



# **National Frequency Plan**

**Edition 5.4** 

MCA/O/16-2605/R.1

**April 2017** 

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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 8.3 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.

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

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

<sup>3 &</sup>lt;a href="http://www.erodocdb.dk/Docs/doc98/official/pdf/ERCREP025.PDF">http://www.erodocdb.dk/Docs/doc98/official/pdf/ERCREP025.PDF</a>.

#### 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 listed in Annex 4.

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, the management of the radio frequency spectrum is to be carried out by the said Authority.

## Part A

**The Radio Spectrum in 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)	(Not allocated)			
	5.53 5.54	5.53 5.54			
8.3 – 9	METEOROLOGICAL AIDS 5.54A	METEOROLOGICAL AIDS 5.54A			
			UWB	National Legislation: S.L.399.40.	
		MLT01		European Legislation: EC Decision 2007/131/EC as amended.	
9 – 11.3	METEOROLOGICAL AIDS 5.54A	METEOROLOGICAL AIDS 5.54A			
	RADIONAVIGATION	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	FIXED			
	MARITIME MOBILE 5.57	MARITIME MOBILE 5.57	Maritime communications		
			SRDs	National Legislation: S.L.399.40.	
	5.56	5.56		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.	

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 MOBILE 5.57	MARITIME MOBILE 5.57	Maritime communications		
	5.56	5.56	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
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 MOBILE 5.57	MARITIME MOBILE 5.57	Maritime communications		
	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60			
			SRDs	National Legislation: S.L.399.40.	
	5.56	5.56		European Legislation: EC Decision 2006/771/EC as amended.	
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 MOBILE 5.57	MARITIME MOBILE 5.57	Maritime communications		
	RADIONAVIGATION	RADIONAVIGATION			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.56	5.56			

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	RADIONAVIGATION 5.62			LORAN-C system
	Fixed	Fixed			
			SRDs	National Legislation: S.L.399.40.	
	5.64	5.64		European Legislation: EC Decision 2006/771/EC as amended.	
110 – 112	FIXED	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	RADIONAVIGATION	RADIONAVIGATION			
		N. C.	SRDs	National Legislation: S.L.399.40. European Legislation:	
	5.64	5.64		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	RADIONAVIGATION 5.60			
	Fixed	Fixed			
	Maritime Mobile	Maritime Mobile	Maritime communications		
			SRDs	National Legislation: S.L.399.40. European Legislation:	
	5.64	5.64		EC Decision 2006/771/EC as amended.	
117.6 – 126	FIXED	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60			
	INDICATION 5.66	INDICIONAL C.SC	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.64	5.64			

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	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	RADIONAVIGATION 5.60	RADIONAVIGATION 5.60			
			SRDs	National Legislation: S.L.399.40.	
	5.64	5.64		European Legislation: EC Decision 2006/771/EC as amended.	
130 – 135.7	FIXED	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
			SRDs	National Legislation: S.L.399.40.	
	5.64	5.64		European Legislation: EC Decision 2006/771/EC as amended.	
135.7 – 137.8	FIXED	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	Amateur 5.67A	Amateur 5.67A	Amateur applications		
			SRDs	National Legislation: S.L.399.40.	
	5.64	5.64		European Legislation: EC Decision 2006/771/EC as amended.	
137.8 – 148.5	FIXED	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
	5.64	5.64			

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.
			SRDs	National Legislation: S.L.399.40. European Legislation:	
		MLT02		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.	
		MLT02		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.
			SRDs	National Legislation: S.L.399.40.	
	5.74	5.74		European Legislation: EC Decision 2006/771/EC as amended.	
315 – 325	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		ao.i.acai	
010 020	Maritime radionavigation (radiobeacons) 5.73	Maritime radionavigation (radiobeacons) 5.73			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.	

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			IALA Plan to allow differential GPS.
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
415 – 435	MARITIME MOBILE 5.79	MARITIME MOBILE 5.79	Maritime communications	amended.	ITU Geneva 1985 plan.
410 – 400	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Wantine Communications		ITU Geneva 1985 plan.
	ALICONIC HOLE WISHING WISH HOLE	7.E.I.O.V.O.II.O.E.I.V.D.O.I.V.O.V.II.O.V	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	TTO GENEVA 1300 Plan.
435 – 472	MARITIME MOBILE 5.79	MARITIME MOBILE 5.79	Maritime communications		ITU Geneva 1985 plan.
	Aeronautical Radionavigation	Aeronautical Radionavigation			
	5.82	5.82	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
472 - 479	MARITIME MOBILE 5.79	MARITIME MOBILE 5.79	Maritime communications		ITU Geneva 1985 plan.
	Amateur 5.80A	Amateur 5.80A	Amateur applications		The equivalent isotropically radiated power of any amateur station shall not exceed 1 Watt.
	Aeronautical Radionavigation	Aeronautical Radionavigation			
	5.82	MLT03 5.82	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
479 – 495	MARITIME MOBILE 5.79 5.79A	MARITIME MOBILE 5.79 5.79A	Maritime communications NAVTEX		ITU Geneva 1985 plan.  490 kHz (national language NAVTEX channel).
	Aeronautical Radionavigation	Aeronautical Radionavigation			
	Aeronaulical Nauionavigation	Actoriaulical Nationavigation	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.82	5.82			

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		ITU Geneva 1985 plan.
			NAVTEX		518 kHz (International NAVTEX channel).
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			ITU Geneva 1985 plan.
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
526.5 – 1606.5	BROADCASTING	BROADCASTING	Broadcasting	National Legislation: Broadcasting Act (Chapter 350).	ITU Geneva 1975 plan.
			SRDs	National Legislation: S.L.399.40.	
		MLT02		European Legislation: EC Decision 2006/771/EC as amended.	
1606.5 – 1625	FIXED	FIXED			
	MARITIME MOBILE 5.90	MARITIME MOBILE 5.90	Maritime communications		ITU Geneva 1985 plan.
	LAND MOBILE	LAND MOBILE			
		Radiolocation			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	
	5.92	5.92		amended.	
1625 – 1635	RADIOLOCATION	RADIOLOCATION			
			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
1635 – 1800	FIXED	FIXED			
	MARITIME MOBILE 5.90	MARITIME MOBILE 5.90	Maritime communications		ITU Geneva 1985 plan.
	LAND MOBILE	LAND MOBILE			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	
	5.92 5.96	5.92 5.96		amended.	
1800 – 1810	RADIOLOCATION	RADIOLOCATION			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
1810 – 1850	AMATEUR	AMATEUR	Amateur applications		
	5.100	5.100	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
1850 – 2000	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications		
		Amateur	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	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 5.103	5.92 5.103			

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	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications		
	Meteorological Aids 5.104				
	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	FIXED			
	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		ITU Geneva 1985 plan.
	LAND MOBILE	LAND MOBILE			
	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).
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.108 5.109 5.110 5.111	5.108 5.109 5.110 5.111			

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	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications		
			SRDs	National Legislation: S.L.399.40.	
	E 02 E 102	E 02 E 402		European Legislation: EC Decision 2006/771/EC as amended.	
2300 – 2498	5.92 5.103 FIXED	5.92 5.103 FIXED		аттепиеи.	
2300 – 2496		MOBILE except aeronautical mobile (R)	Maritime communications		
	MOBILE except aeronautical mobile (R)  BROADCASTING 5.113	MOBILE except defondution mobile (K)	Manume communications		
	BROADCASTING 5.113		000-	Ni-st	
			SRDs	National Legislation: S.L.399.40.	
				European Legislation:	
	5.103	5.103		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	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.	
2502 – 2625	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)			
	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		SRDs	National Legislation: S.L.399.40.	
	5.92 5.103	5.92 5.103		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
2625 – 2650	MARITIME MOBILE	MARITIME MOBILE	Maritime communications		
	MARITIME RADIONAVIGATION	MARITIME RADIONAVIGATION			
	5.92	5.92	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
0050 0050				amended.	
2650 – 2850	FIXED	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)			
	5.92 5.103	5.92 5.103	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).
	5.111 5.115	5.111 5.115	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.
0.00	TETOS WIGHTON E MODILE (OT)	ALTOWER & LINESIE (OI)	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	TO THE PROPERTY.
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.	
	5.116	5.116			

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	FIXED			
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications		
	BROADCASTING 5.113				
			SRDs	National Legislation: S.L.399.40.	
	5.116	5.116		European Legislation: EC Decision 2006/771/EC as amended.	
3230 – 3400	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications		
	BROADCASTING 5.113				
	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	AMATEUR	Amateur applications		
	FIXED	FIXED			
	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	FIXED			
	AERONAUTICAL MOBILE (OR)	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.	

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		ITU RR Appendix 26.
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
3950 – 4000	FIXED	FIXED			
	BROADCASTING	BROADCASTING		National Legislation: Broadcasting Act (Chapter 350).	
		MLT02	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
4000 – 4063	FIXED	FIXED	Fixed links		
	MARITIME MOBILE 5.127	MARITIME MOBILE 5.127	Maritime communications		ITU RR Appendix 17. ITU RR Appendix 25.
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
4063 – 4438	MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132	Maritime communications  NAVTEX		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).
	5.128		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
4438 – 4488	FIXED	FIXED	Fixed links		
	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)			
	Radiolocation 5.132A	Radiolocation 5.132A			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
4488 – 4650	FIXED	FIXED		4.110.1304	
1100 1000	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)			
	media di sinata da madia (1)	mobile (iv)	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.	

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	LAND MOBILE			
	BROADCASTING 5.113				
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	
4995 - 5003	STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)		amended.	
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
5003 – 5005	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.	
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.	

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	MOBILE except aeronautical mobile			
	Radiolocation 5.132A	Radiolocation 5.132A			
			SRDs	National Legislation: S.L.399.40. European Legislation:	
				EC Decision 2006/771/EC as amended.	
5275 – 5351.5	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	
5054 5 5000 5	FIXED	FIVED		amended.	
5351.5 – 5366.5		FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	Amateur 5.133B	Amateur 5.133B	Amateur applications		The maximum radiated power of any amateur station shall not exceed 15 W e.i.r.p.
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
5366.5 - 5450	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
		<b>I</b>	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
5450 – 5480	FIXED	FIXED			
	AERONAUTICAL MOBILE (OR)	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.	

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
5480 – 5680	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27. Telephony distress traffic and calling by rescue centres (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 centres (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.	
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.
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
		MLT02			

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
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.	
6685 – 6765	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.	
6765 – 7000	FIXED	FIXED	Fixed links		
	MOBILE except aeronautical mobile (R)	Land mobile			
	5.138	5.138	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	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE	Amateur applications		
			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
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	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation: S.L.399.40. European Legislation:	
		MLT02		EC Decision 2006/771/EC as amended.	
7300 – 7400	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation: S.L.399.40.	
	5.143 5.143B	MLT02 5.143 5.143B		European Legislation: EC Decision 2006/771/EC as amended.	
7400 – 7450	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation: S.L.399.40.	
	5.143B	MLT02 5.143B		European Legislation: EC Decision 2006/771/EC as amended.	
7450 – 8100	FIXED	FIXED		a.ns.iasa.	
	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.
			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
8195 – 8815	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).
	5.111	5.111	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
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.	
8965 – 9040	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.	
9040 – 9305	FIXED	FIXED	Fixed links	Fixed links	
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
9305 – 9355	FIXED	FIXED			
	Radiolocation 5.145A	Radiolocation 5.145A			
			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
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	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation: S.L.399.40. European Legislation:	
	5.146	MLT02 5.146		EC Decision 2006/771/EC as amended.	
9500 – 9900	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation: S.L.399.40.	
	5.147	MLT02 5.147		European Legislation: EC Decision 2006/771/EC as amended.	
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)	STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)			
			SRDs	National Legislation: S.L.399.40.	
	5.111	5.111		European Legislation: EC Decision 2006/771/EC as amended.	
10003 – 10005	STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		amended.	
	Space Research	Space Research			
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
	5.111	5.111			
	V.III	V.111			

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
10005 – 10100	AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)	Aeronautical communications		ITU RR Appendix 27.
	5.111	5.111	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
10100 – 10150	FIXED	FIXED			
	Amateur	Amateur	Amateur applications		
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
10150 – 11175	FIXED	FIXED	Fixed links	amended.	
10100 - 11173	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	1 IAGU III INS	:	
	WODIEL except aeronadical mobile (it)	MODILE except defortautical mobile (IV)	SRDs	National Legislation S.L.399.40.	
			GNES	European Legislation: EC Decision 2006/771/EC as amended.	
11175 – 11275	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.	
11275 – 11400	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.	
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	BROADCASTING5 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.	

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
11650 – 12050	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation S.L.399.40.	
	5.147	MLT02 5.147		European Legislation: EC Decision 2006/771/EC as amended.	
12050 – 12100	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation S.L.399.40.	
	5.146	MLT02 5.146		European Legislation: EC Decision 2006/771/EC as amended.	
12100 – 12230	FIXED	FIXED	Fixed links		
			SRDs	National Legislation S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
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.	

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
13360 – 13410	FIXED	FIXED	Fixed links		
	RADIO ASTRONOMY	RADIO ASTRONOMY			
			SRDs	National Legislation S.L.399.40.  European Legislation:	
	5.149	5.149		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.	
13450 – 13550	FIXED	FIXED			
	Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)			
	Radiolocation 5.132A	Radiolocation 5.132A	Oceonographic radars		
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13550 – 13570	FIXED	FIXED			
	Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)			
	5.150	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	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
	5.151	MLT02 5.151	SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
13600 – 13800	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.	

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
13800 – 13870	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation S.L.399.40.	
	5.151	MLT02 5.151		European Legislation: EC Decision 2006/771/EC as amended.	
13870 – 14000	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.	
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.	

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
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.	
15600 – 15800	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.	
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		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).
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
17410 – 17480	FIXED	FIXED	Fixed links		
			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
17480 – 17550	BROADCASTING 5.134	BROADCASTING 5.134	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation S.L.399.40.	
	5.146	MLT02 5.146		European Legislation: EC Decision 2006/771/EC as amended.	
17550 – 17900	BROADCASTING	BROADCASTING	Shortwave broadcasting (reception only)	National Legislation: Broadcasting Act (Chapter 350).	ITU RR Article 12.
			SRDs	National Legislation S.L.399.40.	
		MLT02		European Legislation: EC Decision 2006/771/EC as amended.	
17900 – 17970	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.	
17970 – 18030	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.	
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	FIXED	Fixed links		
	Space Research	Space Research			
			SRDs	National Legislation S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
18068 – 18168	AMATEUR	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
			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
18168 – 18780	FIXED	FIXED	Fixed links		
	Mobile except aeronautical mobile	Mobile except aeronautical mobile	Maritime communications		
			SRDs	National Legislation S.L.399.40.  European Legislation:  EC Decision 2006/771/EC as amended.	
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.	

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
19990 – 19995	STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL			
	Space Research	Space Research			
			SRDs	National Legislation S.L.399.40.	
	5.111	5.111		European Legislation: EC Decision 2006/771/EC as amended.	
19995 – 20010	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)			
			SRDs	National Legislation S.L.399.40.	
	5.111	5.111		EC Decision 2006/771/EC as amended.	
20010 – 21000	FIXED	FIXED	Fixed links		
	Mobile	Mobile			
			SRDs	National Legislation S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
21000 – 21450	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.	
21450 – 21850	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.	
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.	

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
21924 – 22000	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.	
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	
00000 00000	FIVED	FIVE		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.	

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
24000 – 24450	FIXED	FIXED			
	LAND MOBILE	LAND MOBILE			
			SRDs	National Legislation S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
24450 – 24600	FIXED	FIXED			
	LAND MOBILE	LAND MOBILE			
	Radiolocation 5.132A	Radiolocation 5.132A			
			SRDs	National Legislation S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
24600 – 24890	FIXED	FIXED			
	LAND MOBILE	LAND MOBILE			
			SRDs	National Legislation S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
24890 – 24990	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.	
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	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.	

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
25010 – 25070	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.	
25070 – 25210	MARITIME MOBILE	MARITIME MOBILE	Maritime communications	anence.	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.	

#### 8.3 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
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.	
26200 - 26350	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	Radiolocation 5.132A	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)	National Legislation S.L.399.40.	ECC Dec(11)03.
			Paging (private, on-site, 26975- 27225 kHz)		
	5.150	5.150	SRDs	National Legislation S.L.399.40.  European Legislation:  EC Decision 2006/771/EC as amended.	ISM band (26957- 27283 kHz)

### **Part B**

**The Radio Spectrum in 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	METEREOLOGICAL AIDS	METEREOLOGICAL AIDS			
	FIXED	FIXED			
	MOBILE	MOBILE			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
		MLT01	UWB	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			
		MLT04	SRDs Wireless audio PMSE equipment	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec (06)08.
30.005 - 30.01	SPACE OPERATION (satellite identification)				
	FIXED				
	MOBILE	MOBILE			
	SPACE RESEARCH				
			SRDs Wireless audio PMSE equipment	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	

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)		
		SRDs Wireless audio PMSE equipment  SL.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ERC Rec 70-03. ECC Dec (01)11 (limited to the band 34.995- 35.225 MHz).		
37.5 – 38.25	FIXED				
	MOBILE	MOBILE			
	Radio astronomy	Radio astronomy			
	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			
	Radiolocation 5.132A	Radiolocation 5.132A			
			Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
39.5 – 39.986	FIXED	MOBILE			
	MOBILE				
			Wireless audio PMSE equipment	National Legislation: S.L.399.40.	ERC Rec 70-03.
39.986 – 40.02	FIXED				
	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 Wireless audio PMSE equipment	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ISM band (40.66-40.7 MHz). ECC Dec (01)12. ERC Rec 70-03.		
	5.150	5.150			

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	MOBILE			
	Space research	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
	5.164	5.164			the band 47-47.25 MHz.
50 – 52	BROADCASTING				
		LAND MOBILE			
		Amateur	Amateur applications		
	5.164	5.164			
52 – 54	BROADCASTING				
		LAND MOBILE			ERC Rec T/R 25-08 (single frequency applications).
	5.164	5.164			
54 – 61	BROADCASTING				
	5.164	LAND MOBILE 5.164			ERC Rec T/R 25-08 (paired with 61-68 MHz).
61 – 68	BROADCASTING	3.104			
01 – 00	BROADCASTING	LAND MOBILE			ERC Rec T/R 25-08 (paired
		LAND WOBILE			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).
		Amateur			Limited to the band 70- 70.5 MHz.
	5.149	5.149			
74.8 – 75.2	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.180	5.180			

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)	AERONAUTICAL MOBILE (R)	Aeronautical communications		Aeronautical mobile communications for safety and regulatory of flights. The provisions of Regulation (EU) 1079/2012 apply.
	5.111 5.200	5.111 5.200			

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
121.45 – 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. The provisions of Regulation (EU) 1079/2012 apply.
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. The provisions of Regulation (EU) 1079/2012 apply.
137 – 137.025	SPACE OPERATION (s-E)	5.111 5.200  ON (s-E) Space operation (s-E)  AL SATELLITE (s-E) METEOROLOGICAL SATELLITE (s-E)  TE (s-E) 5.208A 5.208B MOBILE SATELLITE (s-E) 5.208A 5.208B S-PCS.  5.209  H (s-E) Space research (s-E)  nautical mobile (R) MOBILE  5.208  ON (s-E) Space operation (s-E)  AL SATELLITE (s-E) METEOROLOGICAL SATELLITE (s-E)  H (s-E) Space research (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)			
	MOBILE SATELLITE (s-E) 5.208A 5.208B 5.209		S-PCS.		ERC Dec (99)06.
	SPACE RESEARCH (s-E)	Space research (s-E)			
	Fixed				
	Mobile except aeronautical mobile (R)				Restricted to Aeronautical mobile (OR), including air
107.005 107.175	5.208				sport.
137.025 – 137.175	SPACE OPERATION (s-E)				
	METEOROLOGICAL SATELLITE (s-E)				
	SPACE RESEARCH (s-E) Fixed	Space research (s-E)			
	Mobile except aeronautical mobile (R)	MOBILE			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.
	5.208	5.208			
137.175 – 137.825	SPACE OPERATION (s-E)	Space operation (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)	Meteorological satellite reception		
	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)	Space research (s-E)			
	Fixed				
	Mobile except aeronautical mobile (R)	MOBILE			Mobile restricted to Aeronautical mobile (OR), including air sport.
	5.208	5.208			

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
137.825 – 138	SPACE OPERATION (s-E)	Space operation (s-E)			
	METEOROLOGICAL SATELLITE (s-E)	METEOROLOGICAL SATELLITE (s-E)			
	SPACE RESEARCH (s-E)	Space research (s-E)			
	Fixed				
	Mobile except aeronautical mobile (R)	MOBILE			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.
	5.208	5.208			
138 – 143.6	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical applications		
		LAND MOBILE			
		Space research (s-E)			
	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		
	SPACE RESEARCH (s-E)	SPACE RESEARCH (s-E)			
		LAND MOBILE			
	5.211	5.211			
143.65 – 144	AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)	Aeronautical communications		
		LAND MOBILE			
	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.
	5.218 5.219 5.221	5.218 5.219 5.221			
149.9 – 150.05	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			
		MOBILE	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08.ECC Dec (06)06.
	5.220 5.222 5.223	5.220 5.222 5.223			

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
150.05 – 153	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.
	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				
154 – 156.0125	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.
	5.226	5.226			, ,
156.0125 -	FIXED				
156.4875	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.226	5.226			
156.4875 – 156.5375	MARITIME MOBILE (distress and calling via DSC)	MARITIME MOBILE (distress and calling via DSC)	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18. DSC distress, safety and calling (156.525 MHz).
	5.111 5.226 5.227	5.111 5.226 5.227		S.L.399.40.  National Legislation:	Calling (130.323 Wil 12).
156.5375 – 156.5625	MARITIME MOBILE (distress and calling via DSC)	MARITIME MOBILE (distress and calling via DSC)	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
		MOBILE except aeronautical mobile (R)			
	5.111 5.226 5.227	5.111 5.226 5.227			
156.5625 –	FIXED				
156.7625	MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.226	5.226			
156.7625 – 156.7875	MARITIME MOBILE	MARITIME MOBILE	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	Mobile-satellite (E-s)	Mobile-satellite (E-s)	Satellite AIS	National Legislation:	ITU RR Appendix 18.
	5.111 5.226 5.228	5.111 5.226 5.228		S.L.399.40.	
156.7875 –	MARITIME MOBILE (distress and calling)	MARITIME MOBILE (distress and calling)	Maritime communications	National Legislation:	ITU RR Appendix 18.
156.8125	5.111 5.226	5.111 5.226		S.L.399.40.	International distress, safety and calling (156.8 MHz).
156.8125 – 156.8375	MARITIME MOBILE	MARITIME MOBILE	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	Mobile-satellite (E-s)	Mobile-satellite (E-s)	Satellite AIS	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.111 5.226 5.228	5.111 5.226 5.228			

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
156.8375 – 157.45	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.226	5.226			
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.
160.6 – 160.975	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.226	5.226			
160.975 – 161.475	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.
	5.226	5.226	Maritime communications		Private maritime mobile channels.
161.475 –	FIXED				
161.9625	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications	National Legislation: S.L.399.40.	ITU RR Appendix 18.
	5.226	5.226			
161.9625 –	FIXED				
161.9875	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications AIS	National Legislation: S.L.399.40.	ITU RR Appendix 18, ERC Dec (99)17. AIS (161.975 MHz).
	Mobile-satellite (E-s) 5.228F				
	5.226 5.228A 5.228B	5.226 5.228A 5.228B			
161.9875 –	FIXED 5.226A 5.226B	5.220 5.226A 5.226B			
162.0125	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications	National Legislation:	ITU RR Appendix 18.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Manume communications	S.L.399.40.	110 KK Appendix 16.
	5.226	5.226			
162.0125 -	FIXED				
162.0375	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Maritime communications AIS	National Legislation: S.L.399.40.	ITU RR Appendix 18, ERC Dec (99)17. AIS (162.025 MHz).
	Mobile-satellite (E-s) 5.228F				
	5.226 5.228A 5.228B	5.226 5.228A 5.228B			

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
162.0375 – 174	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.
			Maritime communications		Private maritime mobile channels.
			SRDs	National Legislation: S.L.399.40.	
	5.226	5.226		European Legislation: EC Decision 2006/771/EC as amended.	
174 – 223	BROADCASTING	BROADCASTING	Digital Television Broadcasting Digital Sound Broadcasting	amended.	ITU Geneva 2006 Agreement. Wiesbaden 1995 Special Arrangement as revised in Constanta 2007.
		Land mobile			
	5.235	MLT05 5.235	SRDs		Parts of this band could be used by wireless audio PMSE equipment on a temporary basis.
223 – 230	BROADCASTING	BROADCASTING	Digital Sound Broadcasting		ITU Geneva 2006
223 – 200	Вкольодонно	BROADCACTING	Digital Count Divadeasting		Agreement. Wiesbaden 1995 Special Arrangement as revised in Constanta 2007.
	Fixed				
	Mobile	MLT05			
230 – 235	FIXED				
	MOBILE	MOBILE			
235 – 240	FIXED				
230 – 235 FIXED  MOBILE  235 – 240 FIXED  MOBILE		MOBILE	SAB / SAP applications		
	5.254	5.254			
240 – 242.95	FIXED				
	MOBILE	MOBILE			
	5.254	5.254			
242.95 – 243.05	FIXED				
	MOBILE	AERONUATICAL MOBILE	EPIRBs		Band only available for distress and safety purposes.
	5.111 5.254 5.256	5.111 5.254 5.256			

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
243.05 – 267	FIXED				
	MOBILE	MOBILE	Mobile applications		Government services.
	5.111 5.254 5.256	5.111 5.254 5.256			
267 – 272	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE			
	Space Operation (s-E)				
	5.254 5.257	5.254 5.257			
272 – 273	SPACE OPERATION (s-E)				
	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE			
	5.254	5.254			
273 –312	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE	Mobile applications Aeronautical UHF communications		Government services.
	5.254				
312 – 315	FIXED				
	MOBILE	MOBILE			
	Mobile-Satellite (E-s) 5.254 5.255	5.254 5.255			
315 – 322	FIXED				
	MOBILE	MOBILE	SAB / SAP applications		
	5.254	5.254			
322 – 328.6	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149	5.149			
328.6 - 335.4	AERONAUTICAL RADIONAVIGATION 5.258	AERONAUTICAL RADIONAVIGATION 5.258	ILS / Glide path		
335.4 – 380	FIXED	FIXED	Fixed links		
	MOBILE	MOBILE	SAB / SAP applications		
	5.254	5.254			

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
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).
385 – 387	FIXED	FIXED			
	MOBILE	MOBILE	SAB / SAP applications		
	5.254	5.254			
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	MOBILE	SAB/ SAP applications		
	5.254	5.254			

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
399.9 – 400.05	MOBILE-SATELLITE (E-s) 5.209 5.224A	MOBILE-SATELLITE (E-s) 5.209 5.224A			
	RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260	RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260			
	5.220	5.220			
400.05 – 400.15	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)			
	5.261	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	S-PCS		LEO satellites (ERC Dec (99)06).
	SPACE RESEARCH (s-E) 5.263	SPACE RESEARCH (s-E) 5.263			
	Space operation (s-E)	SPACE OPERATION (s-E)			
	5.264	5.264			
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)		National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	
	METEOROLOGICAL-SATELLITE (E-s)	METEOROLOGICAL-SATELLITE (E-s)			
	Fixed				
	Mobile except aeronautical mobile				
			SRDs	S.L.399.40.  European Legislation:	

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
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) 5.266 5.267	MOBILE-SATELLITE (E-s) 5.266 5.267	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	FIXED				
	MOBILE except aeronautical mobile	LAND MOBILE	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149	5.149			
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	AMATEUR	Amateur applications		
	RADIOLOCATION	RADIOLOCATION			
432 – 433.05	AMATEUR	AMATEUR	Amateur applications		
	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active) 5.279A	Earth exploration-satellite (active) 5.279A			
433.05 – 434.79	AMATEUR	AMATEUR	Amateur applications		
	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active) 5.279A	Earth exploration-satellite (active) 5.279A			
		Land Mobile	SRDs ISM applications	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.138	5.138			

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
434.79 – 438	AMATEUR	AMATEUR	Amateur applications		
	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active) 5.279A	Earth exploration-satellite (active) 5.279A			
438 – 440	AMATEUR	AMATEUR	Amateur applications		
	RADIOLOCATION	RADIOLOCATION			
440 – 450	FIXED	FIXED	Links (440.22-441 MHz)		
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	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).
			PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	Radiolocation 5.286	5.286			
450 – 455	FIXED	FIXED	Links (450.22-451 MHz)		
430 – 433		TIALD	LITINS (430.22-431 WITZ)		
	MOBILE 5.286AA	MOBILE 5.286AA	PMR (12.5 kHz channel spacing)		ERC Rec T/R 25-08. ECC Dec (06)06.
	5.209 5.286 5.286A	5.209 5.286 5.286A	Paging (private, on-site)		200 Dec (00)00.
455 – 456	FIXED				
	MOBILE 5.286AA	MOBILE 5.286AA	PMR (12.5 kHz channel spacing) Paging (private, on-site)		ERC Rec T/R 25-08. ECC Dec (06)06.
	5.209 5.286A	5.209 5.286A			
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	MOBILE 5.286AA	PMR Paging (private, on-site)		ERC Rec T/R 25-08. ECC Dec (06)06.
	5.209 5.286A	5.209 5.286A			
460 – 470	FIXED				
	MOBILE 5.286AA	MOBILE 286AA	On-board ship communications (467.525, 467.550, 467.575 MHz)		ERC Rec T/R 32-02.
			PMR (12.5 kHz channel spacing) Telemetry Paging (private, on-site)		Rec T/R 25-08. ECC Dec (06)06).
	Meteorological-satellite (s-E)				
	5.287 5.289	5.287 5.289			

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
470 - 790	BROADCASTING	BROADCASTING	Television broadcasting (DTT)		ITU Geneva 2006 plan.
		Mobile	Wireless audio PMSE equipment	National Legislation: S.L.399.40. European Legislation: EC Decision 2014/641/EU.	ERC Rec 70-03.  The band 694-790MHz is earmarked for terrestrial systems capable of providing
	5.149 5.296 5.306 5.311A	MLT02 MLT05 MLT06 MLT07 5.149 5.296 5.306 5.311A			electronic communications services.
790 – 862	FIXED				
	BROADCASTING	BROADCASTING	Television broadcasting (DTT)		ITU Geneva 2006 plan. No future broadcasting assignments shall be considered.
	MOBILE except aeronautical mobile 5.316B 5.317A	MOBILE except aeronautical mobile 5.316B 5.317A		European Legislation: EC Decision 2010/267/EU.	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.
			Wireless audio PMSE equipment	National Legislation: S.L.399.40. European Legislation: EC Decision 2014/641/EU.	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.
	5.316 5.316A	MLT08 MLT09 5.316 5.316A			

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
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/EEC 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				
		MLT09			
890 – 942	FIXED				
	MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A	TRA-ECS	European Legislation: EC Directive 87/372/EEC 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.	In the bands 890-915 MHz and 925-942 MHz.
		MLT09		European Legislation: EC Decision 2010/166/EU.	
	BROADCASTING			20 200.001 2010 100 20.	
	Radiolocation	Radiolocation			

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
942 – 960	FIXED				
	MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A	TRA-ECS	European Legislation: EC Directive 87/372/EEC 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				
	AFRONALTION PARIONALION FOR	MLT09			
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).
	AERONAUTCIAL MOBILE (R) 5.327A	AERONAUTCIAL 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			
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)	SPACE RESEARCH (active)			
	5.332	5.332			

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
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)	SPACE RESEARCH (active)			
	Amateur	Amateur	Amateur applications		
	5.332 5.335A	5.332 5.335A			
1260 - 1270	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			Active sensors (satellite).
1200 1210	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)	SPACE RESEARCH (active)			
	Amateur	Amateur	Amateur applications		
		Amateur-satellite	Amateur applications		
	5.282 5.335A	5.282 5.335A			
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)	SPACE RESEARCH (active)			
	Amateur	Amateur	Amateur applications		
	5.335A	5.335A			
1300 – 1350	AERONAUTICAL RADIONAVIGATION 5.337	AERONAUTICAL RADIONAVIGATION 5.337	Radionavigation applications		
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	RADIONAVIGATION-SATELLITE (E-s)	RADIONAVIGATION-SATELLITE (E-s)			Satellite navigation systems.
	5.149 5.337A	5.149 5.337A			
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	RADIOLOCATION			
	5.149 5.338A 5.339	5.149 5.338A 5.339			

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
1400 – 1427	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			Passive sensors (satellite).
	RADIO ASTRONOMY	RADIO ASTRONOMY			All emissions prohibited, ECC Dec (11)01.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			200 Dec (11)01.
	5.340 5.341	5.340 5.341			
1427 – 1429	SPACE OPERATIONS (E-s)	SPACE OPERATIONS (E-s)			
	FIXED	FIXED	Fixed links		ERC Rec T/R 13-01. No future assignments for fixed services shall be considered.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.338A 5.341	5.338A 5.341			
1429 – 1452	FIXED	FIXED			ERC Rec T/R 13-01. No future assignments for fixed services shall be considered.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.338A 5.341	5.338A 5.341			
1452 – 1492	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		European Legislation: EC Directive 2015/750/EU.	This band is earmarked for the supplementary downlink of TRA-ECS.
	BROADCASTING 5.345				Maastricht 2002 special arrangement, as revised in Constanta, 2007.
	BROADCASTING-SATELLITE 5.208B	BROADCASTING-SATELLITE 5.208B MLT09			S-DAB (1479.5-1492 MHz),
	5.341 5.345	5.341 5.345			
1492 – 1518	FIXED	FIXED			ERC Rec T/R 13-01.  No future assignments for fixed services shall be considered.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.341	5.341			
1518 – 1525	FIXED				
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	MOBILE-SATELLITE (s-E) 5.348 5.348A 5.351A	MOBILE-SATELLITE (s-E) 5.348 5.348A 5.351A			IMT (satellite component), ECC Dec (04)09.
	5.341	5.341			

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
1525 – 1530	SPACE OPERATION (s-E)	SPACE OPERATION (s-E)			
	FIXED				
	MOBILE-SATELLITE (s-E) 5.208B 5.351A	MOBILE-SATELLITE (s-E) 5.208B 5.351A	Mobile-satellite applications		IMT (satellite component).
	Earth exploration-satellite		····		
	Mobile except aeronautical mobile				
		5044 5054 5054			
1500 1505	5.341 5.351 5.354	5.341 5.351 5.354			
1530 – 1535	SPACE OPERATION (s-E)	SPACE OPERATION (s-E)			
	MOBILE-SATELLITE (s-E) 5.208B 5.351A 5.353A	MOBILE-SATELLITE (s-E) 5.208B 5.351A 5.353A	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.
	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  5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A	MOBILE-SATELLITE (s-E) 5.208B 5.351A  5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A	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.
1559 – 1610	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION	Radionavigation applications		Satellite navigation (Galileo
1000	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.208B, 5.328B 5.329A	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.208B, 5.328B 5.329A	Tradionavigation applications		(1559.42-1591.42 MHz), GLONASS (1592.9-1610.5 MHz) & GPS (1563.42- 1587.42 MHz)).
	5.341	5.341			
1610 – 1610.6	MOBILE-SATELLITE (E-s) 5.351A	MOBILE-SATELLITE (E-s) 5.351A	Mobile-satellite applications		ECC Dec (09)02.
	AERONAUTICAL RADIONAVIGATION  5.341 5.364 5.366 5.367 5.368 5.371 5.372	AERONAUTICAL RADIONAVIGATION 5.341 5.364 5.366 5.367 5.368 5.371 5.372	Radionavigation applications		Satellite navigation (GLONASS (1592.9-1610.5 MHz)).
1610.6 – 1613.8	MOBILE-SATELLITE (E-s) 5.351A	MOBILE-SATELLITE (E-s) 5.351A	Mobile-satellite applications		ECC Dec (09)02.
	RADIO ASTRONOMY		····		
	AERONAUTICAL NAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372	5.149 5.341 5.364 5.366 5.367 5.368 5.371 5.372			

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
1613.8 – 1626.5	MOBILE-SATELLITE (E-s) 5.351A	MOBILE-SATELLITE (E-s) 5.351A	Mobile-satellite applications		ECC Dec (09)02.
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	Mobile-satellite (s-E) 5.208B	Mobile-satellite (s-E) 5.208B			
	5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372	5.341 5.364 5.365 5.366 5.367 5.368 5.371 5.372			
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	MOBILE-SATELLITE (E-s) 5.351A	Mobile-satellite applications		IMT (satellite component).
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149 5.341 5.351 5.354 5.376A	5.149 5.341 5.351 5.354 5.376A			
1660.5 – 1668	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	Fixed	Fixed			
	Mobile except aeronautical mobile	Mobile except aeronautical mobile			
	5.149 5.341 5.379A	5.149 5.341 5.379A			
1668 – 1668.4	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			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	Fixed	Fixed			
	Mobile except aeronautical mobile	Mobile except aeronautical mobile			
	5.149 5.341 5.379A	5.149 5.341 5.379A			
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			

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
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.
4075 4000	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 5.341	MOBILE except aeronautical mobile 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			
1710 – 1785	FIXED	FIXED			
	MOBILE 5.384A	MOBILE 5.384A	TRA-ECS	European Legislation: EC Decision 2009/766/EC as amended.	MCA/10/44/D.
			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.	
	5.149 5.341 5.385	MLT09 5.149 5.341 5.385			

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
1785 – 1800	FIXED	FIXED			
	MOBILE 5.384A	MOBILE 5.384A			This band is not planned for IMT.
			Wireless audio PMSE equipment	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2014/641/EU.	
1800 – 1805	FIXED	Fixed			
	MOBILE 5.384A	MOBILE 5.384A			This band is not planned for IMT.
			Wireless audio PMSE equipment	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2014/641/EU.	
1805 – 1880	FIXED	FIXED			
	MOBILE 5.384A	MOBILE 5.384A	TRA-ECS	European Legislation: EC Decision 2009/766/EC as amended.	MCA/10/44/D.
			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.	
		MLT09		European Legislation: EC Decision 2010/166/EU.	
1880 – 1885	FIXED	Fixed			
	MOBILE 5.384A	MOBILE 5.384A	DECT	National Legislation: S.L.399.40.	ERC Dec (94)03.
				European Legislation: EC Directive 91/287/EEC.	
1885 – 1900	FIXED	Fixed			
	MOBILE 5.388A	MOBILE 5.388A	DECT	National Legislation: S.L.399.40.	ERC Dec (94)03.
				European Legislation: EC Directive 91/287/EEC.	
	5.388	5.388			

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
1900 – 1930	FIXED	Fixed			
	MOBILE 5.388A	MOBILE 5.388A	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz).
					TDD-Unpaired (1900-1920 MHz), ERC Rec (01)01.
	5.388	MLT09 5.388	MCA services	National Legislation: S.L.399.40. European Legislation: EC Decision 2008/294/EC as amended.	In the band 1920-1930 MHz.
1930 – 1970	FIXED	Fixed			
	MOBILE 5.388A	MOBILE 5.388A	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz). ERC Rec (01)01.
			MCA services	National Legislation: S.L.399.40.	
	5.388	MLT09 5.388		European Legislation: EC Decision 2008/294/EC as amended.	
1970 – 1980	FIXED	Fixed			
	MOBILE 5.388A	MLT09	TRA-ECS	European Legislation: EC Decision 2012/688/EU.	FDD-Paired (1920-1980 MHz / 2110-2170 MHz). ERC Rec (01)01.
			MCA services	National Legislation: S.L.399.40.	
	5.388			European Legislation: EC Decision 2008/294/EC as amended.	
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).
	F 200 F 200A	5 200		European Legislation: EC Decision 2007/98/EC.	
2010 – 2025	5.388 5.389A FIXED	5.388 5.389A Fixed		EC Decision 2007/98/EC.	
2010 – 2025			Videa DMCE applications	Furnan Lagislation	
	MOBILE 5.388A	MOBILE 5.388A	Video PMSE applications	European Legislation: EU Decision 2016/339.	
	5.388	MLT09 5.388			

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
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. European Legislation: EC Decision 2008/294/EC as amended.	
	SPACE RESEARCH (deep space) (E-s) 5.388	MLT09 5.388			
2120 – 2160	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. European Legislation:	
	5.388	MLT09 5.388		EC Decision 2008/294/EC as amended.	
2160 – 2170	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. European Legislation: EC Decision 2008/294/EC as amended.	
	5.388	MLT09 5.388			

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
2170 – 2200	FIXED	Fixed			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E) 5.351A	MOBILE-SATELLITE (s-E) 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.	
2200 – 2290	SPACE OPERATION (s-E) (s-s)				
	EARTH EXPLORATION-SATELLITE (s-E) (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 (s-E) (s-s)				
	5.392	5.392			
2290 – 2300	FIXED	FIXED			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			Designated for SAP / SAB applications (ERC Rec 25-10).
	SPACE RESEARCH (deep space) (s-E)				
2300 – 2400	FIXED	FIXED			No future assignments for
	MOBILE 5.384A	MOBILE 5.384A	SAB applications		fixed services and SAB applications shall be
	Amateur	Amateur	Amateur applications		considered.
	Radiolocation	Radiolocation			Band being considered for terrestrial systems capable of providing electronic communications systems on a shared basis.
2400 – 2450	FIXED	FIXED			
	MOBILE	MOBILE			
	Amateur	Amateur	Amateur applications		
		Amateur-satellite			
	Radiolocation	Radiolocation			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ISM applications.
	5.150 5.282	5.150 5.282			

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
2450 – 2483.5	FIXED	FIXED			
	MOBILE	MOBILE			
	Radiolocation				
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	ISM applications
0.400 5 0500	5.150	5.150		amended.	
2483.5 – 2500	FIXED	FIXED			
	MOBILE	MOBILE	NA-1-11		500 D (00)00
	MOBILE-SATELLITE (s-E) 5.351A  RADIODETERMINATION-SATELLITE (s-E) 5.398	MOBILE-SATELLITE (s-E) 5.351A	Mobile-satellite applications		ECC Dec (09)02.
	Radiolocation 5.398A				
	5.150 5.399 5.402	5.150 5.399 5.402	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ISM applications ERC Rec 70-03.
2500 – 2520	FIXED 5.410	FIXED 5.410			MCA/D/14-1933.
	MOBILE except aeronautical mobile 5.384A	MOBILE except aeronautical mobile 5.384A  MLT09		European Legislation: EC Decision 2008/477/EC.	Band earmarked for terrestrial systems capable of providing electronic communications systems.
2520 – 2655	FIXED 5.410	FIXED 5.410			MCA/D/14-1933.
	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
	BROADCASTING-SATELLITE 5.413 5.416 5.339 5.417C 5.417D 5.418B 5.418C	MLT09 5.339 5.418B 5.418C			communications systems.
2655 – 2670	FIXED 5.410	FIXED 5.410			MCA/D/14-1933.
	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
	BROADCASTING-SATELLITE 5.208B 5.413 5.416				providing electronic communications systems.
	Earth exploration-satellite (passive)	Earth exploration-satellite (passive)			
	Radio astronomy	Radio astronomy			
	Space research (passive)	Space research (passive) MLT09			
	5.149 5.420	5.149			

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
2670 – 2690	FIXED 5.410	FIXED			MCA/D/14-1933.
	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
	Earth exploration-satellite (passive)				communications systems.
	Radio astronomy	Radio astronomy			
	Space research (passive) 5.149	MLT09 5.149			
2690 – 2700	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			
2700 – 2900	AERONAUTICAL RADIONAVIGATION 5.337	AERONAUTICAL RADIONAVIGATION 5.337	Radionavigation applications		
	Radiolocation	Radiolocation			
	5.423	5.423			
2900 - 3100	RADIOLOCATION 5.424A	RADIOLOCATION 5.424A			
	RADIONAVIGATION 5.426	RADIONAVIGATION 5.426			
	5.425 5.427	5.425 5.427			
3100 – 3300	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active)	Earth exploration-satellite (active)			
	Space research (active)	Space research (active)			
2000 2400	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 as amended.	
	Radiolocation				
		MLT09			

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
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)	FSS	National Legislation: S.L.399.40.	
	Mobile	MOBILE MLT09		European Legislation: EC Decision 2008/411/EC as amended.	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	National Legislation: S.L.399.40.	
	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.	
4800 – 4990	FIXED	FIXED			
	MOBILE 5.442	MOBILE except aeronautical mobile 5.442	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	Radio astronomy	Radio astronomy			
	5.149 5.339	5.149 5.339			

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
4990 – 5000	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.	
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	Space research (passive) 5.149	5.149			
5000 – 5010	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA			
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE (E-s)	RADIONAVIGATION-SATELLITE (E-s)			For future use by Galileo,
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
5010 – 5030	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA			
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.443B	RADIONAVIGATION-SATELLITE (s-E) (s-s) 5.328B 5.443B			Satellite navigation (Galileo C1),
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
5030 – 5091	AERONAUTICAL MOBILE (R) 5.443C	AERONAUTICAL MOBILE (R) 5.443C			
	AERONAUTICAL MOBILE-SATELLITE (R) 5.443D	AERONAUTICAL MOBILE-SATELLITE (R) 5.443D			
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.444	5.444			

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
5091 – 5150	AERONAUTICAL MOBILE 5.444B	AERONAUTICAL MOBILE 5.444B			
	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA	AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA			
	AERONAUTICAL RADIONAVIGATION	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	FIXED-SATELLITE (E-s) 5.447A			
	MOBILE except aeronautical mobile 5.446A 5.446B	MOBILE except aeronautical mobile 5.446A 5.446B			The band 5150-5200 MHz is reserved for BBDR radio applications (ECC Rec (08)04).
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.446 5.446C 5.447B 5.447C	5.446 5.446C 5.447B 5.447C	WAS	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/513/EC as amended.	
5250 – 5255	EARTH EXPLORATION-SATELLITE (active)				
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH 5.447D				
	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.	
			WAS	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/513/EC as amended.	
	5.448A	5.448A			

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
5255 – 5350	EARTH EXPLORATION-SATELLITE (active)				
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH (active)				
	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.	
			WAS	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/513/EC as	
5350 – 5460	5.448A  EARTH EXPLORATION-SATELLITE (active) 5.448B	5.448A		amended.	
	SPACE RESEARCH (active) 5.448C				
	AERONAUTICAL RADIONAVIGATION 5.449	AERONAUTICAL RADIONAVIGATION 5.449			
	RADIOLOCATION 5.448D	RADIOLOCATION 5.448D			
			SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
5460 – 5470	RADIONAVIGATION 5.449	RADIONAVIGATION 5.449			
	EARTH EXPLORATION-SATELLITE (active)				
	SPACE RESEARCH (active)				
	RADIOLOCATION 5.448D	RADIOLOCATION 5.448D			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	5.448B	5.448B			

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.	
		SRDs	S.L.399.40.	
			European Legislation: EC Decision 2006/771/EC as amended. EC Decision 2005/513/EC as amended.	
EARTH EXPLORATION-SATELLITE (active)				
RADIOLOCATION 5.450B	RADIOLOCATION 5.450B			
5.448B	5.448B			
MARITIME RADIONAVIGATION	MARITIME RADIONAVIGATION			
MOBILE except aeronautical mobile 5.446A 5.450A	MOBILE except aeronautical mobile5.446A 5.450A			
RADIOLOCATION 5.450B	RADIOLOCATION 5.450B	Meteorological radars		
			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.	
5.450	F 450			
	SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A	SPACE RESEARCH (active) RADIOLOCATION 5.450B  5.448B  MARITIME RADIONAVIGATION  MOBILE except aeronautical mobile 5.446A 5.450A  RADIOLOCATION 5.450B  RADIOLOCATION 5.450B  RADIOLOCATION 5.450B  RADIOLOCATION 5.450B	SPACE RESEARCH (active) RADIOLOCATION 5.450B RADIOLOCATION 5.450B 5.448B 5.448B 5.448B MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B  RADIOLOCATION 5.450B  RADIOLOCATION 5.450B  Meteorological radars  SRDs  WAS	SPACE RESEARCH (active)         RADIOLOCATION 5.450B         RADIOLOCATION 5.450B         RADIOLOCATION 5.450B         RADIOLOCATION 5.450B         RADIOLOCATION 5.450B         MARTIME RADIONAVIGATION         MOBILE except aeronautical mobile 5.446A         MOBILE except aeronautical mobile 5.446A         S.450A         MOBILE except aeronautical mobile 5.446A         S.450A         Meteorological radars           RADIOLOCATION 5.450B         Meteorological radars         SRDs         National Legislation: Except aeronautical mobile 5.446A         S.L.399.40.         S.L.399.40.         S.L.399.40.         S.L.399.40.         S.L.399.40.         S.L.399.40.         S.L.399.40.         European Legislation: Exc Decision 2006/771/EC as amended.

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 mobile5.446A 5.450A			
	Space research (deep space)				
	Amateur	Amateur	Amateur applications		
		Amateur-satellite (E-s)			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.	
	5.282	5.282		European Legislation: EC Decision 2005/513/EC as amended.	
5725 – 5830	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
		Mobile			Earmarked for BFWA applications within the band 5725-5855 MHz (ECC Rec (06)04).
	5.150	5.150	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ISM applications (5725-5875 MHz).
5830 - 5850	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite (s-E)	Amateur-satellite (s-E)	Amateur applications		
	· · · · · · · · · · · · · · · · · · ·	Mobile			Earmarked for BFWA applications within the band 5725-5855 MHz (ECC Rec (06)04).
	5.150	5.150	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	SM applications (5725-5875 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			
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			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	ITS	National Legislation: S.L.399.40. European Legislation: EC Decision 2008/671/EC.	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	FIXED	FIXED	Fixed links		ERC Rec 14-01 & ERC Rec 14-02.
	FIXED-SATELLITE (E-s) 5.457A 5.457B	FIXED-SATELLITE (E-s) 5.457A 5.457B	FSS	National Legislation: S.L.399.40.	
	MOBILE				
		Earth exploration-satellite (passive)			
	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	Fixed links		ERC Rec 14-02.
	FIXED-SATELLITE (E-s) (s-E) 5.441	FIXED-SATELLITE (E-s) (s-E) 5.441			ITU RR Appendix 30B.
	MOBILE				
		Earth exploration-satellite (passive)			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.458 5.458A 5.458B 5.458C	5.458 5.458A 5.458B 5.458C			

## Part $\boldsymbol{B}$ ~ The Radio Spectrum in $\boldsymbol{MHz}$

## 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			

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)	FIXED-SATELLITE (s-E)			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.461	5.461	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7450 – 7550	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	METEOROLOGICAL-SATELLITE (s-E)	METEOROLOGICAL-SATELLITE (s-E)			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	5.461A	5.461A	SRDs	National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7550 – 7750	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
		-	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7750 – 7900	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	METEOROLOGICAL-SATELLITE (s-E) 5.461B	METEOROLOGICAL-SATELLITE (s-E) 5.461B			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
	·	·	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
7900 – 8025	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02.
	5.461	5.461		amended.	

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)	EARTH EXPLORATION-SATELLITE (s-E)			
	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			· · · · · · · · · · · · · · · · · · ·
	MOBILE 5.463	MOBILE 5.463			
	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)	EARTH EXPLORATION-SATELLITE (s-E)			
	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	METEOROLOGICAL-SATELLITE (E-s)	METEOROLOGICAL-SATELLITE (E-s)			
	MOBILE 5.463	MOBILE 5.463			
	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)	EARTH EXPLORATION SATELLITE (s-E)			
	FIXED	FIXED	Fixed links		ECC Rec (02)06.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE 5.463				
	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	FIXED	Fixed links		ECC Rec (02)06.
	MOBILE except aeronautical mobile				
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	SPACE RESEARCH (s-E) 5.465	SPACE RESEARCH (s-E) 5.465			

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)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			
	5.469A	5.469A	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
8650 – 8750	RADIOLOCATION	RADIOLOCATION	Radiolocation applications	amended.	
0030 – 6730	RADIOLOGATION	RADIOLOCATION	SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
8750 – 8850	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	AERONAUTICAL RADIONAVIGATION 5.470	AERONAUTICAL RADIONAVIGATION 5.470			
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
8850 – 9000	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	MARITIME RADIONAVIGATION 5.472	MARITIME RADIONAVIGATION 5.472	Radionavigation applications		
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	
9000 – 9200	AERONAUTICAL RADIONAVIGATION 5.337	AERONAUTICAL RADIONAVIGATION 5.337	Radionavigation applications		
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as amended.	

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	RADIOLOCATION	Radiolocation applications		
	MARITIME RADIONAVIGATION 5.472	MARITIME RADIONAVIGATION5.472	Radionavigation applications		
	5.474	5.474	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
9300 – 9500	RADIONAVIGATION	RADIONAVIGATION	Radionavigation applications		
	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		Weather radars.
	5.427 5.474 5.475 5.475A 5.475B 5.476A	5.427 5.474 5.475 5.475A 5.475B 5.476A	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
9500 – 9800	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION	Radiolocation applications		
	RADIONAVIGATION				
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			
	5.476A	5.476A	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
9800 - 9900	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite (active)	Earth exploration-satellite (active)			
	Space research (active)	Space research (active)			
	Fixed				
	5.478A 5.478B	5.478A 5.478B	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
9900 – 10000	RADIOLOCATION	RADIOLOCATION			
	Fixed	Fixed			
	5.479	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 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 10.3-10.45 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	Amateur applications		
	Amateur-satellite	Amateur-satellite			
			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.	

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.
10.00 10.7	RADIO ASTRONOMY	RADIO ASTRONOMY			7 III CITIOSIONS PIONIBILEA.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			4 40 40 40 40 40 40 40 40
	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			

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)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH 5.501A	SPACE RESEARCH 5.501A			
	Standard frequency and time signal-satellite (E-s)				
	5.501B	5.501B	SRDs	National Legislation: S.L.399.40.	ERC Rec 70-03.
13.75 – 14.0	FIXED-SATELLITE (E-s) 5.484A	FIXED-SATELLITE (E-s) 5.484A	FSS		
	RADIOLOCATION	RADIOLOCATION			
	Earth exploration-satellite				
	Standard frequency and time signal-satellite (E-s)				
	Space research	Space research			
	5.502 5.503	5.502 5.503	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	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.
	RADIONAVIGATION 5.504				
	Mobile-satellite (E-s) 5.504B 5.504C 5.506A	Mobile-satellite (E-s) 5.504B 5.504C 5.506A			
	Space research	Space research			
	5.504A	5.504A			
14.25 – 14.3	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.
	RADIONAVIGATION 5.504				
	Mobile-satellite (E-s) 5.504B 5.506A 5.508A	Mobile-satellite (E-s) 5.504B 5.506A 5.508A			
	Space research	Space research			
	5.504A	5.504A			
4.3 – 14.4	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	Mobile-satellite (E-s) 5.504B 5.506A 5.509A			
	Radionavigation-satellite				
	5.504A	5.504A			

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	Mobile-satellite (E-s) 5.504B 5.506A 5.509A			
	Space research (s-E)				
	55044	5 5044			
4.47 – 14.5	5.504A FIXED	5.504A			
14.47 – 14.5	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	0.1077 0.000 0.0002		0.2.000.10.	
	Mobile-satellite (E-s) 5.504B 5.506A 5.509A	Mobile-satellite (E-s)			
	Radio astronomy	Radio astronomy			
	,	•			
145 440	5.149 5.504A FIXED	5.149 5.504A FIXED	Fixed links		ITU-R F.636-4.
4.5 – 14.8		FIXED	Fixed links		11U-K F.030-4.
	FIXED-SATELLITE (E-s)  MOBILE	MOBILE			
	Space research	WODIL			
4.8 – 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.
10.1	RADIO ASTRONOMY	RADIO ASTRONOMY			7 til difficolorio profilottod.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	, ,	,			
5.4 – 15.43	5.340 RADIOLOCATION 5.511E 5.511F	5.340 RADIOLOCATION 5.511E 5.511F			
15.4 - 15.43	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.511D	5.511D			
5.43 – 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	AERONAUTICAL RADIONAVIGATION			
	5.511C	5.511C			
15.63 – 15.7	RADIOLOCATION 5.511E 5.511F	RADIOLOCATION 5.511E 5.511F			
	AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION			
	5.511D	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	RADIOLOCATION			
	Space research (deep space) (E-s)				
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)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			
		, , , , , , , , , , , , , , , , , , ,	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	
	5.513A	5.513A		amended.	
17.3 – 17.7	FIXED-SATELLITE (E-s) 5.516 (s-E) 5.516A 5.516B	FIXED-SATELLITE (E-s) 5.516 (s-E) 5.516A 5.516B		National Legislation: S.L.399.40.	ITU RR Appendix 30A. ECC Dec(13)01.
	Radiolocation	Radiolocation			
17.7 – 18.1	FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) 5.484A (E-s) 5.516	FIXED-SATELLITE (s-E) 5.484A (E-s) 5.516		National Legislation: S.L.399.40.	ITU RR Appendix 30A. ERC Dec(00)07. ECC Dec(13)01.
	MOBILE				
18.1 – 18.4	FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) 5.484A 5.516B (E-s) 5.520	FIXED-SATELLITE (s-E) 5.484A 5.516B (E-s) 5.520		National Legislation: S.L.399.40.	ERC Dec(00)07. ECC Dec(13)01.
	MOBILE				
		METEOROLOGICAL-SATELLITE (s-E)			
		, ,			
	5.519	5.519			
18.4 –18.6	FIXED	FIXED	Fixed links		ERC Rec 12-03 & ERC Dec(00)07.
	FIXED-SATELLITE (s-E) 5.484A 5.516B	FIXED-SATELLITE (s-E) 5.484A 5.516B		National Legislation: S.L.399.40.	ERC Dec(00)07. ECC Dec(13)01.
	MOBILE				

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)		S.L.399.40.  National Legislation:	
20.1 – 20.2	FIXED-SATELLITE (s-E) 5.484A 5.516B	FIXED-SATELLITE (s-E) 5.484A 5.516B	FSS		ECC Dec(13)01.
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
	5.525 5.526 5.527 5.528	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)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			

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.	In the band 21.65 – 22 GHz.
	5.530A 5.530B 5.530C 5.530D	MLT10 5.530A 5.530B 5.530C 5.530D		European Legislation: EC Decision 2005/50/EC as amended.	
22 – 22.21	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
			SRR	National Legislation: S.L.399.40.	
	5.149	MLT10 5.149		European Legislation: EC Decision 2005/50/EC as amended.	
22.21 – 22.5	EARTH EXPLORATION-SATELLITE (passive)				
FIXED FIXED Fixed links	Fixed links		ERC Rec T/R 13-02.		
	MOBILE except aeronautical mobile MOBILE except aeronautical mobile				
	RADIO ASTRONOMY				
	SPACE RESEARCH (passive)				
	5.149 5.532	MLT10 5.149 5.532	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	
22.5 – 22.55	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	MOBILE	MOBILE	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	
		MLT10			

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).
	SPACE RESEARCH (E-s) 5.532A	SPACE RESEARCH (passive)			
	5.149	MLT10 5.149	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	
23.15 – 23.55	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	INTER-SATELLITE 5.338A	INTER-SATELLITE 5.338A			
	MOBILE	MOBILE			
		MLT10	SRR	National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.	
23.55 – 23.6	FIXED	FIXED	Fixed links		ERC Rec T/R 13-02.
	MOBILE	MOBILE			
		MLT10	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	
23.6 – 24	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive) MLT10			
04.05	5.340	5.340	A		
24 – 24.05	AMATEUR CATELLITE	AMATEUR	Amateur applications		
	AMATEUR-SATELLITE	AMATEUR-SATELLITE			
			SRDs	National Legislation: S.L.399.40.	ISM applications. ERC Rec 70-03.
	5.150	MLT10 5.150	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	

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.
	5.150	MLT10 5.150	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as amended.	
24.25 – 24.45	FIXED	FIXED		Legislation  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	Designated for SAP / SAB applications (ERC Rec 25-10).
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02.
		MLT10	SRR	S.L.399.40.  European Legislation: EC Decision 2005/50/EC as	
24.45 – 24.5	FIXED	FIXED			Designated for SAP / SAB applications (ERC Rec 25-10).
	INTER-SATELLITE				
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02.
	S.L.399.40.  European Legislation: EC Decision 2005/50/E0	S.L.399.40.  European Legislation: EC Decision 2005/50/EC as			
		MLT10			

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.
		MLT10	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as	
24.65 – 24.75	FIXED	FIXED		difference.	ERC Rec T/R 13-02.
2	INTER-SATELLITE				2.30 100 171 10 02.
	FIXED-SATELLITE (E-s) 5.532B	FIXED-SATELLITE (F-s) 5 532B		National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	
	TIALD-OATELLITE (E-3) 0.302B	FIXED-SATELLITE (E-s) 5.532B	SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	
		MLT10	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	S.L.399.40.  European Legislation: EC Decision 2005/50/EC as amended.  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.  National Legislation: EC Decision 2005/70/EC as amended.  National Legislation: S.L.399.40.  European Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: S.L.399.40.  European Legislation: S.L.399.40.	
			SRR	S.L.399.40.  European Legislation:	
		MLT10			

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  Standard frequency and time signal-satellite (E-s)  SRDs  National Legislation: SL.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  SRR  National Legislation: EC Decision 2006/771/EC as amended.  SRR  National Legislation: EC Decision 2006/750/EC as amended.  European Legislation: SL.399.40.  European Legislation: EC Decision 2005/50/EC as amended.  EARTH EXPLORATION-SATELLITE (s-E)  Earth exploration-satellite (s-E) FIXED  INTER-SATELLITE 5.536  MOBILE  MOBILE				
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
		MI T10	SRR	S.L.399.40.  European Legislation: EC Decision 2005/50/EC as	
25.5 – 26.5	EARTH EXPLORATION-SATELLITE (s-E)				
				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	ERC Rec T/R 13-02.
	SPACE RESEARCH (s-E)	SPACE RESEARCH (s-E)			
	Standard frequency and time signal-satellite (E-s)	OTTOE NEOETHORING E)		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.  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 2006/771/EC as amended.  National Legislation: S.L.399.40.  European Legislation: EC Decision 2005/50/EC as	
			SRDs		ECC Dec(11)02.
			SRR		
	5.536A	MLT10 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)	Earth exploration-satellite (s-E)			
	FIXED	FIXED			
	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.	
	5.536A	MLT10	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2005/50/EC as	In the range 26.5 – 26.65 GHz.
07 07 5	FIXED	5.536A FIXED		amended.	
27 – 27.5	INTER-SATELLITE 5.536	INTER-SATELLITE 5.536			
	MOBILE 5.536	MOBILE 3.336			
	IVIODILE	Earth exploration-satellite (s-E)			
27.5 – 28.5	FIXED	FIXED			ECC Dec (05)01 & ERC Rec
21.5 – 20.5	TIMES	TIMED			T/R 13-02.
	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 (limited to the bands 27.5-27.8285 GHz and 28.4445-28.5 GHz).
	MOBILE				
	5.538 5.540	5.538 5.540			
28.5 – 29.1	FIXED	FIXED		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.	ECC Dec (05)01 & ERC Rec T/R 13-02.
	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.523A 5.539	FIXED-SATELLITE (E-s) 5.484A 5.516B 5.523A 5.539			ECC Dec(13)01 (limited to the band 28.5-28.8365 GHz).
	MOBILE				
	Earth exploration-satellite (E-s) 5.541	Earth exploration-satellite (E-s) 5.541			
	5.540	5.540			

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	Earth exploration-satellite (E-s) 5.541			
	5.540	5.540			500 5 (10)01
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)	Mobile-satellite (E-s)			
00.0 00	5.540	5.540		National Lawislation.	F00 D(40)04
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)	MOBILE-SATELLITE (E-s)			
	Earth exploration-satellite (E-s) 5.541 5.543	Earth exploration-satellite (E-s) 5.541 5.543			
20 04	5.525 5.526 5.527 5.538 5.540 FIXED-SATELLITE (E-s) 5.338A	5.525 5.526 5.527 5.538 5.540			ECC Dec (10)02.
30 – 31	MOBILE-SATELLITE (E-s) 5.338A	FIXED-SATELLITE (E-s)  MOBILE-SATELLITE (E-s)			ECC Dec (10)02.
	Standard frequency and time signal-satellite (s-E)	WODILE-SATELLITE (E-5)			
31 – 31.3	FIXED 5.338A	FIXED 5.338A			
0. 00	MOBILE	MOBILE			
	Standard frequency and time signal-satellite (s-E)				
	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)	SPACE RESEARCH (passive)			
	5.340	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	Fixed			
	Mobile except aeronautical mobile	Mobile except aeronautical mobile			
	5.149	5.149			

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)	SPACE RESEARCH (deep space) (s-E)			
	5.547 5.548	5.547 5.548			
Sand (GHz)			ERC Rec (01)02.		
	RADIONAVIGATION	RADIONAVIGATION			
32.3 – 33	FIXED 5.547A	FIXED 5.547A			ERC Rec (01)02.
	INTER-SATELLITE	INTER-SATELLITE			
	RADIONAVIGATION	RADIONAVIGATION			
	5.547 5.548	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)				
	5.549	5.549			
34.7 – 35.2	RADIOLOCATION	RADIOLOCATION			
	Space research	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)	SPACE RESEARCH (active)			
	5.549A	5.549A			
36 – 37	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			
	MOBILE	MOBILE			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.149 5.550A	5.149 5.550A			

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)	SPACE RESEARCH (s-E)			
	5.547	5.547			
37.5 – 38	FIXED	FIXED			ERC Rec T/R 12-01 & ERC Dec (00)02.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)	Fixed links  Fixed links  Fixed links  Fixed links  516B  E)	ERC Dec (00)02.	
	MOBILE except aeronautical mobile				<del>-</del>
	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.
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			ERC Dec (00)02.
	MOBILE				
	Earth exploration-satellite (s-E)				
	5.547	5.547			
39.5 – 40	FIXED	FIXED			
	FIXED-SATELLITE (s-E) 5.516B	FIXED  ITE (s-E) 5.516B FIXED-SATELLITE (s-E) 5.516B	ERC Dec (00)02.		
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)		Legislation	
	Earth exploration-satellite (s-E)	Earth exploration-satellite (s-E)			
	5.547	5.547			
40 – 40.5	EARTH EXPLORATION-SATELLITE (E-s)				
	FIXED	FIXED			
	FIXED-SATELLITE (s-E) 5.516B	FIXED-SATELLITE (s-E) 5.516B			ERC Dec (00)02.
	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).
	FIXED-SATELLITE (s-E)				
	BROADCASTING	BROADCASTING			
	BROADCASTING-SATELLITE	BROADCASTING-SATELLITE			ECC Dec (02)04.
	Mobile				
	5.547	5.547			

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	FIXED Legislation	ECC Dec (02)04.		
	Mobile				
	5.547 5.551H 5.551I	5 547			
42.5 – 43.5	FIXED				ECC Rec (01)04.
	FIXED-SATELLITE (E-s) 5.552				
	MOBILE except aeronautical mobile				
	RADIO ASTRONOMY				
	5.149 5.547	5 149 5 547			
43 5 <b>–</b> 45 5	MOBILE 5.553				
40.0	MOBILE-SATELLITE				
	RADIONAVIGATION				
	RADIONAVIGATION-SATELLITE				
	5.554	5.554			
45.5 – 47	MOBILE 5.553	MOBILE 5.553			
5.5 – 47	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-
	5.552A	5.552A			10).
47.5 – 47.9	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.552 (s-E) 5.516B 5.554A				
	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
	5.552A	5.552A			applications (ERC Rec 25-10).

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 12-11.
	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			Designated for SAP / SAB applications (ERC Rec 25-10).
48.54 – 49.44	FIXED	FIXED			ERC Rec 12-11.
	FIXED-SATELLITE (E-s) 5.552	FIXED-SATELLITE (E-s) 5.552			
	MOBILE 5.149 5.340 5.555	MOBILE 5.149 5.340 5.555			All emissions prohibited from airborne stations in the band 48.94-49.04. Designated for SAP / SAB applications (ERC Rec 25- 10).
40.44 50.0	5.149 5.340 5.555 FIXED	5.149 5.340 5.999 FIXED			,
49.44 – 50.2	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			ERC Rec 12-11.
	MOBILE	MOBILE			Designated for SAP / SAB applications (ERC Rec 25-10).
50.2 – 50.4	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340	5.340			
50.4 – 51.4	FIXED	FIXED			
	FIXED-SATELLITE (E-s) 5.338A	FIXED-SATELLITE (E-s) 5.338A			
	MOBILE				
	Mobile-satellite (E-s)	Mobile-satellite (E-s)			
51.4 – 52.6	FIXED 5.338A	FIXED 5.338A			ERC Rec 12-11.
	MOBILE	MOBILE			
	5.547 5.556	5.547 5.556			
52.6 - 54.25	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			·
	5.340 5.556	5.340 5.556			
54.25 – 55.78	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.556A				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			

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		S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.	
58.2 – 59	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			ECC Rec (09)01.
	MOBILE				
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.547 5.556	5.547 5.556			

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)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			ECC Rec (09)01.
	INTER-SATELLITE 5.556A	INTER-SATELLITE 5.556A			
	MOBILE 5.558	MOBILE 5.558			
	RADIOLOCATION 5.559	RADIOLOCATION 5.559			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
59.3 – 62	FIXED	FIXED		National Legislation: S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Rec (09)01.
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	RADIOLOCATION 5.559	RADIOLOCATION 5.559			
	5.138	5.138	SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ISM applications (61-61.5 GHz) ECC Dec(11)02.
62 – 63	FIXED	FIXED			ECC Rec (09)01.
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	RADIOLOCATION 5.559	RADIOLOCATION 5.559			
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02.
63 – 64	FIXED	FIXED		S.L.399.40.  European Legislation: EC Decision 2006/771/EC as amended.  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 2006/771/EC as amended.  National Legislation: EC Decision 2006/771/EC as amended.  National Legislation: EC Decision 2006/771/EC as amended.	ECC Rec (09)01.
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	RADIOLOCATION 5.559	RADIOLOCATION 5.559			
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02. ECC Dec(09)01.

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			ECC Rec (05)02.
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE except aeronautical mobile	MOBILE except aeronautical mobile			
			SRDs	National Legislation: S.L.399.40.	
	5.547 5.556	5.547 5.556		EC Decision 2006/771/EC as	
65 – 66					
					ECC Rec (05)02.
					200 Neo (00)02.
	·				
	SPACE RESEARCH	SPACE RESEARCH			
			SRDs	National Legislation: S.L.399.40.	
				European Legislation: EC Decision 2006/771/EC as	
				amended.	
66 – 71					
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.554	5.554			
<b>7</b> 1 – <b>7</b> 4	FIXED	FIXED   INTER-SATELLITE   Spate aeronautical mobile   SRDs   National Legislation: S.L.399.40.   European Legislation: EC Decision 2006/771/EC as amended.   SRDs   State	ECC Rec (05)07.		
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	FIXED				
74 – 76	FIXED	FIXED			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)			
			SRDs	S.L.399.40.  European Legislation: EC Decision 2006/771/EC as	ECC Dec(11)02 (limited to the band 75-76 GHz).
	5.561	5.561			

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.
	5.149	5.149	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2004/545/EC.	In the band 77-77.5 GHz.
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.
	5.149	5.149	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2004/545/EC.	
78 – 79	RADIOLOCATION	RADIOLOCATION		20 0003011 2004/040/200	
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite			
	Radio astronomy	Radio astronomy			
	Space research (s-E)	Space research (s-E)			
	Cyace research (5°L)	Space research (S-L)	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:	
	5.149 5.560	5.149 5.560		EC Decision 2004/545/EC.	

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	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite			
	Space research (s-E)				
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
	5.149	5.149	SRR	National Legislation: S.L.399.40. European Legislation: EC Decision 2004/545/EC.	
81 – 84	FIXED 5.338A	FIXED 5.338A			ECC Rec (05)07.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (E-s)	MOBILE-SATELLITE (E-s)			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	Space research (s-E)	Space research (s-E)			
		Amateur			Amateur applications are
		Amateur-satellite	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		limited within the band 81 – 81.5 MHz.
	5.149 5.561A	5.149 5.561A	SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02.
84 – 86	FIXED 5.338A	FIXED 5.338A			ECC Rec (05)07.
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as amended.	ECC Dec(11)02 (limited to 85 GHz).
	5.149	5.149			

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)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			30 30 30 30 30 30 30 30 30 30 30 30 30 3
	5.340	5.340			
92 – 94	FIXED 5.338A	FIXED 5.338A			ECC Rec(14)01.
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	5.149	5.149			
94 – 94.1	EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)			
	RADIOLOCATION	RADIOLOCATION			
	SPACE RESEARCH (active)	SPACE RESEARCH (active)			
	Radio astronomy	Radio astronomy			
	5.562 5.562A	5.562 5.562A			
94.1 – 95	FIXED	FIXED			ECC Rec(14)01.
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	5.149	5.149			
95 – 100	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.149 5.554	5.149 5.554			
100 – 102	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.341	5.340 5.341			
102 – 105	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149 5.341	5.149 5.341			

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	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B			
	5.149 5.341	5.149 5.341			
109.5 – 111.8	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.341	5.340 5.341			
111.8 – 114.25	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B			
	5.149 5.341	5.149 5.341			
114.25 – 116	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.341	5.340 5.341			
116 – 119.98	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.562C	INTER-SATELLITE 5.562C			
	SPACE RESEARCH (passive)				
	5.341	5.341			
119.98 – 120.02	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.562C	INTER-SATELLITE 5.562C			
	SPACE RESEARCH (passive)				
	5.341	5.341			
120.02 – 122.25	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.562C	INTER-SATELLITE 5.562C			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
			SRDs	National Legislation: S.L.399.40.	ISM applications (122-123 GHz)
				European Legislation: EC Decision 2006/771/EC as amended.	
	5.138 5.341	5.138 5.341			

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	FIXED			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	Amateur	Amateur			
			SRDs	National Legislation: S.L.399.40. European Legislation: EC Decision 2006/771/EC as	ISM applications (122-123 GHz)
	5.138	5.138		amended.	
123 – 130	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	Radio astronomy	Radio astronomy			
	5.149 5.554	5.149 5.554			
130 – 134	EARTH EXPLORATION-SATELLITE (active) 5.562E	EARTH EXPLORATION-SATELLITE (active) 5.562E			
	FIXED	FIXED			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	RADIO ASTRONOMY 5.149 5.562A	RADIO ASTRONOMY 5.149 5.562A			
134 – 136	AMATEUR	AMATEUR	Amateur applications		
134 – 136	AMATEUR-SATELLITE	AMATEUR AMATEUR-SATELLITE	Amateur applications		
	Radio astronomy	Radio astronomy			
136 – 141	RADIO ASTRONOMY	RADIO ASTRONOMY			
130 – 141	RADIOLOCATION	RADIOLOCATION			
	Amateur	Amateur	Amateur applications		
	Amateur-satellite	Amateur-satellite	Amateur applications		
	5.149	5.149			
141 – 148.5	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	5.149	5.149			

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)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			30 M M M M M M M M M M M M M M M M M M M
	5.340	5.340			
151.5 – 155.5	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	RADIOLOCATION	RADIOLOCATION			
	5.149	5.149			
155.5 – 158.5	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	FIXED	FIXED			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B			
	5.149 5.562F 5.562G	5.149 5.562F 5.562G			
158.5 – 164	FIXED	FIXED			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	MOBILE-SATELLITE (s-E)	MOBILE-SATELLITE (s-E)			
164 – 167	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			
167 – 174.5	FIXED	FIXED			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	5.149	5.149			
174.5 – 174.8	FIXED	FIXED			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
174.8 – 182	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.562H	INTER-SATELLITE 5.562H			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			

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)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESARCH (passive)	SPACE RESARCH (passive)			
	5.340	5.340			
85 – 190	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			
	INTER-SATELLITE 5.562H	INTER-SATELLITE 5.562H			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
90 – 191.8	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited.
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			·
	5.340	5.340			
91.8 – 200	FIXED	FIXED			
	INTER-SATELLITE	INTER-SATELLITE			
	MOBILE 5.558	MOBILE 5.558			
	MOBILE-SATELLITE	MOBILE-SATELLITE			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
	5.149 5.341 5.554	5.149 5.341 5.554			
00 – 209	EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)			All emissions prohibited
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive)	SPACE RESEARCH (passive)			
	5.340 5.341 5.563A	5.340 5.341 5.563A			
09 – 217	FIXED	FIXED			
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	5.149 5.341	5.149 5.341			
17 – 226	FIXED	FIXED			
	FIXED-SATELLITE (E-s)	FIXED-SATELLITE (E-s)			
	MOBILE	MOBILE			
	RADIO ASTRONOMY	RADIO ASTRONOMY			
	SPACE RESEARCH (passive) 5.562B	SPACE RESEARCH (passive) 5.562B			
	5.149 5.341	5.149 5.341			
26 – 231.5	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			

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			
38 – 240	FIXED	FIXED			
	FIXED-SATELLITE (s-E)	FIXED-SATELLITE (s-E)			
	MOBILE	MOBILE			
	RADIOLOCATION	RADIOLOCATION			
	RADIONAVIGATION	RADIONAVIGATION			
	RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE			
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. European Legislation:	ISM applications (244-246 GHz)
	5.138 5.149	5.138 5.149		EC Decision 2006/771/EC as amended.	
48 – 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** 

Part 1 : Glossary	of Acronyms			СВ	Citizens' Band
AGA	Air-Ground-Air	Appendix 30	Appendix 30B of the Radio Regulations: Provisions for all	CEPT	European Conference of Postal and Telecommunications
AIS	Universal Shipborne Automatic Identification System		services and associated plans and list for the broadcasting- satellite service in the frequency	DECT	Administrations Digital Enhanced Cordless Telecommunications
Appendix 17	Appendix 17 of the Radio Regulations: Frequencies and channelling arrangements in the		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)	DME	Distance Measuring Equipment
	high-frequency bands for the maritime mobile service.	Appendix 30A	Appendix 30A of the Radio	DMO	Direct Mode Operation
Appendix 18	Appendix 18 of the Radio		Regulations: Provisions and associated plans and list for	DSC	Digital Selective Calling
	Regulations: Table of transmitting frequencies in the VHF maritime		feeder links for the broadcasting- satellite service (11.7-12.5 GHz in	DTT	Digital Terrestrial Television
Appendix 25	mobile band  Appendix 25 of the Radio		Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands	e.i.r.p.	Equivalent isotropically radiated power - the product of the power supplied to the antenna and the
Аррения 23	Regulations: Provisions and associated frequency allotment plan for coast radiotelephone stations operating in the exclusive		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		antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain)
Annandiu 20	maritime mobile bands between 4 000 kHz and 27 500 kHz	Appendix 30B	Appendix 30B of the Radio Regulations: Provisions and associated plan for the fixed-	e.r.p.	Equivalent radiated power - (in a given direction) the product of the power supplied to the antenna
Appendix 26	Appendix 26 of the Radio Regulations: Provisions and associated frequency allotment		satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz,		and its <i>gain relative to a</i> half-wave dipole in a given direction
	plan for the Aeronautical Mobile (OR) service in the bands allocated exclusively to that		11.20-11.45 GHz and 12.75- 13.25 GHz	ECC	Electronic Communications Committee: A committee of CEPT responsible for radio and
	service between 3 025 kHz and 18 030 kHz	Article 12	Article 12 of the Radio Regulations: Seasonal planning		telecommunication matters
Appendix 27	Appendix 27 of the Radio		of the high frequency bands allocated to the broadcasting	ECC Dec	ECC Decision
	Regulations: Frequency allotment plan for the Aeronautical Mobile		service between 5 900 kHz and 26 100 kHz	ECC Rec	ECC Recommendation
	(R) service and related information	BBDR	Broad Band Disaster Relief	epfd	Electronic News Gathering  Equivalent power flux-density
		BFWA	Broadband Fixed Wireless Access	EPIRB	Emergency Position-Indicating
		BWA	Broadband Wireless Access	ERC	Radio Beacon European Radiocommunications Committee: A committee of CEPT

	responsible for radio matters - ERC merged into the ECC and no longer in existence	ITU Geneva 1984 plan	Frequency assignment plan for FM sound broadcasting stations in Region 1 and part of Region 3 in the band 87.5-108 MHz	NAVTEX	Navigation Text Messaging system
ERC Dec	ERC Decision			ОВ	Outside Broadcasting
ERC Rec	ERC Recommendation	ITU Geneva 1985 plan	Regional agreements concerning: - the planning of the maritime	PAMR	Public Access Mobile Radio
E-s		1000 pian	radionavigation service (Radiobeacons) in the European	PMR	Private Mobile Radio
E-3	Earth-to-space direction of transmission		maritime area, and - the medium frequency maritime	PMSE	Programme Making and Special Events
FDD	Frequency Division Duplex		mobile and aeronautical	RACON	Radar Beacon
FM	Frequency Modulation		radionavigation services (Region 1)		
FWA	Fixed Wireless Access	ITU Geneva	Regional agreement concerning	RFID	Radio Frequency Identification Devices
GHz	Gigahertz (1 000 000 000 Hz)	2006 Agreement	the planning of terrestrial broadcasting services	R-LAN	Radio Local Area Network
GMDSS	Global Maritime Distress and Safety System	ITU RR	The Radio Regulations of the International Telecommunication Union	SAB	Services Ancillary to Broadcasting
Hz	Hertz, the unit of frequency measurement	ITU-R	The Radiocommunication Sector of the ITU	SAP	Services Ancillary to Programming
ILS	Instrument Landing System	JTIDS	Joint Technical Information	S-DAB	Satellite Digital Audio Broadcasting
IMT	International Mobile Telecommunications		Distribution System	s-E	Space-to-Earth direction of
ISM	Industrial, Scientific and Medical	kHz	Kilohertz (1 000 Hz)	0.2	transmission
iom	applications	MCA services	Mobile communication services on aircraft	S-PCS	Satellite Personal Communications System
ITU	International Telecommunication Union	MCV services	Mobile communication services on board vessels	SRD	Short Range Device
ITU Geneva	Plan for the assignment of	MHz	Megahertz (1 000 000 Hz)	SRR	Short Range Radar
1975 plan	frequencies to broadcasting stations in the medium frequency bands in Regions 1 and 3 and in	MIDS	Multifunctional Information Distribution System	s-s	Space-space direction of transmission
	the low frequency bands in Region 1	MSI	Maritime Service Identity	SSR	Secondary Surveillance Radar
		MWS	Multimedia Wireless system	TACAN	Tactical Air Navigation System

**TDD** Time Division Duplex

**TRA-ECS** Terrestrial Radio Applications

capable of providing Electronic

**Communications Services** 

**UMTS** Universal Mobile

Telecommunications Systems

**UWB** Ultra-Wideband

VOR VHF Omnidirectional Range

VSAT Very Small Aperture Terminal

WARC World Administrative Radio

Conference

WAS Wireless Access System

WRC 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 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.

(R): route.

<sup>(</sup>OR): off-route.

#### 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.

#### 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.

#### 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** 

- **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 \( \text{ North} \) 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:
- 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)

- 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)
- 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.
- 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.

- 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 1715-1800 kHz and 1850-2000 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)
- *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, Turisia, Turkmenistan, Turkey and Ukraine, the band 1 810-1 830 kHz is allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)

- **5.99** 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 1850-2045 kHz, 2194-2498 kHz, 2502-2625 kHz and 2650-2850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.
- 5.104 In Region 1, the use of the band 2 025-2 045 kHz by the meteorological aids service is limited to oceanographic buoy stations.
- 5.108 The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles 31 and 52. (WRC-07)
- 5.109 The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article 31.
- 5.110 The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article 31.
- 5.111 The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.525 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31.

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

- **5.113** 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

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 4210 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz, 19680.5 kHz, 22376 kHz and 26100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix 17).
- 5.132A Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution 612 (Rev.WRC-12). (WRC-12)
- 5.133B Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas territories of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W(e.i.r.p.). (WRC-15)
- 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)
- 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. 5.280,

61-61.5 GHz (centre frequency 61.25 GHz),

122-123 GHz (centre frequency 122.5 GHz), and

244-246 GHz (centre frequency 245 GHz)

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

<b>5.150</b> The following bands:
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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**.

- 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 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)

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)

**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)

*Additional allocation:* the band 148-149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **9.21**. The bandwidth of any individual transmission shall not exceed ±25 kHz.

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<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

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

- 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)
- 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)
- **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)

- *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)
- **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.
- 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 ±25 kHz about the standard frequency 400.1 MHz.
- 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.
- 5.268 Use of the band 410-420 MHz by the space research service is limited to communications within 5 km of an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced by emissions from extra-vehicular activities shall not exceed -153 dB(W/m²) for  $0^{\circ} \le \delta \le 5^{\circ}$ , -153 + 0.077 ( $\delta 5$ ) dB(W/m²) for  $5^{\circ} \le \delta \le 70^{\circ}$  and -148 dB(W/m²) for  $70^{\circ} \le \delta \le 90^{\circ}$ , 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 1 690-1710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.

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

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<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

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)
- 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 1215-1260 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 1260-1300 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.
- **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,

**5.341** In the bands 1 400-1727 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 dB(W/m²) in any 4 kHz band for all angles of arrival, instead

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<sup>\*</sup> **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)

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

<sup>\*\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

of those given in Table 5-2 of Appendix **5**. In the band 1518-1525 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 1525-1544 MHz, 1545-1559 MHz, 1626.5-1645.5 MHz and 1646.5-1660.5 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.
- 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 preemption 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)
- 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

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

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)
- **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 1668-1675 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1668-1668.4 MHz, Resolution **904 (WRC-07)** shall apply. (WRC-07)

- 5.379C In order to protect the radio astronomy service in the band 1 668-1 670 MHz, the aggregate power flux-density values produced by mobile earth stations in a network of the mobile-satellite service operating in this band shall not exceed -181 dB(W/m²) in 10 MHz and -194 dB(W/m²) 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, 1710-1885 MHz, 2300-2400 MHz and 2500-2690 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 1718.8-1722.2 MHz is also allocated to the radio astronomy service on a secondary basis for spectral line observations. (WRC-2000)
- 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)

<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

- 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)
- The use of the band 2 483.5-2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. **9.11A**. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5-2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990-5 000 MHz band allocated to the radio astronomy service worldwide.
- 5.410 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:

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  $\Box$ 122 dB(W/(m²·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°. (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)

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 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:

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 dB(W/(m² · 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)
- 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)
- 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, Turisia, 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.
- 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 dB(W/(m² · 4 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).
- 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**.
- 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. 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)
- 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 dB(W/m²) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4 990-5 000 MHz, 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 dB(W/m²) in a 150 kHz band. In order not to cause harmful interference to the radio astronomy service in the band 4 990-5 000 MHz, radionavigation-satellite service systems operating in the band 5 010-5 030 MHz shall comply with the limits in the band 4 990-5 000 MHz defined in Resolution 741 (Rev.WRC-12). (WRC-12)

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

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

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

**5.444A** 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:

- 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)

<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

- 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/m²) 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/m²) in any 4 kHz band for all angles of arrival.
- 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, 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)
- 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.

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 (θ), without the consent of the affected administration:

-135 dB(W/m<sup>2</sup>) in a 1 MHz band for 0° ≤  $\theta$  < 5°

 $-135 + 0.5 (\theta - 5) dB(W/m^2)$  in a 1 MHz band for  $5^{\circ} \le \theta < 5^{\circ}$ 

−125 dB(W/m²) in a 1 MHz band for  $25^{\circ} \le \theta \le 90^{\circ}$  (WRC-12)

**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, Turisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, service is not applicable. (WRC-07)
- **5.482A** For sharing of the band 10.6-10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution **751 (WRC-07)** applies. (WRC-07)
- 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. 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)
- Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix 30 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference, or require more protection from interference, than the broadcasting-satellite service transmissions operating in conformity with the Plan or the List, as appropriate. (WRC-2000)
- 5.497 The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
- **5.498A** The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)
- 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/(m² · 10 MHz)) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognized by the coastal State;
- -115 dB(W/(m² · 10 MHz)) for more than 1% of the time produced 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained.

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;
  - 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)
- 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 dB(W/m²) in a 50 MHz bandwidth, into any radio astronomy observatory site for more than 2% of the time. (WRC-2000)

- 5.511C Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. 4.10 applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340. (WRC-97)
- 5.511D Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of -146 dB(W/(m²·MHz)) for any angle of arrival. In the band 15.63-15.65 GHz, where an administration plans emissions from a non-geostationary space station that exceed -146 dB(W/(m²·MHz)) for any angle of arrival, it shall coordinate under No. 9.11A with the affected administrations. Stations in the fixed-satellite service operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. 4.10 applies). (WRC-97)
- **5.511E** In the frequency band 15.4-15.7 GHz, stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the aeronautical radionavigation service. (WRC-12)
- **5.511F** In order to protect the radio astronomy service in the frequency band 15.35-15.4 GHz, radiolocation stations operating in the frequency band 15.4-15.7 GHz shall not exceed the power flux-density level of -156 dB(W/m²) 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)
- 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 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 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:

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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,
                  (space-to-Earth) in Region 1,
49.44-50.2 GHz
and
27.5-27.82 GHz
                  (Earth-to-space) in Region 1,
28.35-28.45 GHz (Earth-to-space) in Region 2,
28.45-28.94 GHz (Earth-to-space) in all Regions,
28.94-29.1 GHz
                  (Earth-to-space) in Region 2 and 3,
29.25-29.46 GHz (Earth-to-space) in Region 2,
29.46-30 GHz
                  (Earth-to-space) in all Regions,
48.2-50.2 GHz
                  (Earth-to-space) in Region 2.
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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)

<sup>\*</sup> Note by the Secretariat: This Resolution was revised by 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)
- 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 dB(W/(m² · 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. 9.11A and shall continue to be subject to Articles 9 (except No. 9.11A) and 11 procedures, and to the provisions of No. 22.2. (WRC-97)
- **5.536** Use of the 25.25-27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.
- 5.536A Administrations operating earth stations in the Earth exploration-satellite service or the space research service shall not claim protection from stations in the fixed and mobile services operated by other administrations. In addition, earth stations in the Earth exploration-satellite service or in the space research service should be operated taking into account the most recent version of Recommendation ITU-R SA.1862. (WRC-12)
- 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)
- 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/m²) 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/m²) in 1 GHz and -246 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and

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<sup>\*</sup> Note by the Secretariat: This Resolution was revised by WRC-12.

-209 dB(W/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station.

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)

**5.5511** 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/m²) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station.

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 dB(W/m²) 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 dB(W/(m² · 100 MHz)) for all angles of arrival. (WRC-97)
- **5.557A** In the band 55.78-56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to -26 dB(W/MHz). (WRC-2000)
- 5.558 In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 122.25-123 GHz, 130-134 GHz, 167-174.8 GHz and 191.8-200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. 5.43). (WRC-2000)
- 5.558A Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed -147 dB(W/(m² · 100 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)

- 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 dB(W/(m² · 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 above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed -144 dB(W/(m² · MHz)) for all angles of arrival. (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, 397-399 GHz, 369-392 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, 713-718 GHz, 729-733 GHz, 657-692 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 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.
MLT06	The rights of use of the band 646 - 654 MHz (TV channel 43) is to be granted to providers of broadcast content services to pursue general interest objectives.
MLT07	Wireless audio PMSE equipment is 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.
MLT08	The technical parameters of electronic communications systems operating in the band 790 - 862 MHz will be in accordance with EC Decision 2010/267/EU.
MLT09	Individual rights of use of radio frequencies in the bands 790 - 862 MHz, 880 - 915 MHz, 925 - 960 MHz, 1452 - 1492 MHz, 1710 - 1785 MHz, 1805 - 1880 MHz, 1900 - 1980 MHz, 2010 - 2025 MHz, 2110 - 2170 MHz and 3400 - 3800 GHz may be transferred or leased in accordance with article 45 of the Electronic Communications (Regulation) Act (Chapter 399).
MLT10	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 S.L.399.40.

## 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/14-1933

Assignment Process for Additional Spectrum for Wireless Broadband.

#### Part 3: EU Legislation - Directives

#### 87/372/EEC

On the frequency bands to be reserved for the cocoordinated 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.

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: EU Legislation - 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.

#### 2005/631/EC

Concerning essential requirements as referred to in Directive 1999/5/EC of the European Parliament and of the Council ensuring access of Cospas-Sarsat locator beacons to emergency services

#### 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/FC and 2014/702/FU.

#### 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.

Amended by Commission Implementing Decision 2014/276/EU.

#### 2008/432/EC

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

#### 2008/477/EC

#### 2009/114/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).

#### 2009/343/EC

Amending Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultrawideband 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 of 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.

#### 2014/276/EU

Amending Decision 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.

#### 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 ultrawideband technology in a harmonised manner in the Community.

#### 2015/750/EU

On the harmonisation of the 1452-1492 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Union.

#### 2016/339/EU

On the harmonisation of the 2010-2025 MHz frequency band for portable or mobile wireless video links and cordless cameras used for programme making and special events.

#### Part 5: EU legislation - Regulations

#### Regulation (EU) 1079/2012

Laying down the requirements for voice channels spacing for the single European sky.

#### Part 6: 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.

#### 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 7: 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.

#### 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 12-11

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.

#### FRC 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).

#### ECC 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.

#### ECC Rec (14)01

Radio frequency channel arrangements for fixed service systems operating in the band 92-95 GHz.

#### Part 8: ITU Recommendations

ITU-R F.636-4

Radio-frequency channel arrangements for radiorelay 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 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

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

Web: http://www.cept.org/ecc/deliverables