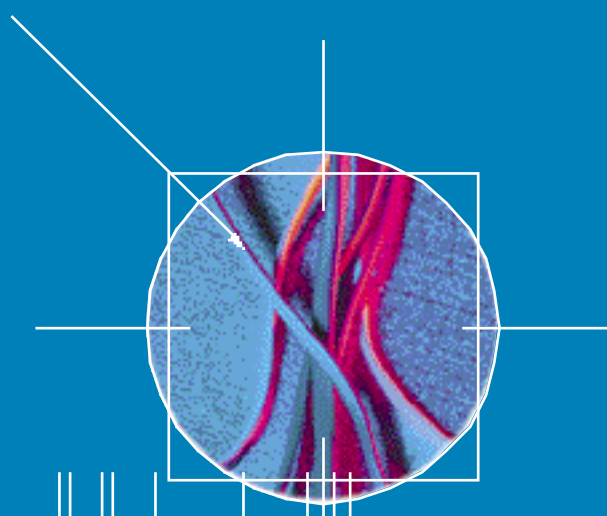




## Portuguese Frequency Allocation Table

Portuguese Frequency  
*Allocation Table*

### 3. Portuguese Frequency Allocation Table

|| || | | ||

#### Column 1: FREQUENCY BANDS

Shows the frequency band to which each line of the table is related to.

#### Column 2: ITU ALLOCATIONS FROM THE RR (Art. S5) APPLICABLE TO PORTUGAL

Contains, for each frequency band:

- allocation from Art. S5 of the RR applied to Portugal;
- Services authorised in Portugal (marked in **bold**);
- Notes from Art.S5 of the RR applied to Portugal;
- Notes within parenthesis are related to additional allocations, alternative or different categories of services for Portugal;
- Footnotes added by WRC-2000 do not follow ordinal numbering;
- Footnotes marked with an asterisk (\*) have been included or modified by WRC-2000 as described in the lists annexed to the Table.

#### Column 3: PORTUGUESE USAGE

Services / systems authorised in Portugal (marked in **bold**) and main planned services / systems.

#### Column 4: NOTES

Planning used;

Relevant national and international norms;

Conditioning to the usage of bands;

Other relevant information.

**Annex:** The Annex to the Table lists the footnotes that are relevant to the decisions taken by WRC-2000

**1<sup>st</sup>)** Footnotes added by WRC-2000

**2<sup>nd</sup>)** Footnotes modified by WRC-2000

**3<sup>rd</sup>)** Footnotes suppressed by WRC-2000 (that were included in the last edition of the Portuguese Frequency Allocation Table)

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                 | NATIONAL USAGE                                                                                                                             | NOTES                                                                                     |
|-------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Below 9                 | (Not allocated)<br>S5.53, S5.54                                              |                                                                                                                                            |                                                                                           |
| 9 - 14                  | <b>RADIONAVIGATION</b>                                                       | <b>OMEGA system (RV)</b><br>(10,2 kHz; 11,33 kHz and 13,6 kHz)<br><br><b>SRD – Inductive applications:</b><br>car immobilisers (9-135 kHz) | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6                   |
| 14 - 19,95              | FIXED<br><br>MARITIME MOBILE S5.57<br><br>S5.56                              | <b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6<br><br>Government |
| 19,95 - 20,05           | STANDARD FREQUENCY AND<br>TIME SIGNAL (20 kHz)                               | <b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6<br>Government     |
| 20,05 - 70              | FIXED<br><br>MARITIME MOBILE S5.57<br><br>S5.56                              | <b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6<br>Government     |
| 70 - 72                 | <b>RADIONAVIGATION</b> S5.60                                                 | <b>DECCA system (RV)</b><br><br><b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6                   |
| 72 - 84                 | FIXED<br><br>MARITIME MOBILE S5.57<br><br>RADIONAVIGATION S5.60<br><br>S5.56 | <b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6                   |
| 84 - 86                 | <b>RADIONAVIGATION</b> S5.60                                                 | <b>DECCA system (RV)</b><br><br><b>SRD – Inductive applications:</b><br>car immobilisers<br>(9-135 kHz)                                    | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6                   |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                           | NATIONAL USAGE                                                                                                        | NOTES                                                                                   |
|-------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 86 - 90                 | FIXED<br><br>MARITIME MOBILE S5.57<br><br>RADIONAVIGATION<br><br>S5.56 | <br><br><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 90 - 110                | <b>RADIONAVIGATION S5.62</b><br><br>Fixed<br><br>S5.64                 | <b>LORAN-C system (RV) (100 kHz)</b><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b> | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 110 - 112               | FIXED<br><br>MARITIME MOBILE<br><br>RADIONAVIGATION<br><br>S5.64       | <br><br><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 112 - 115               | <b>RADIONAVIGATION S5.60</b>                                           | <b>DECCA system (RV)</b><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 115 - 1176              | RADIONAVIGATION S5.60<br><br>Fixed<br><br>Maritime mobile<br><br>S5.64 | <br><br><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 117,6 - 126             | FIXED<br><br>MARITIME MOBILE<br><br>RADIONAVIGATION S5.60<br><br>S5.64 | <br><br><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |
| 126 - 129               | <b>RADIONAVIGATION S5.60</b>                                           | <b>DECCA system (RV)</b><br><br><b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>             | <br><br><br><br>CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6 |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                     | NATIONAL USAGE                                                                                                                        | NOTES                                                                                                         |
|-------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 129 - 130               | FIXED<br><br>MARITIME MOBILE<br><br>RADIONAVIGATION S5.60<br><br>S5.64                                           | <b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                                                             | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6                                       |
| 130 - 148,5             | FIXED<br><br>MARITIME MOBILE<br><br>S5.64                                                                        | <b>SRD – Inductive applications:<br/>car immobilisers<br/>(9-135 kHz)</b>                                                             | CEPT/ERC/REC 70-03 Annex 9<br>National regulation no. 649/95<br>of 22/6<br><br>Government<br>(137,8-148,5kHz) |
| 148,5 - 255             | BROADCASTING                                                                                                     |                                                                                                                                       |                                                                                                               |
| 255 - 283,5             | BROADCASTING<br><br><b>AERONAUTICAL RADIONAVIGATION</b>                                                          | <b>NDB – Radiobeacons (RVA)</b>                                                                                                       | ICAO – (Annex 10)                                                                                             |
| 283,5 - 315             | <b>AERONAUTICAL RADIONAVIGATION</b><br><br><b>MARITIME RADIONAVIGATION<br/>(radiobeacons) S5.73</b><br><br>S5.74 | <b>NDB – Radiobeacons (RVA)</b><br><br><b>OMEGA DIFFERENTIAL system (RV)<br/>(285-315 kHz)</b><br><br><b>NDB – Radiobeacons (RVM)</b> | ICAO – (Annex 10)<br><br>GE-85 (Radiobeacons)                                                                 |
| 315 - 325               | <b>AERONAUTICAL RADIONAVIGATION</b><br><br>Maritime radionavigation<br>(radiobeacons) S5.73                      | <b>NDB – Radiobeacons (RVA)</b><br><br><b>OMEGA DIFFERENTIAL system (RV)</b>                                                          | ICAO – (Annex 10)                                                                                             |
| 325 - 405               | <b>AERONAUTICAL RADIONAVIGATION</b>                                                                              | <b>NDB and LOCATOR – radiobeacons<br/>(RVA)</b><br><br><b>OMEGA DIFFERENTIAL system (RV)</b>                                          | ICAO – (Annex 10)                                                                                             |
| 405 - 415               | <b>RADIONAVIGATION S5.76</b>                                                                                     | <b>OMEGA DIFFERENTIAL system (RV)</b>                                                                                                 |                                                                                                               |
| 415 - 435               | <b>MARITIME MOBILE S5.79</b><br><br><b>AERONAUTICAL RADIONAVIGATION</b>                                          | <b>Maritime mobile (MM)</b><br><br><b>NDB and LOCATOR - radiobeacons<br/>(RVA)</b>                                                    | GE-85<br><br>ICAO – (Annex 10)                                                                                |
| 435 - 495               | <b>MARITIME MOBILE S5.79, S5.79A</b><br><br>Aeronautical radionavigation<br><br>S5.82                            | <b>Maritime mobile (MM)</b>                                                                                                           | GE-85<br><br>Government                                                                                       |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                              | NATIONAL USAGE                                                                                                                                        | NOTES                                              |
|-------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| 495 - 505               | <b>MOBILE (distress and calling)</b><br>S5.83                                             | <b>Mobile (MOV)</b>                                                                                                                                   | RR Ap. S13 (RR 3010): 500 kHz                      |
| 505 - 526,5             | <b>MARITIME MOBILE</b> S5.79, S5.79A,<br>S5.84<br><br><b>AERONAUTICAL RADIONAVIGATION</b> | <b>Maritime mobile (MM)</b><br><br><b>NAVTEX – International system<br/>(MM) (518 kHz)</b><br><br><b>NDB – Radiobeacons (RVA)<br/>(510-526,5 kHz)</b> | GE-85<br><br>ICAO – (Annex 10)                     |
| 526,5 - 1606,5          | <b>BROADCASTING</b>                                                                       | <b>Sound broadcasting (RAD)</b>                                                                                                                       | GE-75                                              |
| 1606,5 - 1625           | FIXED<br><br><b>MARITIME MOBILE</b> S5.90<br><br>LAND MOBILE<br><br>S5.92                 | <b>Maritime mobile (MM)</b>                                                                                                                           | GE-85<br><br>Government                            |
| 1625 - 1635             | RADIOLOCATION                                                                             |                                                                                                                                                       |                                                    |
| 1635 - 1800             | FIXED<br><br><b>MARITIME MOBILE</b> S5.90<br><br>LAND MOBILE<br><br>S5.92                 | <b>Maritime mobile (MM)</b>                                                                                                                           | GE-85<br><br>Government<br>(1715-1800 kHz)         |
| 1800 - 1810             | RADIOLOCATION                                                                             |                                                                                                                                                       |                                                    |
| 1810 - 1850             | <b>AMATEUR</b><br><br>S5.100                                                              | <b>Amateur (AM)</b>                                                                                                                                   | Amateur national regulations<br>CEPT Rec T/R 61-01 |
| 1850 - 2000             | FIXED<br><br>MOBILE except aeronautical<br>mobile<br><br>S5.92, S5.103                    |                                                                                                                                                       | Government                                         |
| 2000 - 2025             | FIXED<br><br>MOBILE except aeronautical<br>mobile (R)<br><br>S5.92, S5.103                |                                                                                                                                                       | Government                                         |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                    | NATIONAL USAGE                       | NOTES                                                      |
|-------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------|
| 2025 - 2045             | FIXED<br><br>MOBILE except aeronautical<br>mobile (R)<br><br>Meteorological aids<br>S5.104<br><br>S5.92, S5.103 |                                      | Government                                                 |
| 2045 - 2160             | FIXED<br><br><b>MARITIME MOBILE</b><br><br>LAND MOBILE<br><br>S5.92                                             | <b>Maritime mobile (MM)</b>          | GE-85<br><br>Government<br>(2140-2160 kHz)                 |
| 2160 - 2170             | RADIOLOCATION                                                                                                   |                                      |                                                            |
| 2170 - 2173,5           | MARITIME MOBILE                                                                                                 |                                      |                                                            |
| 2173,5 - 2190,5         | <b>MOBILE (distress and calling)</b><br><br>S5.108, S5.109, S5.110, S5.111                                      | <b>Mobile (distress and calling)</b> | RR Ap. S13 (RR 3010): 2174,5 kHz;<br>2182 kHz e 2187,5 kHz |
| 2190,5 - 2194           | MARITIME MOBILE                                                                                                 |                                      |                                                            |
| 2194 - 2300             | FIXED<br><br>MOBILE except aeronautical<br>mobile (R)<br><br>S5.92, S5.103                                      |                                      | Government                                                 |
| 2300 - 2498             | FIXED<br><br>MOBILE except aeronautical<br>mobile (R)<br><br>BROADCASTING S5.113<br><br>S5.103                  |                                      | Government                                                 |
| 2498 - 2501             | STANDARD FREQUENCY AND<br>TIME SIGNAL (2500 kHz)                                                                |                                      |                                                            |
| 2501 - 2502             | STANDARD FREQUENCY AND<br>TIME SIGNAL<br><br>Space research                                                     |                                      |                                                            |
| 2502 - 2625             | FIXED<br><br>MOBILE except aeronautical<br>mobile (R)<br><br>S5.92, S5.103                                      |                                      | Government                                                 |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                     | NATIONAL USAGE                                                   | NOTES                                              |
|-------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------|
| 2625 - 2650             | MARITIME MOBILE<br>MARITIME RADIONAVIGATION<br>S5.92                                             |                                                                  | Government                                         |
| 2650 - 2850             | <b>FIXED</b><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br>S5.92, S5.103                 | <b>Fixed (FIX)</b><br><b>Mobile (MOV)</b>                        | Government                                         |
| 2850 - 3025             | <b>AERONAUTICAL MOBILE (R)</b><br>S5.111, S5.115                                                 | <b>Aeronautical mobile (MAR)</b>                                 | RR Ap. S27 (Ap. 27 Aer2)                           |
| 3025 - 3155             | <b>AERONAUTICAL MOBILE (OR)</b>                                                                  | <b>Aeronautical mobile (MAOR)</b>                                | RR Ap. S26 (Ap. 26)<br>Government                  |
| 3155 - 3200             | <b>FIXED</b><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br>S5.116                        | <b>Fixed (FIX)</b><br><b>Mobile (MOV)</b>                        | Government                                         |
| 3200 - 3230             | <b>FIXED</b><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br>BROADCASTING S5.113<br>S5.116 | <b>Fixed (FIX)</b><br><b>Mobile (MOV)</b>                        |                                                    |
| 3230 - 3400             | <b>FIXED</b><br><b>MOBILE</b> except aeronautical<br>mobile<br>BROADCASTING S5.113<br>S5.116     | <b>Fixed (FIX)</b><br><b>Mobile (MOV)</b>                        | Government<br>(3375-3400 kHz)                      |
| 3400 - 3500             | <b>AERONAUTICAL MOBILE (R)</b>                                                                   | <b>Aeronautical mobile (MAR)</b>                                 | RR Ap. S27 (Ap. 27 Aer2)                           |
| 3500 - 3800             | <b>AMATEUR</b><br><b>FIXED</b><br><b>MOBILE</b> except aeronautical<br>mobile<br>S5.92           | <b>Amateur (AM)</b><br><b>Fixed (FIX)</b><br><b>Mobile (MOV)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01 |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                              | NATIONAL USAGE                                                                     | NOTES                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3800 - 3900             | <b>FIXED</b><br><b>AERONAUTICAL MOBILE (OR)</b><br><b>LAND MOBILE</b>                     | <b>Fixed (FIX)</b><br><b>Aeronautical mobile (MAOR)</b><br><b>Land mobile (MT)</b> | Government                                                                                                                                                                                                                                                                                                                                                               |
| 3900 - 3950             | <b>AERONAUTICAL MOBILE (OR)</b>                                                           | <b>Aeronautical mobile (MAOR)</b>                                                  | RR Ap. S26 (Ap. 26)<br>Government                                                                                                                                                                                                                                                                                                                                        |
| 3950 - 4000             | <b>FIXED</b><br>BROADCASTING                                                              | <b>Fixed (FIX)</b>                                                                 | Government                                                                                                                                                                                                                                                                                                                                                               |
| 4000 - 4063             | <b>FIXED</b><br>MÓVEL MARÍTIMO S5.127                                                     | <b>Fixed (FIX)</b>                                                                 | Government                                                                                                                                                                                                                                                                                                                                                               |
| 4063 - 4438             | <b>MARITIME MOBILE</b> S5.79A,<br>S5.109, S5.110, S5.130, S5.131,<br>S5.132<br><br>S5.129 | <b>Maritime mobile (MM)</b>                                                        | RR Ap. S17 (Ap. 16):<br>(4065-4152 kHz; 4351-4438 kHz)<br><br>RR Ap. S25 (Ap. 25):<br>(4351-4438 kHz)<br><br>RR Ap. S17 (Ap. 31)<br><br>RR Ap. S17 (Ap. 32):<br>(4209,25-4219,25 kHz)<br><br>RR Ap. S17 (Ap. 33):<br>(4202,25-4207,25 kHz)<br><br>RR Ap. S13 (RR 3010):<br>(4125 kHz; 4177,5 kHz e<br>4207,5 kHz)<br><br>Government<br>(4152-4172 kHz;<br>4221-4351 kHz) |
| 4438 - 4650             | <b>FIXED</b><br><b>MOBILE except aeronautical<br/>mobile (R)</b>                          | <b>Fixed (FIX)</b><br><b>Mobile (MOV)</b>                                          | Government                                                                                                                                                                                                                                                                                                                                                               |
| 4650 - 4700             | <b>AERONAUTICAL MOBILE (R)</b>                                                            | <b>Aeronautical mobile (MAR)</b>                                                   | RR Ap. S27 (Ap. 27 Aer2)                                                                                                                                                                                                                                                                                                                                                 |
| 4700 - 4750             | <b>AERONAUTICAL MOBILE (OR)</b>                                                           | <b>Aeronautical mobile (MAOR)</b>                                                  | RR Ap. S26 (Ap. 26)<br>Government                                                                                                                                                                                                                                                                                                                                        |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                          | NATIONAL USAGE                                          | NOTES                             |
|-------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------|
| 4750 - 4850             | <b>FIXED</b><br><b>AERONAUTICAL MOBILE (OR)</b><br>LAND MOBILE<br>BROADCASTING S5.113 | <b>Fixed (FIX)</b><br><b>Aeronautical mobile (MAOR)</b> | Government                        |
| 4850 - 4995             | <b>FIXED</b><br><b>LAND MOBILE</b><br>BROADCASTING S5.113                             | <b>Fixed (FIX)</b><br><b>Land mobile (MT)</b>           | Government                        |
| 4995 - 5003             | STANDARD FREQUENCY AND<br>TIME SIGNAL (5000 kHz)                                      |                                                         |                                   |
| 5003 - 5005             | STANDARD FREQUENCY AND<br>TIME SIGNAL<br>Space research                               |                                                         |                                   |
| 5005 - 5060             | <b>FIXED</b><br>BROADCASTING S5.113                                                   | <b>Fixed (FIX)</b>                                      | Government                        |
| 5060 - 5450             | <b>FIXED</b><br>Mobile except aeronautical<br>mobile                                  | <b>Fixed (FIX)</b>                                      | Government                        |
| 5250 - 5450             | <b>FIXED</b><br>MOBILE except aeronautical<br>mobile                                  | <b>Fixed (FIX)</b>                                      | Government                        |
| 5450 - 5480             | <b>FIXED</b><br><b>AERONAUTICAL MOBILE (OR)</b><br>LAND MOBILE                        | <b>Fixed (FIX)</b><br><b>Aeronautical mobile (MAOR)</b> | RR Ap. S26 (Ap. 26)<br>Government |
| 5480 - 5680             | <b>AERONAUTICAL MOBILE (R)</b><br>S5.111, S5.115                                      | <b>Aeronautical mobile (MAR)</b>                        | RR Ap. S27 (Ap. 27 Aer2)          |
| 5680 - 5730             | <b>AERONAUTICAL MOBILE (OR)</b><br>S5.111, S5.115                                     | <b>Aeronautical mobile (MAOR)</b>                       | RR Ap. S26 (Ap. 26)<br>Government |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                           | NATIONAL USAGE                                                                                                                                                                                                         | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5730 - 5900             | <b>FIXED</b><br><br>LAND MOBILE                                                                        | <b>Fixed (FIX)</b>                                                                                                                                                                                                     | Government                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5900 - 5950             | BROADCASTING S5.134<br><br>S5.136                                                                      |                                                                                                                                                                                                                        | Extension band for HFBC, to be effective up from 1.4.2007                                                                                                                                                                                                                                                                                                                                                                        |
| 5950 - 6200             | <b>BROADCASTING</b>                                                                                    | <b>Sound broadcasting (RAD)</b>                                                                                                                                                                                        | RR Art S12A (Art. 17)                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6200 - 6525             | <b>MARITIME MOBILE</b> S5.109,<br>S5.110, S5.130, S5.132<br><br><br><br><br><br><br><br><br><br>S5.137 | <b>Maritime mobile (MM)</b>                                                                                                                                                                                            | RR Ap. S17 (Ap. 16):<br>(6200-6233 kHz;<br>6501-6525 kHz)<br><br>RR Ap. S25 (Ap. 25):<br>(6501-6525 kHz)<br><br>RR Ap. S17 (Ap. 31)<br><br>RR Ap. S17 (Ap. 32):<br>(6313,75-6330,75 kHz)<br><br>RR Ap. S17 (Ap. 33):<br>(6300,25-6311,75 kHz)<br><br>RR Ap. S17 (Ap. 35):<br>(6284,75-6300,25 kHz)<br><br>RR Ap. S13 (RR 3010):<br>(6215 kHz; 6268 kHz<br>and 6312 kHz)<br><br>Government<br>(6233-6261 kHz;<br>6332,5-6501 kHz) |
| 6525 - 6685             | <b>AERONAUTICAL MOBILE (R)</b>                                                                         | <b>Aeronautical mobile (MAR)</b>                                                                                                                                                                                       | RR Ap. S27 (Ap. 27 Aer2)                                                                                                                                                                                                                                                                                                                                                                                                         |
| 6685 - 6765             | <b>AERONAUTICAL MOBILE (OR)</b>                                                                        | <b>Aeronautical mobile (MAOR)</b>                                                                                                                                                                                      | RR Ap. S26 (Ap. 26)<br><br>Government                                                                                                                                                                                                                                                                                                                                                                                            |
| 6765 - 7000             | <b>FIXED</b><br><br>Land mobile<br><br><br><br><br><br><br><br><br><br>S5.138                          | <b>Fixed (FIX)</b><br><br><b>Land mobile (MT)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(6765-6795 kHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (6765-6795 kHz)</b> | CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9<br><br>Government<br>(6795-7000 kHz)                                                                                                                                                                                                                                                                                                                     |
| 7000 - 7100             | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                                                         | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b>                                                                                                                                                             | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                                                                                                                                                                                                                                                                               |



| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                      | NATIONAL USAGE                            | NOTES                                                        |
|-------------------------|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------|
| 9500 - 9900             | <b>BROADCASTING</b><br>S5.147                                     | <b>Sound broadcasting (RAD)</b>           | RR Art S12A (Art. 17):<br>(9500-9775 kHz)                    |
| 9900 - 9995             | <b>FIXED</b>                                                      | <b>Fixed (FIX)</b>                        | Government                                                   |
| 9995 - 10003            | STANDARD FREQUENCY AND<br>TIME SIGNAL (10000 kHz)<br>S5.111       |                                           |                                                              |
| 10003 - 10005           | STANDARD FREQUENCY AND<br>TIME SIGNAL<br>Space research<br>S5.111 |                                           |                                                              |
| 10005 - 10100           | <b>AERONAUTICAL MOBILE (R)</b><br>S5.111                          | <b>Aeronautical mobile (MAR)</b>          | RR Ap. S27 (Ap. 27 Aer2)                                     |
| 10100 - 10150           | <b>FIXED</b><br><b>Amateur</b>                                    | <b>Fixed (FIX)</b><br><b>Amateur (AM)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01           |
| 10150 - 11175           | <b>FIXED</b><br>Mobile except aeronautical<br>mobile (R)          | <b>Fixed (FIX)</b>                        | Government                                                   |
| 11175 - 11275           | <b>AERONAUTICAL MOBILE (OR)</b>                                   | <b>Aeronautical mobile (MAOR)</b>         | RR Ap. S26 (Ap. 26)<br>Government                            |
| 11275 - 11400           | <b>AERONAUTICAL MOBILE (R)</b>                                    | <b>Aeronautical mobile (MAR)</b>          | RR Ap. S27 (Ap. 27 Aer2)                                     |
| 11400 - 11600           | <b>FIXED</b>                                                      | <b>Fixed (FIX)</b>                        | Government                                                   |
| 11600 - 11650           | BROADCASTING S5.134<br>S5.146                                     |                                           | Extension band for HFBC, to be<br>effective up from 1.4.2007 |
| 11650 - 12050           | <b>BROADCASTING</b><br>S5.147                                     | <b>Sound broadcasting (RAD))</b>          | RR Art S12A (Art. 17):<br>(11700-11975 kHz)                  |
| 12050 - 12100           | BROADCASTING S5.134<br>S5.146                                     |                                           | Extension band for HFBC, to be<br>effective up from 1.4.2007 |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                       | NATIONAL USAGE                                                                                                                                                                                                         | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12100 - 12230           | <b>FIXED</b>                                                                                                       | <b>Fixed (FIX)</b>                                                                                                                                                                                                     | Government                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 12230 - 13200           | <b>MARITIME MOBILE</b> S5.109<br>S5.110, S5.132, S5.145                                                            | <b>Maritime mobile (MM)</b>                                                                                                                                                                                            | RR Ap. S17 (Ap. 16):<br>(12230-12368 kHz;<br>13077-13200 kHz)<br><br>RR Ap. S25 (Ap. 25):<br>(13077-13200 kHz)<br><br>RR Ap. S17 (Ap. 31)<br><br>RR Ap. S17 (Ap. 32):<br>(12476,75-12549,75 kHz;<br>12578,75-12656,75 kHz)<br><br>RR Ap. S17 (Ap. 33):<br>(12559,75-12576,75kHz)<br><br>RR Ap. S17 (Ap. 35):<br>(12421,75-12476,75 kHz)<br><br>RR Ap. S13 (3010):<br>(12290 kHz; 12520 kHz and<br>12577 kHz)<br><br>Government<br>(12368-12420 kHz;<br>12658,5-13077 kHz) |
| 13200 - 13260           | <b>AERONAUTICAL MOBILE (OR)</b>                                                                                    | <b>Aeronautical mobile (MAOR)</b>                                                                                                                                                                                      | RR Ap. S26 (Ap. 26)<br><br>Government                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 13260 - 13360           | <b>AERONAUTICAL MOBILE (R)</b>                                                                                     | <b>Aeronautical mobile (MAR)</b>                                                                                                                                                                                       | RR Ap. S27 (Ap. 27 Aer2)                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 13360 - 13410           | <b>FIXED</b><br><br>RADIO ASTRONOMY<br><br>S5.149*                                                                 | <b>Fixed (FIX)</b>                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 13410 - 13570           | <b>FIXED</b><br><br><b>Mobile except aeronautical<br/>mobile (R)</b><br><br><br><br><br><br><br><br><br><br>S5.150 | <b>Fixed (FIX)</b><br><br><b>Mobile (MOV)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(13553-13567 kHz)</b><br><br><b>SRD - Non-specific short range<br/>devices (13553-13567 kHz)</b> | CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9<br><br>Government<br>(13410-13450 kHz;<br>13495-13515 kHz)                                                                                                                                                                                                                                                                                                                                        |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                | NATIONAL USAGE                                         | NOTES                                                                                       |
|-------------------------|-------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 13570 - 13600           | BROADCASTING S5.134, S5.135<br>S5.151                       |                                                        | Extension band for HFBC, to be effective up from 1.4.2007.                                  |
| 13600 - 13800           | <b>BROADCASTING</b><br>S5.148                               | <b>Sound broadcasting (RAD)</b>                        |                                                                                             |
| 13800 - 13870           | BROADCASTING S5.134, S5.135<br>S5.151                       |                                                        | Extension band for HFBC, to be effective up from 1.4.2007                                   |
| 13870 - 14000           | <b>FIXED</b><br>Mobile except aeronautical mobile (R)       | <b>Fixed (FIX)</b>                                     | Government<br>(13870-13914 kHz)                                                             |
| 14000 - 14250           | <b>AMATEUR</b><br><b>AMATEUR-SATELLITE</b>                  | <b>Amateur (AM)</b><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01                                          |
| 14250 - 14350           | <b>AMATEUR</b>                                              | <b>Amateur (AM)</b>                                    | Amateur national regulations<br>CEPT Rec T/R 61-01                                          |
| 14350 - 14990           | <b>FIXED</b><br>Mobile except aeronautical mobile (R)       | <b>Fixed (FIX)</b>                                     | Government<br>(14604-14670 kHz)                                                             |
| 14990 - 15005           | STANDARD FREQUENCY AND<br>TIME SIGNAL (15000 kHz)<br>S5.111 |                                                        |                                                                                             |
| 15005 - 15010           | STANDARD FREQUENCY AND<br>TIME SIGNAL<br>Space research     |                                                        |                                                                                             |
| 15010 - 15100           | <b>AERONAUTICAL MOBILE (OR)</b>                             | <b>Aeronautical mobile (MAOR)</b>                      | RR Ap. S26 (Ap. 26)<br>Government                                                           |
| 15100 - 15600           | <b>BROADCASTING</b><br><br>S5.148                           | <b>Sound broadcasting (RAD)</b>                        | RR Art. S12A (Art. 17) :<br>(15100-15400 kHz)<br><br>RR S5.148 (531) :<br>(15450-15600 kHz) |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL             | NATIONAL USAGE                    | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|----------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15600 - 15800           | BROADCASTING S5.134, S5.135<br>S5.146                    |                                   | Extension band for HFBC, to be<br>effective up from 1.4.2007                                                                                                                                                                                                                                                                                                                                                                                                |
| 15800 - 16360           | <b>FIXED</b>                                             | <b>Fixed (FIX)</b>                | Government<br>(16180-16231 kHz)                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 16360 - 17410           | <b>MARITIME MOBILE</b> S5.109,<br>S5.110, S5.132, S5.145 | <b>Maritime mobile (MM)</b>       | RR Ap. S17 (Ap. 16) :<br>(16360-16549 kHz;<br>17242-17410 kHz)<br><br>RR Ap. S25 (Ap. 25) :<br>(17242-17410 kHz)<br><br>RR Ap. S17 (Ap.31)<br><br>RR Ap. S17 (Ap. 32) :<br>(16683,25-16733,75kHz;<br>16806,25-16902,75 kHz)<br><br>RR Ap. S17 (Ap. 33) :<br>(16784,75-16804,25kHz)<br><br>RR Ap. S17 (Ap.35) :<br>(16618,75-16683,25 kHz)<br><br>RR Ap. S13 (RR 3010) :<br>(16420 kHz; 16695 kHz and<br>16804,5 kHz)<br><br>Government<br>(16549-16617 kHz) |
| 17410 - 17480           | <b>FIXED</b>                                             | <b>Fixed (FIX)</b>                | Government<br>(17410-17451 kHz)                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 17480 - 17550           | BROADCASTING S5.134, S5.135<br>S5.146                    |                                   | Extension band for HFBC, to be<br>effective up from 1.4.2007                                                                                                                                                                                                                                                                                                                                                                                                |
| 17550 - 17900           | <b>BROADCASTING</b><br>S5.148                            | <b>Sound broadcasting (RAD)</b>   | RR Art. S12A (Art. 17) :<br>(17700-17900 kHz)                                                                                                                                                                                                                                                                                                                                                                                                               |
| 17900 - 17970           | <b>AERONAUTICAL MOBILE (R)</b>                           | <b>Aeronautical mobile (MAR)</b>  | RR Ap. S27 (Ap. 27 Aer2)                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 17970 - 18030           | <b>AERONAUTICAL MOBILE (OR)</b>                          | <b>Aeronautical mobile (MAOR)</b> | RR Ap. S26 (Ap. 26)<br><br>Government                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 18030 - 18052           | <b>FIXED</b>                                             | <b>Fixed (FIX)</b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 18052 - 18068           | FIXED<br>Space research                                  |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                              | NATIONAL USAGE                                             | NOTES                                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18068 - 18168           | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                            | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                                                                      |
| 18168 - 18780           | <b>FIXED</b><br><br>Mobile except aeronautical<br>mobile                  | <b>Fixed (FIX)</b>                                         | Government<br>(18249-18373 kHz)                                                                                                                                                                                         |
| 18780 - 18900           | MARITIME MOBILE                                                           |                                                            | RR Ap. S17 (Ap. 16) :<br>(18780-18846 kHz)<br><br>RR Ap. S17 (Ap.31)<br><br>RR Ap. S17 (Ap. 32) :<br>(18870-18892,75kHz)<br><br>RR Ap. S17 (Ap. 33) :<br>(18892,75-18898,25 kHz)<br><br>Government<br>(18846-18870 kHz) |
| 18900 - 19020           | BROADCASTING S5.134, S5.135<br><br>S5.146                                 |                                                            | Extension band for HFBC, to be<br>effective up from 1.4.2007                                                                                                                                                            |
| 19020 - 19680           | <b>FIXED</b>                                                              | <b>Fixed (FIX)</b>                                         | Government<br>(19020-19120 kHz)                                                                                                                                                                                         |
| 19680 - 19800           | <b>MARITIME MOBILE</b> S5.132                                             | <b>Maritime mobile (MM)</b>                                | RR Ap. S17 (Ap. 16) :<br>(19755-19800 kHz)<br><br>RR Ap. S17 (Ap. 25) :<br>(19755-19800kHz)<br><br>RR Ap. S17 (Ap.31)<br><br>RR Ap. S17 (Ap. 32) :<br>(19680,25-19703,25 kHz)<br><br>Government<br>(19705-19755kHz)     |
| 19800 - 19990           | <b>FIXED</b>                                                              | <b>Fixed (FIX)</b>                                         |                                                                                                                                                                                                                         |
| 19990 - 19995           | STANDARD FREQUENCY AND<br>TIME SIGNAL<br><br>Space research<br><br>S5.111 |                                                            |                                                                                                                                                                                                                         |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                    | NATIONAL USAGE                                             | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19995 - 20010           | STANDARD FREQUENCY AND<br>TIME SIGNAL (20000 kHz)<br><br>S5.111 |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 20010 - 21000           | <b>FIXED</b><br><br><b>Mobile</b>                               | <b>Fixed (FIX)</b><br><br><b>Mobile (MOV)</b>              | Government<br>(20442-20680 kHz)                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 21000 - 21450           | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                  | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                                                                                                                                                                                                                                                                                                              |
| 21450 - 21850           | <b>BROADCASTING</b><br><br>S5.148                               | <b>Sound broadcasting (RAD)</b>                            | RR Art. S12A (Art. 17) :<br>(21450-21750 kHz)<br><br>RR S5.148 (531) :<br>(21750-21850 kHz)                                                                                                                                                                                                                                                                                                                                                                     |
| 21850 - 21870           | <b>FIXED</b>                                                    | <b>Fixed (FIX)</b>                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 21870 - 21924           | FIXED S5.155B                                                   |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 21924 - 22000           | AERONAUTICAL MOBILE (R)                                         |                                                            | RR Ap. S27 (Ap. 27 Aer2)                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 22000 - 22855           | <b>MARITIME MOBILE</b> S5.132                                   | <b>Maritime mobile (MM)</b>                                | RR Ap. S17 (Ap. 16) :<br>(22000-22180 kHz;<br>22696-22855 kHz)<br><br>RR Ap. S25 (Ap. 25) :<br>(22696-22855 kHz)<br><br>RR Ap. S17 (Ap.31)<br><br>RR Ap. S17 (Ap. 32) :<br>(22284,25-22351,75 kHz;<br>22375,75-22443,75kHz)<br><br>RR Ap. S17 (Ap. 33) :<br>(22351,75-22374,25 kHz)<br><br>RR Ap. S17 (Ap. 34) :<br>(22279,25-22284,25 kHz)<br><br>RR Ap. S17 (Ap.35) :<br>(22241,75-22279,25 kHz)<br><br>Government<br>(22180-22240 kHz;<br>22445,5-22696 kHz) |
| 22855 - 23000           | <b>FIXED</b>                                                    | <b>Fixed (FIX)</b>                                         | Government<br>(22900-23000 kHz)                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| FREQUENCY BAND<br>(KHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                    | NATIONAL USAGE                                             | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23000 - 23200           | <b>FIXED</b><br><br>Mobile except aeronautical<br>mobile (R)    | <b>Fixed (FIX)</b><br><br>Mobile (MOV)                     |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 23200 - 23350           | FIXED S5.156A<br><br><b>AERONAUTICAL MOBILE (OR)</b>            | <b>Aeronautical mobile (MAOR)</b>                          | Government                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 23350 - 24000           | <b>FIXED</b><br><br>MOBILE except aeronautical<br>mobile S5.157 | <b>Fixed (FIX)</b>                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 24000 - 24890           | <b>FIXED</b><br><br>LAND MOBILE                                 | <b>Fixed (FIX)</b>                                         | Government<br>(24125-24325 kHz)                                                                                                                                                                                                                                                                                                                                                                                                               |
| 24890 - 24990           | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                  | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                                                                                                                                                                                                                                                                                            |
| 24990 - 25005           | STANDARD FREQUENCY AND<br>TIME SIGNAL (25000 kHz)               |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 25005 - 25010           | STANDARD FREQUENCY AND<br>TIME SIGNAL<br><br>Space research     |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 25010 - 25070           | <b>FIXED</b><br><br>MOBILE except aeronautical<br>mobile        |                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 25070 - 25210           | <b>MARITIME MOBILE</b>                                          | <b>Maritime mobile (MM)</b>                                | RR Ap. S17 (Ap. 16) :<br>(25070-25121 kHz;<br>26145-26175 kHz)<br><br>RR Ap. S25 (Ap. 25) :<br>(26145-26175 kHz)<br><br>RR Ap. S17 (Ap.31)<br><br>RR Ap. S17 (Ap. 32) :<br>(25172,75-25192,75 kHz;<br>26100,25-26120,75 kHz)<br><br>RR Ap. S17 (Ap. 33) :<br>(25192,75-25208,25 kHz)<br><br>RR Ap. S17 (Ap. 34) :<br>(25171,25-25172,75 kHz)<br><br>RR Ap. S17 (Ap.35) :<br>(25161,25-25171,25 kHz)<br><br>Government<br>(25121-25161,25 kHz) |



| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                          | NATIONAL USAGE                                                                                                                                                                                                                                       | NOTES                                                                                                                                                                                                                                    |
|-------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27,5 - 28               | METEOROLOGICAL AIDS<br><br>FIXED<br><br><b>MOBILE</b>                                                 | <b>CT0 – Cordless telephones<br/>(27,550-27,825 MHz) (MOV)</b>                                                                                                                                                                                       | Government<br>(27,85-28MHz)                                                                                                                                                                                                              |
| 28 - 29,7               | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                                                        | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b>                                                                                                                                                                                           | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                                                                                       |
| 29,7 - 30,005           | FIXED<br><br><b>MOBILE</b>                                                                            | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SRD – Low power narrowband<br/>telecommand, telemetry,<br/>telealarm and data<br/>transmission equipment<br/>for use outside the ISM<br/>bands (29,980 MHz;<br/>29,990 MHz; 30,000 MHz)</b>        | 40 MHz plan<br><br>National regulation no. 859/94<br>of 23/9                                                                                                                                                                             |
| 30,005 - 30,01          | SPACE OPERATION<br>(satellite identification)<br><br>FIXED<br><br><b>MOBILE</b><br><br>SPACE RESEARCH | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SRD – Low power narrowband<br/>telecommand, telemetry,<br/>telealarm and data<br/>transmission equipment<br/>for use outside the ISM<br/>bands (30,010 MHz)</b>                                    | 40 MHz plan<br><br>National regulation no. 859/94<br>of 23/9                                                                                                                                                                             |
| 30,01 - 37,5            | FIXED<br><br><b>MOBILE</b>                                                                            | <b>SMT – Private mobile radio (MOV)</b><br><br><b>CT0 – Cordless telephones<br/>(37-37,275 MHz) (MOV)</b><br><br><b>SRD – Model control<br/>(35,005-35,205 MHz)</b><br><br><b>SRD – Radio microphones<br/>(34,41-34,59 MHz;<br/>34,66-34,84 MHz)</b> | 40 MHz plan<br><br><br>CEPT/ERC/REC 70-03 Annex 8<br>National regulation no. 859/94<br>of 23/9<br><br>National regulation no. 859/94<br>of 23/9<br><br>Government<br>(30,0375-33,0875 MHz;<br>35,8625-36,9625 MHz;<br>37,3125-37, 5 MHz) |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                             | NATIONAL USAGE                                                                                                                                                                                                                                                                                          | NOTES                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 37,5 - 38,25            | FIXED<br><br><b>MOBILE</b><br><br>Radio astronomy<br><br>S5.149*         | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | 40 MHz plan<br><br>Government<br>(37,5-38,25 MHz)                                                                                  |
| 38,25 - 39,986          | FIXED<br><br><b>MOBILE</b>                                               | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | 40 MHz plan<br><br>Government<br>(38,25-39,7625 MHz)                                                                               |
| 39,986 - 40,02          | FIXED<br><br><b>MOBILE</b><br><br>Space research                         | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | 40 MHz plan                                                                                                                        |
| 40,02 - 40,98           | FIXED<br><br><b>MOBILE</b><br><br><br><br><br><br><br><br><br><br>S5.150 | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SCPP – Private radio paging (MOV) (40,680 MHz)</b><br><br><b>ISM – Industrial, scientific and medical applications (40,66-40,7 MHz)</b><br><br><b>SRD – Non-specific short range devices (40,66-40,7 MHz); Model control (40,665 MHz; 40,695 MHz)</b> | 40 MHz plan<br><br>On-site paging<br><br><br><br><br>CEPT/ERC/REC 70-03 Annex 1, Annex 8<br>National regulation no. 859/94 of 23/9 |
| 40,98 - 41,015          | FIXED<br><br><b>MOBILE</b><br><br>SPACE RESEARCH                         | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | Government                                                                                                                         |
| 41,015 - 44             | FIXED<br><br><b>MOBILE</b>                                               | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | Government                                                                                                                         |
| 44 - 47                 | FIXED<br><br><b>MOBILE</b><br><br>Radiolocation (S5.162A)*               | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                 | Government                                                                                                                         |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                          | NATIONAL USAGE                                                        | NOTES                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 47 - 68                 | <b>BROADCASTING</b><br><br>Radiolocation (S5.162A)*                                                                                                                                                                                                                   | <b>Analogue television<br/>broadcasting (RAD)</b>                     | Band I (47-68 MHz) (channels<br>2 to 4)<br>ST-61<br><br>Government<br>(47,25-49,5 MHz; 50,5-51 MHz;<br>54-68 MHz)           |
| 68 - 74,8               | FIXED<br><br><b>MOBILE</b> except aeronautical<br>mobile<br><br>S5.149*                                                                                                                                                                                               | <b>SMT – Private mobile radio (MOV)</b>                               | 80 MHz plan<br><br>Government<br>(68,8875-69,8625 MHz;<br>73,3-74,1 MHz)                                                    |
| 74,8 - 75,2             | <b>AERONAUTICAL RADIONAVIGATION</b><br><br>S5.180                                                                                                                                                                                                                     | <b>Aeronautical radiobeacons –<br/>ILS / glide path markers (RVA)</b> | ICAO – (Annex 10)                                                                                                           |
| 75,2 - 87,5             | FIXED<br><br><b>MOBILE</b> except aeronautical<br>mobile                                                                                                                                                                                                              | <b>SMT – Private mobile radio (MOV)</b>                               | 80 MHz plan<br><br>Government<br>(75,2125-77,65 MHz;<br>79,4125-80,3875 MHz;<br>83,8250-84,6250 MHz;<br>85,7375-87,4875MHz) |
| 87,5 - 108              | <b>BROADCASTING</b>                                                                                                                                                                                                                                                   | <b>Sound broadcasting (RAD)</b>                                       | Band II – FM<br>GE-84                                                                                                       |
| 108 - 117,975           | <b>AERONAUTICAL RADIONAVIGATION</b>                                                                                                                                                                                                                                   | <b>Aeronautical radiobeacons –<br/>VOR and ILS localizers (RVA)</b>   | ICAO – (Annex 10)                                                                                                           |
| 117,975 - 137           | <b>AERONAUTICAL MOBILE (R)</b><br><br>S5.111, S5.198, S5.199, S5.200,<br>S5.203                                                                                                                                                                                       | <b>Aeronautical mobile (MAR)</b>                                      | ICAO – (Annex 10)                                                                                                           |
| 137 - 137,025           | SPACE OPERATION (space-to-Earth)<br><br>METEOROLOGICAL-SATELLITE<br>(space-to-Earth)<br><br>MOBILE-SATELLITE (space-to-Earth)<br>S5.208A, S5.209<br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>Fixed<br><br>Mobile except aeronautical<br>mobile (R)<br><br>S5.208 |                                                                       |                                                                                                                             |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                                                   | NATIONAL USAGE                                                                                                                            | NOTES                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 137,025 - 137,175       | SPACE OPERATION (space-to-Earth)<br><br><b>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)</b><br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>Fixed<br><br>Mobile-satellite (space-to-Earth)<br>S5.208A, S5.209<br><br>Mobile except aeronautical<br>mobile (R)<br><br>S5.208                  | <b>METEOSAT – Low resolution<br/>picture transmissions –<br/>LRPT (MET-S)</b>                                                             |                                      |
| 137,175 - 137,825       | SPACE OPERATION (space-to-Earth)<br><br><b>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)<br/>LRPT (MET-S)</b><br><br>MOBILE-SATELLITE (space-to-Earth)<br>S5.208A, S5.209<br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>Fixed<br><br>Mobile except aeronautical<br>mobile (R)<br><br>S5.208 | <b>METEOSAT – Low resolution<br/>picture transmissions –<br/><br/>Automatic picture transmission –<br/>APT (MET-S) (137,5-137,62 MHz)</b> | METEOSAT will replace APT<br>systems |
| 137,825 - 138           | SPACE OPERATION (space-to-Earth)<br><br><b>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)</b><br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>Fixed<br><br>Mobile-satellite (space-to-Earth)<br>S5.208A, S5.209<br><br>Mobile except aeronautical<br>mobile (R)<br><br>S5.208                  | <b>METEOSAT – Low resolution<br/>picture transmissions –<br/>LRPT (MET-S)</b>                                                             |                                      |
| 138 - 143,6             | <b>AERONAUTICAL MOBILE (OR)</b>                                                                                                                                                                                                                                                                | <b>Aeronautical mobile (OR) (MAOR)</b>                                                                                                    | Government                           |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                               | NATIONAL USAGE                                                                                                                                                                                                                            | NOTES                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 143,6 - 143,65          | <b>AERONAUTICAL MOBILE (OR)</b><br><br>SPACE RESEARCH<br>(space-to-Earth)                                                                                                                                  | <b>Aeronautical mobile (OR) (MAOR)</b>                                                                                                                                                                                                    | Government                                                                                                                                             |
| 143,65 - 144            | <b>AERONAUTICAL MOBILE (OR)</b>                                                                                                                                                                            | <b>Aeronautical mobile (OR) (MAOR)</b>                                                                                                                                                                                                    | Government                                                                                                                                             |
| 144 - 146               | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b>                                                                                                                                                             | <b>Amateur (AM) (144-145,8 MHz)</b><br><br><b>Amateur-satellite (AM-S)<br/>(145,8-146 MHz)</b><br><br><b>POSAT-1 (AM-S)<br/>(145,925 MHz;145,975 MHz)</b>                                                                                 | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                     |
| 146 - 148               | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile (R)</b>                                                                                                                                       | <b>Fixed (FIX)</b><br><br><b>Mobile (MOV)</b>                                                                                                                                                                                             | Government<br>(146,0125-148 MHz)                                                                                                                       |
| 148 - 149,9             | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile (R)</b><br><br>MOBILE-SATELLITE<br>(Earth-to-space) S5.209<br><br><b>SPACE OPERATION<br/>(Earth-to-space) S5.218</b><br><br>S5.219, (S5.221*) | <b>SMT- Private mobile radio (MOV)</b><br><br><br><br><br><b>POSAT-1<br/>(148,285 MHz;148,585 MHz)</b>                                                                                                                                    | 160 MHz plan<br><br><br><br><br>Low Earth orbiting satellite,<br>under RR S4.4 (RR 342)<br><br>Government<br>(148-148,4 MHz;<br>149,0125-149,8875 MHz) |
| 149,9 - 150,05          | MOBILE-SATELLITE (Earth-to-space)<br>S5.209, S5.224A<br><br><b>RADIONAVIGATION-SATELLITE<br/>S5.224B</b><br><br>S5.220, S5.222, S5.223                                                                     | <b>TRANSIT – Radionavigation-<br/>satellite system (RV-S)<br/>(150 MHz)</b>                                                                                                                                                               | To be cancelled                                                                                                                                        |
| 150,05 - 153            | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile</b><br><br>RADIO ASTRONOMY<br><br><br><br><br>S5.149*                                                                                         | <b>SMT – Private mobile radio (MOV)</b><br><br><br><br><br><b>SRD – Low power narrowband<br/>telecommand, telemetry, telealarm<br/>and data transmission equipment<br/>for use outside the ISM bands<br/>(150,9375 MHz; 150,9500 MHz)</b> | 160 MHz plan<br><br><br><br><br>National regulation no. 859/94<br>of 23/9<br><br>Government<br>(150,5375-150,8875;<br>151,2-151,9875 MHz)              |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                       | NATIONAL USAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NOTES                                                                                                                                                                                                                                                     |
|-------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 153 - 154               | FIXED<br><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br><br>Meteorological aids                            | <b>SMT – Private mobile radio (MOV)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 MHz plan<br><br>Government<br>(153,6125-154 MHz)                                                                                                                                                                                                      |
| 154 - 156,7625          | FIXED<br><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br><br><br><br><br><br><br><br><br><br>S5.226, S5.227 | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SMM – Maritime mobile<br/>networks (156-156,7625 MHz)<br/>(MOV)</b><br><br><b>Coast-to-ship communications<br/>for differential GPS (MOV);<br/>ship station: 156,075 MHz;<br/>coast station: 160,675 MHz</b><br><br><b>SRD – Low power narrowband<br/>telecommand, telemetry, telealarm<br/>and data transmission equipment<br/>for use outside the ISM bands<br/>(155,5375 MHz; 155,5500 MHz)</b>                                                         | 160 MHz plan<br><br>RR Ap. S18 (Ap. 18)<br>RR Ap. S13 (3010): 156,525 MHz<br><br>RR Ap. S18 (Ap. 18) – channel 61<br><br>National regulation no. 859/94<br>of 23/9<br><br>Government<br>(154-154,65 MHz;<br>155,1375-155,4875 MHz;<br>155,8-155,9875 MHz) |
| 156,7625 - 156,8375     | <b>MARITIME MOBILE<br/>(distress and calling)</b><br><br>S5.111, S5.226                                            | <b>Maritime mobile (MM)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RR Ap. S18 (Ap. 18)<br>RR Ap. S13 (3010): 156,8 MHz                                                                                                                                                                                                       |
| 156,8375 - 174          | FIXED<br><br><b>MOBILE</b> except aeronautical<br>mobile (R)<br><br><br><br><br><br><br><br><br><br>S5.226         | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SCPP – Private radio paging<br/>(MOV) (169,175 MHz)</b><br><br><b>SCP – Public national radio<br/>paging (MOV) (164,925 MHz;<br/>167,200 MHz; 167,325 MHz;<br/>167,375 MHz)</b><br><br>ERMES – Pan-european paging<br>system (MOV) (Frequency<br>band: 169,4-169,8 MHz;<br>1st phase: 169,425 MHz;<br>169,475 MHz; 169,650 MHz;<br>169,750 MHz)<br><br><b>SMM – Maritime mobile<br/>networks (MOV)<br/>(156,8375-158,0125 MHz)<br/>(160,6125-162,6125)</b> | 160 MHz plan<br><br>On-site paging<br><br>National paging<br><br>ERC/DEC/(94)02<br>Directive 90/544/EEC<br>CEPT Rec T/R 25-07<br><br>RR Ap. S18 (Ap. 18) and<br>national planification                                                                    |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                      | NATIONAL USAGE                                                                                     | NOTES                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 174 - 223               | <b>BROADCASTING</b>                                                               | Analogue television<br>broadcasting (RAD)<br><br>T-DAB – Sound broadcasting<br>(RAD) (219-230 MHz) | Band III (174-216 MHz)<br>(channels 5 to 10)<br>ST-61<br><br>Wiesbaden Agreement 1995<br>CEPT/ERC Rec T/R 52-02 |
| 223 - 230               | <b>BROADCASTING</b><br><br>Fixed<br><br>Mobile                                    | <b>T-DAB: Sound broadcasting<br/>(RAD) (219-230 MHz)</b>                                           | Wiesbaden Agreement 1995<br>CEPT/ERC Rec T/R 52-02<br><br>Government<br>(225-230 MHz)                           |
| 230 - 235               | FIXED<br><br>MOBILE                                                               |                                                                                                    | Government                                                                                                      |
| 235 - 267               | FIXED<br><br>MOBILE<br><br>S5.111, S5.199, S5.254, S5.256                         |                                                                                                    | Government                                                                                                      |
| 267 - 272               | FIXED<br><br>MOBILE<br><br>Space operation (space-to-Earth)<br><br>S5.254, S5.257 |                                                                                                    | Government                                                                                                      |
| 272 - 273               | SPACE OPERATION<br>(space-to-Earth)<br><br>FIXED<br><br>MOBILE<br><br>S5.254      |                                                                                                    | Government                                                                                                      |
| 273 - 312               | FIXED<br><br>MOBILE<br><br>S5.254                                                 |                                                                                                    | Government                                                                                                      |
| 312 - 315               | FIXED<br><br>MOBILE<br><br>Mobile-satellite (Earth-to-space)<br>S5.254, S5.255    |                                                                                                    | Government                                                                                                      |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                          | NATIONAL USAGE                                                                  | NOTES                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 315 - 322               | FIXED<br><br>MOBILE<br><br>S5.254                                                                                                     |                                                                                 | Government                                                                                                          |
| 322 - 328,6             | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>S5.149*                                                                             |                                                                                 | Government                                                                                                          |
| 328,6 - 335,4           | <b>AERONAUTICAL RADIONAVIGATION</b><br><br>S5.258                                                                                     | <b>Aeronautical radiobeacons –<br/>ILS / glide path markers (RVA)</b>           | ICAO – (Annex 10)                                                                                                   |
| 335,4 - 387             | FIXED<br><br>MOBILE<br><br><br>S5.254                                                                                                 | TETRA emergency (380-383 MHz)                                                   | ERC/DEC(96)01<br>Sub-band 383-385 MHz is<br>reserved for future use by<br>TETRA emergency systems<br><br>Government |
| 387 - 390               | FIXED<br><br>MOBILE<br><br>Mobile-satellite (space-to-Earth)<br>S5.208A, S5.254, S5.255                                               |                                                                                 | Government                                                                                                          |
| 390 - 399,9             | FIXED<br><br>MOBILE<br><br><br>S5.254                                                                                                 | TETRA emergency (390-393 MHz)                                                   | ERC/DEC(96)01<br>Sub-band 393-395 MHz is<br>reserved for future use by<br>TETRA emergency systems<br><br>Government |
| 399,9 - 400,05          | MOBILE-SATELLITE<br>(Earth-to-space) S5.209, S5.224A<br><br><b>RADIONAVIGATION-SATELLITE</b><br>S5.222, S5.224B, S5.260<br><br>S5.220 | <b>TRANSIT – Radionavigation-<br/>satellite system (RV-S)<br/>(399,968 MHz)</b> | To be cancelled                                                                                                     |
| 400,05 - 400,15         | STANDARD FREQUENCY ANT<br>TIME SIGNAL-SATELLITE<br>(400,1 MHz)<br><br>S5.261                                                          |                                                                                 |                                                                                                                     |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                | NATIONAL USAGE                                                                                                                                                      | NOTES                |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 400,15 - 401            | <p>METEOROLOGICAL AIDS</p> <p>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)</p> <p>MOBILE-SATELLITE<br/>(space-to-Earth) S5.208A,<br/>S5.209</p> <p>SPACE RESEARCH<br/>(space-to-Earth) S5.263</p> <p>Space operation (space-to-Earth)<br/>S5.264</p>       |                                                                                                                                                                     |                      |
| 401 - 402               | <p>METEOROLOGICAL AIDS</p> <p>SPACE OPERATION<br/>(space-to-Earth)</p> <p><b>EARTH EXPLORATION-SATELLITE<br/>(Earth-to-space)</b></p> <p><b>METEOROLOGICAL-SATELLITE<br/>(Earth-to-space)</b></p> <p>Fixed</p> <p>Mobile except aeronautical<br/>mobile</p> | <p><b>DORIS system<br/>(401,25 MHz 350 Hz)</b></p> <p><b>DCP – Data collecting<br/>platforms for meteorological<br/>service (MET-S)<br/>(401,9 MHz 200 kHz)</b></p> |                      |
| 402 - 403               | <p>METEOROLOGICAL AIDS</p> <p>EARTH EXPLORATION-SATELLITE<br/>(Earth-to-space)</p> <p><b>METEOROLOGICAL-SATELLITE<br/>(Earth-to-space)</b></p> <p>Fixed</p> <p>Mobile except aeronautical<br/>mobile</p>                                                    | <p><b>DCP – Data collecting platforms<br/>for meteorological service<br/>(MET-S) (401,9 MHz 200 kHz)</b></p>                                                        |                      |
| 403 - 406               | <p><b>METEOROLOGICAL AIDS</b></p> <p>Fixed</p> <p>Mobile except aeronautical<br/>mobile</p>                                                                                                                                                                 | <b>Radiosondes (METAX)</b>                                                                                                                                          |                      |
| 406 - 406,1             | <p><b>MOBILE-SATELLITE<br/>(Earth-to-space)</b></p> <p>S5.266, S5.267</p>                                                                                                                                                                                   | <b>Low power EPIRB COSPAS –<br/>SARSAT (MV-S)</b>                                                                                                                   | RR Ap. S13 (RR 3010) |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                      | NATIONAL USAGE                                                                                                                                                                                                                                          | NOTES                                                                                                                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 406,1 - 410             | <b>FIXED</b><br><br>MOBILE except aeronautical<br>mobile<br><br>RADIO ASTRONOMY<br><br>S5.149*                    | <b>Single channel (FIX)</b>                                                                                                                                                                                                                             | Single channel links plan<br>Planned for unidirectional links<br><br>Government<br>(408,7875-409,9875 MHz)                                                                                                                                                  |
| 410 - 420               | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile</b><br><br>SPACE RESEARCH<br>(space-to-space) S5.268 | <b>Single channel (FIX)</b><br><br><b>TETRA civil</b>                                                                                                                                                                                                   | Single channel links plan<br>Planned for bidirectional links<br><br>ERC/DEC/(96)04<br>Some channels within the<br>sub-band 413-417,6 MHz<br><br>Government<br>(417,5875-418,5875 MHz)                                                                       |
| 420 - 430               | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile</b><br><br>Radiolocation                             | <b>Single channel (FIX)</b><br><br><b>TETRA civil</b><br><br><b>POSAT-1</b><br>(429,450 MHz; 429,520 MHz;<br>429,880 MHz; 429,950 MHz)                                                                                                                  | Single channel links plan<br><br>ERC/DEC/(96)04<br>Some channels within the<br>sub-band 423-427,6 MHz<br><br>Low Earth orbiting satellite,<br>under RR S4.4 (RR 342)<br><br>Government<br>(427,5875-428,5875MHz)                                            |
| 430 - 440               | <b>AMATEUR</b><br><br><b>Amateur-satellite</b><br>S5.282<br><br>RADIOLOCATION<br><br><br><br>S5.138, (S5.280)     | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b><br>(435-438 MHz)<br><br><b>ISM – Industrial, scientific and<br/>medical applications</b><br>(433,05-434,79 MHz)<br><br><b>SRD – Non-specific short range<br/>devices (433,05-434,79 MHz)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br>The amateur-satellite uses have<br>a secondary allocation in the<br>sub-band 435-438 MHz,<br>under RR S5.282 (664)<br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9 |
| 440 - 450               | <b>FIXED</b><br><br><b>MOBILE except aeronautical<br/>mobile</b><br><br>Radiolocation<br><br>S5.286               | <b>SMT – Private mobile radio (MOV)</b><br><br><b>PMR446 (446-446,1 MHz)</b>                                                                                                                                                                            | 440-450 MHz plan<br><br>CEPT/ERC/DEC(98)25<br>National regulation no. 802/99<br>of 20/9                                                                                                                                                                     |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL              | NATIONAL USAGE                                                                                                                                                                                                                                                                                                                                                                          | NOTES                                                                                                                                                              |
|-------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 450 - 455               | FIXED<br><br><b>MOBILE</b><br><br>S5.209, S5.286, S5.286A | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SMRP – National trunking mobile system (MOV)</b><br>(frequency assignments in the sub-band 450,0125-451,3875 MHz)<br><br>TETRA civil                                                                                                                                                                                                  | 450 MHz plan<br><br>MPT 1327<br><br>ERC/DEC/(96)04<br>Some channels within the band 450-470 MHz                                                                    |
| 455 - 456               | FIXED<br><br><b>MOBILE</b><br><br>S5.209, S5.286A         | <b>SMT – Private mobile radio (MOV)</b><br><br>TETRA civil                                                                                                                                                                                                                                                                                                                              | 450 MHz plan<br><br>ERC/DEC/(96)04<br>Some channels within the band 450-470 MHz                                                                                    |
| 456 - 459               | FIXED<br><br><b>MOBILE</b><br><br>S5.287                  | <b>SMT – Private mobile radio (MOV)</b><br><br><b>On board communications (maritime)</b> (457,525 MHz; 457,5375 MHz; 457,550 MHz; 457,5625 MHz; 457,575 MHz) (MOV)<br><br><b>SRD – Low power narrowband telecommand, telemetry, telealarm and data transmission equipment for use outside the ISM bands</b> (458,1125 MHz; 458,1250 MHz; 458,1370 MHz; 458,1500 MHz)<br><br>TETRA civil | 450 MHz plan<br><br>National regulation no. 859/94 of 23/9<br><br>ERC/DEC/(96)04<br>Some channels within the band 450-470 MHz<br><br>Government (458,2125-459 MHz) |
| 459 - 460               | FIXED<br><br><b>MOBILE</b><br><br>S5.209, S5.286A         | <b>SMT – Private mobile radio (MOV)</b><br><br><b>SCPP – Private radio paging (MOV)</b> (459,650 MHz)<br><br>TETRA civil                                                                                                                                                                                                                                                                | 450 MHz plan<br><br>On-site paging<br><br>ERC/DEC/(96)04<br>Some channels within the band 450-470 MHz<br><br>Government (459-459,3625 MHz)                         |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                  | NATIONAL USAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NOTES                                                                                                                                                                                              |
|-------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 460 - 470               | <p>FIXED</p> <p><b>MOBILE</b></p> <p>Meteorological-satellite<br/>(space-to-Earth)</p> <p>S5.287, S5.289</p>  | <p><b>SMT – Private mobile radio (MOV)</b></p> <p><b>SMRP – National trunking mobile system (MOV)</b><br/>(frequency assignments in the sub-band 460,0125 – 461,3875 MHz)</p> <p><b>SCPP – Private radio paging (MOV)</b> (468,1125 MHz; 468,1250 MHz; 469,275 MHz)</p> <p><b>ECAR – Equipment of coverage in a restricted area</b><br/>(468,15 MHz; 468,1375 MHz)</p> <p><b>On board communications (maritime)</b> (467,525 MHz; 467,5375 MHz; 467,550 MHz; 467,5625 MHz; 467,575 MHz) (MOV)</p> <p>TETRA civil</p> | <p>450 MHz plan</p> <p>MPT 1327</p> <p>On-site paging</p> <p>ERC/DEC/(96)04<br/>Some channels within the band 450-470 MHz</p> <p>Government<br/>(468,2125-469,2125 MHz; 469,3625-469,5875 MHz)</p> |
| 470 - 790               | <p><b>BROADCASTING</b></p> <p>Land mobile (S5.296)*</p> <p>S5.149*, S5.306, S5.311</p>                        | <p><b>Analogue television broadcasting (RAD)</b></p> <p>DVB-T – Digital television broadcasting (646-862 MHz) (RAD)</p>                                                                                                                                                                                                                                                                                                                                                                                              | <p>Bands IV (470-582 MHz) and V (582-790 MHz) (channels 21 to 60) ST-61</p> <p>Band V (some channels between 43 and 69)</p>                                                                        |
| 790 - 862               | <p><b>FIXED</b></p> <p><b>BROADCASTING</b></p> <p>MOBILE except aeronautical mobile (S5.316)*<br/>S5.XXX*</p> | <p><b>STL – Studio transmitter link (FIX)</b> (838,75-852,25 MHz)</p> <p><b>Analogue television broadcasting (RAD)</b></p> <p>DVB-T – Digital television broadcasting (646-862 MHz) (RAD)</p> <p>IMT-2000 - International Mobile Telecommunications - 2000 (MOV)</p>                                                                                                                                                                                                                                                 | <p>To be completely abandoned until the end of 1999</p> <p>Band V (some channels between 43 and 69)</p> <p>Designated by WRC-2000 as additional bands (806-960 MHz)</p>                            |
| 862 - 890               | <p>FIXED</p> <p>MOBILE except aeronautical mobile S5.XXX*</p>                                                 | <p>GSM – Global system for mobile communications (MOV)<br/>(extension band: 880-890 MHz)</p> <p>IMT-2000 - International Mobile Telecommunications - 2000 (MOV)</p> <p><b>Sodal alarms (869,2-869,25 MHz)</b></p>                                                                                                                                                                                                                                                                                                    | <p>CEPT Rec T/R 75-02<br/>(862-960 MHz)</p> <p>ERC/DEC/(97)02</p> <p>Designated by WRC-2000 as additional bands (806-960 MHz)</p> <p>ERC/DEC/(97)06</p> <p>Government<br/>(873-878 MHz)</p>        |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                    | NATIONAL USAGE                                                                                                                                                                                                                                                                                           | NOTES                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 890 - 942               | <p>FIXED</p> <p><b>MOBILE</b> except aeronautical mobile S5.XXX*</p> <p>Radiolocation</p>                                                                                                                                       | <p><b>GSM – Global system for mobile communications (MOV)</b> (frequency assignments in the sub-bands 890-914 MHz and 935-942 MHz); (extension band: 925-935 MHz)</p> <p><b>CT1 – Cordless telephones (MOV)</b> (914-915 MHz)</p> <p>IMT-2000 - International Mobile Telecommunications - 2000 (MOV)</p> | <p>CEPT Rec T/R 75-02 (862-960 MHz)</p> <p>ERC/DEC/(94)01<br/>Directive 87/372/EEC<br/>CEPT Rec T/R 20-08<br/>ERC/DEC/(97)02</p> <p>CEPT Rec T/R 24-03 (914-915 MHz; 959-960 MHz)</p> <p>Designated by WRC-2000 as additional bands (806-960 MHz)</p> <p>Government (918-923 MHz)</p> |
| 942 - 960               | <p>FIXED</p> <p><b>MOBILE</b> except aeronautical mobile S5.XXX*</p>                                                                                                                                                            | <p><b>GSM – Global system for mobile communications (MOV)</b> (frequency assignments in the sub-band 942-959 MHz)</p> <p><b>CT1 – Cordless telephones (MOV)</b> (959-960 MHz)</p> <p>IMT-2000 - International Mobile Telecommunications - 2000 (MOV)</p>                                                 | <p>CEPT Rec T/R 75-02 (862-960 MHz)</p> <p>ERC/DEC/(94)01<br/>Directive 87/372/EEC<br/>CEPT Rec T/R 20-08</p> <p>CEPT Rec T/R 24-03 (914-915 MHz; 959-960 MHz)</p> <p>Designated by WRC-2000 as additional bands (806-960 MHz)</p>                                                    |
| 960 - 1215              | <p><b>AERONAUTICAL RADIONAVIGATION</b> S5.328</p> <p>S5.328A*</p>                                                                                                                                                               | <p><b>Flight, safety and navigation systems – DME, TACAN, SSR (RVA)</b></p>                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                       |
| 1215 - 1240             | <p>EARTH EXPLORATION-SATELLITE (active)</p> <p>RADIOLOCATION</p> <p><b>RADIONAVIGATION-SATELLITE (space-to-Earth)</b> S5.329*, S5.329A*</p> <p>SPACE RESEARCH (active)</p> <p>RADIONAVIGATION (S5.331 (712))</p> <p>S5.332*</p> | <p><b>GPS – Global positioning system (RVA-S)</b></p>                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                                                        | NATIONAL USAGE                                             | NOTES                                                                                                          |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1240 - 1260             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>RADIONAVIGATION-SATELLITE<br>(space-to-Earth) S5.329*, S5.329A*<br><br>SPACE RESEARCH (active)<br><br><b>Amateur</b><br><br>RADIONAVEGAÇÃO (S5.331)*<br><br>S5.332*                                                             | <b>Amateur (AM)</b>                                        | Amateur national regulations<br>CEPT Rec T/R 61-01                                                             |
| 1260 - 1300             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>RADIONAVIGATION-SATELLITE<br>(space-to-Earth) (space-to-space)<br>S5.329*, S5.329A*<br><br>SPACE RESEARCH (active)<br><br><b>Amateur</b><br><br><b>Amateur-satellite</b> S5.282<br><br>RADIONAVIGATION(S5.331)*<br><br>S5.335A* | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01                                                             |
| 1300 - 1350             | <b>AERONAUTICAL RADIONAVIGATION</b><br>S5.337<br><br>RADIOLOCATION<br><br>RADIONAVIGATION-SATELLITE<br>(Earth-to-space)<br><br>S5.149*, S5.337A*                                                                                                                                                    | <b>Radars (RVA; RLC)</b>                                   |                                                                                                                |
| 1350 - 1400             | <b>FIXED</b><br><br><br>MOBILE<br><br>RADIOLOCATION<br><br>S5.149, S5.339                                                                                                                                                                                                                           | <b>Fixed links (FIX)</b>                                   | Planned use in accordance with<br>CEPT Rec T/R 13-01<br>Annex A (1350-1375 MHz) and<br>Annex B (1375-1400 MHz) |
| 1400 - 1427             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.341                                                                                                                                                                              | ALL EMISSIONS ARE PROHIBITED IN THIS BAND                  |                                                                                                                |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                             | NATIONAL USAGE                                                                                                              | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1427 - 1429             | SPACE OPERATION<br>(Earth-to-space)<br><br>FIXED<br><br>MOBILE except aeronautical<br>mobile<br><br>S5.341                                                               |                                                                                                                             | Band 1,5 GHz<br>Planned use in accordance with<br>CEPT Rec T/R 13-01 Annex B<br>(1427-1452MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1429 - 1452             | FIXED<br><br><br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>S5.341                                                                                          | Fixed links (FIX)                                                                                                           | Band 1,5 GHz<br>Low capacity analogue and<br>digital fixed links: 30 channels<br>and 2 Mbit/s<br>Recommendation ITU-R F 746-1<br>(1429-1525 MHz)<br>(to be cancelled)<br>Planned use in accordance with<br>CEPT Rec T/R 13-01 Annex B<br>(1427-1452MHz)                                                                                                                                                                                                                                                                                                            |
| 1452 - 1492             | FIXED<br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>BROADCASTING S5.345, (S5.347)*<br><br><br>BROADCASTING-SATELLITE<br>S5.345, (S5.347)*<br><br><br>S5.341 | Fixed links (FIX)<br><br><br><br>T-DAB: Sound broadcasting (RAD)<br><br><br>S-DAB: Sound broadcasting-<br>satellite (RAD-S) | and 1,5 GHz<br>Low capacity analogue and<br>digital fixed links: 30 channels<br>and 2 Mbit/s<br>Recommendation ITU-R F 746-1<br>(1429-1525 MHz)<br>(to be cancelled)<br><br>CEPT/ERC Rec T/R 52-02<br>This band will be partially<br>planned by a CEPT conference<br>during the year 2001<br><br>Band designated by WARC-92<br>for digital broadcasting-satellite<br>sound, from 2007 onwards<br>Decided within CEPT to limit the<br>S-DAB plan to a part of this<br>band (its use in CEPT is<br>dependent on the decisions to<br>be taken for T-DAB in this band) |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                          | NATIONAL USAGE                                                                             | NOTES                                                                                                                                                                                                                                  |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1492 - 1525             | <b>FIXED</b><br><br>MOBILE except aeronautical mobile<br>S5.341                                                                                                                                       | <b>Fixed links (FIX)</b><br><br><b>STL – Studio transmitter link (FIX) (1517-1525 MHz)</b> | Band 1,5 GHz<br>Low capacity analogue and digital fixed links: 30 channels and 2 Mbit/s<br>Recommendation ITU-R F 746-1 (1429-1525 MHz) (to be cancelled)<br>Planned use in accordance with CEPT Rec T/R 13-01 Annex A (1492-1517 MHz) |
| 1525 - 1530             | SPACE OPERATION (space-to-Earth)<br><b>FIXED</b><br><b>MOBILE-SATELLITE (space-to-Earth) S5.SSS*</b><br>Earth exploration-satellite<br>Mobile except aeronautical mobile<br>S5.341, S5.351, S5.354    | <b>Maritime mobile-satellite (MM-S)</b>                                                    |                                                                                                                                                                                                                                        |
| 1530 - 1533             | SPACE OPERATION (space-to-Earth)<br><b>MOBILE-SATELLITE (space-to-Earth) S5.353A*, S5.SSS*</b><br>Earth exploration-satellite<br>Fixed<br>Mobile except aeronautical mobile<br>S5.341, S5.351, S5.354 | <b>Maritime mobile-satellite (MM-S)</b><br><b>Land mobile-satellite (MT-S)</b>             |                                                                                                                                                                                                                                        |
| 1533 – 1535             | SPACE OPERATION (space-to-Earth)<br><b>MOBILE-SATELLITE (space-to-Earth) S5.353A*, S5.SSS*</b><br>Earth exploration-satellite<br>Fixed<br>Mobile except aeronautical mobile<br>S5.341, S5.351, S5.354 | <b>Land mobile-satellite (MT-S)</b>                                                        |                                                                                                                                                                                                                                        |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                           | NATIONAL USAGE                                                                           | NOTES                                                                 |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 1535 – 1544             | <b>MOBILE-SATELLITE<br/>(space-to-Earth) S5.SSS*</b><br>S5.341, S5.351, S5.353A*, S5.354                                                                                               | Maritime mobile-satellite (MM-S)                                                         |                                                                       |
| 1544 - 1545             | <b>MOBILE-SATELLITE<br/>(space-to-Earth)</b><br>S5.341, S5.354, S5.356                                                                                                                 | Search and rescue satellite<br>systems, including GMDSS<br>(MV-S)                        | Band limited to distress and<br>rescue systems                        |
| 1545 - 1559             | MOBILE-SATELLITE<br>(space-to-Earth) S5.SSS*<br>S5.341, S5.351, S5.354, S5.357,<br>S5.357A*                                                                                            |                                                                                          |                                                                       |
| 1559 - 1610             | AERONAUTICAL RADIONAVIGATION<br><b>RADIONAVIGATION-SATELLITE<br/>(space-to-Earth) (space-to-space)</b><br>S5.329A*<br>S5.341                                                           | <b>GPS – Global positioning<br/>system (RVA-S)</b>                                       |                                                                       |
| 1610 - 1610,6           | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br>AERONAUTICAL RADIONAVIGATION<br>S5.341, S5.364, S5.366, S5.367,<br>S5.368, S5.371, S5.372                                              | S-PCS (1610-1626,5 MHz):<br>CDMA (1610-1621,35 MHz) and<br>TDMA (1621,35-1626,5) systems | ERC/DEC/(97)03                                                        |
| 1610,6 - 1613,8         | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br>RADIO ASTRONOMY<br>AERONAUTICAL RADIONAVIGATION<br>S5.149*, S5.341, S5.364, S5.366,<br>S5.367, S5.368, S5.371, S5.372                  | S-PCS (1610-1626,5 MHz):<br>CDMA (1610-1621,35 MHz) and<br>TDMA (1621,35-1626,5) systems | ERC/DEC/(97)03<br><br>Important band for radio<br>astronomy in Europe |
| 1613,8 - 1626,5         | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br>AERONAUTICAL RADIONAVIGATION<br>Mobile-satellite (space-to-Earth)<br>S5.341, S5.364, S5.365, S5.366,<br>S5.367, S5.368, S5.371, S5.372 | S-PCS (1610-1626,5 MHz):<br>CDMA (1610-1621,35 MHz) and<br>TDMA (1621,35-1626,5) systems | ERC/DEC/(97)03                                                        |
| 1626,5 – 1631,5         | <b>MOBILE-SATELLITE<br/>(Earth-to-space) S5.SSS*</b><br>S5.341, S5.351, S5.353A*, S5.354                                                                                               | Maritime mobile-satellite<br>(MM-S)                                                      |                                                                       |
| 1631,5 – 1634,5         | <b>MOBILE-SATELLITE<br/>(Earth-to-space) S5.SSS*</b><br>S5.341, S5.351, S5.353A*, S5.354,<br>S5.374                                                                                    | Maritime mobile-satellite<br>(MM-S)                                                      |                                                                       |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                | NATIONAL USAGE                                                             | NOTES                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------|
| 1634,5 – 1645,5         | <b>MOBILE-SATELLITE<br/>(Earth-to-space) S5.SSS*</b><br><br>S5.341, S5.351, S5.353A*, S5.354                                                | <b>Mobile-satellite (MT-S)</b>                                             |                                                 |
| 1645,5 – 1646,5         | <b>MOBILE-SATELLITE<br/>(Earth-to-space) S5.SSS*</b><br><br>S5.341, S5.354, S5.375                                                          | <b>Search and rescue satellite<br/>systems, including GMDSS<br/>(MV-S)</b> | Band limited to distress and<br>rescue systems  |
| 1646,5 – 1656,5         | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br><br>S5.341, S5.351, S5.354, S5.357A*,<br>S5.376                                             |                                                                            |                                                 |
| 1656,5 – 1660           | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br><br>S5.341, S5.351, S5.354, S5.374                                                          |                                                                            |                                                 |
| 1660 – 1660,5           | MOBILE-SATELLITE<br>(Earth-to-space) S5.SSS*<br><br>RADIO ASTRONOMY<br><br>S5.149*, S5.341, S5.351, S5.354,<br>S5.376A                      |                                                                            | Important band for radio<br>astronomy in Europe |
| 1660,5 – 1668,4         | RADIO ASTRONOMY<br><br>SPACE RESEARCH<br>(passive)<br><br>Fixed<br><br>Mobile except aeronautical<br>mobile<br><br>S5.149*, S5.341, S5.379A |                                                                            | Important band for radio<br>astronomy in Europe |
| 1668,4 – 1670           | METEOROLOGICAL AIDS<br><br>FIXED<br><br>MOBILE except aeronautical<br>mobile<br><br>RADIO ASTRONOMY<br><br>S5.149*, S5.341                  |                                                                            | Important band for radio<br>astronomy in Europe |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                   | NATIONAL USAGE                                                                                                   | NOTES                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1670 - 1675             | METEOROLOGICAL AIDS<br><br>FIXED<br><br>METEOROLOGICAL-SATELLITE<br>(space-to-Earth)<br><br>MOBILE S5.380<br><br>S5.341                                        | TFTS – Terrestrial flight<br>telephone system (ground-air)<br>(MOV); (1670-1675 MHz)                             | ERC/DEC/(92)01<br>CEPT/ERC Rec T/R 42-01                                         |
| 1675 - 1690             | METEOROLOGICAL AIDS<br><br>FIXED<br><br>METEOROLOGICAL-SATELLITE<br>(space-to-Earth)<br><br>MOBILE except aeronautical<br>mobile<br><br>S5.341                 |                                                                                                                  | Government                                                                       |
| 1690 - 1700             | METEOROLOGICAL AIDS<br><br><b>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)</b><br><br>Fixed<br><br>Mobile except aeronautical<br>mobile<br><br>S5.289, S5.341 | <b>METEOSAT – Meteorological<br/>satellites for high resolution<br/>pictures transmission –<br/>HRPT (MET-S)</b> |                                                                                  |
| 1700 - 1710             | <b>FIXED</b><br><br>METEOROLOGICAL-SATELLITE<br>(space-to-Earth)<br><br>MOBILE except aeronautical<br>mobile<br><br>S5.289, S5.341                             | <b>Fixed links (FIX)</b>                                                                                         | 2 GHz band<br>Recommendation ITU-R F 283-5<br>(1.7-1.9 GHz)<br>(to be cancelled) |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                               | NATIONAL USAGE                                                                                                                                                                                                                                                                                                                                                           | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1710 - 1930             | <p><b>FIXED</b></p> <p><b>MOBILE</b> S5.380, S5.AAA*, S5.BBB*</p> <p>S5.149*, S5.341, S5.385*, S5.388*</p> | <p><b>Fixed links (FIX)</b></p> <p><b>DCS 1800 – Digital communications system (1710-1785 MHz; 1805-1880 MHz)</b></p> <p>TFTS – Terrestrial flight telephone system (air-ground) (MOV); (1800-1805 MHz)</p> <p><b>DECT – Digital cellular telecommunications system (MOV); (1880-1900 MHz)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p> | <p>2 GHz band<br/>Low and medium capacity analogue and digital fixed links: 30-960 channels and 2-34 Mbit/s<br/>Recommendations ITU-R F 283-5 (1.7-1.9 GHz and 1.9-2.1 GHz) and ITU-R F 382-7 (1.7-2.1 GHz and 1.9-2.3 GHz)<br/>(to be cancelled)</p> <p>ERC/DEC/(95)03<br/>CEPT Rec T/R 22-07</p> <p>ERC/DEC/(92)01<br/>CEPT/ERC Rec T/R 42-01</p> <p>ERC/DEC/(94)03<br/>Directive 91/287/EEC<br/>CEPT Rec T/R 22-02</p> <p>Designated by WARC-1992 the bands 1885-2025 MHz and 2110-2200 MHz<br/>Designated by WRC-2000 as additional bands (1710-1885 MHz)<br/>ERC/DEC/(97)07<br/>(Terrestrial component: 1900-1980 MHz; 2010-2025 MHz; 2110-2170 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p> |
| 1930 - 1980             | <p><b>FIXED</b></p> <p><b>MOBILE</b> S5.BBB*</p> <p>S5.388*</p>                                            | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p>                                                                                                                                                                                                                                                                    | <p>2 GHz band<br/>Low and medium capacity analogue and digital fixed links: 30-960 channels and 2-34 Mbit/s<br/>Recommendations ITU-R F 283-5 (1.9-2.1 GHz) and ITU-R F 382-7 (1.7-2.1 GHz and 1.9-2.3 GHz)<br/>(to be cancelled)</p> <p>Designated by WARC-1992 the bands 1885-2025 MHz and 2110-2200 MHz<br/>ERC/DEC/(97)07 (Terrestrial component: 1900-1980 MHz; 2010-2025 MHz; 2110-2170 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p>                                                                                                                                                                                                                                                        |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                                            | NATIONAL USAGE                                                                                                                            | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1980 - 2010             | <p><b>FIXED</b></p> <p><b>MOBILE</b></p> <p><b>MOBILE-SATELLITE</b><br/>(Earth-to-space) S5.SSS*<br/>S5.388*, S5.389A</p>                                                                                                                                                               | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p> <p>S-PCS (1980-2010 MHz)</p>        | <p>2 GHz band<br/>Low and medium capacity analogue and digital fixed links: 30-960 channels and 2-34 Mbit/s Recommendations ITU-R F 283-5 (1.9-2.1 GHz) and ITU-R F 382-7 (1.7-2.1 GHz and 1.9-2.3 GHz) (to be cancelled)<br/>ERC/DEC/(97)04</p> <p>Designated by WARC-1992 the bands 1885-2025 MHz and 2110-2200 MHz<br/>ERC/DEC/(97)07<br/>(Satellite component: 1980-2010 MHz; 2170-2200 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p> <p>ERC/DEC/(97)03<br/>ERC/DEC/(97)04</p> |
| 2010 - 2025             | <p><b>FIXED</b></p> <p><b>MOBILE S5.BBB*</b></p> <p>S5.388*</p>                                                                                                                                                                                                                         | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p>                                     | <p>2 GHz band<br/>Low and medium capacity analogue and digital fixed links: 30-960 channels and 2-34 Mbit/s Recommendations ITU-R F 283-5 (1.9-2.1 GHz) and ITU-R F 382-7 (1.7-2.1 GHz and 1.9-2.3 GHz) (to be cancelled)</p> <p>Designated by WARC-1992 the bands 1885-2025 MHz and 2110-2200 MHz<br/>ERC/DEC/(97)07<br/>(Terrestrial component: 1900-1980 MHz; 2010-2025 MHz; 2110-2170 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p>                                            |
| 2025 - 2110             | <p><b>SPACE OPERATION</b><br/>(Earth-to-space)(space-to-space)</p> <p><b>EARTH EXPLORATION-SATELLITE</b><br/>(Earth-to-space)<br/>(space-to-space)</p> <p><b>FIXED</b></p> <p><b>MOBILE S5.391</b></p> <p><b>SPACE RESEARCH</b> (Earth-to-space)<br/>(space-to-space)</p> <p>S5.392</p> | <p><b>TCR – Tracking control and ranging (OE)</b></p> <p><b>DORIS system</b><br/>(2036,25 MHz 400 Hz)</p> <p><b>Fixed links (FIX)</b></p> | <p>2 GHz band<br/>Low and medium capacity analogue and digital fixed links: 30-960 channels and 2-34 Mbit/s Recommendations ITU-R F 283-5 (1.9-2.1 GHz) and ITU-R F 382-7 (1.7-2.1 GHz and 1.9-2.3 GHz) (to be cancelled)<br/>Planned use in accordance with CEPT Rec T/R 13-01 Annex C (2025-2110 MHz)</p>                                                                                                                                                                       |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                     | NATIONAL USAGE                                                                                                                     | NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2110 - 2120             | <p><b>FIXED</b></p> <p>MOBILE S5.BBB*</p> <p>SPACE RESEARCH<br/>(deep space) (Earth-to-space)</p> <p>S5.388*</p> | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p>                              | <p>2 GHz band<br/>Low and medium capacity<br/>analogue and digital fixed links:<br/>30-960 channels and 2-34 Mbit/s<br/>Recommendations ITU-R F 283-5<br/>(2.1-2.3 GHz) and ITU-R F 382-7<br/>(1.9-2.3 GHz)<br/>(to be cancelled)</p> <p>Designated by WARC-1992<br/>the bands 1885-2025 MHz<br/>and 2110-2200 MHz<br/>ERC/DEC/(97)07<br/>(Terrestrial component:<br/>1900-1980 MHz; 2010-2025 MHz;<br/>2110-2170 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p> |
| 2120 - 2170             | <p><b>FIXED</b></p> <p>MOBILE S5.BBB*</p> <p>S5.388*</p>                                                         | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p>                              | <p>2 GHz band<br/>Low and medium capacity<br/>analogue and digital fixed links:<br/>30-960 channels and 2-34 Mbit/s<br/>Recommendations ITU-R F 283-5<br/>and ITU-R F 382-7<br/>(1900-2300 MHz)<br/>(to be cancelled)</p> <p>Designated by WARC-1992<br/>the bands 1885-2025 MHz<br/>and 2110-2200 MHz<br/>ERC/DEC/(97)07 (Terrestrial<br/>component: 1900-1980 MHz;<br/>2010-2025 MHz; 2110-2170 MHz)<br/>ERC/DEC(99)25<br/>ERC/DEC(00)01</p>                 |
| 2170 - 2200             | <p><b>FIXED</b></p> <p>MOBILE</p> <p>MOBILE-SATELLITE<br/>(space-to-Earth) S5.SSS*</p> <p>S5.388*, S5.389A</p>   | <p><b>Fixed links (FIX)</b></p> <p>IMT-2000 – International mobile telecommunication – 2000 (MOV)</p> <p>S-PCS (2170-2200 MHz)</p> | <p>2 GHz band<br/>Low and medium capacity<br/>analogue and digital fixed links:<br/>30-960 channels and 2-34 Mbit/s<br/>Recommendations ITU-R F 283-5<br/>and ITU-R F 382-7<br/>(1900-2300 MHz)<br/>(to be cancelled)<br/>ERC/DEC/(97)04</p> <p>Designated by WARC-1992<br/>the bands 1885-2025 MHz<br/>and 2110-2200 MHz<br/>ERC/DEC/(97)07 (Satellite<br/>component: 1980-2010 MHz;<br/>2170-2200 MHz)</p> <p>ERC/DEC/(97)03<br/>ERC/DEC/(97)04</p>          |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                                         | NATIONAL USAGE                                                                                              | NOTES                                                                                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2200 - 2290             | <b>SPACE OPERATION</b><br><b>(space-to-Earth) (space-to-space)</b><br><br>EARTH EXPLORATION-SATELLITE<br>(space-to-Earth) (space-to-space)<br><br><b>FIXED</b><br><br><br><br><br><br><br><br>MOBILE S5.391<br><br>SPACE RESEARCH<br>(space-to-Earth) (space-to-space)<br><br>S5.392 | <b>TCR – Tracking, control and<br/>ranging (OE)</b><br><br><br><br><br><br><br><br><b>Fixed links (FIX)</b> | 2 GHz band<br>Low and medium capacity<br>analogue and digital fixed links:<br>30-960 channels and 2-34 Mbit/s<br>Recommendations ITU-R F 283-5<br>and ITU-R F 382-7<br>(1900-2300 MHz)<br>(to be cancelled)<br>Planned use in accordance with<br>CEPT Rec T/R 13-01 Annex C<br>(2200-2290 MHz) |
| 2290 - 2300             | <b>FIXED</b><br><br><br><br><br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>SPACE RESEARCH<br>(deep space) (space-to-Earth)                                                                                                                                              | <b>Fixed links (FIX)</b>                                                                                    | 2 GHz band<br>Low and medium capacity<br>analogue and digital fixed links:<br>30-960 channels and 2-34 Mbit/s<br>Recommendations ITU-R F 283-5<br>and ITU-R F 382-7<br>(1900-2300 MHz)<br>(to be cancelled)                                                                                    |
| 2300 - 2400             | <b>FIXED</b><br><br><br><br><br><br><br><br>MOBILE<br><br>Amateur<br><br>Radiolocation<br><br>S5.150, S5.282                                                                                                                                                                         | <b>Fixed links (FIX)</b>                                                                                    | 2 GHz band<br>ENG/OB – analogue transportable<br>links for television broadcasting<br>(2300-2500 MHz)<br>Recommendation ITU-R F 283-5<br>(to be cancelled)                                                                                                                                     |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                           | NATIONAL USAGE                                                                                                                                                                                                                                                    | NOTES                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2400 - 2450             | <b>FIXED</b><br><br>MOBILE<br>Amateur<br><b>Amateur-satellite</b><br>S5.282<br>Radiolocation<br><br>S5.150                             | <b>Fixed links (FIX)</b><br><br><b>Amateur-satellite (AM-S)</b><br><br><b>ISM – Industrial, scientific and medical applications (2400-2500 MHz)</b><br><br><b>SRD – Non-specific short range devices (2400-2483,5 MHz); RLANS and HIPERLANs (2400-2483,5 MHz)</b> | 2 GHz band<br>ENG/OB – analogue transportable links for television broadcasting (2300-2500 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>Amateur national regulations<br>CEPT Rec T/R 61-01<br><br>CEPT/ERC/REC 70-03 Annex 1, Annex 3<br>National regulation no. 859/94 of 23/9 |
| 2450 - 2483,5           | <b>FIXED</b><br><br>MOBILE<br>Radiolocation<br><br>S5.150                                                                              | <b>Fixed links (FIX)</b><br><br><b>ISM – Industrial, scientific and medical applications (2400-2500 MHz)</b><br><br><b>SRD – Non-specific short range devices (2400-2483,5 MHz); RLANS and HIPERLANs (2400-2483,5 MHz)</b>                                        | 2 GHz band<br>ENG/OB – analogue transportable links for television broadcasting (2300-2500 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>CEPT/ERC/REC 70-03 Annex 1, Annex 3<br>National regulation no. 859/94 of 23/9                                                           |
| 2483,5 - 2500           | <b>FIXED</b><br><br>MOBILE<br>MOBILE-SATELLITE (space-to-Earth) S5.SSS*<br>Radiolocation<br><br>S5.150, S5.371, S5.398, S5.399, S5.402 | <b>Fixed links (FIX)</b><br><br>S-PCS (2483,5-2500 MHz)<br><br><b>ISM – Industrial, scientific and medical applications (2400-2500 MHz)</b>                                                                                                                       | 2 GHz band<br>ENG/OB – analogue transportable links for television and sound broadcasting (2300-2500 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>ERC/DEC/(97)03                                                                                                                |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                             | NATIONAL USAGE                                                                                    | NOTES                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2500 - 2520             | <b>FIXED</b> S5.409, S5.410, S5.411<br><br>MOBILE except aeronautical mobile S5.AAA*<br><br>MOBILE-SATELLITE (space-to-Earth) S5.403, S5.SSS*<br><br>S5.414                                                                                                              | <b>Fixed links (FIX)</b><br><br><br>IMT-2000 - International mobile telecommunications-2000 (MOV) | 2 GHz band<br>ENG/OB – analogue transportable links for television broadcasting (2500-2700 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>Designated by WRC-2000 as additional bands (2500-2690 MHz)<br><br>Band allocated to the mobile satellite service up from 1.1.2005 |
| 2520 - 2655             | <b>FIXED</b> S5.409, S5.410, S5.411<br><br>MOBILE except aeronautical mobile S5.AAA*<br><br>BROADCASTING-SATELLITE S5.413, S5.416<br><br>S5.339, S5.403, S5.[XXX2]*, S5.[XXX3]*                                                                                          | <b>Fixed links (FIX)</b><br><br><br>IMT-2000 - International mobile telecommunications-2000 (MOV) | 2 GHz band<br>ENG/OB – analogue transportable links for television and sound broadcasting (2500-2700 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>Designated by WRC-2000 as additional bands (2500-2690 MHz)                                                              |
| 2655 - 2670             | <b>FIXED</b> S5.409, S5.410, S5.411<br><br>MOBILE except aeronautical mobile S5.AAA*<br><br>BROADCASTING-SATELLITE S5.413, S5.416<br><br>Earth exploration-satellite (passive)<br><br>Radio astronomy<br><br>Space research (passive)<br><br>S5.149*, S5.420             | <b>Fixed links (FIX)</b><br><br><br>IMT-2000 - International mobile telecommunications-2000 (MOV) | 2 GHz band<br>ENG/OB – analogue transportable links for television broadcasting (2500-2700 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>Designated by WRC-2000 as additional bands (2500-2690 MHz)                                                                        |
| 2670 - 2690             | <b>FIXED</b> S5.409, S5.410, S5.411<br><br>MOBILE except aeronautical mobile S5.AAA*<br><br>MOBILE-SATELLITE (Earth-to-space) S5.SSS*<br><br>Earth exploration-satellite (passive)<br><br>Radio astronomy<br><br>Space research (passive)<br><br>S5.149*, S5.419, S5.420 | <b>Fixed links (FIX)</b><br><br><br>IMT-2000 - International mobile telecommunications-2000 (MOV) | 2 GHz band<br>ENG/OB – analogue transportable links for television broadcasting (2500-2700 MHz)<br>Recommendation ITU-R F 283-5 (to be cancelled)<br><br>Designated by WRC-2000 as additional bands (2500-2690 MHz)<br><br>Band allocated to the mobile satellite service up from 1.1.2005 |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                          | NATIONAL USAGE                                                                                                                                           | NOTES                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2690 - 2700             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*        | ALL EMISSIONS ARE PROHIBITED IN THIS BAND                                                                                                                |                                                                                                                                                                                   |
| 2700 - 2900             | <b>AERONAUTICAL RADIONAVIGATION</b><br>S5.337<br><br><b>METEOROLOGICAL AIDS</b><br>S5.423<br><br><b>Radiolocation</b> | <b>Radionavigation systems (RVA)</b><br><br><b>Meteorological radars (METAX)</b><br><br><b>Radars (RVA, RLC)</b>                                         |                                                                                                                                                                                   |
| 2900 - 3100             | <b>RADIONAVIGATION</b> S5.426<br><br><b>Radiolocation</b><br><br>S5.425, S5.427                                       | <b>Radars (RVA, RLC)</b>                                                                                                                                 |                                                                                                                                                                                   |
| 3100 - 3300             | <b>RADIOLOCATION</b><br><br>Earth exploration-satellite<br>(active)<br><br>Space research (active)<br><br>S5.149*     | <b>Radars (RLC)</b>                                                                                                                                      | Government                                                                                                                                                                        |
| 3300 - 3400             | <b>RADIOLOCALIZAÇÃO</b><br><br>S5.149*                                                                                | <b>Radars (RLC)</b>                                                                                                                                      | Government                                                                                                                                                                        |
| 3400 - 3600             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br>Mobile<br><br>Radiolocation                        | <b>Fixed (FIX) – applications P-MP</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                                             | CEPT/ERC/REC 14-03, Annex B                                                                                                                                                       |
| 3600 - 4200             | <b>FIXED</b><br><br><br><br><br><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br>Mobile                         | <b>Fixed links (FIX)</b><br><br><br><br><br><b>FWA (3 blocs of 2x28 MHz within<br/>the sub-band 3600-3800 MHz)</b><br><br><b>Fixed-satellite (FIX-S)</b> | 4 GHz band<br>Medium and high capacity<br>analogue fixed links:<br>600-1800 channels<br>Rec ITU-R F 382-7<br>(3800-4200 MHz)<br><br>CEPT/ERC/REC 12-08 Annex B<br>(3600-3800 MHz) |
| 4200 - 4400             | <b>AERONAUTICAL RADIONAVIGATION</b><br>S5.438<br><br>S5.440                                                           | <b>Radars (RVA)</b>                                                                                                                                      |                                                                                                                                                                                   |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                            | NATIONAL USAGE                  | NOTES                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------|
| 4400 - 4500             | FIXED<br><br>MOBILE                                                                                                                     |                                 | Government                                      |
| 4500 - 4800             | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br>S5.441*<br><br>MOBILE                                                                  |                                 | RR Ap. S30B<br><br>Government                   |
| 4800 - 4990             | FIXED<br><br>MOBILE S5.442<br><br>Radio astronomy<br><br>S5.149*, S5.339                                                                |                                 | Government                                      |
| 4990 - 5000             | FIXED<br><br>MOBILE except aeronautical<br>mobile<br><br>RADIO ASTRONOMY<br><br>Space research (passive)<br><br>S5.149*                 |                                 | Government                                      |
| 5000 - 5150             | AERONAUTICAL RADIONAVIGATION<br><br>S5.367, S5.444*, S5.444A, S5.444B*,<br>S5.444C*                                                     |                                 | Band reserved for MLS system<br>(5030-5150 MHz) |
| 5150 - 5250             | AERONAUTICAL RADIONAVIGATION<br><br>FIXED-SATELLITE<br>(Earth-to-space) S5.447A<br><br>MOBILE (S5.447)*<br><br>S5.446, S5.447B, S5.447C | <b>HIPERLAN (5150-5250 MHz)</b> | ERC/DEC/(96)03<br>CEPT Rec T/R 22-06            |
| 5250 - 5255             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH<br><br>S5.447D, S5.448A                              | HIPERLAN (5250-5300 MHz)        | CEPT Rec T/R 22-06<br><br>Government            |
| 5255 - 5350             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH (active)<br><br>S5.448A                              | HIPERLAN (5250-5300 MHz)        | CEPT Rec T/R 22-06<br><br>Government            |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                              | NATIONAL USAGE                                                                                                                                                                                                                 | NOTES                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5350 - 5460             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>AERONAUTICAL RADIONAVIGATION<br>S5.449<br><br>Radiolocation<br><br>S5.448B |                                                                                                                                                                                                                                |                                                                                                                                                                     |
| 5460 - 5470             | RADIONAVIGATION S5.449<br><br>Radiolocation                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                     |
| 5470 - 5600             | <b>MARITIME RADIONAVIGATION</b><br><br>Radiolocation<br><br>S5.452                                                        | <b>Radars (RVM)</b>                                                                                                                                                                                                            |                                                                                                                                                                     |
| 5600 - 5650             | <b>MARITIME RADIONAVIGATION</b><br><br><b>METEOROLOGICAL AIDS</b><br>S5.452<br><br>Radiolocation                          | <b>Radars (RVM)</b><br><br><b>Meteorological radars (METAX)</b>                                                                                                                                                                |                                                                                                                                                                     |
| 5650 - 5670             | RADIOLOCATION<br><br>Amateur<br><br><b>Amateur-satellite S5.282</b><br><br>Space research<br>(deep space)                 | <b>Amateur-satellite (AM-S)</b>                                                                                                                                                                                                | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                                                  |
| 5670 - 5725             | RADIOLOCATION<br><br>Amateur<br><br>Space research<br>(deep space)                                                        |                                                                                                                                                                                                                                |                                                                                                                                                                     |
| 5725 - 5830             | FIXED-SATELLITE (Earth-to-space)<br><br>RADIOLOCATION<br><br><b>Amateur</b><br><br><br><br><br><br><br><br><br><br>S5.150 | <b>Amateur (AM)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(5725-5875 MHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (5725-5875 MHz)</b><br><br><b>RTT/RTI (5795-5815 MHz)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br><br><br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9<br><br>ERC/DEC/(92)02 |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                            | NATIONAL USAGE                                                                                                                                                                           | NOTES                                                                                                                                                                                                                                                                                                                  |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5830 - 5850             | FIXED-SATELLITE (Earth-to-space)<br><br>RADIOLOCATION<br><br><b>Amateur</b><br><br>Amateur-satellite<br>(space-to-Earth)<br><br><br><br>S5.150                          | <b>Amateur (AM)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(5725-5875 MHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (5725-5875 MHz)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9                                                                                                                                                                                  |
| 5850 - 5925             | FIXED<br><br>FIXED-SATELLITE (Earth-to-space)<br><br>MOBILE<br><br><br><br>S5.150                                                                                       | <b>ISM – Industrial, scientific and<br/>medical applications<br/>(5725-5875 MHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (5725-5875 MHz)</b>                            | CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9                                                                                                                                                                                                                                                |
| 5925 - 6700             | <b>FIXED</b><br><br><br><br><br><br><br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br><br><br>MOBILE<br><br>S5.149*, S5.440, S5.458                                    | <b>Fixed links (FIX)</b><br><br><br><br><br><br><br><b>Fixed-satellite (FIX-S): VSATs;<br/>SNGs; occasional carriers;<br/>permanent carriers</b>                                         | Lower 6 GHz band<br>(5925-6425 MHz)<br>Upper 6 GHz band<br>(6425-7110 MHz)<br>Medium and high capacity<br>analogue fixed links:<br>600 to 1800 channels<br>Recommendation ITU-R F 383-5<br>(5925-6425 MHz)<br>Recommendation ITU-R F 384-6<br>(6425-7110 MHz)<br><br>5925-6425 MHz: non-preferential<br>band for VSATs |
| 6700 - 7075             | <b>FIXED</b><br><br><br><br><br><br><br><br><b>FIXED-SATELLITE (Earth-to-space)<br/>(space-to-Earth) S5.441*</b><br><br>MOBILE<br><br>S5.458, S5.458A, S5.458B, S5.458C | <b>Fixed links (FIX)</b><br><br><br><br><br><br><br><b>Fixed-satellite (FIX-S)</b>                                                                                                       | Upper 6 GHz band<br>(6425-7110 MHz)<br>High capacity analogue and digital<br>fixed links: 140 Mbit/s<br>Recommendation ITU-R F 384-6<br>(6425-7110 MHz)<br><br>RR Ap. S30B<br>(6725-7025 MHz)                                                                                                                          |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                   | NATIONAL USAGE                                                                                                    | NOTES                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7075 - 7250             | <b>FIXED</b><br><br>MOBILE<br>S5.458, S5.460                                                                                                                                   | <b>Fixed links (FIX)</b>                                                                                          | Upper 6 GHz band<br>(6425-7110 MHz)<br>High capacity analogue and digital<br>fixed links: 140 Mbit/s<br>Recommendation ITU-R F 384-6<br>(6425-7110 MHz)<br>Recommendation ITU-R F 385-6<br>(7110-7425 MHz) |
| 7250 - 7300             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br>MOBILE<br>S5.461                                                                                            | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                    | Recommendation ITU-R F 385-6<br>(7110-7425 MHz)<br><br>Government                                                                                                                                          |
| 7300 - 7450             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br>MOBILE except aeronautical mobile<br>S5.461                                                                 | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                    | 7 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 385-6<br>(7110-7425 MHz)                                    |
| 7450 - 7550             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br><b>METEOROLOGICAL-SATELLITE<br/>(space-to-Earth)</b><br><br>MOBILE except aeronautical<br>mobile<br>S5.461A | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b><br><br><b>Meteorological-satellite<br/>(MET-S)</b> | 7 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 385-6<br>(7425-7750 MHz)                                    |
| 7550 - 7750             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (space-to-Earth)</b><br><br>MOBILE except aeronautical<br>mobile                                                                        | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                    | 7 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 385-6<br>(7425-7750 MHz)                                    |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                           | NATIONAL USAGE                                                                                                    | NOTES                                                                                                                                                                                                        |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7750 - 7850             | <b>FIXED</b><br><br>METEOROLOGICAL-SATELLITE<br>(space-to-Earth) S5.461B<br><br>MOBILE except aeronautical<br>mobile                                                                                   | <b>Fixed links (FIX)</b>                                                                                          | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz)                                      |
| 7850 - 7900             | <b>FIXED</b><br><br>MOBILE except aeronautical<br>mobile                                                                                                                                               | <b>Fixed links (FIX)</b>                                                                                          | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz)                                      |
| 7900 - 8025             | <b>FIXED</b><br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br><br>MOBILE<br>S5.461                                                                                                                    | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                    | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz)<br><br>Government<br>(7975-8025 MHz) |
| 8025 - 8175             | EARTH EXPLORATION-SATELLITE<br>(space-to-Earth)<br><br><b>FIXED</b><br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br><br>MOBILE S5.463<br>S5.462A                                                     | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b>                                                    | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz)                                      |
| 8175 - 8215             | EARTH EXPLORATION-SATELLITE<br>(space-to-Earth)<br><br><b>FIXED</b><br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br><br>METEOROLOGICAL-SATELLITE<br>(Earth-to-space)<br><br>MOBILE S5.463<br>S5.462A | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b><br><br><b>Meteorological-satellite<br/>(MET-S)</b> | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz; 8200-8500 MHz)                       |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                           | NATIONAL USAGE                                                 | NOTES                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8215 - 8400             | EARTH EXPLORATION-SATELLITE<br>(space-to-Earth)<br><br><b>FIXED</b><br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br><br>MOBILE S5.463<br><br>S5.462A | <b>Fixed links (FIX)</b><br><br><b>Fixed-satellite (FIX-S)</b> | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(7700-8300 MHz; 8200-8500 MHz) |
| 8400 - 8500             | <b>FIXED</b><br><br>MOBILE except aeronautical<br>mobile<br><br>SPACE RESEARCH<br>(space-to-Earth) S5.465                                              | <b>Fixed links (FIX)</b>                                       | 8 GHz band<br>Low capacity analogue and digital<br>fixed links: up to 120 channels<br>and 4 x 2 Mbit/s, respectively<br>Recommendation ITU-R F 386-5<br>(8200-8500 MHz)                |
| 8500 - 8550             | RADIOLOCATION                                                                                                                                          |                                                                | Government                                                                                                                                                                             |
| 8550 - 8650             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH (active)<br><br>S5.469A                                             |                                                                | Government                                                                                                                                                                             |
| 8650 - 8750             | RADIOLOCATION                                                                                                                                          |                                                                | Government                                                                                                                                                                             |
| 8750 - 8850             | RADIOLOCATION<br><br>AERONAUTICAL RADIONAVIGATION<br>S5.470                                                                                            |                                                                | Government                                                                                                                                                                             |
| 8850 - 9000             | RADIOLOCATION<br><br>MARITIME RADIONAVIGATION<br>S5.472                                                                                                |                                                                | Government                                                                                                                                                                             |
| 9000 - 9200             | <b>AERONAUTICAL RADIONAVIGATION</b><br>S5.337<br><br><b>Radiolocation</b>                                                                              | <b>Radars (RVA, RLC)</b>                                       |                                                                                                                                                                                        |

| FREQUENCY BAND<br>(MHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                      | NATIONAL USAGE                                                                                | NOTES                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 9200 - 9300             | <b>RADIOLOCATION</b><br><br><b>MARITIME RADIONAVIGATION</b><br>S5.472<br><br>S5.474                                               | Radars (RVM, RLC) – SARTs                                                                     |                                                                         |
| 9300 - 9500             | <b>RADIONAVIGATION</b> S5.476<br><br><b>Radiolocation</b><br><br>S5.427, S5.474, S5.475                                           | Radars (RVA, RLC) – SARTs                                                                     |                                                                         |
| 9500 - 9800             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>Radiolocation<br><br>RADIONAVIGATION<br><br>SPACE RESEARCH (active)<br><br>S5.476A | <b>SRD – Equipment for detecting<br/>movement and equipment<br/>for alert (9500-9975 MHz)</b> | CEPT/ERC/REC 70-03 Annex 6<br>National regulation no. 859/94<br>of 23/9 |
| 9800 - 10000            | <b>RADIOLOCATION</b><br><br>Fixed<br><br>S5.479                                                                                   | <b>SRD – Equipment for detecting<br/>movement and equipment<br/>for alert (9500-9975 MHz)</b> | CEPT/ERC/REC 70-03 Annex 6<br>National regulation no. 859/94<br>of 23/9 |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                    | NATIONAL USAGE                                      | NOTES                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 10 - 10,45              | FIXED<br><br>MOBILE<br><br>RADIOLOCATION<br><br><b>Amateur</b><br><br>S5.479                                                                                                                                    | <b>Amateur (AM)</b>                                 | Amateur national regulations<br>CEPT Rec T/R 61-01                                                      |
| 10,45 - 10,5            | RADIOLOCATION<br><br><b>Amateur</b><br><br>Amateur-satellite                                                                                                                                                    | <b>Amateur (AM)</b><br><br>Amateur-satellite (AM-S) | Amateur national regulations<br>CEPT Rec T/R 61-01                                                      |
| 10,5 - 10,55            | <b>FIXED</b><br><br><br><br>MOBILE<br><br>Radiolocation                                                                                                                                                         | <b>Fixed (FIX)</b>                                  | 10 GHz band<br>ENG/OB – analogue transportable<br>links for television broadcasting<br>(10,5-10,68 GHz) |
| 10,55 - 10,6            | <b>FIXED</b><br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>Radiolocation                                                                                                                           | <b>Fixed (FIX)</b>                                  | 10 GHz band<br>ENG/OB – analogue transportable<br>links for television broadcasting<br>(10,5-10,68 GHz) |
| 10,6 - 10,68            | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br><b>FIXED</b><br><br><br>MOBILE except aeronautical<br>mobile<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>Radiolocation<br><br>S5.149*, S5.482 | <b>Fixed (FIX)</b>                                  | 10 GHz band<br>ENG/OB – analogue transportable<br>links for television broadcasting<br>(10,5-10,68 GHz) |
| 10,68 - 10,7            | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>Radiolocation<br><br>S5.340*, S5.482                                                                     | ALL EMISSIONS ARE PROHIBITED IN THIS BAND           |                                                                                                         |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                    | NATIONAL USAGE                                                                                                                                                                                 | NOTES                                                                                                                                                                                                                                                                                      |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10,7 - 11,7             | <p><b>FIXED</b></p> <p><b>FIXED-SATELLITE<br/>(space-to-Earth)</b> S5.441*, S5.484A*<br/>S5.484</p> <p><b>MOBILE</b> except aeronautical<br/>mobile</p>                         | <p><b>Fixed links (FIX)</b></p> <p><b>Fixed-satellite (FIX-S):<br/>VSATs; SNGs</b></p> <p><b>EUTELTRACS – Land mobile<br/>satellite system for data<br/>communications (10,7-11,7 GHz)</b></p> | <p>11 GHz band<br/>High capacity digital fixed links:<br/>140 Mbit/s<br/>Rec. ITU-R F 387-7 Annex 2<br/>(10,7-11,7 GHz)</p> <p>RR Ap. S30B: (10,7-10,95 GHz;<br/>11,2-11,45 GHz)<br/>10,95-11,2 GHz and 11,45-11,7 GHz:<br/>non-preferential bands for VSATs<br/>and SNGs applications</p> |
| 11,7 - 12,5             | <p><b>FIXED</b></p> <p><b>BROADCASTING</b></p> <p><b>BROADCASTING-SATELLITE</b></p> <p><b>MOBILE</b> except aeronautical<br/>mobile</p> <p>S5.487*, S5.487A*, S5.492*</p>       |                                                                                                                                                                                                | <p>12 GHz band</p> <p>RR Ap. S30 and Ap. S30A</p>                                                                                                                                                                                                                                          |
| 12,5 - 12,75            | <p><b>FIXED-SATELLITE<br/>(space-to-Earth)</b> S5.484A*, S5.487A*<br/>(Earth-to-space)</p> <p>Fixed (S5.495)*</p> <p><b>Mobile</b> except aeronautical<br/>mobile (S5.495)*</p> | <p><b>Fixed-satellite (FIX-S):<br/>VSATs; SNGs</b></p> <p><b>EUTELTRACS – Land mobile<br/>satellite system for data<br/>communications (12,5-12,75 GHz)</b></p>                                | <p>Preferential band for<br/>VSATs and SNGs<br/>CEPT/ERC/REC 13-03</p> <p>12 GHz band</p>                                                                                                                                                                                                  |
| 12,75 - 13,25           | <p><b>FIXED</b></p> <p><b>FIXED-SATELLITE<br/>(Earth-to-space)</b> S5.441*</p> <p><b>MOBILE</b></p> <p>Space research<br/>(deep space)<br/>(space-to-Earth)</p>                 | <p><b>Fixed links (FIX)</b></p>                                                                                                                                                                | <p>13 GHz band<br/>Low and medium capacity digital<br/>fixed links: up to 34 Mbit/s<br/>Rec. ITU-R F 497-5 (12,75-13,25 GHz)</p> <p>RR Ap. S30B</p>                                                                                                                                        |
| 13,25 - 13,4            | <p><b>EARTH EXPLORATION-SATELLITE<br/>(active)</b></p> <p><b>AERONAUTICAL RADIONAVIGATION</b><br/>S5.497</p> <p><b>SPACE RESEARCH (active)</b><br/>S5.498A</p>                  |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                            |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                           | NATIONAL USAGE                                                                                                                                                              | NOTES                                                                                             |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 13,4 - 13,75            | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH S5.501A<br><br>Standard frequency and time<br>signal-satellite (Earth-to-space)<br><br>S5.501B                                                      | <b>SRD – Equipment for detecting<br/>movement and equipment<br/>for alert (13,4-14 GHz)</b>                                                                                 | CEPT/ERC/REC 70-03 Annex 6<br>National regulation no. 859/94<br>of 23/9<br><br>Government         |
| 13,75 - 14              | FIXED-SATELLITE (Earth-to-space)<br>S5.484A*<br><br>RADIOLOCATION<br><br>Standard frequency and time<br>signal-satellite (Earth-to-space)<br><br>Space research<br><br>S5.502*, S5.503*, S5.503A                                       | <b>SRD – Equipment for detecting<br/>movement and equipment<br/>for alert (13,4-14 GHz)</b>                                                                                 | CEPT/ERC/REC 70-03 Annex 6<br>National regulation no. 859/94<br>of 23/9<br><br>Government         |
| 14 - 14,25              | <b>FIXED-SATELLITE (Earth-to-space)</b><br>S5.484A*, S5.506<br><br>RADIONAVIGATION S5.504<br><br><b>Mobile-satellite (Earth-to-space)<br/>except aeronautical<br/>mobile-satellite</b><br><br>Space research                           | <b>Fixed-satellite (FIX-S): VSATs;<br/>SNGs; occasional carriers</b><br><br><b>EUTELTRACS – Land mobile<br/>satellite system for data<br/>communications (14-14,25 GHz)</b> | Preferential band for<br>VSATs and SNGs<br>CEPT/ERC/REC 13-03                                     |
| 14,25 - 14,3            | <b>FIXED-SATELLITE (Earth-to-space)</b><br>S5.484A*, S5.506<br><br>RADIONAVIGATION S5.504<br><br>Mobile-satellite (Earth-to-space)<br>except aeronautical mobile-satellite<br><br>Space research<br><br>FIXED (S5.508)*                | <b>Fixed-satellite (FIX-S): VSATs;<br/>SNGs; occasional carriers</b>                                                                                                        | Non-preferential band for VSATs<br>and SNGs applications<br>CEPT/ERC/REC 13-03<br><br>14 GHz band |
| 14,3 - 14,4             | FIXED<br><br><b>FIXED-SATELLITE (Earth-to-space)</b><br>S5.484A*, S5.506<br><br>MOBILE except aeronautical<br>mobile<br><br>Mobile-satellite (Earth-to-space)<br>except aeronautical mobile-satellite<br><br>Radionavigation-satellite | <b>Fixed-satellite (FIX-S): VSATs;<br/>SNGs; occasional carriers</b>                                                                                                        | 14 GHz band<br><br>Non-preferential band for VSATs<br>and SNGs applications<br>CEPT/ERC/REC 13-03 |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                   | NATIONAL USAGE                                                   | NOTES                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 14,4 - 14,47            | <p>FIXED</p> <p><b>FIXED-SATELLITE (Earth-to-space)</b><br/>S5.484A*, S5.506</p> <p>MOBILE except aeronautical mobile</p> <p>Mobile-satellite (Earth-to-space) except aeronautical mobile-satellite</p> <p>Space research (space-to-Earth)</p> | <b>Fixed-satellite (FIX-S): VSATs; SNGs; occasional carriers</b> | <p>14 GHz band</p> <p>Non-preferential band for VSATs and SNGs applications<br/>CEPT/ERC/REC 13-03</p>     |
| 14,47 - 14,5            | <p>FIXED</p> <p><b>FIXED-SATELLITE (Earth-to-space)</b><br/>S5.484A*, S5.506</p> <p>MOBILE except aeronautical mobile</p> <p>Mobile-satellite (Earth-to-space) except aeronautical mobile-satellite</p> <p>Radio astronomy</p> <p>S5.149*</p>  | <b>Fixed-satellite (FIX-S): VSATs; SNGs; occasional carriers</b> | <p>14 GHz band</p> <p>Non-preferential band for VSATs and SNGs applications<br/>CEPT/ERC/REC 13-03</p>     |
| 14,5 - 14,8             | <p><b>FIXED</b></p> <p>FIXED-SATELLITE (Earth-to-space)<br/>S5.510</p> <p>MOBILE</p> <p>Space research</p>                                                                                                                                     | <b>Fixed links (FIX)</b>                                         | <p>15 GHz band<br/>CEPT/ERC/REC 12-07 Annex A (14,5-14,62 GHz)</p> <p>Government<br/>(14,62-14,8 GHz)</p>  |
| 14,8 - 15,35            | <p><b>FIXED</b></p> <p>MOBILE</p> <p>Space research</p> <p>S5.339</p>                                                                                                                                                                          | <b>Fixed links (FIX)</b>                                         | <p>15 GHz band<br/>CEPT/ERC/REC 12-07 Annex A (15,23-15,35 GHz)</p> <p>Government<br/>(14,8-15,23 GHz)</p> |
| 15,35 - 15,4            | <p>EARTH EXPLORATION-SATELLITE (passive)</p> <p>RADIO ASTRONOMY</p> <p>SPACE RESEARCH (passive)</p> <p>S5.340*, S5.511</p>                                                                                                                     | ALL EMISSIONS ARE PROHIBITED IN THIS BAND                        |                                                                                                            |
| 15,4 - 15,43            | AERONAUTICAL RADIONAVIGATION<br>S5.511D                                                                                                                                                                                                        |                                                                  |                                                                                                            |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                             | NATIONAL USAGE            | NOTES                                                                                                               |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------|
| 15,43 - 15,63           | FIXED-SATELLITE<br>(Earth-to-space) S5.511A*<br><br>AERONAUTICAL RADIONAVIGATION<br><br>S5.511C                          |                           |                                                                                                                     |
| 15,63 - 15,7            | AERONAUTICAL RADIONAVIGATION<br>S5.511D                                                                                  |                           |                                                                                                                     |
| 15,7 - 16,6             | <b>RADIOLOCATION</b>                                                                                                     | <b>Radars (RLC)</b>       | Government                                                                                                          |
| 16,6 - 17,1             | <b>RADIOLOCATION</b><br><br>Space research (deep space)<br>(Earth-to-space)                                              | <b>Radars (RLC)</b>       | Government                                                                                                          |
| 17,1 - 17,2             | RADIOLOCATION                                                                                                            | HIPERLANs (17,1-17,3 GHz) | CEPT Rec T/R 22-06<br>Government                                                                                    |
| 17,2 - 17,3             | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH (active)<br><br>S5.513A               | HIPERLANs (17,1-17,3 GHz) | CEPT Rec T/R 22-06<br>Government                                                                                    |
| 17,3 - 17,7             | FIXED-SATELLITE (Earth-to-space)<br>S5.516*<br><br>Radiolocation                                                         |                           |                                                                                                                     |
| 17,7 - 18,1             | <b>FIXED</b><br><br>FIXED-SATELLITE<br>(space-to-Earth) S5.484A*<br>(Earth-to-space) S5.516*<br><br>MOBILE               | <b>Fixed links (FIX)</b>  | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |
| 18,1 - 18,4             | <b>FIXED</b><br><br>FIXED-SATELLITE<br>(space-to-Earth) S5.484A*<br>(Earth-to-space) S5.520*<br><br>MOBILE<br><br>S5.519 | <b>Fixed links (FIX)</b>  | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                 | NATIONAL USAGE           | NOTES                                                                                                               |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| 18,4 - 18,6             | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br>S5.484A*<br><br>MOBILE                                                                                                                               | <b>Fixed links (FIX)</b> | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |
| 18,6 - 18,8             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br><b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br>S5.522B*<br><br>MOBILE except aeronautical<br>mobile<br><br>Space research (passive)<br><br>S5.522A* | <b>Fixed links (FIX)</b> | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |
| 18,8 - 19,3             | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br>S5.523A<br><br>MOBILE                                                                                                                                | <b>Fixed links (FIX)</b> | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |
| 19,3 - 19,7             | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br>(Earth-to-space) S5.523B, S5.523C,<br>S5.523D, S5.523E<br><br>MOBILE                                                                                 | <b>Fixed links (FIX)</b> | 18 GHz band<br>Low and high capacity digital<br>fixed links: up to 140 Mbit/s<br>Rec. ITU-R F 595-5 (17,7-19,7 GHz) |
| 19,7 - 20,1             | FIXED-SATELLITE (space-to-Earth)<br>S5.484A*<br><br>Mobile-satellite (space-to-Earth)                                                                                                                        |                          |                                                                                                                     |
| 20,1 - 20,2             | FIXED-SATELLITE (space-to-Earth)<br>S5.484A*<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>S5.525, S5.526, S5.527, S5.528                                                                               |                          |                                                                                                                     |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                   | NATIONAL USAGE           | NOTES                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20,2 - 21,2             | FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>Standard frequency and time<br>signal (space-to-Earth)                                                     |                          | Government                                                                                                                                                                                     |
| 21,2 - 21,4             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>FIXED<br><br>MOBILE<br><br>SPACE RESEARCH (passive)                                                                                            |                          |                                                                                                                                                                                                |
| 21,4 - 22               | FIXED<br><br>MOBILE<br><br>BROADCASTING-SATELLITE<br><br>S5.530                                                                                                                                |                          |                                                                                                                                                                                                |
| 22 - 22,21              | <b>FIXED</b><br><br><br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>S5.149*                                                                                                        | <b>Fixed links (FIX)</b> | 23 GHz band<br>Low and medium capacity digital<br>fixed links: up to 34 Mbit/s<br>Rec. ITU-R F 637-2<br>(to be cancelled)<br>Planned use in accordance with<br>T/R 13-02 Annex A (22-22,6 GHz) |
| 22,21 - 22,5            | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br><b>FIXED</b><br><br><br><br><br>MOBILE except aeronautical<br>mobile<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br>S5.149*, S5.532 | <b>Fixed links (FIX)</b> | 23 GHz band<br>Low and medium capacity digital<br>fixed links: up to 34 Mbit/s<br>Rec. ITU-R F 637-2<br>(to be cancelled)<br>Planned use in accordance with<br>T/R 13-02 Annex A (22-22,6 GHz) |
| 22,5 - 22,55            | <b>FIXED</b><br><br><br><br><br><br><br><br>MOBILE                                                                                                                                             | <b>Fixed links (FIX)</b> | 23 GHz band<br>Low and medium capacity digital<br>fixed links: up to 34 Mbit/s<br>Rec. ITU-R F 637-2<br>(to be cancelled)<br>Planned use in accordance with<br>T/R 13-02 Annex A (22-22,6 GHz) |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                    | NATIONAL USAGE                                                                                                                                                                                                                          | NOTES                                                                                                                                                                                                          |
|-------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22,55 - 23,55           | <b>FIXED</b><br><br>INTER-SATELLITE<br><br>MOBILE<br><br>S5.149*                                                | <b>Fixed links (FIX)</b>                                                                                                                                                                                                                | 23 GHz band<br>Low and medium capacity digital<br>fixed links: up to 34 Mbit/s<br>Rec. ITU-R F 637-2<br>(to be cancelled)<br>Planned use in accordance with<br>T/R 13-02 Annex A (22-22,6 GHz;<br>23-23,6 GHz) |
| 23,55 - 23,6            | <b>FIXED</b><br><br>MOBILE                                                                                      | <b>Fixed links (FIX)</b>                                                                                                                                                                                                                | 23 GHz band<br>Planned use in accordance with<br>CEPT Rec T/R 13-02<br>Annex A (23-23,6 GHz)                                                                                                                   |
| 23,6 - 24               | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*  | ALL EMISSIONS ARE PROHIBITED IN THIS BAND                                                                                                                                                                                               |                                                                                                                                                                                                                |
| 24 - 24,05              | <b>AMATEUR</b><br><br><b>AMATEUR-SATELLITE</b><br><br><br><br><br><br><br>S5.150                                | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(24-24,25 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (24-24,25 GHz)</b>           | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br><br><br><br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9                                                              |
| 24,05 - 24,25           | <b>RADIOLOCATION</b><br><br><b>Amateur</b><br><br>Earth exploration-satellite<br>(active)<br><br><br><br>S5.150 | <b>Radars (RLC)</b><br><br><b>Amateur (AM)<br/>(24,05-24,15 GHz)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(24-24,25 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (24-24,25 GHz)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br><br><br><br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9                                                              |
| 24,25 - 24,45           | <b>FIXED</b>                                                                                                    |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                |
| 24,45 - 24,75           | <b>FIXED</b><br><br>INTER-SATELLITE                                                                             | <b>FWA (6 blocs of 2x56 MHz within<br/>the sub-band 24,5-26,5 GHz)</b>                                                                                                                                                                  | CEPT Rec T/R 13-02 Annex B<br>(24,5-26,5 GHz)                                                                                                                                                                  |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                           | NATIONAL USAGE                                                      | NOTES                                                                           |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 24,75 - 25,25           | <b>FIXED</b>                                                                                                                                                                                           | <b>FWA (6 blocs of 2x56 MHz within the sub-band 24,5-26,5 GHz)</b>  | CEPT Rec T/R 13-02 Annex B (24,5-26,5 GHz)<br><br>Government (25,242-25,25 GHz) |
| 25,25 - 25,5            | <b>FIXED</b><br><br>INTER-SATELLITE S5.536<br><br>MOBILE<br><br>Standard frequency and time signal-satellite (Earth-to-space)                                                                          | <b>FWA (6 blocs of 2x56 MHz within the sub-band 24,5-26,5 GHz)</b>  | CEPT Rec T/R 13-02 Annex B (24,5-26,5 GHz)                                      |
| 25,5 - 27               | EARTH EXPLORATION-SATELLITE (space-to-Earth)<br>S5.536A*, S5.536B<br><br><b>FIXED</b><br><br>INTER-SATELLITE S5.536<br><br>MOBILE<br><br>Standard frequency and time signal-satellite (Earth-to-space) | <b>FWA (6 blocs of 2x56 MHz within the sub-band 24,5-26,5 GHz)</b>  | CEPT Rec T/R 13-02 Annex B (24,5-26,5 GHz)<br><br><br>Government (26,25-27 GHz) |
| 27 - 27,5               | <b>FIXED</b><br><br>INTER-SATELLITE S5.536<br><br>MOBILE                                                                                                                                               |                                                                     | Government                                                                      |
| 27,5 - 28,5             | <b>FIXED</b><br><br>FIXED-SATELLITE (Earth-to-space)<br>S5.484A*, S5.539<br><br>MOBILE<br><br>S5.538, S5.540                                                                                           | <b>FWA (2 blocs of 2x175 MHz within the sub-band 27,5-29,5 GHz)</b> | CEPT Rec T/R 13-02 Annex C (27,5-29,5 GHz)                                      |
| 28,5 - 29,1             | <b>FIXED</b><br><br>FIXED-SATELLITE (Earth-to-space)<br>S5.484A*, S5.523A, S5.539<br><br>MOBILE<br><br>Earth exploration-satellite (Earth-to-space)<br>S5.541<br><br>S5.540                            | <b>FWA (2 blocs of 2x175 MHz within the sub-band 27,5-29,5 GHz)</b> | CEPT Rec T/R 13-02 Annex C (27,5-29,5 GHz)                                      |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                      | NATIONAL USAGE                                                          | NOTES                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------|
| 29,1 - 29,5             | <b>FIXED</b><br><br>FIXED-SATELLITE (Earth-to-space)<br>S5.523C, S5.523E, S5.535A,<br>S5.539, S5.541A*<br><br><b>MOBILE</b><br><br>Earth exploration-satellite<br>(Earth-to-space)<br>S5.541<br><br>S5.540                        | <b>FWA (2 blocs of 2x175 MHz within<br/>the sub-band 27,5-29,5 GHz)</b> | CEPT Rec T/R 13-02 Annex C<br>(27,5-29,5 GHz) |
| 29,5 - 29,9             | FIXED-SATELLITE (Earth-to-space)<br>S5.484A*, S5.539<br><br>Earth exploration-satellite<br>(Earth-to-space) S5.541<br><br>Mobile-satellite (Earth-to-space)<br><br>S5.540                                                         |                                                                         |                                               |
| 29,9 - 30               | FIXED-SATELLITE (Earth-to-space)<br>S5.484A*, S5.539<br><br><b>MOBILE-SATELLITE</b><br>(Earth-to-space)<br><br>Earth exploration-satellite<br>(Earth-to-space)<br>S5.541<br><br>S5.525, S5.526, S5.527, S5.538,<br>S5.540, S5.543 |                                                                         |                                               |
| 30 - 31                 | FIXED-SATELLITE (Earth-to-space)<br><br><b>MOBILE-SATELLITE</b><br>(Earth-to-space)<br><br>Standard frequency and time<br>signal-satellite (space-to-Earth)                                                                       |                                                                         | Government                                    |
| 31 - 31,3               | <b>FIXED</b><br><br><b>MOBILE</b><br><br>Standard frequency and time<br>signal-satellite<br>(space-to-Earth)<br><br>Space research<br>S5.544<br><br>S5.149*                                                                       |                                                                         | 31 GHz band                                   |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                            | NATIONAL USAGE                            | NOTES      |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------|
| 31,3 - 31,5             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*                                                          | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |            |
| 31,5 - 31,8             | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>Fixed<br><br>Mobile except aeronautical<br>mobile<br><br>S5.149* |                                           |            |
| 31,8 - 32               | FIXED S5.547A*<br><br>RADIONAVIGATION<br><br>SPACE RESEARCH<br>(deep space)<br>(space-to-Earth)<br><br>S5.547*, S5.548                                                  |                                           |            |
| 32 - 32,3               | FIXED S5.547A*<br><br>INTER-SATELLITE<br><br>RADIONAVIGATION<br><br>SPACE RESEARCH<br>(deep space)<br>(space-to-Earth)<br><br>S5.547*, S5.548                           |                                           |            |
| 32,3 - 33               | FIXED S5.547A*<br><br>INTER-SATELLITE<br><br>RADIONAVIGATION<br><br>S5.547*, S5.548                                                                                     |                                           |            |
| 33 - 33,4               | FIXED S5.547A*<br><br>RADIONAVIGATION<br><br>S5.547*                                                                                                                    |                                           |            |
| 33,4 - 34,2             | RADIOLOCATION                                                                                                                                                           |                                           | Government |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                 | NATIONAL USAGE           | NOTES                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------|
| 34,2 - 34,7             | RADIOLOCATION<br><br>SPACE RESEARCH<br>(deep space)<br>(Earth-to-space)                                                                                                                      |                          | Government                                         |
| 34,7 - 35,2             | RADIOLOCATION<br><br>Space research                                                                                                                                                          |                          | Government                                         |
| 35,2 - 35,5             | METEOROLOGICAL AIDS<br><br>RADIOLOCATION                                                                                                                                                     |                          | Government                                         |
| 35,5 - 36               | METEOROLOGICAL AIDS<br><br>EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH (active)<br><br>S5.551A                                                        |                          | Government                                         |
| 36 - 37                 | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>FIXED<br><br>MOBILE<br><br>SPACE RESEARCH (passive)<br><br>S5.149*                                                                           |                          | Government                                         |
| 37 - 37,5               | <b>FIXED</b><br><br>MOBILE<br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>S5.547*                                                                                                          | <b>Fixed links (FIX)</b> | 38 GHz band<br>CEPT Rec T/R 12-01<br>(37-39,5 GHz) |
| 37,5 - 38               | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>SPACE RESEARCH<br>(space-to-Earth)<br><br>Earth exploration-satellite<br>(space-to-Earth)<br><br>S5.547*, S5.NGSO* | <b>Fixed links (FIX)</b> | 38 GHz band<br>CEPT Rec T/R 12-01<br>(37-39,5 GHz) |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                                                                                                           | NATIONAL USAGE                         | NOTES                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------|
| 38 - 39,5               | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>Earth exploration-satellite<br>(space-to-Earth)<br><br>S5.547*, S5.NGSO*                                                                                                                     | <b>Fixed links (FIX)</b>               | 38 GHz band<br>CEPT Rec T/R 12-01<br>(37-39,5 GHz) |
| 39,5 - 40               | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>Earth exploration-satellite<br>(space-to-Earth)<br><br>S5.547*, S5.NGSO*                                                                         |                                        |                                                    |
| 40 - 40,5               | EARTH EXPLORATION-SATELLITE<br>(Earth-to-space)<br><br><b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>SPACE RESEARCH<br>(Earth-to-space)<br><br>Earth exploration-satellite<br>(space-to-Earth) |                                        |                                                    |
| 40,5 - 41               | <b>FIXED</b><br><br>FIXED-SATELLITE (space-to-Earth)<br><br>BROADCASTING<br><br>BROADCASTING-SATELLITE<br><br>Mobile<br><br>S5.547*                                                                                                                                    | MWS, including MVDS<br>(40,5-43,5 GHz) | ERC/DEC/(99)15<br>CEPT Rec T/R 52-01               |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                       | NATIONAL USAGE                                         | NOTES                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------|
| 41 - 42                 | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>BROADCASTING<br>BROADCASTING-SATELLITE<br>Mobile<br>S5.547*, S5.RAS*                  | MWS, including MVDS<br>(40,5-43,5 GHz)                 | ERC/DEC/(99)15<br>CEPT Rec T/R 52-01               |
| 42 - 42,5               | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>BROADCASTING<br>BROADCASTING-SATELLITE<br>Mobile<br>S5.547*, S5.RAS*, S5.NGSO*        | MWS, including MVDS<br>(40,5-43,5 GHz)                 | ERC/DEC/(99)15<br>CEPT Rec T/R 52-01               |
| 42,5 - 43,5             | FIXED<br>FIXED-SATELLITE (Earth-to-space)<br>S5.552<br>MOBILE except aeronautical<br>mobile<br>RADIO ASTRONOMY<br>S5.149*, S5.547* | MWS, including MVDS<br>(40,5-43,5 GHz)                 | ERC/DEC/(99)15<br>CEPT Rec T/R 52-01               |
| 43,5 - 47               | MOBILE S5.553*<br>MOBILE-SATELLITE<br>RADIONAVIGATION<br>RADIONAVIGATION-SATELLITE<br>S5.554*                                      |                                                        | Government<br>(43,5-45,5 GHz)                      |
| 47 - 47,2               | <b>AMATEUR</b><br><b>AMATEUR-SATELLITE</b>                                                                                         | <b>Amateur (AM)</b><br><b>Amateur-satellite (AM-S)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01 |
| 47,2 - 50,2             | FIXED<br>FIXED-SATELLITE (Earth-to-space)<br>S5.552<br>MOBILE<br>S5.149*, S5.340*, S5.552A,<br>S5.555*                             |                                                        |                                                    |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                              | NATIONAL USAGE                                                                                    | NOTES       |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------|
| 50,2 - 50,4             | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>SPACE RESEARCH (passive)<br>S5.340*, S5.555A                                                                      | <b>Radiometers - passive sensors<br/>(EXP-S)</b><br><br>ALL EMISSIONS ARE PROHIBITED IN THIS BAND |             |
| 50,4 - 51,4             | FIXED<br><br>FIXED-SATELLITE (Earth-to-space)<br><br>MOBILE<br><br>Mobile-satellite (Earth-to-space)                                                                      |                                                                                                   |             |
| 51,4 - 52,6             | FIXED<br><br>MOBILE<br><br>S5.547*, S5.556*                                                                                                                               |                                                                                                   |             |
| 52,6 - 54,25            | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.556*                                                                  | <b>Radiometers - passive sensors<br/>(EXP-S)</b><br><br>ALL EMISSIONS ARE PROHIBITED IN THIS BAND |             |
| 54,25 - 55,78           | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>INTER-SATELLITE S5.556A<br><br>SPACE RESEARCH (passive)                                                           | <b>Radiometers - passive sensors<br/>(EXP-S)</b>                                                  |             |
| 55,78 - 56,9            | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>FIXED S5.XXZ*<br><br>INTER-SATELLITE S5.556A<br><br>MOBILE S5.558*<br><br>SPACE RESEARCH (passive)<br><br>S5.547* | <b>Radiometers - passive sensors<br/>(EXP-S)</b>                                                  | 55 GHz band |
| 56,9 - 57               | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>FIXED<br><br>INTER-SATELLITE S5.558A<br><br>MOBILE S5.558*<br><br>SPACE RESEARCH (passive)<br><br>S5.547*         | <b>Radiometers - passive sensors<br/>(EXP-S)</b>                                                  | 55 GHz band |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                    | NATIONAL USAGE                                                                                                                                                                            | NOTES                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 57 - 58,2               | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>FIXED<br><br>INTER-SATELLITE S5.556A<br><br>MOBILE S5.558*<br><br>SPACE RESEARCH (passive)<br><br>S5.547*               | <b>Radiometers - passive sensors<br/>(EXP-S)</b><br><br>Fixed links (FIX)                                                                                                                 | 58 GHz band<br>CEPT/ERC/REC 12-09<br>(57-59 GHz)                                                                                |
| 58,2 - 59               | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>FIXED<br><br>MOBILE<br><br>SPACE RESEARCH (passive)<br><br>S5.547*, S5.556*                                             | <b>Radiometers - passive sensors<br/>(EXP-S)</b><br><br>Fixed links (FIX)                                                                                                                 | 58 GHz band<br>CEPT/ERC/REC 12-09<br>(57-59 GHz)                                                                                |
| 59 - 59,3               | <b>EARTH EXPLORATION-SATELLITE<br/>(passive)</b><br><br>FIXED<br><br>INTER-SATELLITE S5.556A<br><br>MOBILE S5.558*<br><br>RADIOLOCATION S5.559*<br><br>SPACE RESEARCH (passive) |                                                                                                                                                                                           | Government                                                                                                                      |
| 59,3 - 64               | FIXED<br><br>INTER-SATELLITE<br><br>MOBILE S5.558*<br><br>RADIOLOCATION S5.559*<br><br><br><br><br><br>S5.138                                                                   | <b>ISM – Industrial, scientific and<br/>medical applications (61-61,5 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (61-61,5 GHz)</b><br><br><b>RTT / RTI (63-64 GHz)</b> | CEPT/ERC/REC 70-03 Annex 1<br>National regulation nº 859/94<br>of 23/9<br><br>ERC/DEC/(92)02<br><br>Government<br>(59,3-61 GHz) |
| 64 - 65                 | FIXED<br><br>INTER-SATELLITE<br><br>MOBILE except aeronautical<br>mobile<br><br>S5.547*, S5.556*                                                                                |                                                                                                                                                                                           |                                                                                                                                 |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                       | NATIONAL USAGE                           | NOTES                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------|
| 65 - 66                 | EARTH EXPLORATION-SATELLITE<br><br>FIXED<br><br>INTER-SATELLITE<br><br>MOBILE except aeronautical<br>mobile<br><br>SPACE RESEARCH<br><br>S5.547*                                   |                                          |                                                    |
| 66 - 71                 | INTER-SATELLITE<br><br>MOBILE S5.553*, S5.558*<br><br>MOBILE-SATELLITE<br><br>RADIONAVIGATION<br><br>RADIONAVIGATION-SATELLITE<br><br>S5.554*                                      |                                          |                                                    |
| 71 - 74                 | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>MOBILE-SATELLITE<br>(space-to-Earth)                                                                            |                                          | Government                                         |
| 74 - 75,5               | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>BROADCASTING<br><br>BROADCASTING-SATELLITE<br><br>Space research (space-to-Earth)<br><br>S5.561*                |                                          |                                                    |
| 75,5 - 76               | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>BROADCASTING<br><br>BROADCASTING-SATELLITE<br><br>Space research (space-to-Earth)<br><br>S5.EEE*<br><br>S5.561* | Amateur (AM)<br>Amateur-satellite (AM-S) | Amateur national regulations<br>CEPT Rec T/R 61-01 |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                          | NATIONAL USAGE                                             | NOTES                                                                |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------|
| 76 - 77,5               | RADIO ASTRONOMY<br>RADIOLOCATION<br>Amateur<br><b>Amateur-satellite</b><br>Space research (space-to-Earth)<br>S5.149*                                                 | <b>Amateur-satellite (AM-S)</b><br><br>RTT/RTI (76-77 GHz) | Amateur national regulations<br>CEPT Rec T/R 61-01<br>ERC/DEC/(92)02 |
| 77,5 - 78               | AMATEUR<br>AMATEUR-SATELLITE<br>Radio astronomy<br>Space research (space-to-Earth)<br>S5.149*                                                                         | Amateur-satellite (AM-S)                                   | Amateur national regulations<br>CEPT Rec T/R 61-01                   |
| 78 - 79                 | RADIOLOCATION<br>Amateur<br><b>Amateur-satellite</b><br>Radio astronomy<br>Space research (space-to-Earth)<br>S5.149*, S5.560                                         | <b>Amateur-satellite (AM-S)</b>                            | Amateur national regulations<br>CEPT Rec T/R 61-01                   |
| 79 - 81                 | RADIO ASTRONOMY<br>RADIOLOCATION<br>Amateur<br><b>Amateur-satellite</b><br>Space research (space-to-Earth)<br>S5.149*                                                 | <b>Amateur-satellite (AM-S)</b>                            | Amateur national regulations<br>CEPT Rec T/R 61-01                   |
| 81 - 84                 | FIXED<br>FIXED-SATELLITE (Earth-to-space)<br>MOBILE<br>MOBILE-SATELLITE<br>(Earth-to-space)<br>RADIO ASTRONOMY<br>Space research (space-to-Earth)<br>S5.149*, S5.DDD* |                                                            | Government                                                           |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                    | NATIONAL USAGE                            | NOTES |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 84 - 86                 | FIXED<br><br>FIXED-SATELLITE<br>(Earth-to-space)<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>S5.149*                                            |                                           |       |
| 86 - 92                 | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*                                  | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 92 - 94                 | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>S5.149*                                                                  |                                           |       |
| 94 - 94,1               | EARTH EXPLORATION-SATELLITE<br>(active)<br><br>RADIOLOCATION<br><br>SPACE RESEARCH (active)<br><br>Radio astronomy<br><br>S5.562, S5.FFF*       |                                           |       |
| 94,1 - 95               | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>S5.149*                                                                  |                                           |       |
| 95 - 100                | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>RADIONAVIGATION<br><br>RADIONAVIGATION-SATELLITE<br><br>S5.149*, S5.554* |                                           |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                           | NATIONAL USAGE                            | NOTES |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 100 - 102               | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.341 | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 102 - 105               | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>S5.149*, S5.341                                                      |                                           |       |
| 105 - 109,5             | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br>S5.CCA*<br><br>S5.149*, S5.341           |                                           |       |
| 109,5 - 111,8           | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.341 | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 111,8 - 114,25          | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br>S5.CCA*<br><br>S5.149*, S5.341           |                                           |       |
| 114,25 - 116            | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.341 | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                   | NATIONAL USAGE                                                                                                                                            | NOTES                                                                   |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 116 - 119,98            | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>INTER-SATELLITE S5.XXY*<br><br>SPACE RESEARCH (passive)<br><br>S5.341                                                          |                                                                                                                                                           |                                                                         |
| 119,98 - 120,02         | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>FIXED<br><br>INTER-SATELLITE S5.XXY*<br><br>MOBILE S5.558<br><br>SPACE RESEARCH (passive)<br><br>Amateur<br><br>S5.138, S5.341 |                                                                                                                                                           |                                                                         |
| 120,02 - 122,25         | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>INTER-SATELLITE S5.XXY*<br><br>SPACE RESEARCH (passive)<br><br><br><br><br>S5.138                                              | <b>ISM – Industrial, scientific and<br/>medical applications<br/>(122-123 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (122-123 GHz)</b> | CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9 |
| 122,25 - 123            | FIXED<br><br>INTER-SATELLITE<br><br>MOBILE S5.558*<br><br>Amateur<br><br><br><br><br>S5.138                                                                                    | <b>ISM – Industrial, scientific and<br/>medical applications<br/>(122-123 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (122-123 GHz)</b> | CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9 |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                                           | NATIONAL USAGE | NOTES |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|
| 123 - 126               | FIXED-SATELLITE<br>(space-to-Earth)<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>RADIONAVIGATION<br><br>RADIONAVIGATION-SATELLITE<br><br>Radio astronomy<br><br>S5.554*          |                |       |
| 126 - 130               | FIXED-SATELLITE<br>(space-to-Earth)<br><br>MOBILE-SATELLITE<br>(space-to-Earth)<br><br>RADIONAVIGATION<br><br>RADIONAVIGATION-SATELLITE<br><br>Radio astronomy<br><br>S5.149*, S5.554* |                |       |
| 130-134                 | EARTH EXPLORATION-SATELLITE<br>(active) S5.LLL*<br><br>FIXED<br><br>INTER-SATELLITE<br><br>MOBILE S5.558*<br><br>RADIO ASTRONOMY<br><br>S5.149*, S5.FFF*                               |                |       |
| 134 - 136               | AMATEUR<br><br>AMATEUR-SATELLITE<br><br>Radio astronomy                                                                                                                                |                |       |
| 136 - 141               | RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>Amateur<br><br>Amateur-satellite<br><br>S5.149*                                                                                            |                |       |
| 141 - 148,5             | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>S5.149*                                                                                                         |                |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                          | NATIONAL USAGE                            | NOTES |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 148,5 - 151,5           | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*                                                        | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 151,5 - 155,5           | FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>RADIOLOCATION<br><br>S5.149*                                                                                        |                                           |       |
| 155,5 - 158,5           | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>FIXED<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br>S5.CCA<br><br>S5.149*, S5.BBA*, S5.AAB* |                                           |       |
| 158,5 - 164             | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br><br>MOBILE<br><br>MOBILE-SATELLITE (space-to-Earth)                                                                  |                                           |       |
| 164 - 167               | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*                                                        | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 167 - 168               | FIXED<br><br>FIXED-SATELLITE (space-to-Earth)<br><br>INTER-SATELLITE<br><br>MOBILE S5.558*                                                                            |                                           |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                       | NATIONAL USAGE                            | NOTES |
|-------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 168 - 170               | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>INTER-SATELLITE<br>MOBILE S5.558*<br>S5.149*          |                                           |       |
| 170 - 174,5             | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>INTER-SATELLITE<br>MOBILE S5.558*<br>S5.149*          |                                           |       |
| 174,5 - 174,8           | FIXED<br>FIXED-SATELLITE<br>MOBILE S5.558*                                                         |                                           |       |
| 174,8 - 182             | EARTH EXPLORATION-SATELLITE<br>(passive)<br>INTER-SATELLITE S5.YYY*<br>SPACE RESEARCH (passive)    |                                           |       |
| 182 - 185               | EARTH EXPLORATION-SATELLITE<br>(passive)<br>RADIO ASTRONOMY<br>SPACE RESEARCH (passive)<br>S5.340* | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 185 - 190               | EARTH EXPLORATION-SATELLITE<br>(passive)<br>INTER-SATELLITE S5.YYY*<br>SPACE RESEARCH (passive)    |                                           |       |
| 190 - 191,8             | EARTH EXPLORATION-SATELLITE<br>(passive)<br>SPACE RESEARCH (passive)<br>S5.340*                    | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                               | NATIONAL USAGE                            | NOTES |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 191,8 - 200             | FIXED<br>INTER-SATELLITE<br>MOBILE S5.558*<br>MOBILE-SATELLITE<br>RADIONAVIGATION<br>RADIONAVIGATION-SATELLITE<br>S5.149*, S5.341, S5.554* |                                           |       |
| 200 - 209               | EARTH EXPLORATION-SATELLITE<br>(passive)<br>RADIO ASTRONOMY<br>SPACE RESEARCH (passive)<br>S5.340*, S5.341, S5.RRR*                        | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 209 - 217               | FIXED<br>FIXED-SATELLITE (Earth-to-space)<br>MOBILE<br>RADIO ASTRONOMY<br>S5.149*, S5.341                                                  |                                           |       |
| 217 - 226               | FIXED<br>FIXED-SATELLITE (Earth-to-space)<br>MOBILE<br>RADIO ASTRONOMY<br>SPACE RESEARCH (passive)<br>S5.CCA*<br>S5.149*, S5.341           |                                           |       |
| 226 - 231,5             | EARTH EXPLORATION-SATELLITE<br>(passive)<br>RADIO ASTRONOMY<br>SPACE RESEARCH (passive)<br>S5.340*                                         | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 231,5 - 232             | FIXED<br>MOBILE<br>Radiolocation                                                                                                           |                                           |       |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                 | NATIONAL USAGE                                                                                                                                                                                   | NOTES                                                                                                                             |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 232 - 235               | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>MOBILE<br>Radiolocation                                                         |                                                                                                                                                                                                  |                                                                                                                                   |
| 235 - 238               | EARTH EXPLORATION-SATELLITE<br>(passive)<br>FIXED-SATELLITE (space-to-Earth)<br>SPACE RESEARCH (passive)<br>S5.RRR*, S5.NNN* |                                                                                                                                                                                                  |                                                                                                                                   |
| 238 - 240               | FIXED<br>FIXED-SATELLITE (space-to-Earth)<br>MOBILE<br>RADIOLOCATION<br>RADIONAVIGATION<br>RADIONAVIGATION-SATELLITE         |                                                                                                                                                                                                  |                                                                                                                                   |
| 240 - 241               | FIXED<br>MOBILE<br>RADIOLOCATION                                                                                             |                                                                                                                                                                                                  |                                                                                                                                   |
| 241 - 248               | RADIO ASTRONOMY<br>RADIOLOCATION<br>Amateur<br><b>Amateur-satellite</b><br><br>S5.138, S5.149*                               | <b>Amateur-satellite (AM-S)</b><br><br><b>ISM – Industrial, scientific and<br/>medical applications<br/>(244-246 GHz)</b><br><br><b>SRD – Non-specific short range<br/>devices (244-246 GHz)</b> | Amateur national regulations<br>CEPT Rec T/R 61-01<br><br>CEPT/ERC/REC 70-03 Annex 1<br>National regulation no. 859/94<br>of 23/9 |
| 248 - 250               | <b>AMATEUR</b><br><b>AMATEUR-SATELLITE</b><br><br>Radio astronomy<br>S5.149*                                                 | <b>Amateur (AM)</b><br><br><b>Amateur-satellite (AM-S)</b>                                                                                                                                       | Amateur national regulations<br>CEPT Rec T/R 61-01                                                                                |

| FREQUENCY BAND<br>(GHz) | ITU ALLOCATIONS<br>APPLICABLE TO<br>PORTUGAL                                                                                                                        | NATIONAL USAGE                            | NOTES |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------|
| 250 - 252               | EARTH EXPLORATION-SATELLITE<br>(passive)<br><br>RADIO ASTRONOMY<br><br>SPACE RESEARCH (passive)<br><br>S5.340*, S5.RRR*                                             | ALL EMISSIONS ARE PROHIBITED IN THIS BAND |       |
| 252 - 265               | FIXED<br><br>MOBILE<br><br>MOBILE-SATELLITE (Earth-to-space)<br><br>RADIO ASTRONOMY<br><br>RADIONAVIGATION<br><br>RADIONAVIGATION-SATELLITE<br><br>S5.149*, S5.554* |                                           |       |
| 265 - 275               | FIXED<br><br>FIXED-SATELLITE (Earth-to-space)<br><br>MOBILE<br><br>RADIO ASTRONOMY<br><br>S5.149*, S5.RRR*                                                          |                                           |       |
| 275 - 1000              | (Not allocated) S5.565*                                                                                                                                             |                                           |       |