

## **ICP - Autoridade Nacional das Comunicações**

### **Regulation No. XXXX/2015**

#### **Radio Licensing Regulation**

By determination of 19 August 2009, ICP-ANACOM's Management Board, under paragraph 2 of article 8 and paragraph 3 of article 12, both of Decree-Law No. 151-A/2000, of 20 July, defined and publicised the categories of stations that require a radio license, as well as information to be attached to applications for the allocation or amendment of such licenses.

This Authority believes that Notice No. 15252/2009, published in Series II of the Official Gazette of 31 August 2009 must be now reviewed, after five years' operation, taking into account, in particular:

- i) The introduction of the concept of technological neutrality, which, in the scope of radio licensing, led to the removal of the reference to technologies such as GSM (Global System for Mobile Communications) or UMTS (Universal Mobile Telecommunications System) and the emergence of networks underpinning the operation of Terrestrial Electronic Communications Services;
- ii) The need to define the concept of 2 GHz MSS network license (Mobile Satellite Systems operating in the 2 GHz band) with CGC stations (Complementary Ground Components);
- iii) The decision of the World Radiocommunication Conference (WRC-12), which identified, in the scope of the Aeronautical Mobile Service, networks underpinning the operation of surface applications;
- iv) The need to establish a framework for the licensing of Land Radiodetermination Service networks, composed of centralised reporting and surveillance systems, which have emerged recently, as well as of earth stations in the Space Research Service.

In compliance with article 11 of ICP-ANACOM's Statutes, in annex to Decree-Law No. 309/2001, of 7 December, the Draft Regulation was submitted to the respective regulatory consultation procedure, interested parties having been given a period of 30 working days in which to comment.

The final report, which analyses responses received in the scope of this procedure and substantiates the options taken by ICP-ANACOM, has been published at this Authority's website.

Therefore, under article 9a) and article 26 b) of ICP-ANACOM's Statutes, published in annex to Decree-Law No. 309/2001, of 7 December, and pursuant to paragraph 2 of article 8 and paragraph 3 of article 12, both of Decree-Law No. 151-A/2000, of 20 July, as amended by Decree-Law No. 264/2009, of 28 September, ICP-ANACOM approves the following Regulation:

## **Article 1**

### **Subject-matter and scope**

1 - This Regulation defines and publicises, in accordance with Decree-Law No. 151-A/2000, of 20 July, republished in annex to Decree-Law No. 264/2009, of 28 September, and amended by Law No. 20/2012, of 14 May and by Law No. 82-B/2014, of 31 December, hereinafter referred to as Decree-Law No. 151-A/2000, the following:

- a) The categories of stations which, forming part of a radiocommunication network, require a licence, in compliance with paragraph 2 of article 8 of the referred Decree-Law;
- b) Information to be attached to applications, as well as requirements of technical projects, for allocation or amendment of radio licenses, according to the type of license and services concerned, in compliance with paragraph 3 of article 12 of the referred Decree-Law.

2 - Users of stations referred to in point a) of paragraph 1 and all applicants of radio licenses are obliged to abide by this regulation.

## **Article 2**

### **Definitions, abbreviations and endnotes**

1 - For the purposes of this Regulation, and without prejudice to provisions laid down in the Radio Regulations annexed to the International Telecommunication Convention, definitions in article 2 of Decree-Law No. 151-A/2000 shall apply.

2 - The endnotes listed in the Annex form an integral part of this Regulation.

## **Article 3**

### **Categories of stations which, forming part of a radiocommunication network, require a licence**

The categories of stations referred to in paragraph 2 of article 8 of Decree-Law No. 151-A/2000, which, forming part of a radiocommunication network, require a licence, are as follows:

- a) In the fixed service<sup>1</sup>: fixed shortwave stations<sup>2</sup>;
- b) In the fixed-satellite service<sup>3</sup>: earth stations<sup>4</sup> and satellite news gathering (SNG) earth stations<sup>5</sup>;
- c) In the aeronautical mobile service<sup>6</sup>: aeronautical stations<sup>7</sup>, except for stations integrating networks underpinning the operation of surface applications<sup>8</sup>;
- d) In the maritime mobile service<sup>9</sup>: coast stations<sup>10</sup>;
- e) In the mobile-satellite service<sup>11</sup>: earth stations, except for those integrating networks that include complementary ground components (CGC)<sup>12</sup>;
- f) In the port operations service<sup>13</sup>: port stations<sup>14</sup>;

- g) In the broadcasting service<sup>15</sup>: analogue radio broadcasting and/or relay stations<sup>16</sup> and digital radio broadcasting stations (DRM system)<sup>17</sup>;
- h) In the radiodetermination service<sup>18</sup>: transceiver land radiodetermination stations<sup>19</sup>, except for those integrating centralised reporting and surveillance systems, and exclusively receiver land radiodetermination stations operating in primary frequency bands, for which protection against harmful interference has been required;
- i) In the radiodetermination-satellite service<sup>20</sup>: transceiver radiodetermination-satellite stations<sup>21</sup> and exclusively receiver radiodetermination-satellite stations operating in primary frequency bands for which protection against harmful interference has been required;
- j) In the meteorological-satellite service<sup>22</sup>: transceiver earth stations, and exclusively receiver earth stations operating in primary frequency bands for which protection against harmful interference has been required;
- k) In the meteorological aids service<sup>23</sup>: transceiver meteorological aids stations<sup>24</sup>, and exclusively receiver meteorological aids stations operating in primary frequency bands for which protection against harmful interference has been required;
- l) In the space operation service<sup>25</sup>: transceiver earth stations, and exclusively receiver earth stations operating in primary frequency bands for which protection against harmful interference has been required;
- m) In the earth exploration-satellite service<sup>26</sup>: transceiver earth stations, and exclusively receiver earth stations operating in primary frequency bands for which protection against harmful interference has been required;
- n) In the radio astronomy service<sup>27</sup>: radio astronomy stations<sup>28</sup> operating in primary frequency bands for which protection against harmful interference has been required;
- o) In the space research service<sup>64</sup>: earth stations operating in primary frequency bands.

#### **Article 4**

##### **Information to be attached to radio licensing applications for allocation of network licenses**

Information to be attached to applications, as well as requirements of technical projects, for allocation or amendment of network radio licenses, according to the type of license and services concerned, in compliance with paragraph 3 of article 12 of Decree-Law No. 151-A/2000, of 20 July, is as follows:

- a) Radio networks<sup>30</sup> for the provision of terrestrial electronic communications services<sup>29</sup>**
  - i. Identity of the applicant;

- ii. Mail address and address for collection purposes;
- iii. Frequency bands allocated;
- iv. Location of base stations with effective radiated power (e.r.p.) equal to or higher than 250 mW, including stations commonly called repeaters;
- v. Maximum effective radiated power<sup>31</sup> (e.r.p.) estimated for base stations;
- vi. Characteristics of base stations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**b) Land Mobile Service networks<sup>32</sup> - digital trunked networks<sup>33</sup> and railway communications networks (GSM-R)<sup>34</sup>**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Location of base stations, including stations commonly called repeaters, and channels used;
- v. Maximum effective radiated power (e.r.p.) estimated for base stations;
- vi. Characteristics of base stations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**c) Land Mobile Service networks - private networks<sup>35</sup>**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose and structure;
- iv. Service area;
- v. Frequency band and operating method;
- vi. Amount of, and grounds for, required channels;
- vii. Amount of mobile stations;
- viii. Class and location of stations, where appropriate;
- ix. Characteristics of stations;
- x. Effective radiated power (e.r.p.) calculations (only for networks with e.r.p. over 5W);

- xi. Network devices;
- xii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**d) Land mobile service networks - Broadcast auxiliary service (program making and special events)<sup>36</sup>**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Service area;
- v. Frequency band;
- vi. Amount of, and grounds for, required frequencies;
- vii. Effective radiated power (e.r.p.) of stations;
- viii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**e) Land mobile service networks - other networks**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Frequency band;
- v. Location of base stations, including stations commonly called repeaters;
- vi. Effective radiated power (e.r.p.) estimated for base stations;
- vii. Characteristics of base stations;
- viii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**f) Aeronautical mobile service networks underpinning the operation of surface applications**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose and structure;
- iv. Frequency band;
- v. Service area;

- vi. Amount of stations;
- vii. Location of stations;
- viii. Characteristics of stations;
- ix. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**g) Mobile-satellite service networks involving CGC stations**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Location of earth stations and of CGC stations;
- v. Characteristics of earth stations and of CGC stations;
- vi. Identification of associated satellite network;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**h) Fixed service networks - point-to-point link networks<sup>37</sup>, point-to-multipoint link networks<sup>38</sup> and studio to transmitter link networks<sup>39</sup>**

Information for the application for indication of frequency band and plan

- i. Identity of the applicant;
- ii. Mail address;
- iii. Network purpose and structure;
- iv. Location of base stations;
- v. Characteristics of network stations;
- vi. Signature of the applicant.

Elements of the application for network license

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Frequency band and plan;
- iv. Characteristics of network links;

- v. Characteristics of network stations;
- vi. Land profile and equivalent isotropically radiated power (e.i.r.p.) calculations of the respective radio links<sup>41</sup>;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**i) Fixed service networks - occasionally-used beams<sup>40</sup>**

Information for the application for indication of frequency band and plan

- i. Identity of the applicant;
- ii. Mail address;
- iii. Network purpose and structure;
- iv. Characteristics of network stations;
- v. Signature of the applicant.

Elements of the application for network license

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Frequency band and plan;
- iv. Characteristics of network stations;
- v. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**j) Fixed-satellite service networks - VSAT earth station networks<sup>42</sup>**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Frequency band;
- v. Location of VSAT earth stations;
- vi. Characteristics of VSAT earth stations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**k) Broadcasting service networks - digital terrestrial radio broadcasting service<sup>43</sup> and digital terrestrial television broadcasting service<sup>44</sup>**

- i. Identity of the applicant;

- ii. Mail address and address for collection purposes;
- iii. Identification of the network;
- iv. Location of stations;
- v. Characteristics of stations;
- vi. Calculations of effective radiated power (e.r.p.) of stations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**I) Land radiodetermination service networks, which include reporting and surveillance systems with centralised management**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Network purpose;
- iv. Frequency band;
- v. Location of stations;
- vi. Characteristics of stations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**Article 5**

**Information to be attached to radio licensing applications for allocation of station licenses**

Information to be attached to applications, as well as requirements of technical projects, for allocation or amendment of station radio licenses, according to the type of license and services concerned, in compliance with paragraph 3 of article 12 of Decree-Law No. 151-A/2000, of 20 July, is as follows:

**a) Stations of the fixed shortwave service - fixed shortwave stations<sup>45</sup>**

Information for the application for indication of frequency band and plan

- i. Identity of the applicant;
- ii. Mail address;
- iii. Network purpose;
- iv. Location of the station;
- v. Characteristics of the station;



- vi. Signature of the applicant.

Elements of the application for station license

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Frequency band(s) and plan;
- iv. Location of the station;
- v. Characteristics of the station;
- vi. Effective radiated power (e.r.p.) calculations;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**b) Stations in the satellite radiocommunications service: fixed-satellite service earth stations, satellite news gathering (SNG) earth stations, meteorological-satellite service earth stations, mobile-satellite service earth stations, except for those integrating networks that involve CGC stations, space operation service earth stations, earth exploration-satellite service earth stations and space research service earth stations.**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Earth station purpose;
- iv. Frequency band;
- v. Desired frequencies (not applicable to SNG earth stations);
- vi. Location of earth station (not applicable to SNG earth stations);
- vii. Characteristics of the earth station;
- viii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**c) Mobile service stations - aeronautical stations, except for those integrating networks underpinning the operation of surface applications, coast stations and port stations**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;

- iii. Station purpose;
- iv. Frequency band;
- v. Location of the station;
- vi. Characteristics of the station;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**d) Analogue radio broadcasting stations**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Station purpose;
- iv. Location of the station;
- v. Characteristics of the station;
- vi. Calculations of effective radiated power (e.r.p.) of stations;
- vii. Copy of the certificate for the pursue of the radio activity, only required for new licenses;
- viii. Location of studios, forms of connection to the station (applicable to stations of a local scope) and location of the station;
- ix. Technical characteristics of radiocommunication equipment to be used;
- x. Explanatory report of the installation, based on field strength measurements, for the cases provided for in article 2 of Decree-Law No. 126/2002, of 10 May;
- xi. Identity of the technical manager;
- xii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**e) Digital radio broadcasting stations (DRM system)**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Station purpose;
- iv. Location of the station;
- v. Characteristics of the station;
- vi. Calculations of effective radiated power (e.r.p.) of the station;

- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**f) Stations of the land and satellite radiodetermination service, of the meteorological aids services and of the radio astronomy service**

- i. Identity of the applicant;
- ii. Mail address and address for collection purposes;
- iii. Station purpose;
- iv. Frequency band;
- v. Location of the station;
- vi. Characteristics of the station;
- vii. Signature of the applicant, either qualified electronic signature or signature recognised under the law.

**Article 6**

**Repealing provision**

Notice No. 15252/2009, published in the Official Gazette No. 168 (II Series) of 31 August 2009, which publicised the determination issued by the Management Board of ICP - Autoridade Nacional das Comunicações (ICP-ANACOM), of 19 August 2009, concerning radio licenses, is hereby repealed.

**Article 7**

**Entry into force**

This Regulation comes into force on the day following that of its publication in the Official Gazette.

## ANNEX

### List of endnotes

#### **<sup>1</sup>Fixed service**

A radiocommunication service between specified fixed points.

#### **<sup>2</sup>Fixed station**

A station in the fixed service.

#### **<sup>3</sup>Fixed-satellite service**

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

#### **<sup>4</sup>Earth station**

A station located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication:

- with one or more space stations<sup>46</sup>, or
- with one or more stations of the same kind, by means of one or more reflecting satellites or other objects in space.

#### **<sup>5</sup>Satellite news gathering (SNG) earth station**

An earth station providing broadcasting auxiliary services of an occasional nature within the scope of Satellite News Gathering services, ensuring links between the news reporting location and the studio, operating in frequency bands allocated to the fixed- satellite service.

#### **<sup>6</sup>Aeronautical mobile service**

A mobile service between aeronautical stations<sup>7</sup> and aircraft stations<sup>47</sup> or between aircraft stations, in which survival craft stations<sup>48</sup> may participate.

#### **<sup>7</sup>Aeronautical station**

A land station<sup>49</sup> in the aeronautical mobile service.

#### **<sup>8</sup>Networks underpinning the operation of surface applications**

Networks including wireless data transmission systems, operating at airports, intended for the establishment of airport communications. These systems, the terminals of which are located within the airport area (surface applications), were designed to provide high data transmission rate over short distances.

### **<sup>9</sup>Maritime mobile service**

A mobile service between coast stations and ship stations<sup>50</sup>, or between ship stations, or between associated on-board communication stations.

### **<sup>10</sup>Coast station**

A land station in the maritime mobile service.

### **<sup>11</sup>Mobile-satellite service**

A radiocommunication service:

- between mobile earth stations<sup>51</sup> and one or more space stations, or between space stations used by this service; or
- between mobile earth stations, by means of one or more space stations.

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

### **<sup>12</sup>Complementary ground component (CGC station)**

A ground station of a mobile-satellite system<sup>52</sup> used at fixed locations, in order to improve the availability of mobile satellite systems in geographical areas within the footprint of the system's satellite(s), where communications with one or more space stations cannot be ensured with the required quality.

### **<sup>13</sup>Port operations service**

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

### **<sup>14</sup>Port stations**

A coast station in the port operations service.

### **<sup>15</sup>Broadcasting service**

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

### **<sup>16</sup>Analogue radio broadcasting station**

A radio broadcasting or relay station<sup>53</sup> using analogue technology, and operating in frequency bands allocated to the broadcasting service.

### **<sup>17</sup>Digital radio broadcasting station**

A radio broadcasting or relay station using DRM (Digital Radio Mondiale) system specifications, and operating in frequency bands below 174 MHz which are allocated to the broadcasting service.

**<sup>18</sup>Radiodetermination service**

A radiocommunication service for the purpose of the determination of the position, velocity or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

**<sup>19</sup>Land radiodetermination station**

A station in the radiodetermination service.

**<sup>20</sup>Radiodetermination-satellite service**

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

**<sup>21</sup> Radiodetermination-satellite station**

A station in the radiodetermination-satellite service.

**<sup>22</sup>Meteorological-satellite service**

An earth exploration-satellite service<sup>26</sup> for meteorological purposes.

**<sup>23</sup>Meteorological aids service**

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

**<sup>24</sup>Meteorological aids station**

A station in the meteorological aids service.

**<sup>25</sup>Space operation service**

A radiocommunication service concerned exclusively with the operation of spacecraft, in particular space tracking<sup>54</sup>, space telemetry<sup>55</sup>, and space telecommand<sup>56</sup>.

**<sup>26</sup>Earth exploration-satellite service**

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

- information relating to the characteristics of the Earth and its natural phenomena is obtained from active sensors<sup>57</sup> or passive sensors<sup>58</sup> on Earth satellites<sup>59</sup>;
- similar information is collected from airborne or Earth-based platforms.

**<sup>27</sup>Radio astronomy service**

A service involving the use of radio astronomy.

### **<sup>28</sup>Radio astronomy station**

A station in the radio astronomy service.

### **<sup>29</sup>Electronic communications service**

A service provided as a rule for remuneration, which consists wholly or mainly in the conveyance of signals on electronic communications networks<sup>30</sup>, including telecommunications services and transmission services in networks used for broadcasting, without prejudice to the exclusion referred in points a) and b) of paragraph 1 of article 2 of Law No. 5/2004, of 10 February as amended by Law No. 51/2011, of 13 September.

### **<sup>30</sup>Electronic communications network**

Transmission systems and, where applicable, switching or routing equipment and other resources, namely network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit- and packet-switched, including Internet) and mobile terrestrial networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed.

### **<sup>31</sup>Effective radiated power (e.r.p.)**

The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

### **<sup>32</sup>Land Mobile Service**

A mobile service between base stations<sup>60</sup> and land mobile stations<sup>61</sup>, or between land mobile stations.

### **<sup>33</sup>Digital trunked network**

A trunking network in the land mobile service<sup>62</sup> using digital technology, which includes base stations and land mobile stations operating in frequency bands allocated for the purpose.

### **<sup>34</sup>Railway communications networks (GSM-R)**

A network in the land mobile service with GSM-RTP technology, underpinning railway communications, which includes base stations and land mobile stations operating in frequency bands allocated for the purpose.

### **<sup>35</sup>Privative network in the land mobile service**

A network in the land mobile service intended to underpin privative telecommunications services. It may include fixed stations operating in frequencies in the scope of the fixed service or of the land mobile service for command and/or interconnection with base stations.

**<sup>36</sup>Broadcast auxiliary service (program making and special events)**

Radio applications used to support the production of broadcasting programmes or special events such as conferences, culture events, educational events, sport events, or film production, and which namely include microphone emitters, in-ear monitors, wireless video cameras and video, audio and data links.

**<sup>37</sup>Point-to-point link network**

A network including fixed stations that ensure unidirectional or bidirectional point-to-point radio links, operating in frequency bands allocated to the fixed service.

**<sup>38</sup>Point-to-multipoint link network**

A network including central stations and terminal stations that ensure unidirectional or bidirectional point-to-multipoint radio links, operating in frequency bands allocated to the fixed service.

**<sup>39</sup>Studio-transmitter link networks**

Point-to-point unidirectional radio link established between a fixed station close to the studio and another fixed station close to the respective transmitter broadcasting station, operating in frequency bands allocated to the fixed service.

**<sup>40</sup>Occasionally-used beams**

A network including fixed stations that ensure occasionally-used point-to-point or point-to-multipoint radio links, either unidirectional or bidirectional, operating in frequency bands allocated to the fixed service.

**<sup>41</sup>Equivalent isotropically radiated power (e.i.r.p.)**

The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (isotropic or absolute gain).

**<sup>42</sup>VSAT earth station network**

A network including earth stations with a low-diameter satellite dish (Very Small Aperture Terminal), operating in frequency bands allocated to the fixed-satellite service.

**<sup>43</sup>Digital terrestrial radio broadcasting network**

A network including radio broadcasting or relay stations using digital technology, operating in frequency bands allocated to the broadcasting service.

**<sup>44</sup>Digital terrestrial television broadcasting service**

A network consisting of television broadcasting or relay stations using digital technology, operating in frequency bands allocated to the broadcasting service.



**<sup>45</sup>Fixed shortwave station**

A fixed station that ensures point-to-point or point-to-multipoint radio links, operating in frequency bands allocated to the fixed service, in the range between 3 MHz and 30 MHz.

**<sup>46</sup>Space station**

A station located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.

**<sup>47</sup>Aircraft station**

A mobile station in the aeronautical mobile service located on board an aircraft, other than a survival craft station.

**<sup>48</sup>Survival craft station**

A mobile station in the maritime mobile service or the aeronautical mobile service intended solely for survival purposes and located on any lifeboat, life-raft or other survival equipment.

**<sup>49</sup>Land station**

A station in the mobile service not intended to be used while in motion.

**<sup>50</sup>Ship station**

A mobile station in the maritime mobile service located on board a vessel which is not permanently moored, other than a survival craft station.

**<sup>51</sup>Mobile earth station**

An earth station in the mobile-satellite service intended to be used while in motion or during halts at unspecified points.

**<sup>52</sup>Mobile-satellite system**

Electronic communications networks and associated resources able to provide radiocommunication services between a mobile earth station and one or more space stations, or between mobile earth stations by means of one or more space stations, or between a mobile earth station and one or more complementary ground based station used at fixed locations. This system must include, at least, one space station.

**<sup>53</sup>Radio broadcasting station**

A station in the broadcasting service.

**<sup>54</sup>Space tracking**

Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

**<sup>55</sup>Space telemetry**

The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft<sup>63</sup>, including those relating to the functioning of spacecraft.

**<sup>56</sup>Space telecommand**

The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate functions of equipment on an associated space object, including the space station.

**<sup>57</sup>Active sensor**

A measuring tool used in the Earth exploration-satellite service or in the space research service<sup>64</sup>, by means of which information is obtained through the transmission and reception of radio waves.

**<sup>58</sup>Passive sensor**

A measuring tool used in the Earth exploration-satellite service or in the space research service, by means of which information is obtained through the reception of radio waves of a natural source.

**<sup>59</sup>Satellite**

A body which revolves around another body of preponderant mass and which has a motion primarily and permanently determined by the force of attraction of that other body.

**<sup>60</sup>Base station**

A land station in the land mobile service.

**<sup>61</sup>Land mobile station**

A mobile station in the land mobile service capable of surface movement within the geographical limits of a country or continent.

**<sup>62</sup>Land mobile service network**

A network including base stations and/or land mobile stations, operating in frequency bands allocated to the land mobile service.

**<sup>63</sup>Spacecraft**

A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.

**<sup>64</sup>Space research service**

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