3 332-3 339 MHz,	76-86 GHz,	252-275 GHz
3 345.8-3 352.5 MHz,	92-94 GHz,	
4 825-4 835 MHz,	94.1-100 GHz,	

are allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 4.5 and 4.6 and Article 29). (WRC-07)

**5.150** 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** *Additional allocation:* frequencies in the bands 13 570-13 600 kHz and 13 800-13 870 kHz may be used by stations in the fixed service and in the mobile except aeronautical mobile (R) service, communicating only within the boundary of the country in which they are located, on the condition that harmful

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interference is not caused to the broadcasting service. When using frequencies in these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations. (WRC-07)

**5.155B** The band 21 870-21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.

**5.156A** The use of the band 23 200-23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.

**5.157** The use of the band 23 350-24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.

**5.164** Additional allocation: in Albania, Algeria, Germany, Austria, Belgium, Bosnia and Herzegovina, Botswana, Bulgaria, Côte d'Ivoire, Denmark, Spain, Estonia, Finland, France, Gabon, Greece, Ireland, Israel, Italy, Jordan, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Morocco, Mauritania, Monaco, Montenegro, Nigeria, Norway, the Netherlands, Poland, Syrian Arab Republic, Slovakia, Czech Rep., Romania, the United Kingdom, Serbia, Slovenia, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia and Turkey, the band 47-68 MHz, in South Africa the band 47-50 MHz, and in Latvia the band 48.5-56.5 MHz, are also allocated to the land mobile service on a primary basis. However, stations of the land mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, existing or planned broadcasting stations of countries other than those mentioned in connection with the band. (WRC-12)

**5.180** The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons.

Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.

**5.197A** *Additional allocation:* the band 108-117.975 MHz is also allocated on a primary basis to the aeronautical mobile (R) service, limited to systems operating in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **413 (Rev.WRC-07)\***. The use of the band 108-112 MHz by the aeronautical mobile (R) service shall be limited to systems composed of ground-based transmitters and associated receivers that provide navigational information in support of air navigation functions in accordance with recognized international aeronautical standards. (WRC-07)

**5.200** In the band 117.975-137 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article **31** for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)

**5.208** The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-97)

**5.208A** In making assignments to space stations in the mobile-satellite service in the bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from harmful interference from unwanted emissions. The threshold levels of interference detrimental to the radio astronomy service are shown in the relevant ITU-R Recommendation. (WRC-07)

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\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

\*\* This provision was previously numbered as No. **5.347A**. It was renumbered to preserve the sequential order.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.208B\*\*** In the bands:

137-138 MHz,  
387-390 MHz,  
400.15-401 MHz,  
1 452-1 492 MHz,  
1 525-1 610 MHz,  
1 613.8-1 626.5 MHz,  
2 655-2 690 MHz,  
21.4-22 GHz,

Resolution **739 (Rev.WRC-07)** applies. (WRC-07)

**5.209** The use of the bands 137-138 MHz, 148-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 454-456 MHz and 459-460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems. (WRC-97)

**5.211** Additional allocation: in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Denmark, the United Arab Emirates, Spain, Finland, Greece, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Liechtenstein, Luxembourg, Mali, Malta, Montenegro, Norway, the Netherlands, Qatar, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia and Turkey, the band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis. (WRC-12)

**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  $\pm 25$  kHz.

**5.219** The use of the band 148-149.9 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148-149.9 MHz.

**5.220** The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399.9-400.05 MHz. (WRC-97)

**5.221** Stations of the mobile-satellite service in the band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Croatia, Cuba, Denmark, Djibouti, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Ethiopia, the Russian Federation, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, the Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, Kyrgyzstan, Dem. People's Rep. of Korea, Slovakia, Romania, the United Kingdom, Senegal, Serbia, Sierra Leone, Singapore, Slovenia, Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Zambia and Zimbabwe. (WRC-12)

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.222** Emissions of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399.9-400.05 MHz may also be used by receiving earth stations of the space research service.

**5.223** Recognizing 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 authorize such use in application of No. **4.4**.

**5.224A** The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service (Earth-to-space) is limited to the land mobile-satellite service (Earth-to-space) until 1 January 2015. (WRC-97)

**5.224B** The allocation of the bands 149.9-150.05 MHz and 399.9-400.05 MHz to the radionavigation-satellite service shall be effective until 1 January 2015. (WRC-97)

**5.226** The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875-156.5625 MHz are contained in Articles **31** and **52**, and in Appendix **18**.

The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency and the band 156.7625-156.8375 MHz are contained in Article **31** and Appendix **18**.

In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles **31** and **52**, and Appendix **18**).

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 frequencies 156.8 MHz and 156.525 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements. (WRC-07)

**5.227** *Additional allocation:* the bands 156.4875-156.5125 MHz and 156.5375-156.5625 MHz are also allocated to the fixed and land mobile services on a primary basis. The use of these bands by the fixed and land mobile services shall not cause harmful interference to nor claim protection from the maritime mobile VHF radiocommunication service. (WRC-07)

**5.228** The use of the frequency bands 156.7625-156.7875 MHz and 156.8125-156.8375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system (AIS) emissions of long-range AIS broadcast messages (Message 27, see the most recent version of Recommendation ITU-R M.1371). With the exception of AIS emissions, emissions in these frequency bands by systems operating in the maritime mobile service for communications shall not exceed 1 W. (WRC-12)

**5.228A** The frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz may be used by aircraft stations for the purpose of search and rescue operations and other safety-related communications. (WRC-12)

**5.228B** The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the fixed and land mobile services shall not cause harmful interference to, or claim protection from, the maritime mobile service. (WRC-12)

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

- 5.228F** The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system emissions from stations operating in the maritime mobile service. (WRC-12)
- 5.235** *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.
- 5.254** The bands 235-322 MHz and 335.4-399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. **9.21**, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations except for the additional allocation made in footnote No. **5.256A**. (WRC-03)
- 5.255** The bands 312-315 MHz (Earth-to-space) and 387-390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under No. **9.11A**.
- 5.256** The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)
- 5.256A** *Additional allocation:* in China, the Russian Federation, Kazakhstan and Ukraine, the band 258-261 MHz is also allocated to the space research service (Earth-to-space) and space operation service (Earth-to-space) on a primary basis. Stations in the space research service (Earth-to-space) and space operation service (Earth-to-space) shall not cause harmful interference to, nor claim protection from, nor constrain the use and development of the mobile service systems and mobile-satellite service systems operating in the band. Stations in space research service (Earth-to-space) and space operation service (Earth-to-space) shall not constrain the future development of fixed service systems of other countries. (WRC-03)
- 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** Recognizing 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 authorize such use in application of No. **4.4**.
- 5.261** Emissions shall be confined in a band of  $\pm 25$  kHz about the standard frequency 400.1 MHz.
- 5.263** The band 400.15-401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
- 5.264** The use of the band 400.15-401 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The power flux-density limit indicated in Annex 1 of Appendix **5** shall apply until such time as a competent world radiocommunication conference revises it.
- 5.266** The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Article **31**). (WRC-07)
- 5.267** Any emission capable of causing harmful interference to the authorized uses of the band 406-406.1 MHz is prohibited.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**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  $-153 \text{ dB(W/m}^2\text{)}$  for  $0^\circ \leq \delta \leq 5^\circ$ ,  $-153 + 0.077 (\delta - 5) \text{ dB(W/m}^2\text{)}$  for  $5^\circ \leq \delta \leq 70^\circ$  and  $-148 \text{ dB(W/m}^2\text{)}$  for  $70^\circ \leq \delta \leq 90^\circ$ , where  $\delta$  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. (WRC-97)

**5.279A** The use of this band by sensors in the Earth exploration-satellite service (active) shall be in accordance with Recommendation ITU-R SA.1260-1. Additionally, the Earth exploration-satellite service (active) in the band 432-438 MHz shall not cause harmful interference to the aeronautical radionavigation service in China. The provisions of this footnote in no way diminish the obligation of the Earth exploration-satellite service (active) to operate as a secondary service in accordance with Nos. **5.29** and **5.30**. (WRC-03)

**5.280** In Germany, Austria, Bosnia and Herzegovina, Croatia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Montenegro, Portugal, Serbia, Slovenia and Switzerland, the band 433.05-434.79 MHz (centre frequency 433.92 MHz) is designated for industrial, scientific and medical (ISM) applications. Radiocommunication services of these countries operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No. **15.13**. (WRC-07)

**5.282** In the bands 435-438 MHz, 1 260-1 270 MHz, 2 400-2 450 MHz, 3 400-3 410 MHz (in Regions 2 and 3 only) and 5 650-5 670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. **5.43**). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. **25.11**. The use of the bands 1 260-1 270 MHz and 5 650-5 670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.

**5.286** 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 No. **9.11A**. (WRC-97)

**5.286AA** The band 450-470 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). See Resolution **224 (Rev.WRC-07)\***. This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-07)

**5.287** In the maritime mobile service, the frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Where needed, equipment designed for 12.5 kHz channel spacing using also the additional frequencies 457.5375 MHz, 457.5625 MHz, 467.5375 MHz and 467.5625 MHz may be introduced for on-board communications. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Recommendation ITU-R M.1174-2. (WRC-07)

**5.289** Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460-470 MHz and 1 690-1 710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.

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\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.296** *Additional allocation:* in Albania, Germany, Saudi Arabia, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Burkina Faso, Cameroon, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Djibouti, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Gabon, Ghana, Iraq, Ireland, Iceland, Israel, Italy, Jordan, Kuwait, Latvia, The Former Yugoslav Republic of Macedonia, Libya, Liechtenstein, Lithuania, Luxembourg, Mali, Malta, Morocco, Moldova, Monaco, Niger, Norway, Oman, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Slovakia, the Czech Republic, the United Kingdom, Sudan, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia and Turkey, the band 470-790 MHz, and in Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Zambia and Zimbabwe, the band 470-698 MHz are also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table in countries other than those listed in this footnote. (WRC-12)

**5.306** *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.

**5.311A** For the frequency band 620-790 MHz, see also Resolution **549 (WRC-07)**. (WRC-07)

**5.316** *Additional allocation:* in Germany, Saudi Arabia, Bosnia and Herzegovina, Burkina Faso, Cameroon, Côte d'Ivoire, Croatia, Denmark, Egypt, Finland, Greece, Israel, the Libyan Arab Jamahiriya, Jordan, Kenya, The Former Yugoslav Republic of Macedonia, Liechtenstein, Mali, Monaco, Montenegro, Norway, the Netherlands, Portugal, the United Kingdom, the Syrian Arab Republic, Serbia, Sweden and Switzerland, the band 790-830 MHz, and in these same countries and in Spain, France, Gabon and Malta, the band 830-862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause harmful interference to, or claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band. This allocation is effective until 16 June 2015. (WRC-07)

**5.316A** *Additional allocation:* in Spain, France, Gabon and Malta, the band 790-830 MHz, in Albania, Angola, Bahrain, Benin, Botswana, Burundi, Congo (Rep. of the), Egypt, United Arab Emirates, Estonia, Gambia, Ghana, Guinea, Guinea-Bissau, Hungary, Iraq, Kuwait, Lesotho, Latvia, Lebanon, Lithuania, Luxembourg, Malawi, Morocco, Mauritania, Mozambique, Namibia, Niger, Nigeria, Oman, Uganda, Poland, Qatar, Slovakia, Czech Rep., Romania, Rwanda, Senegal, Sudan, South Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Yemen, Zambia, Zimbabwe and French overseas departments and communities of Region 1, the band 790-862 MHz and in Georgia, the band 806-862 MHz, are also allocated to the mobile, except aeronautical mobile, service on a primary basis subject to the agreement by the administrations concerned obtained under No. **9.21** and under the GE06 Agreement, as appropriate, including those administrations mentioned in No. **5.312**, where appropriate. See Resolutions **224 (Rev.WRC-12)** and **749 (Rev.WRC-12)**. This allocation is effective until 16 June 2015. (WRC-12)

**5.316B** In Region 1, the allocation to the mobile, except aeronautical mobile, service on a primary basis in the frequency band 790-862 MHz shall come into effect from 17 June 2015 and shall be subject to agreement obtained under No. **9.21** with respect to the aeronautical radionavigation service in countries mentioned in No. **5.312**. For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful application of the procedures of that Agreement. Resolutions **224 (Rev.WRC-12)** and **749 (Rev.WRC-12)** shall apply, as appropriate. (WRC-12)

**5.317A** Those parts of the band 698-960 MHz in Region 2 and the band 790-960 MHz in Regions 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) – see Resolutions **224 (Rev.WRC-12)** and **749 (Rev.WRC-12)**, as appropriate. This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-12)

**5.327A** The use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service is limited to systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **417 (Rev.WRC-12)**. (WRC-12)



## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.328** The use of the band 960-1 215 MHz by the aeronautical radionavigation service is reserved on a worldwide basis for the operation and development of airborne electronic aids to air navigation and any directly associated ground-based facilities. (WRC-2000)

**5.328A** Stations in the radionavigation-satellite service in the band 1 164-1 215 MHz shall operate in accordance with the provisions of Resolution **609 (Rev.WRC-07)** and shall not claim protection from stations in the aeronautical radionavigation service in the band 960-1 215 MHz. No. **5.43A** does not apply. The provisions of No. **21.18** shall apply. (WRC-07)

**5.328B** The use of the bands 1 164-1 300 MHz, 1 559-1 610 MHz and 5 010-5 030 MHz by systems and networks in the radionavigation-satellite service for which complete coordination or notification information, as appropriate, is received by the Radiocommunication Bureau after 1 January 2005 is subject to the application of the provisions of Nos. **9.12, 9.12A** and **9.13**. Resolution **610 (WRC-03)** shall also apply; however, in the case of radionavigation-satellite service (space-to-space) networks and systems, Resolution **610 (WRC-03)** shall only apply to transmitting space stations. In accordance with No. **5.329A**, for systems and networks in the radionavigation-satellite service (space-to-space) in the bands 1 215-1 300 MHz and 1 559-1 610 MHz, the provisions of Nos. **9.7, 9.12, 9.12A** and **9.13** shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)

**5.329** Use of the radionavigation-satellite service in the band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to, and no protection is claimed from, the radionavigation service authorized under No. **5.331**. Furthermore, the use of the radionavigation-satellite service in the band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to the radiolocation service. No. **5.43** shall not apply in respect of the radiolocation service. Resolution **608 (WRC-03)** shall apply. (WRC-03)

**5.329A** Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1 215-1 300 MHz and 1 559-1 610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on radionavigation-satellite service (space-to-Earth) systems or on other services operating in accordance with the Table of Frequency Allocations. (WRC-07)

**5.332** In the band 1 215-1 260 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis. (WRC-2000)

**5.335A** In the band 1 260-1 300 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis. (WRC-2000)

**5.337** The use of the bands 1 300-1 350 MHz, 2 700-2 900 MHz and 9 000-9 200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.

**5.337A** The use of the band 1 300-1 350 MHz by earth stations in the radionavigation-satellite service and by stations in the radiolocation service shall not cause harmful interference to, nor constrain the operation and development of, the aeronautical-radionavigation service. (WRC-2000)

**5.338A** In the bands 1 350-1 400 MHz, 1 427-1 452 MHz, 22.55-23.55 GHz, 30-31.3 GHz, 49.7-50.2 GHz, 50.4-50.9 GHz and 51.4-52.6 GHz, Resolution **750 (WRC-07)** applies. (WRC-07)

**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.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

- 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 No. **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\*,
  - 52.6-54.25 GHz,
  - 86-92 GHz,
  - 100-102 GHz,
  - 109.5-111.8 GHz,
  - 114.25-116 GHz,
  - 148.5-151.5 GHz,
  - 164-167 GHz,
  - 182-185 GHz,
  - 190-191.8 GHz,
  - 200-209 GHz,
  - 226-231.5 GHz,

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\* **5.340.1** The allocation to the Earth exploration-satellite service (passive) and the space research service (passive) in the band 50.2-50.4 GHz should not impose undue constraints on the use of the adjacent bands by the primary allocated services in those bands. (WRC-97)

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

250-252 GHz. (WRC-03)

**5.341** In the bands 1 400-1 727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.

**5.345** Use of the band 1 452-1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (WARC-92)\***.

**5.348** The use of the band 1 518-1 525 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from the stations in the fixed service. No. **5.43A** does not apply. (WRC-03)

**5.348A** In the band 1 518-1 525 MHz, the coordination threshold in terms of the power flux-density levels at the surface of the Earth in application of No. **9.11A** for space stations in the mobile-satellite (space-to-Earth) service, with respect to the land mobile service use for specialized mobile radios or used in conjunction with public switched telecommunication networks (PSTN) operating within the territory of Japan, shall be  $-150 \text{ dB(W/m}^2\text{)}$  in any 4 kHz band for all angles of arrival, instead of those given in Table 5-2 of Appendix 5. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from stations in the mobile service in the territory of Japan. No. **5.43A** does not apply. (WRC-03)

**5.351** 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 authorized by an administration to communicate via space stations using these bands.

**5.351A\*\*** For the use of the bands 1 518-1 544 MHz, 1 545-1 559 MHz, 1 610-1 645.5 MHz, 1 646.5-1 660.5 MHz, 1 668-1 675 MHz, 1 980-2 010 MHz, 2 170-2 200 MHz, 2 483.5-2 520 MHz and 2 670-2 690 MHz by the mobile-satellite service, see Resolutions **212 (Rev.WRC-07)** and **225 (Rev.WRC-07)**. (WRC-07)

**5.353A** In applying the procedures of Section II of Article 9 to the mobile-satellite service in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution **222 (WRC-2000)\*** shall apply.) (WRC-2000)

**5.354** The use of the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the mobile-satellite services is subject to coordination under No. **9.11A**.

**5.356** The use of the band 1 544-1 545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article **31**).

**5.357** Transmissions in the band 1 545-1 555 MHz from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorized when such transmissions are used to extend or supplement the satellite-to-aircraft links.

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\* *Note by the Secretariat:* This Resolution was revised by WRC-03.

\*\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

\* *Note by the Secretariat:* This Resolution was revised by WRC-07 and WRC-12.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.357A** In applying the procedures of Section II of Article 9 to the mobile-satellite service in the frequency 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 (Rev.WRC-12) shall apply.) (WRC-12)

**5.359** *Additional allocation:* in Germany, Saudi Arabia, Armenia, Austria, Azerbaijan, Belarus, Benin, Cameroon, the Russian Federation, France, Georgia, Greece, Guinea, Guinea-Bissau, Jordan, Kazakhstan, Kuwait, Lithuania, Mauritania, Uganda, Uzbekistan, Pakistan, Poland, the Syrian Arab Republic, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, 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. (WRC-12)

**5.364** The use of the band 1 610-1 626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under No. 9.11A. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. 5.366 (to which No. 4.10 applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed -3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. 5.366 and stations in the fixed service operating in accordance with the provisions of No. 5.359. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. 5.366.

**5.365** The use of the band 1 613.8-1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under No. 9.11A.

**5.366** The band 1 610-1 626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. 9.21.

**5.367** *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.

**5.369** *Different category of service:* in Angola, Australia, China, Eritrea, Ethiopia, India, Iran (Islamic Republic of), Israel, Lebanon, Liberia, Madagascar, Mali, Pakistan, Papua New Guinea, Syrian Arab Republic, the Dem. Rep. of the Congo, Sudan, South Sudan, Togo and Zambia, the allocation of the band 1 610-1 626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. 5.33), subject to agreement obtained under No. 9.21 from countries not listed in this provision. (WRC-12)

**5.371** *Additional allocation:* in Region 1, the band 1 610-1 626.5 MHz (Earth-to-space) is also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. 9.21. (WRC-12)

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

- 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 stations in the fixed service operating in the countries listed in No. **5.359**. (WRC-97)
- 5.375** The use of the band 1 645.5-1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article **31**).
- 5.376** Transmissions in the band 1 646.5-1 656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.
- 5.376A** Mobile earth stations operating in the band 1 660-1 660.5 MHz shall not cause harmful interference to stations in the radio astronomy service. (WRC-97)
- 5.379A** Administrations are urged to give all practicable protection in the band 1 660.5-1 668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664.4-1 668.4 MHz as soon as practicable.
- 5.379B** The use of the band 1 668-1 675 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 668-1 668.4 MHz, Resolution **904 (WRC-07)** shall apply. (WRC-07)
- 5.379C** In order to protect the radio astronomy service in the band 1 668-1 670 MHz, the aggregate power flux-density values produced by mobile earth stations in a network of the mobile-satellite service operating in this band shall not exceed  $-181 \text{ dB(W/m}^2\text{)}$  in 10 MHz and  $-194 \text{ dB(W/m}^2\text{)}$  in any 20 kHz at any radio astronomy station recorded in the Master International Frequency Register, for more than 2% of integration periods of 2 000 s. (WRC-03)
- 5.379D** For sharing of the band 1 668.4-1 675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution **744 (Rev.WRC-07)** shall apply. (WRC-07)
- 5.379E** In the band 1 668.4-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to stations in the meteorological aids service in China, Iran (Islamic Republic of), Japan and Uzbekistan. In the band 1 668.4-1 675 MHz, administrations are urged not to implement new systems in the meteorological aids service and are encouraged to migrate existing meteorological aids service operations to other bands as soon as practicable. (WRC-03)
- 5.380A** In the band 1 670-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, existing earth stations in the meteorological-satellite service notified before 1 January 2004. Any new assignment to these earth stations in this band shall also be protected from harmful interference from stations in the mobile-satellite service. (WRC-07)
- 5.384A** The bands, or portions of the bands, 1 710-1 885 MHz, 2 300-2 400 MHz and 2 500-2 690 MHz, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-07)\***. This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-07)
- 5.385** *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. (WRC-2000)

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\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

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**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 (IMT). 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 in accordance with Resolution **212 (Rev.WRC-07)** (See also Resolution **223 (Rev.WRC-07)\***). (WRC-12)

**5.388A** In Regions 1 and 3, the bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz and, in Region 2, the bands 1 885-1 980 MHz and 2 110-2 160 MHz may be used by high altitude platform stations as base stations to provide International Mobile Telecommunications-2000 (IMT-2000), in accordance with Resolution **221 (Rev.WRC-03)**. Their use by IMT-2000 applications using high altitude platform stations as base stations does not preclude the use of these bands by any station in the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-03)

**5.389A** The use of the bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobile-satellite service is subject to coordination under No. **9.11A** and to the provisions of Resolution **716 (Rev.WRC-2000)**. (WRC-07)

**5.391** In making assignments to the mobile service in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-97)

**5.392** Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2 025-2 110 MHz and 2 200-2 290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.

**5.398** In respect of the radiodetermination-satellite service in the band 2 483.5-2 500 MHz, the provisions of No. **4.10** do not apply.

**5.398A** *Different category of service:* In Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Ukraine, the band 2 483.5-2 500 MHz is allocated on a primary basis to the radiolocation service. The radiolocation stations in these countries shall not cause harmful interference to, or claim protection from, stations of the fixed, mobile and mobile-satellite services operating in accordance with the Radio Regulations in the frequency band 2 483.5-2 500 MHz. (WRC-12)

**5.399** Except for cases referred to in No. **5.401**, stations of the radiodetermination-satellite service operating in the frequency band 2 483.5-2 500 MHz for which notification information is received by the Bureau after 17 February 2012, and the service area of which includes Armenia, Azerbaijan, Belarus, the Russian Federation, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Ukraine, shall not cause harmful interference to, and shall not claim protection from stations of the radiolocation service operating in these countries in accordance with No. **5.398A**. (WRC-12).

**5.401** In Angola, Australia, Bangladesh, Burundi, China, Eritrea, Ethiopia, India, Iran (Islamic Republic of), Lebanon, Liberia, Libya, Madagascar, Mali, Pakistan, Papua New Guinea, Syrian Arab Republic, Dem. Rep. of the Congo, Sudan, Swaziland, Togo and Zambia, the band 2 483.5-2 500 MHz was already allocated on a primary basis to the radiodetermination-satellite service before WRC-12, subject to agreement obtained under No. **9.21** from countries not listed in this provision. Systems in the radiodetermination-satellite service for which complete coordination information has been received by the Radiocommunication Bureau before 18 February 2012 will retain their regulatory status, as of the date of receipt of the coordination request information. (WRC-12)

**5.402** The use of the band 2 483.5-2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. **9.11A**. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5-2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990-5 000 MHz band allocated to the radio astronomy service worldwide.

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**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**. No. **9.21** does not apply to tropospheric scatter links situated entirely outside Region 1. Administrations shall make all practicable efforts to avoid developing new tropospheric scatter systems in this band. When planning new tropospheric scatter radio-relay links in this band, all possible measures shall be taken to avoid directing the antennas of these links towards the geostationary-satellite orbit. (WRC-12)

**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.

**5.416** 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 provisions of No. **9.19** shall be applied by administrations in this band in their bilateral and multilateral negotiations. (WRC-07)

**5.417A** In applying provision No. **5.418**, in Korea (Rep. of) and Japan, *resolves* 3 of Resolution **528 (Rev.WRC-03)** is relaxed to allow the broadcasting-satellite service (sound) and the complementary terrestrial broadcasting service to additionally operate on a primary basis in the band 2 605-2 630 MHz. This use is limited to systems intended for national coverage. An administration listed in this provision shall not have simultaneously two overlapping frequency assignments, one under this provision and the other under No. **5.416**. The provisions of No. **5.416** and Table **21-4** of Article **21** do not apply. Use of non-geostationary-satellite systems in the broadcasting-satellite service (sound) in the band 2 605-2 630 MHz is subject to the provisions of Resolution **539 (Rev.WRC-03)**. The power flux-density at the Earth's surface produced by emissions from a geostationary broadcasting-satellite service (sound) space station operating in the band 2 605-2 630 MHz for which complete Appendix **4** coordination information, or notification information, has been received after 4 July 2003, for all conditions and for all methods of modulation, shall not exceed the following limits:

$$\begin{aligned} & -130 \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 0^\circ \leq \theta \leq 5^\circ \\ & -130 + 0.4 (\theta - 5) \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 5^\circ < \theta \leq 25^\circ \\ & -122 \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 25^\circ < \theta \leq 90^\circ \end{aligned}$$

where  $\theta$  is the angle of arrival of the incident wave above the horizontal plane, in degrees. These limits may be exceeded on the territory of any country whose administration has so agreed. In the case of the broadcasting-satellite service (sound) networks of Korea (Rep. of), as an exception to the limits above, the power flux-density value of  $\square 122 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  shall be used as a threshold for coordination under No. **9.11** in an area of 1 000 km around the territory of the administration notifying the broadcasting-satellite service (sound) system, for angles of arrival greater than  $35^\circ$ . (WRC-03)

**5.417C** Use of the band 2 605-2 630 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.417A**, for which complete Appendix **4** coordination information, or notification information, has been received after 4 July 2003, is subject to the application of the provisions of No. **9.12**. (WRC-03)

**5.417D** Use of the band 2 605-2 630 MHz by geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, has been received after 4 July 2003 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), pursuant to No. **5.417A**, and No. **22.2** does not apply. (WRC-03)

**5.418** *Additional allocation:* in Korea (Rep. of), India, Japan and Thailand, 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 the provisions of

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Resolution **528 (Rev.WRC-03)**. The provisions of No. **5.416** and Table **21-4** of Article **21**, do not apply to this additional allocation. Use of non-geostationary-satellite systems in the broadcasting-satellite service (sound) is subject to Resolution **539 (Rev.WRC-03)**. Geostationary broadcasting-satellite service (sound) systems for which complete Appendix **4** coordination information has been received after 1 June 2005 are limited to systems intended for national coverage. The power flux-density at the Earth's surface produced by emissions from a geostationary broadcasting satellite service (sound) space station operating in the band 2 630-2 655 MHz, and for which complete Appendix **4** coordination information has been received after 1 June 2005, shall not exceed the following limits, for all conditions and for all methods of modulation:

$$\begin{aligned} & -130 \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 0^\circ \leq \theta \leq 5^\circ \\ & -130 \square 0.4 (\theta - 5) \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 5^\circ < \theta \leq 25^\circ \\ & -122 \text{ dB(W/(m}^2 \cdot \text{MHz))} && \text{for } 25^\circ < \theta \leq 90^\circ \end{aligned}$$

where  $\theta$  is the angle of arrival of the incident wave above the horizontal plane, in degrees. These limits may be exceeded on the territory of any country whose administration has so agreed. As an exception to the limits above, the pfd value of  $-122 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  shall be used as a threshold for coordination under No. **9.11** in an area of 1 500 km around the territory of the administration notifying the broadcasting-satellite service (sound) system.

**5.418B** Use of the band 2 630-2 655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418**, for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000, is subject to the application of the provisions of No. **9.12**. (WRC-03)

**5.418C** Use of the band 2 630-2 655 MHz by geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. **9.13** with respect to non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418** and No. **22.2** does not apply. (WRC-03)

**5.420** The band 2 655-2 670 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 No. **9.11A** applies. (WRC-07)

**5.422** *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Brunei Darussalam, Congo (Rep. of the), Côte d'Ivoire, Cuba, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Mauritania, Mongolia, Montenegro, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, the Dem. Rep. of the Congo, Romania, Somalia, Tajikistan, Tunisia, Turkmenistan, Ukraine and Yemen, 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. (WRC-12)

**5.423** In the band 2 700-2 900 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the aeronautical radionavigation service.

**5.424A** In the band 2 900-3 100 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the radionavigation service. (WRC-03)

**5.425** In the band 2 900-3 100 MHz, the use of the shipborne interrogator-transponder (SIT) system shall be confined to the sub-band 2 930 -2 950 MHz.



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**5.426** The use of the band 2 900-3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.

**5.427** In the bands 2 900-3 100 MHz and 9 300-9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. **4.9**.

**5.430A** *Different category of service:* in Albania, Algeria, Germany, Andorra, Saudi Arabia, Austria, Azerbaijan, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Cameroon, Cyprus, Vatican, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Egypt, Spain, Estonia, Finland, France and French overseas departments and communities in Region 1, Gabon, Georgia, Greece, Guinea, Hungary, Ireland, Iceland, Israel, Italy, Jordan, Kuwait, Lesotho, Latvia, The Former Yugoslav Republic of Macedonia, Liechtenstein, Lithuania, Malawi, Mali, Malta, Morocco, Mauritania, Moldova, Monaco, Mongolia, Montenegro, Mozambique, Namibia, Niger, Norway, Oman, Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Slovakia, Czech Rep., Romania, United Kingdom, San Marino, Senegal, Serbia, Sierra Leone, Slovenia, South Africa, Sweden, Switzerland, Swaziland, Chad, Togo, Tunisia, Turkey, Ukraine, Zambia and Zimbabwe, the band 3 400-3 600 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis subject to agreement obtained under No. **9.21** with other administrations and is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this band, it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed  $-154.5 \text{ dB(W)/(m}^2 \cdot 4 \text{ kHz)}$  for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the band 3 400-3 600 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). This allocation is effective from 17 November 2010. (WRC-12)

**5.438** Use of the band 4 200-4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the Earth exploration-satellite and space research services may be authorized 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 authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of  $\pm 2$  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 systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

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**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. In Region 2 (except Brazil, Cuba, Guatemala, Paraguay, Uruguay and Venezuela), and in Australia, the band 4 825-4 835 MHz is also allocated to the aeronautical mobile service, limited to aeronautical mobile telemetry for flight testing by aircraft stations. Such use shall be in accordance with Resolution **416 (WRC-07)** and shall not cause harmful interference to the fixed service. (WRC-07)

**5.443AA** In the frequency bands 5 000-5 030 MHz and 5 091-5 150 MHz, the aeronautical mobile-satellite (R) service is subject to agreement obtained under No. **9.21**. The use of these bands by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)

**5.443B** In order not to cause harmful interference to the microwave landing system operating above 5 030 MHz, the aggregate power flux-density produced at the Earth's surface in the band 5 030-5 150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the band 5 010-5 030 MHz shall not exceed  $-124.5 \text{ dB(W/m}^2\text{)}$  in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4 990-5 000 MHz, radionavigation-satellite service systems operating in the band 5 010-5 030 MHz shall comply with the limits in the band 4 990-5 000 MHz defined in Resolution **741 (WRC-03)**. (WRC-03)

**5.443B** In order not to cause harmful interference to the microwave landing system operating above 5 030 MHz, the aggregate power flux-density produced at the Earth's surface in the band 5 030-5 150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the band 5 010-5 030 MHz shall not exceed  $-124.5 \text{ dB(W/m}^2\text{)}$  in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4 990-5 000 MHz, radionavigation-satellite service systems operating in the band 5 010-5 030 MHz shall comply with the limits in the band 4 990-5 000 MHz defined in Resolution **741 (Rev.WRC-12)**. (WRC-12)

**5.443C** The use of the frequency band 5 030-5 091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5 030-5 091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5 010-5 030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of  $-75 \text{ dBW/MHz}$  in the frequency band 5 010-5 030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)

**5.443D** In the frequency band 5 030-5 091 MHz, the aeronautical mobile-satellite (R) service is subject to coordination under No. **9.11A**. The use of this frequency band by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)

**5.444** The frequency band 5 030-5 150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. In the frequency band 5 030-5 091 MHz, the requirements of this system shall have priority over other uses of this band. For the use of the frequency band 5 091-5 150 MHz, No. **5.444A** and Resolution **114 (Rev.WRC-12)** apply. (WRC-12)

**5.444A** *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 satellite systems in the mobile-satellite service and is subject to coordination under No. **9.11A**.

In the band 5 091-5 150 MHz, the following conditions also apply:

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- prior to 1 January 2018, the use of the band 5 091-5 150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution **114 (Rev.WRC-03)\***;
- after 1 January 2016, no new assignments shall be made to earth stations providing feeder links of non-geostationary mobile-satellite systems;
- after 1 January 2018, the fixed-satellite service will become secondary to the aeronautical radionavigation service. (WRC-07)

**5.444B** The use of the frequency band 5 091-5 150 MHz by the aeronautical mobile service is limited to:

- systems operating in the aeronautical mobile (R) service and in accordance with international aeronautical standards, limited to surface applications at airports. Such use shall be in accordance with Resolution **748 (Rev.WRC-12)**;
- aeronautical telemetry transmissions from aircraft stations (see No. **1.83**) in accordance with Resolution **418 (Rev.WRC-12)**. (WRC-12)

**5.446** *Additional allocation:* in the countries listed in No. **5.369**, 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 No. **5.369** and Bangladesh, 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/m<sup>2</sup>) in any 4 kHz band for all angles of arrival. (WRC-12)

**5.446A** The use of the bands 5 150-5 350 MHz and 5 470-5 725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution **229 (Rev.WRC-12)**. (WRC-12)

**5.446B** In the band 5 150-5 250 MHz, stations in the mobile service shall not claim protection from earth stations in the fixed-satellite service. No. **5.43A** does not apply to the mobile service with respect to fixed-satellite service earth stations. (WRC-03)

**5.446C** *Additional allocation:* in Region 1 (except in Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Syrian Arab Republic, Sudan, South Sudan and Tunisia) and in Brazil, the band 5 150-5 250 MHz is also allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. **1.83**), in accordance with Resolution **418 (Rev.WRC-12)**. These stations shall not claim protection from other stations operating in accordance with Article 5. No. **5.43A** does not apply. (WRC-12)

**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 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 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/m<sup>2</sup>) in any 4 kHz band for all angles of arrival.

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\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

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**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 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. (WRC-97)

**5.447F** In the band 5 250-5 350 MHz, stations in the mobile service shall not claim protection from the radiolocation service, the Earth exploration-satellite service (active) and the space research service (active). These services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendations ITU-R M.1638 and ITU-R SA.1632. (WRC-03)

**5.448A** The Earth exploration-satellite (active) and space research (active) services in the frequency band 5 250-5 350 MHz shall not claim protection from the radiolocation service. No. **5.43A** does not apply. (WRC-03)

**5.448B** The Earth exploration-satellite service (active) operating in the band 5 350-5 570 MHz and space research service (active) operating in the band 5 460-5 570 MHz shall not cause harmful interference to the aeronautical radionavigation service in the band 5 350-5 460 MHz, the radionavigation service in the band 5 460-5 470 MHz and the maritime radionavigation service in the band 5 470-5 570 MHz. (WRC-03)

**5.448C** The space research service (active) operating in the band 5 350-5 460 MHz shall not cause harmful interference to nor claim protection from other services to which this band is allocated. (WRC-03)

**5.448D** In the frequency band 5 350-5 470 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the aeronautical radionavigation service operating in accordance with No. **5.449**. (WRC-03)

**5.449** The use of the band 5 350-5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.

**5.450A** In the band 5 470-5 725 MHz, stations in the mobile service shall not claim protection from radiodetermination services. Radiodetermination services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendation ITU-R M.1638. (WRC-03)

**5.450B** In the frequency band 5 470-5 650 MHz, stations in the radiolocation service, except ground-based radars used for meteorological purposes in the band 5 600-5 650 MHz, shall not cause harmful interference to, nor claim protection from, radar systems in the maritime radionavigation service. (WRC-03)

**5.452** Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the maritime radionavigation service.

**5.457A** In the bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may communicate with space stations of the fixed-satellite service. Such use shall be in accordance with Resolution **902 (WRC-03)**. (WRC-03)

**5.457B** In the bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may operate with the characteristics and under the conditions contained in Resolution **902 (WRC-03)** in Algeria, Saudi Arabia, Bahrain, Comoros, Djibouti, Egypt, United Arab Emirates, Jordan, Kuwait, Libya, Morocco,

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Mauritania, Oman, Qatar, the Syrian Arab Republic, Sudan, South Sudan, Tunisia and Yemen, in the maritime mobile-satellite service on a secondary basis. Such use shall be in accordance with Resolution **902 (WRC-03)**. (WRC-12)

**5.458** In the band 6 425-7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075-7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425-7 025 MHz and 7 075-7 250 MHz.

**5.458A** In making assignments in the band 6 700-7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650-6 675.2 MHz from harmful interference from unwanted emissions.

**5.458B** The space-to-Earth allocation to the fixed-satellite service in the band 6 700-7 075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under No. **9.11A**. The use of the band 6 700-7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. **22.2**.

**5.458C** Administrations making submissions in the band 7 025-7 075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.

**5.460** The use of the band 7 145-7 190 MHz by the space research service (Earth-to-space) is restricted to deep space; no emissions to deep space shall be effected in the band 7 190-7 235 MHz. Geostationary satellites in the space research service operating in the band 7 190-7 235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. **5.43A** does not apply. (WRC-03)

**5.461** *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. (WRC-97)

**5.461B** The use of the band 7 750-7 900 MHz by the meteorological-satellite service (space-to-Earth) is limited to non-geostationary satellite systems. (WRC-12)

**5.462A** In Regions 1 and 3 (except for Japan), in the band 8 025-8 400 MHz, the Earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following values for angles of arrival ( $\theta$ ), without the consent of the affected administration:

-135 dB(W/m <sup>2</sup> ) in a 1 MHz band	for $0^\circ \leq \theta < 5^\circ$
-135 + 0.5 ( $\theta - 5$ ) dB(W/m <sup>2</sup> ) in a 1 MHz band	for $5^\circ \leq \theta < 5^\circ$
-125 dB(W/m <sup>2</sup> ) in a 1 MHz band	for $25^\circ \leq \theta \leq 90^\circ$ (WRC-12)

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- 5.463** Aircraft stations are not permitted to transmit in the band 8 025-8 400 MHz. (WRC-97)
- 5.465** In the space research service, the use of the band 8 400-8 450 MHz is limited to deep space.
- 5.469A** In the band 8 550-8 650 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service. (WRC-97)
- 5.470** The use of the band 8 750-8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.
- 5.472** In the bands 8 850-9 000 MHz and 9 200-9 225 MHz, the maritime radionavigation service is limited to shore-based radars.
- 5.474** In the band 9 200-9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article 31).
- 5.475** The use of the band 9 300-9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300-9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. (WRC-07)
- 5.475A** The use of the band 9 300-9 500 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 300 MHz that cannot be fully accommodated within the 9 500-9 800 MHz band. (WRC-07)
- 5.475B** In the band 9 300-9 500 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, radars operating in the radionavigation service in conformity with the Radio Regulations. Ground-based radars used for meteorological purposes have priority over other radiolocation uses. (WRC-07)
- 5.476A** In the band 9 300-9 800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from, stations of the radionavigation and radiolocation services. (WRC-07)
- 5.478A** The use of the band 9 800-9 900 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 500 MHz that cannot be fully accommodated within the 9 300-9 800 MHz band. (WRC-07)
- 5.478B** In the band 9 800-9 900 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from stations of the fixed service to which this band is allocated on a secondary basis. (WRC-07)
- 5.479** The band 9 975-10 025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.
- 5.482** In the band 10.6-10.68 GHz, the power delivered to the antenna of stations of the fixed and mobile, except aeronautical mobile, services shall not exceed -3 dBW. This limit may be exceeded, subject to agreement obtained under No. 9.21. However, in Algeria, Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Egypt, United Arab Emirates, Georgia, India, Indonesia, Iran (Islamic Republic of), Iraq, Jordan, Libyan Arab Jamahiriya, Kazakhstan, Kuwait, Lebanon, Morocco, Mauritania, Moldova, Nigeria, Oman, Uzbekistan, Pakistan, Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, Singapore, Tajikistan, Tunisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, service is not applicable. (WRC-07)

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**5.482A** For sharing of the band 10.6-10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution **751 (WRC-07)** applies. (WRC-07)

**5.483** *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, China, Colombia, Korea (Rep. of), Costa Rica, Egypt, the United Arab Emirates, Georgia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Mongolia, Qatar, Kyrgyzstan, the Dem. People's Rep. of Korea, Tajikistan, Turkmenistan and Yemen, 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. (WRC-12)

**5.484** In Region 1, the use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

**5.484A** The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

**5.487** In the band 11.7-12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to, or claim protection from, broadcasting-satellite stations operating in accordance with the Regions 1 and 3 Plan in Appendix **30**. (WRC-03)

**5.487A** *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-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-03)

**5.492** Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix **30** may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate. (WRC-2000)

**5.497** The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.

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**5.498A** The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)

**5.500** *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, the Syrian Arab Republic, Singapore, Sudan, Chad and Tunisia, the band 13.4-14 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-03)

**5.501A** The allocation of the band 13.4-13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)

**5.501B** In the band 13.4-13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service. (WRC-97)

**5.502** In the band 13.75-14 GHz, an earth station of a geostationary fixed-satellite service network shall have a minimum antenna diameter of 1.2 m and an earth station of a non-geostationary fixed-satellite service system shall have a minimum antenna diameter of 4.5 m. In addition, the e.i.r.p., averaged over one second, radiated by a station in the radiolocation or radionavigation services shall not exceed 59 dBW for elevation angles above 2° and 65 dBW at lower angles. Before an administration brings into use an earth station in a geostationary-satellite network in the fixed-satellite service in this band with an antenna size smaller than 4.5 m, it shall ensure that the power flux-density produced by this earth station does not exceed:

- -115 dB(W/(m<sup>2</sup> · 10 MHz)) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognized by the coastal State;
- -115 dB(W/(m<sup>2</sup> · 10 MHz)) for more than 1% of the time produced 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained.

For earth stations within the fixed-satellite service having an antenna diameter greater than or equal to 4.5 m, the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. (WRC-03)

**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:

- in the band 13.77-13.78 GHz, the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in geostationary-satellite orbit shall not exceed:
  - i)  $4.7D + 28$  dB(W/40 kHz), where  $D$  is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 1.2 m and less than 4.5 m;
  - ii)  $49.2 + 20 \log(D/4.5)$  dB(W/40 kHz), where  $D$  is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 4.5 m and less than 31.9 m;
  - iii) 66.2 dB(W/40 kHz) for any fixed-satellite service earth station for antenna diameters (m) equal to or greater than 31.9 m;



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- iv) 56.2 dB(W/4 kHz) for narrow-band (less than 40 kHz of necessary bandwidth) fixed-satellite service earth station emissions from any fixed-satellite service earth station having an antenna diameter of 4.5 m or greater;
- 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 these frequency ranges to compensate for rain attenuation, to the extent that the power flux-density at the fixed-satellite service space station does not exceed the value resulting from use by an earth station of an e.i.r.p. meeting the above limits in clear-sky conditions. (WRC-03)

**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.

**5.504A** In the band 14-14.5 GHz, aircraft earth stations in the secondary aeronautical mobile-satellite service may also communicate with space stations in the fixed-satellite service. The provisions of Nos. **5.29**, **5.30** and **5.31** apply. (WRC-03)

**5.504B** Aircraft earth stations operating in the aeronautical mobile-satellite service in the band 14-14.5 GHz shall comply with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz band located on the territory of Spain, France, India, Italy, the United Kingdom and South Africa. (WRC-03)

**5.504C** In the band 14-14.25 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Botswana, Côte d'Ivoire, Egypt, Guinea, India, Iran (Islamic Republic of), Kuwait, Nigeria, Oman, the Syrian Arab Republic and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-12)

**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.

**5.506A** In the band 14-14.5 GHz, ship earth stations with an e.i.r.p. greater than 21 dBW shall operate under the same conditions as earth stations located on board vessels, as provided in Resolution **902 (WRC-03)**. This footnote shall not apply to ship earth stations for which the complete Appendix 4 information has been received by the Bureau prior to 5 July 2003. (WRC-03)

**5.506B** Earth stations located on board vessels communicating with space stations in the fixed-satellite service may operate in the frequency band 14-14.5 GHz without the need for prior agreement from Cyprus, Greece and Malta, within the minimum distance given in Resolution **902 (WRC-03)** from these countries. (WRC-03)

**5.508A** In the band 14.25-14.3 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Botswana, China, Côte d'Ivoire, Egypt, France, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-12)

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**5.509A** In the band 14.3-14.5 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Botswana, Cameroon, China, Côte d'Ivoire, Egypt, France, Gabon, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Morocco, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom, Sri Lanka, Tunisia and Viet Nam by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-12)

**5.511** *Additional allocation:* in Saudi Arabia, Bahrain, Cameroon, Egypt, the United Arab Emirates, Guinea, Iran (Islamic Republic of), Iraq, Israel, Kuwait, Lebanon, Oman, Pakistan, Qatar, the Syrian Arab Republic and Somalia, the band 15.35-15.4 GHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-12)

**5.511A** The band 15.43-15.63 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. Use of the band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth and Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. **9.11A**. The use of the frequency band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth) is limited to feeder links of non-geostationary systems in the mobile-satellite service for which advance publication information has been received by the Bureau prior to 2 June 2000. In the space-to-Earth direction, the minimum earth station elevation angle above and gain towards the local horizontal plane and the minimum coordination distances to protect an earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. In order to protect the radio astronomy service in the band 15.35-15.4 GHz, the aggregate power flux-density radiated in the 15.35-15.4 GHz band by all the space stations within any feeder-link of a non-geostationary system in the mobile-satellite service (space-to-Earth) operating in the 15.43-15.63 GHz band shall not exceed the level of  $-156 \text{ dB(W/m}^2\text{)}$  in a 50 MHz bandwidth, into any radio astronomy observatory site for more than 2% of the time. (WRC-2000)

**5.511C** Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. **4.10** applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340. (WRC-97)

**5.511D** Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of  $-146 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  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  $-146 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  for any angle of arrival, it shall coordinate under No. **9.11A** with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. **4.10** applies). (WRC-97)

**5.511E** In the frequency band 15.4-15.7 GHz, stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the aeronautical radionavigation service. (WRC-12)

**5.511F** In order to protect the radio astronomy service in the frequency band 15.35-15.4 GHz, radiolocation stations operating in the frequency band 15.4-15.7 GHz shall not exceed the power flux-density level of  $-156 \text{ dB(W/m}^2\text{)}$  in a 50 MHz bandwidth in the frequency band 15.35-15.4 GHz, at any radio astronomy observatory site for more than 2 per cent of the time. (WRC-12)

**5.513A** Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis. (WRC-97)

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**5.516** The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. The use of the band 17.3-17.8 GHz in Region 2 by systems in the fixed-satellite service (Earth-to-space) is limited to geostationary satellites. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article 11. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. 9.12 for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. 5.43A does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

**5.516A** In the band 17.3-17.7 GHz, earth stations of the fixed-satellite service (space-to-Earth) in Region 1 shall not claim protection from the broadcasting-satellite service feeder-link earth stations operating under Appendix 30A, nor put any limitations or restrictions on the locations of the broadcasting-satellite service feeder-link earth stations anywhere within the service area of the feeder link. (WRC-03)

**5.516B** The following bands are identified for use by high-density applications in the fixed-satellite service:

- 17.3-17.7 GHz (space-to-Earth) in Region 1,
- 18.3-19.3 GHz (space-to-Earth) in Region 2,
- 19.7-20.2 GHz (space-to-Earth) in all Regions,
- 39.5-40 GHz (space-to-Earth) in Region 1,
- 40-40.5 GHz (space-to-Earth) in all Regions,
- 40.5-42 GHz (space-to-Earth) in Region 2,
- 47.5-47.9 GHz (space-to-Earth) in Region 1,
- 48.2-48.54 GHz (space-to-Earth) in Region 1,
- 49.44-50.2 GHz (space-to-Earth) in Region 1,
- and
- 27.5-27.82 GHz (Earth-to-space) in Region 1,
- 28.35-28.45 GHz (Earth-to-space) in Region 2,
- 28.45-28.94 GHz (Earth-to-space) in all Regions,
- 28.94-29.1 GHz (Earth-to-space) in Region 2 and 3,

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

- 29.25-29.46 GHz (Earth-to-space) in Region 2,
- 29.46-30 GHz (Earth-to-space) in all Regions,
- 48.2-50.2 GHz (Earth-to-space) in Region 2.

This identification does not preclude the use of these bands by other fixed-satellite service applications or by other services to which these bands are allocated on a co-primary basis and does not establish priority in these Radio Regulations among users of the bands. Administrations should take this into account when considering regulatory provisions in relation to these bands. See Resolution **143 (WRC-03)**\*. (WRC-03)

**5.519** *Additional allocation:* the bands 18-18.3 GHz in Region 2 and 18.1-18.4 GHz in Regions 1 and 3 are also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Their use is limited to geostationary satellites. (WRC-07)

**5.520** The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of geostationary-satellite systems in the broadcasting-satellite service. (WRC-2000)

**5.522A** The emissions of the fixed service and the fixed-satellite service in the band 18.6-18.8 GHz are limited to the values given in Nos. **21.5A** and **21.16.2**, respectively. (WRC-2000)

**5.522B** The use of the band 18.6-18.8 GHz by the fixed-satellite service is limited to geostationary systems and systems with an orbit of apogee greater than 20 000 km. (WRC-2000)

**5.523A** The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of No. **9.11A** and No. **22.2** does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. **9.11A** with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix 4 notification information is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

**5.523B** The use of the band 19.3-19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **9.11A**, and No. **22.2** does not apply.

**5.523C** No. **22.2** shall continue to apply in the bands 19.3-19.6 GHz and 29.1-29.4 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix 4 coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

**5.523D** The use of the band 19.3-19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No. **9.11A**, but not subject to the provisions of No. **22.2**. The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. **5.523C** and **5.523E**, is not subject to the provisions of No. **9.11A** and shall continue to be subject to Articles **9** (except No. **9.11A**) and **11** procedures, and to the provisions of No. **22.2**. (WRC-97)

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\* *Note by the Secretariat:* This Resolution was revised by WRC-07.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

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

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**5.536** Use of the 25.25-27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.

**5.536A** Administrations operating earth stations in the Earth exploration-satellite service or the space research service shall not claim protection from stations in the fixed and mobile services operated by other administrations. In addition, earth stations in the Earth exploration-satellite service or in the space research service should be operated taking into account the most recent version of Recommendation ITU-R SA.1862. (WRC-12)

**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. (WRC-07)

**5.539** The band 27.5-30 GHz may be used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting-satellite service.

**5.540** *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. (WRC-2000)

**5.543** The band 29.95-30 GHz may be used for space-to-space links in the Earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.

**5.544** 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.

**5.547** The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolution 75 (WRC-2000)\*). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5-40 GHz and 40.5-42 GHz (see No. 5.516B), administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate. (WRC-07)

**5.547A** Administrations should take practical measures to minimize the potential interference between stations in the fixed service and airborne stations in the radionavigation service in the 31.8-33.4 GHz band, taking into account the operational needs of the airborne radar systems. (WRC-2000)

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\* *Note by the Secretariat:* This Resolution was revised by WRC-12.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

**5.548** In designing systems for the inter-satellite service in the band 32.3-33 GHz, for the radionavigation service 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**). (WRC-03)

**5.549A** In the band 35.5-36.0 GHz, the mean power flux-density at the Earth's surface, generated by any spaceborne sensor in the Earth exploration-satellite service (active) or space research service (active), for any angle greater than 0.8° from the beam centre shall not exceed -73.3 dB(W/m<sup>2</sup>) in this band. (WRC-03)

**5.550A** For sharing of the band 36-37 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile services, Resolution **752 (WRC-07)** shall apply. (WRC-07)

**5.551H** The equivalent power flux-density (epfd) produced in the band 42.5-43.5 GHz by all space stations in any non-geostationary-satellite system in the fixed-satellite service (space-to-Earth), or in the broadcasting-satellite service operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station for more than 2% of the time:

-230 dB(W/m<sup>2</sup>) in 1 GHz and -246 dB(W/m<sup>2</sup>) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and

-209 dB(W/m<sup>2</sup>) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station.

These epfd values shall be evaluated using the methodology given in Recommendation ITU-R S.1586-1 and the reference antenna pattern and the maximum gain of an antenna in the radio astronomy service given in Recommendation ITU-R RA.1631 and shall apply over the whole sky and for elevation angles higher than the minimum operating angle  $\theta_{min}$  of the radiotelescope (for which a default value of 5° should be adopted in the absence of notified information).

These values shall apply at any radio astronomy station that either:

- was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or
- was notified before the date of receipt of the complete Appendix 4 information for coordination or notification, as appropriate, for the space station to which the limits apply.

Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-07)

**5.551I** The power flux-density in the band 42.5-43.5 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth), or the broadcasting-satellite service (space-to-Earth) operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station:

-137 dB(W/m<sup>2</sup>) in 1 GHz and -153 dB(W/m<sup>2</sup>) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and

-116 dB(W/m<sup>2</sup>) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station.

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

These values shall apply at the site of any radio astronomy station that either:

- was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or
- was notified before the date of receipt of the complete Appendix 4 information for coordination or notification, as appropriate, for the space station to which the limits apply.

Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-03)

**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 (Rev.WRC-07)**. (WRC-07)

**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**). (WRC-2000)

**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. (WRC-2000)

**5.554A** The use of the bands 47.5-47.9 GHz, 48.2-48.54 GHz and 49.44-50.2 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary satellites. (WRC-03)

**5.555** *Additional allocation:* the band 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis. (WRC-2000)

**5.555B** The power flux-density in the band 48.94-49.04 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth) operating in the bands 48.2-48.54 GHz and 49.44-50.2 GHz shall not exceed  $-151.8 \text{ dB(W/m}^2\text{)}$  in any 500 kHz band at the site of any radio astronomy station. (WRC-03)

**5.556** In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements. (WRC-2000)

**5.556A** Use of the bands 54.25-56.9 GHz, 57-58.2 GHz and 59-59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed  $-147 \text{ dB(W/(m}^2 \cdot 100 \text{ MHz))}$  for all angles of arrival. (WRC-97)

**5.557A** In the band 55.78-56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to  $-26 \text{ dB(W/MHz)}$ . (WRC-2000)



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**5.558** In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 122.25-123 GHz, 130-134 GHz, 167-174.8 GHz and 191.8-200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **5.43**). (WRC-2000)

**5.558A** Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed  $-147 \text{ dB(W/(m}^2 \cdot 100 \text{ MHz))}$  for all angles of arrival. (WRC-97)

**5.559** In the band 59-64 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **5.43**). (WRC-2000)

**5.560** In the band 78-79 GHz radars located on space stations may be operated on a primary basis in the Earth exploration-satellite service and in the space research service.

**5.561** In the band 74-76 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the fixed-satellite service or stations of the broadcasting-satellite service operating in accordance with the decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service. (WRC-2000)

**5.561A** The 81-81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis. (WRC-2000)

**5.562** The use of the band 94-94.1 GHz by the Earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars. (WRC-97)

**5.562A** In the bands 94-94.1 GHz and 130-134 GHz, transmissions from space stations of the Earth exploration-satellite service (active) that are directed into the main beam of a radio astronomy antenna have the potential to damage some radio astronomy receivers. Space agencies operating the transmitters and the radio astronomy stations concerned should mutually plan their operations so as to avoid such occurrences to the maximum extent possible. (WRC-2000)

**5.562B** In the bands 105-109.5 GHz, 111.8-114.25 GHz, 155.5-158.5 GHz and 217-226 GHz, the use of this allocation is limited to space-based radio astronomy only. (WRC-2000)

**5.562C** Use of the band 116-122.25 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed  $-148 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  for all angles of arrival. (WRC-2000)

**5.562E** The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5-134 GHz. (WRC-2000)

**5.562F** In the band 155.5-158.5 GHz, the allocation to the Earth exploration-satellite (passive) and space research (passive) services shall terminate on 1 January 2018. (WRC-2000)

**5.562G** The date of entry into force of the allocation to the fixed and mobile services in the band 155.5-158.5 GHz shall be 1 January 2018. (WRC-2000)

**5.562H** Use of the bands 174.8-182 GHz and 185-190 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 to 1 000 km

## Annex 2 ~ Relevant Footnotes from ITU Radio Regulations

above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed  $-144 \text{ dB(W/(m}^2 \cdot \text{MHz))}$  for all angles of arrival. (WRC-2000)

**5.563A** In the bands 200-209 GHz, 235-238 GHz, 250-252 GHz and 265-275 GHz, ground-based passive atmospheric sensing is carried out to monitor atmospheric constituents. (WRC-2000)

**5.563B** The band 237.9-238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only. (WRC-2000)

**5.565** The following frequency bands in the range 275-1 000 GHz are identified for use by administrations for passive service applications:

- radio astronomy service: 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz and 926-945 GHz;
- Earth exploration-satellite service (passive) and space research service (passive): 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz.

The use of the range 275-1 000 GHz by the passive services does not preclude use of this range by active services. Administrations wishing to make frequencies in the 275-1 000 GHz range available for active service applications are urged to take all practicable steps to protect these passive services from harmful interference until the date when the Table of Frequency Allocations is established in the above-mentioned 275-1 000 GHz frequency range.

All frequencies in the range 1 000-3 000 GHz may be used by both active and passive services. (WRC-12)

# **Annex 3**

## **National Footnotes**

### Annex 3 ~ National Footnotes

- MLT01 The entire radio frequency spectrum could also be used by equipment using ultra-wideband technology subject to the conditions set out in S.L.399.40.
- MLT02 Currently spectrum allocated to broadcasting services, with the exception of public broadcasting services, is assigned to the Broadcasting Authority in accordance with Article 18 of the Broadcasting Act (Cap.350). However, spectrum for the distribution of television and radio services in accordance with the Electronic Communications (Regulation) Act (Cap. 399) is assigned to the Malta Communications Authority.
- MLT03 Stations in the amateur service using the band 472-479 kHz shall not exceed a maximum equivalent isotropically radiated power (e.i.r.p.) of 1 Watt and shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service.
- MLT04 The band 30 MHz - 12.4 GHz may be used by Ground- and Wall- Probing Radar applications (GPR/WPR) imaging systems in accordance with ECC Dec (06)08.
- MLT05 The rights of use of certain TV channels within this band are to be granted to providers of broadcast content services to pursue general interest objectives.
- MLT06 The allocation of the band to the broadcasting service is limited to digital terrestrial broadcasting. The use of the band by analogue terrestrial television is no longer permitted.
- MLT07 The technical parameters of electronic communications systems operating in the band 790 - 862 MHz will be in accordance with EC Decision 2010/267/EU.
- MLT08 Wireless audio PMSE equipment are allowed to make use of that spectrum which is not used or earmarked for the use by terrestrial broadcasting services. The provisions contained in S.L.399.40 apply.
- MLT09 The bands 21.65 - 24.25 GHz and 24.25 - 26.65 GHz will cease to be available for automotive short-range radar equipment until the dates established in the Third Schedule of the General Authorisations (Radiocommunications Apparatus) Regulations (S.L.399.40).

## **Annex 4**

### **List of Relevant Documentation**

## Annex 4 ~ List of Relevant Documentation

The documents listed below can be sourced from the relevant organizations – see Annex 5 for the addresses.

### Part 1 : National Legislation

#### Chapter 399

Electronic Communications (Regulation) Act.

#### S.L.399.40

General Authorisations (Radiocommunications Apparatus) Regulation.

#### S.L.399.44

Authorisation of Frequency Use (Provision of 2GHz Mobile Satellite Services) Regulations.

### Part 2 : MCA Decisions

#### MCA/10/44/D

The Future of the 900 MHz and 1800 MHz bands: MCA Decision on the Assignment Methodology and Licence Conditions.

#### MCA/D/12-0754

Assignment of Spectrum in the 3400 – 3800 MHz band: Decision of the Malta Communications Authority on the Assignment Methodology and Licence Conditions.

#### MCA/D/14-1933

Assignment Process for Additional Spectrum for Wireless Broadband.

### Part 3 : EC Directives

#### 87/372/EEC

On the frequency bands to be reserved for the co-ordinated introduction of public Pan-European Cellular digital land-based mobile communications in the Community.

*Amended by Council Directive 2009/114/EC.*

#### 91/287/EEC

On the frequency bands to be designated for the coordinated introduction of digital European cordless telecommunication (DECT) in the Community.

#### 2009/114/EC

Amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community.

### Part 4 : EC Decisions

#### 2004/545/EC

On the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community.

#### 2005/50/EC

On the harmonisation of the 24 GHz range radio spectrum for the time-limited use by automotive short-range radar equipment in the Community.

*Amended by Commission Implementing Decision 2011/485/EU.*

#### 2005/513/EC

On the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs).

*Amended by Commission Decision 2007/90/EC.*

#### 2006/771/EC

On harmonisation of the radio spectrum for use by short-range devices.

*Amended by Commission Decisions 2008/432/EC, 2009/381/EC, 2010/368/EU, 2011/829/EU and 2013/752/EU.*

#### 2006/804/EC

On harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band.

#### 2007/90/EC

Amending Decision 2005/513/EC on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs).

#### 2007/98/EC

On the harmonised use of radio spectrum in the 2GHz frequency bands for the implementation of systems providing mobile satellite services.

#### 2007/131/EC

On allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community.

*Amended by Commission Decisions 2009/343/EC and 2014/702/EU.*

#### 2008/294/EC

On harmonised conditions of spectrum use for the operation of mobile communication services on aircraft (MCA services) within the Community.

*Amended by Commission Implementing Decision 2013/654/EU.*

#### 2008/411/EC

On the harmonisation of the 3400-3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community.

#### 2008/432/EC

Amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

#### 2008/477/EC

On the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing mobile satellite services.

#### 2008/671/EC

On the harmonised use of radio spectrum in the 5875-5905 MHz frequency band for safety related applications of Intelligent Transport Systems (ITS).

## Annex 4 ~ List of Relevant Documentation

### 2009/343/EC

Amending Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community.

### 2009/381/EC

Amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

### 2009/766/EC

On the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community.

*Amended by Commission Implementing Decision 2011/251/EU.*

### 2010/166/EU

On harmonised use of radio spectrum for mobile communication services on board vessels (MCV services) in the European Union.

### 2010/267/EU

On harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union.

### 2010/368/EU

Amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

### 2011/251/EU

Amending Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community.

### 2011/485/EU

Amending Decision 2005/50/EC on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community.

### 2011/829/EU

Amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices.

### 2012/688/EU

On the harmonisation of the frequency bands 1920-1980 MHz and 2110-2170 MHz for terrestrial systems capable of providing electronic communications services in the Union.

### 243/2012/EU

Establishing a multi-annual radio spectrum policy programme (RSPP).

### C(2013) 4590

Granting a derogation to the Republic of Malta under Article 6(4) of the Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme (RSPP).

### 2013/654/EU

Amending Commission Decision 2008/294/EC to include additional access technologies and frequency bands for mobile communications services on aircraft (MCA services).

### 2013/752/EU

Amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices and repealing Decision 2005/928/EU.

### 2014/641/EU

On harmonised technical conditions of radio spectrum use by wireless audio programme making and special events in the Union.

### 2014/702/EU

Amending Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community.

## Part 5 : CEPT Decisions

### ERC Dec (94)03

ERC Decision of 24 October 1994 on the frequency band to be designated for the coordinated introduction of the Digital European Cordless Telecommunications system.

### ERC Dec (98)25

ERC Decision of 23 November 1998 on the harmonised frequency band to be designated for PMR 446.

### ERC Dec (99)06

ERC Decision of 10 March 1999 on the harmonised introduction of satellite personal communication systems operating in the bands below 1 GHz (S-PCS<1GHz).

### ERC Dec (99)17

ERC Decision of 1 June 1999 on the Automatic Identification and Surveillance system (AIS) channels in the maritime VHF band.

### ERC Dec (00)02

ERC Decision of 27 March 2000 on the use of the band 37.5-40.5 GHz by the fixed service and Earth stations of the fixed - satellite service (space to Earth).

### ERC Dec (00)07

ERC Decision of 19 October 2000 on the shared use of the band 17.7-19.7 GHz by the fixed service and Earth stations of the fixed-satellite service (space-to-Earth).

### ERC Dec (00)08

ERC Decision of 19 October 2000 on the use of the band 10.7-12.5 GHz by the fixed service and Earth stations of the broadcasting-satellite and fixed-satellite Service (space-to-Earth).

### ERC Dec (01)11

ERC Decision of 12 March 2001 on harmonised frequencies, technical characteristics and exemption from individual licensing of Short Range Devices used for Flying Model control operating in the frequency band 34.995-35.225 MHz.

## Annex 4 ~ List of Relevant Documentation

### ERC Dec (01)12

ERC Decision of 12 March 2001 on harmonised frequencies, technical characteristics and exemption from individual licensing of Short Range Devices used for Model control operating in the frequencies 40.665, 40.675, 40.685 and 40.695 MHz.

### ERC Dec (01)19

ERC Decision of 12 March 2001 on harmonised frequency bands to be designated for the Direct Mode Operation (DMO) of the Digital Land Mobile Systems for the Emergency Services.

### ECC Dec (02)04

ECC Decision of 15 March 2002 on the use of the band 40.5-42.5 GHz by terrestrial (fixed service/broadcasting service) systems and uncoordinated Earth stations in the fixed satellite service and broadcasting-satellite service (space to Earth).

### ECC Dec (04)09

ECC Decision of 12 November 2004 on the designation of the bands 1518-1525 MHz and 1670-1675 MHz for the Mobile-Satellite Service.

### ECC Dec (05)01

ECC Decision of 18 March 2005 on the use of the band 27.5-29.5 GHz by the Fixed Service and uncoordinated Earth stations of the Fixed-Satellite Service (Earth-to-space).

### ECC Dec (05)12

ECC Decision of 28 October 2005 on harmonised frequencies, technical characteristics, exemption from individual licensing and free carriage and use of digital PMR 446 applications operating in the frequency band 446.1-446.2 MHz.

### ECC Dec (06)05

ECC Decision of 7 July 2006 on the harmonised frequency bands to be designated for Air-Ground-Air operation (AGA) of the Digital Land Mobile Systems for the Emergency Services.

### ECC Dec (06)06

ECC Decision of 7 July 2006 on the availability of frequency bands for the introduction of Narrow Band Digital Land Mobile PMR/PAMR in the 80 MHz, 160 MHz and 400 MHz bands.

### ECC Dec (06)08

ECC Decision of 1 December 2006 on the conditions for use of the radio spectrum by Ground- and Wall-Probing Radar (GPR/WPR) imaging systems.

### ECC Dec (08)05

ECC Decision of 27 June 2008 on the harmonisation of frequency bands for the implementation of digital Public Protection and Disaster Relief (PPDR) radio applications in bands within the 380-470 MHz range.

### ECC Dec (09)01

ECC Decision of 13 March 2009 on the harmonised use of the 63-64 GHz frequency band for Intelligent Transport Systems (ITS).

### ECC Dec (09)02

ECC Decision of 26 June 2009 on the harmonisation of the bands 1610-1626.5 MHz and 2483.5-2500 MHz for use by systems in the Mobile-Satellite Service.

### ECC Dec (10)02

ECC Decision of 12 November 2010 on compatibility between the fixed satellite service in the 30-31 GHz band and the Earth exploration satellite service (passive) in the 31.3-31.5 GHz band.

### ECC Dec (11)01

ECC Decision of 11 March 2011 on the protection of Earth exploration satellite service (passive) in the 1400-1427 MHz band.

### ECC Dec(11)02

ECC Decision of 11 March 2011 on industrial Level Probing Radars (LPR) operating in frequency bands 6 - 8.5 GHz, 24.05 - 26.5 GHz, 57 - 64 GHz and 75 - 85 GHz.

### ECC Dec(11)03

ECC Decision of 24 June 2011 on the harmonised use of frequencies for Citizens' Band (CB) radio equipment.

### ECC Dec(13)01

ECC Decision of 8 March 2013 on the use, free circulation, and exemption from individual licensing of Earth stations on mobile platforms (ESOMPs) in the frequency bands available for use by uncoordinated FSS Earth stations within the ranges 17.3-20.2 GHz and 27.5-30.0 GHz.

### ECC Dec(13)03

ECC Decision on the harmonised use of the frequency band 1452-1492 MHz for Mobile/Fixed Communications Networks Supplemental Downlink (MFCN SDL).

## Part 6 : CEPT Recommendations

### ERC Rec T/R 32-02

Frequencies to be used by on-board communication stations.

### ERC Rec T/R 25-08

Planning criteria and coordination of frequencies in the Land Mobile Service in the range 29.7-921 MHz.

### ERC Rec T/R 13-02

Preferred channel arrangements for fixed services in the range 22.0-29.5 GHz.

### ERC Rec T/R 13-01

Preferred channel arrangements for fixed services in the range 1-3 GHz.

### ERC Rec T/R 12-01

Harmonized radio frequency channel arrangements for analogue and digital terrestrial fixed systems operating in the band 37-39.5 GHz.



## Annex 4 ~ List of Relevant Documentation

### ERC Rec 12-02

Harmonised radio frequency channel arrangements for analogue and digital terrestrial fixed systems operating in the band 12.75 GHz to 13.25 GHz.

### ERC Rec 12-03

Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 17.7 GHz to 19.7 GHz.

### ERC Rec 12-05

Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 10.0-10.68 GHz.

### ERC Rec 12-06

Harmonised radio frequency channel arrangements for digital terrestrial fixed systems operating in the band 10.7 GHz to 11.7 GHz.

### ERC Rec 12-08

Harmonised radio frequency channel arrangements and block allocations for low, medium and high capacity systems in the band 3600 MHz to 4200 MHz.

### ERC Rec 12-10

Harmonised radio frequency arrangements for digital systems operating in the band 48.5 GHz-50.2 GHz.

### ERC Rec 12-11

Radio frequency channel arrangement for fixed service systems operating in the band 51.4-52.6 GHz.

### ERC Rec 12-12

Radio frequency channel arrangement for fixed service systems operating in the band 55.78-57.0 GHz.

### ERC Rec 13-03

The use of the band 14.0 - 14.5 GHz for Very Small Aperture Terminals (VSAT) and Satellite News Gathering (SNG).

### ERC Rec 14-01

Radio-frequency channel arrangements for high capacity analogue and digital radio-relay systems operating in the band 5925 MHz-6425 MHz.

### ERC Rec 14-02

Radio-frequency channel arrangements for medium and high capacity analogue or high capacity digital radio-relay systems operating in the band 6425 MHz-7125 MHz.

### ERC Rec 14-03

Harmonised radio frequency channel arrangements for low and medium capacity systems in the band 3400 MHz to 3600 MHz.

### ERC Rec 25-10

Frequency ranges for the use of temporary terrestrial audio and video SAP/SAB links (incl. ENG/OB).

### ERC Rec 70-03

Relating to the use of Short Range Devices (SRD).

### ERC Rec (00)05

Use of the band 24.5-26.5 GHz for fixed wireless access.

### ERC Rec (01)02

Preferred channel arrangement for digital fixed service systems operating in the frequency band 31.8-33.4 GHz.

### ERC Rec (01)03

Use of parts of the band 27.5-29.5 GHz for Fixed Wireless Access (FWA).

### ERC Rec (01)04

Recommended guidelines for the accommodation and assignment of Multimedia Wireless Systems (MWS) in the frequency band 40.5-43.5 GHz.

### ECC Rec (02)02

Channel arrangements for digital fixed service systems (point-to-point and point-to-multipoint) operating in the frequency band 31-31.3 GHz.

### ECC Rec (02)06

Preferred channel arrangements for digital Fixed Service Systems operating in the frequency range 7125-8500 MHz.

### ECC Rec (05)02

Use of the 64-66 GHz frequency band for Fixed Service.

### ECC Rec (05)07

Radio frequency channel arrangements for Fixed Service Systems operating in the bands 71-76 GHz and 81-86 GHz.

### ECC Rec (06)04

Use of the band 5725-5875 MHz for Broadband Fixed Wireless Access (BFWA).

### ECC Rec (08)01

Use of the band 5855-5875 MHz for Intelligent Transport Systems.

### ECC Rec (08)04

The identification of frequency bands for the implementation of Broad Band Disaster Relief (BBDR) radio applications in the 5 GHz frequency range.

### ECC Rec (09)01

Use of the 57-64 GHz frequency band for point-to-point Fixed Wireless Systems.

## Part 7 : ITU Recommendations

### ITU-R F.636-4

Radio-frequency channel arrangements for radio-relay systems operating in the 15 GHz band.

## **Annex 5**

### **Sources of Further Information**

## Annex 5 ~ Sources of Further Information

### The Malta Communications Authority (MCA)

General queries regarding radio frequency spectrum management, including this table of frequency allocations, can be directed to:

Malta Communications Authority  
Valletta Waterfront  
Pinto Wharf  
Floriana FRN 1913  
Malta

Tel: +356 21 33 68 40  
Fax: +356 21 33 68 46  
Email: [info@mca.org.mt](mailto:info@mca.org.mt)  
Web: <http://www.mca.org.mt>

### The European Union (EU)

All legislation of the European Union can be obtained from the website of the European Commission.

Please visit: <http://eur-lex.europa.eu/homepage.html?locale=en>.

### The International Telecommunication Union (ITU)

The ITU is responsible for the publication of the Radio Regulations, which include the International Table of Frequency Allocations (Article 5). The Radio Regulations incorporate the decisions of the World Radiocommunication Conferences, including all Appendices, Resolutions, Recommendations and ITU-R Recommendations incorporated by reference.

Publications of the International Telecommunication Union can be obtained from:

Sales Office  
International Telecommunication Union  
Place des Nations  
CH-1211 Geneva 20  
Switzerland

Tel: +41 22 730 61 41  
Fax: +41 22 730 51 94  
Email: [sales@itu.int](mailto:sales@itu.int)  
Web: <http://www.itu.int/publications>

### The European Conference of Postal and Telecommunications Administrations (CEPT)

CEPT documentation, including all deliverables (decisions, recommendations, reports) of the CEPT can be obtained from the:

European Communications Office  
Nyropsgade 37, 4<sup>th</sup> floor  
1602 Copenhagen  
Denmark

Tel: +45 33 89 63 00  
Fax: +45 33 89 63 30  
Email: [eco@eco.cept.org](mailto:eco@eco.cept.org)  
Web: <http://www.cept.org/ecc/deliverables>