

3.2 Frequency bands and channels reserved and to be made available in 2008/2009, for the operation of non-publically available electronic communications networks and services

The terms and abbreviations used mean the following:

Rights of use required: identification of the need to allocate rights of use according to article 16 of Law no. 5/2004 of 10 February

Exploration mode: (*simplex, duplex or semi-duplex, when applicable*)

. *simplex*: operation mode in which it is possible to alternately transmit in both directions in the telecommunication channel, using one or two frequencies

. *duplex*: operation mode in which it is possible to simultaneously transmit in both directions in the telecommunication channel, using two frequencies

. *semi-duplex*: simplex operation mode at one end of the telecommunication channels and duplex operation at the other, using two frequencies

Type of channel: (*spacing between adjacent channels, when applicable*)

Shared use: use of a frequency/channel by more than one entity

Exclusive use: use of a frequency/channel by one single entity

Scope of use:

n - national scope: use of a frequency/channel in the national territory

g - geographical scope: use of a frequency/channel on a given, well determined area by radiocommunication stations, such as fixed stations, broadcasting stations and Earth stations.

Allocation procedure: full accessibility or selection by competition or comparison

NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –

FIXED SERVICE - DECA-METRIC WAVE LINKS (SFHF)				
Frequency Band	Rights of use required	Type of use⁽¹⁾	Scope of use	Allocation procedure
3200 – 3375 kHz	NO	(2)	g	full accessibility
6765 – 6795 kHz	NO	(2)	g	full accessibility
7350 – 7757 kHz	NO	(2)	g	full accessibility
13450 – 13495 kHz	NO	(2)	g	full accessibility
13515 – 13570 kHz	NO	(2)	g	full accessibility
13914 – 14000 kHz	NO	(2)	g	full accessibility
14350 – 14604 kHz	NO	(2)	g	full accessibility
14670 – 14990 kHz	NO	(2)	g	full accessibility
15800 – 16180 kHz	NO	(2)	g	full accessibility
16231-16360 kHz	NO	(2)	g	full accessibility
17452 – 17480 kHz	NO	(2)	g	full accessibility
18030 – 18052 kHz	NO	(2)	g	full accessibility
18168 – 18249 kHz	NO	(2)	g	full accessibility
18373 – 18780 kHz	NO	(2)	g	full accessibility
19120 – 19680 kHz	NO	(2)	g	full accessibility
19800 – 19990 kHz	NO	(2)	g	full accessibility
20010 – 20442 kHz	NO	(2)	g	full accessibility
20680 – 21000 kHz	NO	(2)	g	full accessibility
21850 – 21870 kHz	NO	(2)	g	full accessibility
22855 – 22900 kHz	NO	(2)	g	full accessibility
23000 – 23200 kHz	NO	(2)	g	full accessibility
23350 – 24125 kHz	NO	(2)	g	full accessibility
24325 – 24890 kHz	NO	(2)	g	full accessibility
25010 – 25070 kHz	NO	(2)	g	full accessibility
25210 – 25550 kHz	NO	(2)	g	full accessibility
26175 – 26870 kHz	NO	(2)	g	full accessibility
26957 – 27500 kHz	NO	(2)	g	full accessibility
27500 – 27850 kHz	NO	(2)	g	full accessibility
29700 – 30005 kHz	NO	(2)	g	full accessibility

⁽¹⁾ Shared Use channels.

⁽²⁾ Band shared with other users.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

FIXED SERVICE - POINT-to-POINT LINKS				
Frequency Band	Rights of use required	Type of use⁽¹⁾	Scope of use	Allocation procedure
406.1-410 MHz	NO	(2) (3)	g	full accessibility
410-430 MHz	NO	(3) (4)	g	full accessibility
1350 – 1375 MHz 1492 – 1517 MHz CEPT Rec. T/R 13-01 A	NO	(3)	g	full accessibility
1375 – 1400 MHz 1427 – 1452 MHz CEPT Rec. T/R 13-01 B	NO	(3)	g	full accessibility
2025 – 2110 MHz 2200 – 2290 MHz CEPT Rec. T/R 13-01 C	NO	(3)	g	full accessibility
6 GHz (Low) (5925 – 6425 MHz) ERC/REC 14-01 Annex 1	NO	(3)	g	full accessibility
6 GHz (High) (6425 – 7110 MHz) ERC/REC 14-02 Annex 1	NO	(3)	g	full accessibility
7 GHz (Low) (7125-7425 MHz) ECC/REC/(02)06 Annex 1	NO	(3)	g	full accessibility
7 GHz (High) (7425-7725 MHz) ECC/REC/(02)06 Annexes 1 and 3	NO	(3)	g	full accessibility
8 GHz (Low) (7700 – 8300 MHz) Rec. ITU-R F.386 Annex 1	NO	(3)	g	full accessibility
8 GHz (High) (8200 – 8500 MHz) Rec. ITU-R F.386	NO	(3)	g	full accessibility
11 GHz (10.7 – 11.7 GHz) ERC/REC 12-06 Rec3	NO	(3)	g	full accessibility
13 GHz (12.75 – 13.25 GHz) Rec. ITU-R F.497	NO	(3)	g	full accessibility
13 GHz (12.75 – 13.25 GHz) ERC/REC 12-02 Annexes A and B	NO	(3)	g	full accessibility
15 GHz (14.5 – 15.35 GHz) ERC/REC 12-07 Annex A	NO	(3)	g	full accessibility
18 GHz (17.7 – 19.7 GHz) ITU-R F.595 Annexes 3 and 4	NO	(3)	g	full accessibility
18 GHz (17.7 – 19.7 GHz) ERC/REC 12-03 Annex A	NO	(3)	g	full accessibility
23 GHz (22 – 23.6 GHz) CEPT Rec. T/R 13-02 Annex A	NO	(3)	g	full accessibility

⁽¹⁾ Shared Use channels.

⁽²⁾ Band with specific planning at 12.5 kHz and 25 kHz (simplex).

⁽³⁾ Band shared with other users.

⁽⁴⁾ Band with specific planning at 12.5 kHz and 25 kHz (duplex) and shared with the land mobile service.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

FIXED SERVICE - POINT-to-POINT LINKS (cont.)				
Frequency Band	Rights of use required	Type of use⁽¹⁾	Scope of use	Allocation procedure
32 GHz (31.8 – 33.4 GHz) ERC/REC/(01)02	NO	(2)	g	full accessibility
38 GHz (37 – 39.5 GHz) CEPT Rec T/R 12-01	NO	(2)	g	full accessibility
58 GHz (57 – 59 GHz) ERC/REC 12-09 Annex A	NO	(2)	g	full accessibility
74 GHz (74 – 76 GHz) ECC/REC/(05)07 Annex 4	NO	(2)	g	full accessibility
84 GHz (84 – 86 GHz) ECC/REC/(05)07 Annex 4	NO	(2)	g	full accessibility

FIXED SERVICE - STUDIO TRANSMITTER LINK Studio Transmitter Link (STL)					
Frequency Band	Rights of use required	Type of channel	No of channels⁽¹⁾	Scope of use	Allocation procedure
1517 – 1525 MHz	NO	100 kHz	80	g	full accessibility ⁽³⁾
	NO	300 kHz	26	g	full accessibility ⁽³⁾

BROADCASTING SERVICE - SAP/SAB video links⁽⁴⁾					
Frequency Band	Rights of use required	Type of channel	No of channels⁽¹⁾	Scope of use	Allocation procedure
2025-2110 MHz	NO	(5)	(6)	g	full accessibility
2200-2260 MHz	NO	(5)	(6)	g	full accessibility
2390-2400 MHz	NO	(5)	(6)	g	full accessibility
2483.5-2500 MHz	NO	(5)	(6)	g	full accessibility
10-10.45 GHz	NO	(5)	(6)	g	full accessibility

(1) Shared Use channels.

(2) Band shared with other users.

(3) Limited to holders of sound broadcasting licence (permit).

(4) SAP/SAB video links, particularly for wireless cameras, portable and mobile SAP/SAB video links and SAP/SAB point-to-point video links used for live transmission of events.

(5) Depending on request received.

(6) Depending on type of channel.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

Integrated Emergency and Security Network System					
Frequency Band	Rights of use required	Type of channel	No of channels ⁽¹⁾	Scope of use	Allocation procedure
383-385 MHz / 393-395 MHz	N. A.	25 kHz	80 ⁽⁴⁾	n	Resolution of the Council of Ministers no. 56/2003 of 8 April

GSM-R					
Frequency Band	Rights of use required	Type of channel	No of channels ⁽¹⁾	Scope of use	Allocation procedure
876 -880 MHz / 921 -925 MHz	NO	200kHz ⁽⁵⁾	20	n	To be defined

LAND MOBILE SERVICE (SMT)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	Type of use ⁽²⁾	Scope of use	Allocation procedure
29.7 - 41 MHz	NO	20 kHz simplex	(3)	g	full accessibility
		20 kHz semi-duplex	(3)	g	full accessibility
68 - 87.5 MHz	NO	12.5 kHz simplex	(3)	g	full accessibility
		12.5 kHz semi-duplex	(3)	g	full accessibility
148 - 174 MHz	NO	12.5 kHz simplex	(3)	g	full accessibility
		12.5 kHz semi-duplex	(3)	g	full accessibility
440 - 450 MHz	NO	12.5 kHz simplex	(3)	g	full accessibility
		12.5 kHz semi-duplex	(3)	g	full accessibility
450 - 470 MHz	NO	12.5 kHz simplex	(3)	g	full accessibility
		12.5 kHz semi-duplex	(3)	g	full accessibility

⁽¹⁾ Exclusive use channels.

⁽¹⁾ Exclusive use channels.

⁽²⁾ Shared Use channels.

⁽³⁾ Band shared with other users.

⁽⁴⁾ 4 channels in use in the 383-385 MHz/ 393-395 MHz extension band.

⁽⁵⁾ 876-876.1 MHz sub-band is used with 12.5 kHz spacing between channels.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

LAND MOBILE SERVICE – Systems using digital technology					
Frequency Band	Rights of use required	Type of channel	No of channels (2)	Scope of use	Allocation procedure
410 - 430 MHz	NO	25 kHz	105	g	full accessibility

MOBILE MARITIME SERVICE (SMM)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels (1)	Scope of use	Allocation procedure
156 – 174 MHz (Appendix 18 of the RR)	NO	25 kHz simplex	26	g	full accessibility
	NO	25 kHz duplex	33	g	full accessibility

AERONAUTICAL MOBILE SERVICE (SMA)					
Frequency Band	Rights of use required	Type of channel	Type of use (1)	Scope of use	Allocation procedure
3400 - 3500 kHz	NO	3 kHz	(2)	g	full accessibility
5480 - 5680 kHz	NO	3 kHz	(2)	g	full accessibility
8815 - 8965 kHz	NO	3 kHz	(2)	g	full accessibility
11275 - 11400 kHz	NO	3 kHz	(2)	g	full accessibility
13260 - 13360 kHz	NO	3 kHz	(2)	g	full accessibility
17900 - 17970 kHz	NO	3 kHz	(2)	g	full accessibility
117.975 - 137 MHz	NO	25 kHz	(2)	g	full accessibility
117.975 - 137 MHz	NO	8.33 kHz	(2)	g	full accessibility
143.9 - 144 MHz (3)	NO	12.5 kHz simplex	(2)	n	full accessibility

(1) Shared Use channels.

(2) Band shared with other users.

(3) Sport and recreational free flight and engineless ultralights and hang gliders.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

AERONAUTICAL RADIONAVIGATION SERVICE (RVA)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels ⁽¹⁾	Scope of use	Allocation procedure
255 - 283.5 kHz	NO	(2)	(3)	g	full accessibility
283.5 - 315 kHz	NO	(2)	(3)	g	full accessibility
315 - 325 kHz	NO	(2)	(3)	g	full accessibility
325 - 405 kHz	NO	(2)	(3)	g	full accessibility
415 - 435 kHz GE-85	NO	1 kHz	(3)	g	full accessibility
74.8 - 75.2 MHz	NO	(2)	1	g	full accessibility
108 - 117.975 MHz	NO	(2)	(3)	g	full accessibility
328.6 - 335.4 MHz	NO	(2)	(3)	g	full accessibility
960 - 1350 MHz	NO	(2)	(3)	g	full accessibility
2700 - 2900 MHz	NO	(2)	(3)	g	full accessibility
2900 - 3100 MHz	NO	(2)	(3)	g	full accessibility
4200 - 4400 MHz	NO	(2)	(3)	g	full accessibility
5000 - 5150 MHz	NO	(2)	(3)	g	full accessibility
5150 - 5250 MHz	NO	(2)	(3)	g	full accessibility
9000 - 9200 MHz	NO	(2)	(3)	g	full accessibility
9300 - 9500 MHz	NO	(2)	(3)	g	full accessibility
15.4 - 15.7 GHz	NO	(2)	(3)	g	full accessibility

⁽¹⁾ Shared Use channels.

⁽²⁾ Not applicable.

⁽³⁾ Band shared with other users.

NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –

MARITIME RADIONAVIGATION SERVICE (RVM)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels ⁽¹⁾	Scope of use	Allocation procedure
283.5 - 315 kHz	NO	0.5 kHz	(2)	g	full accessibility
2900 - 3100 MHz	NO	(3)	(2)	g	full accessibility
5470 - 5600 MHz	NO	(3)	(2)	g	full accessibility
5600 - 5650 MHz	NO	(3)	(2)	g	full accessibility
9200 - 9300 MHz	NO	(3)	(2)	g	full accessibility
9300 - 9500 MHz	NO	(3)	(2)	g	full accessibility

RADIOLOCATION SERVICE (SV)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels ⁽¹⁾	Scope of use	Allocation procedure
2700 - 2900 MHz	NO	(3)	(2)	g	full accessibility
2900 - 3100 MHz	NO	(3)	(2)	g	full accessibility
5725 - 5830 MHz	NO	(3)	(2)	g	full accessibility
5830 - 5850 MHz	NO	(3)	(2)	g	full accessibility
9200 - 9300 MHz	NO	(3)	(2)	g	full accessibility
9300 - 9500 MHz	NO	(3)	(2)	g	full accessibility
59 - 64 GHz	NO	(3)	(2)	g	full accessibility

⁽¹⁾ Shared Use channels.

⁽²⁾ Band shared with other users.

⁽³⁾ Not applicable.

**NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –**

METEOROLOGICAL AID SERVICE					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels ⁽¹⁾	Scope of use	Allocation procedure
5600 - 5650 MHz	NO	(2)	(3)	g	full accessibility

PERSONAL RADIO SERVICE - CITIZEN BAND (CB)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	No of channels ⁽¹⁾	Scope of use	Allocation procedure
26965 – 27405 kHz	NO	10 kHz simplex	40	n	full accessibility

AMATEUR SERVICE (AM)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	Type of use ⁽¹⁾	Scope of use	Allocation procedure
(4)	NO	(4)		g	(4)
135.7 – 137.8 kHz	NO	(2)		g	Category A
7100 – 7200 kHz	NO	(2)		g	Category A
50 – 50.5 MHz	NO	(2)		g	Category A

AMATEUR-SATELLITE SERVICE (AMS)					
Frequency Band	Rights of use required	Type of channel Exploration Mode	Type of use ⁽¹⁾	Scope of use	Allocation procedure
(4)	NO	(4)		g	(4)

(1) Shared Use channels.

(2) Not applicable.

(3) Band shared with other users.

(4) Frequency bands and transmission classes assigned in accordance with the terms of Administrative Rule no. 322/95 of 17 April until the publication of new legislation.

NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –

FIXED SATELLITE SERVICE (SFS)					
Frequency Band	Rights of use required	Type of channel	No of channels (1)	Scope of use	Allocation procedure
3800 – 4200 MHz Downlink	NO	(2)	(3)	g	full accessibility
5725 – 5830 MHz Uplink	NO	(2)	(3)	g	full accessibility
5830 – 5850 MHz Uplink	NO	(2)	(3)	g	full accessibility
5850 – 5925 MHz Uplink	NO	(2)	(3)	g	full accessibility
5925 – 6425 MHz Uplink	NO	(2)	(3)	g	full accessibility
7300 – 7450 MHz Downlink	NO	(2)	(3)	g	full accessibility
7450 – 7550 MHz Downlink	NO	(2)	(3)	g	full accessibility
8025 – 8175 MHz Uplink	NO	(2)	(3)	g	full accessibility
8175 – 8215 MHz Uplink	NO	(2)	(3)	g	full accessibility
8215 – 8400 MHz Uplink	NO	(2)	(3)	g	full accessibility
10.7 – 10.95 GHz ⁽⁴⁾ Downlink	NO	(2)	(3)	g	full accessibility
10.95 – 11.2 GHz Downlink	NO	(2)	(3)	g	full accessibility
11.2 – 11.45 GHz ⁽⁴⁾ Downlink	NO	(2)	(3)	g	full accessibility
11.45 – 11.7 GHz Downlink	NO	(2)	(3)	g	full accessibility
12.5 – 12.75 GHz Downlink	NO	(2)	(3)	g	full accessibility
12.75 – 13.25 GHz ⁽⁴⁾ Uplink	NO	(2)	(3)	g	full accessibility
14 – 14.5 GHz Uplink	NO	(2)	(3)	g	full accessibility
17.3 – 18.1 GHz ⁽⁵⁾ Uplink	NO	(2)	(3)	g	Full accessibility
17.3 – 17.7 GHz ⁽⁶⁾ Downlink	NO	(2)	(3)	g	Full accessibility
19.7 – 20.2 GHz ⁽⁶⁾ Downlink	NO	(2)	(3)	g	full accessibility
27.5 – 27.82 GHz ⁽⁶⁾ Uplink	NO	(2)	(3)	g	full accessibility
28.45 – 28.94 GHz ⁽⁶⁾ Uplink	NO	(2)	(3)	g	full accessibility
29.46 – 30.0 GHz ⁽⁶⁾ Uplink	NO	(2)	(3)	g	full accessibility

(1) Shared Use channels.

(2) Not applicable.

(3) Band shared with other users.

(4) Appendix 30B.

(5) Appendix 30A.

(6) HDFSS.

NON-PUBLICLY AVAILABLE ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES
– Reserved Frequencies –

SPACE OPERATIONS SERVICE (OE)					
Frequency Band	Rights of use required	Type of channel	No of channels ⁽¹⁾	Scope of use	Allocation procedure
2025-2110 MHz Uplink	NO	(2)	(3)	g	full accessibility
2200-2290 MHz Downlink	NO	(2)	(3)	g	full accessibility

EARTH EXPLORATION SERVICE - SATELLITE (EXP-S)					
Frequency Band	Rights of use required	Type of channel	No of channels ⁽¹⁾	Scope of use	Allocation procedure
8025-8400 MHz Downlink	NO	(2)	(3)	g	full accessibility

⁽¹⁾ Shared Use channels.

⁽¹⁾ Shared Use channels.