## 0.1 INTRODUCTION

Under the terms of Article 3 of Law no 5/2004 of 10 February - Law of Electronic Communications (LCE) - which defines the legal regime applicable to electronic communications networks and services and to associated resources and services, as well as the powers and responsibilities of ICP-ANACOM in this field, the following definitions are used:

"Electronic communications network, transmission systems and, where applicable, switching or routing equipment and other resources making it possible to send signals by cable, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit-switched or packet switched, including the Internet) and land mobile networks, power line systems, when used to transmit signals, networks used for audio and television broadcasting, and cable television networks, irrespective of the type of information conveyed."

"Electronic communications service, the service normally provided for a price, which includes or is fully made up of sending signals through electronic communications networks, including telecommunications services and transmission services on networks used for broadcasting, without prejudice to the exclusion referred to in paragraph b) of section 1 of article 2 of Law no 5/2004 of 10 February."

In accordance with Article 15 of the Law of Electronic Communications, ICP-ANACOM is charged, with regard to the management of the spectrum, with planning the use of frequencies in accordance with the following criteria:

- a) availability of radio spectrum;
- b) guarantee of effective competition in the relevant markets;
- c) effective and efficient use of frequencies.

ICP-ANACOM is likewise responsible for allocating and assigning frequencies according to objective, transparent, non-discriminatory and proportionate criteria. ICP-ANACOM shall further promote the harmonized use of frequencies in the European Union in order to ensure their effective and efficient use, pursuant to Decision no 676/2002/EC of the Parliament and of the Council of 7 March 2002, concerning a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision).

Meanwhile, in accordance with Article 16 of the LEC, ICP-ANACOM is charged with publishing, on an annual basis, the NFAP - National Frequency Allocation Plan (*Quadro Nacional de Atribuição de Frequências*), which shall consist of:

- a) the frequency bands and number of channels already allocated to companies providing publicly available electronic communications networks and services, including the revision date of each allocation;
- b) the reserved frequency bands and those to be made available in the following year, within the scope of (publicly available or not) electronic communications networks and services, specifying the cases where frequency usage rights are required, and the corresponding allocation procedure;
- the frequencies whose usage rights may be transferred, under the terms of article
   37 of the Law of Electronic Communications.

Frequencies allocated to the Armed Forces and to security forces and services are not included in this publication.

The NFAP further contains the appropriate radio spectrum subdivisions, listings for each frequency band of all radiocommunications services applicable to Portugal, according to the Radiocommunications Regulation (RR) of the International Telecommunication Union - Radiocommunication Sector (ITU-R). This information is presented in the "Frequency Allocation Table". This Table likewise reflects the main national applications, without prejudice to future decisions which may be taken by determination of the Board of Directors of ICP-ANACOM.

The Radio Regulation, which is a document published by ITU-R, resulting from agreements signed by the Member States in the context of international conferences, is binding upon the countries belonging to this organization. The "Frequency Allocation Table" is effectively derived from this treaty, specifically Article 5 thereof, which identifies the spectrum allocated to a wide range of radio services for each one of the ITU's three administrative regions of the world.

"Table of Frequency Allocation Table" of Article 5, and all other articles, appendices, Resolutions and Recommendations, may only be modified at the World Radiocommunication Conferences (WRCs), held every 3 or 4 years. Besides the reviewing the RR, the WRCs establish regulatory and technical guidelines for the use of the radio spectrum and for satellite communications. The results of the most recent WRC, held in Geneva, from 22 October to 16 November 2007, can be consulted at

http://www.anacom.pt/render.jsp?categoryId=117299&languageId=1. In the meantime, preparation work will soon begin for the next WRC, scheduled for 2011.

The uses of the spectrum are based on the publication of the frequency band uses and reservations established for each year by the NFAP, in respect of electronic communication services and networks whether publicly available or not.

Undertakings intending to provide publicly available electronic communications networks and services which entail use of the spectrum are bound to previously submit a short description of the network or service they intend to commence to ICP- ANACOM and to give an estimate of the intended date of commencement, without prejudice to other details which may be required by the regulator. The procedures for commencing the provision of electronic communication networks or services can be consulted on ICP-ANACOM's

(http://www.anacom.pt/render.jsp?categoryId=113659&languageId=1).

The provision of non-publically available electronic communication networks or services, operating in bands of radio frequencies subject to licensing, is only dependent on the corresponding network or station licensing application, pursuant to Decree-Law no 151-A/2000 of 20 July.

The legal regime applicable to the use of stations of the amateur and amateur satellite services is set forth in Decree-Law no 53/2009 of 2 March.

Where frequency uses are for own use and exempt from radio licensing, no prior ICP-ANACOM action is required for spectrum use. The NFAP includes indication of such uses that are exempt from radio licensing.

The NFAP further specifies the cases where frequency usage rights are required, and the corresponding allocation procedure, which may be by full accessibility mode or may involve selection by competition or comparison, including auction or tender. The respective processes follow specific procedures, as set out by articles 31 and 35 of the Law of Electronic Communications.

The usage rights set out in the NFAP are transferable in accordance with the regime set forth in article 37 of the LEC. Additionally, ANACOM intends to define a general policy, in respect of the transmission of frequency usage rights, with the establishment of rules and relevant conditions.

Under the terms of article 31 of the Law of Electronic Communications, notwithstanding the terms of the NFAP, ICP-ANACOM may proceed to release decisions limiting the allocation of usage rights, which decisions shall have due grounds and shall take into

consideration the need to maximise benefits for users and to facilitate the development of competition.

In summary, it is the remit of ICP-ANACOM to carry out the planning of frequencies, which planning shall have a basis that includes the availability of the radio spectrum and the effective and efficient use of frequencies.

As can be seen in the section of the NFAP that presents the reservation of frequency bands established for each year, the process of allocating available spectrum is, as a rule, that of full accessibility. Note should be taken of the availability of spectrum in full accessibility, for example in Fixed Service applications. This permits users of the spectrum swifter access, maximising benefits for consumers, promoting competition and the development of the market.

It should also be noted that, as required by the LEC, the present version of the NFAP identifies the frequencies available in 2008/2009 for the operation of electronic communications networks and services (annex 3 to the present publication), especially the existence of the available spectrum for:

- BWA (4 blocks of 2x28 MHz) in the 3400-3800 MHz band, which will be subject to auction;
- FWA, with geographical limitations, in the 24.5-26.5 GHz band (full accessibility);
- Publicly available land mobile service (1 carrier of 2x1.25 MHz on a national basis) in the 450-470 MHz band, to be assigned subsequent to public tender;
- Land Mobile Service in the GSM extension band (50 channels of 200 kHz to 900 MHz)
   and 150 channels of 200 kHz also in the 1800 MHz band;
- Mobile Communications onboard Aircraft (MCA the 1800 MHz band) and on board trains (GSM-R - the 900 MHz band).
- Fixed service, point-point and point-multipoint links, in various frequency bands;
- Analogue and digital radio and television broadcasting;
- Fixed satellite, mobile satellite and satellite broadcasting services.

Also in relation to the available spectrum, or spectrum that is expected to become available over the medium term, there are two additional notes:

• It was considered necessary to discuss the framework for the 2.6 GHz band (2500-2690 MHz); this band is the subject of a public consultation being held to compile the

views of various market participants on the future framework that will define the method of allocation and use of this band;

Analogue television broadcasting transmissions have been scheduled to cease by 26
April 2012, in particular in the UHF range (470-862 MHz) and it is expected that there
will be broad debate on the future use of the spectrum that results from the switch-off
(digital dividend).

Note should also be made of the intention to initiate a multidisciplinary discussion on secondary spectrum trading, with the aim of moving forward in finding mechanisms which provide for flexible and efficient management and use of the radio spectrum.

As noted, the allocation and assignment of frequencies is governed by objective, transparent, non-discriminatory and proportionate criteria. The harmonisation of spectrum usage at a European / worldwide level is a further factor in spectrum planning, which is reflected in the information contained in the NFAP. In this context emphasis should be given to the extreme importance that the NFAP has for the management and planning of the radio spectrum insofar as it brings together part of the elements required for the full compliance of these activities, as for the market, providing in a transparent form to all stakeholders, the information needed for the development of their activity.

Following amendments made by the WRC to the RR, and as a result of the analysis and background of market developments and trends at a national and European level, amendments to the NFAP are proposed through this document. Taking into account that the adoption of the NFAP constitutes a measure with significant impact on the relevant market, it is annually submitted to the general consultation procedure as set out in article 8 of the Law of Electronic Communications. Subsequently, a new edition of the NFAP is published, in order that the edition in force remains updated. Nevertheless, in exceptional circumstances and where there is due cause, there may be a need to make alterations to items contained in the NFAP.

As a fundamental instrument in the management of the spectrum, stability is enshrined in the NFAP by the Law, in order to guarantee security to market players, together with the capacity to adapt.

In the meantime, it is necessary to ensure a balance between the stability that is the aim of the NFAP and the alterations that are necessary to ensure that it continues to appropriately reflect the objectives as set out by Law, in particular the need to promote harmonisation of frequency use (paragraph 4 of article 15 of the Law of Electronic Communications) and the guarantee of conditions for effective competition in the relevant

markets, as well as the effective and efficient use of frequencies (see points b) and c) of paragraph 2 of article 15 of the Law of Electronic Communications).

In summary, the NFAP has been updated to reflect current usage (dated November 2008) and the availability of the spectrum for 2008/2009 as follows:

- a) Update of the allocation table (Annex 1), to reflect the results of the World Radiocommunication Conference WRC-07 and the introduction of a new Annex 6 containing the frequency bands and conditions of use by the various amateur categories;
- b) Update of the uses of the frequency bands with reference to November 2008 (Annex 2);
- c) Provision, among others, of spectrum for MCA, GSM-R, Fixed Service FH (opening of new channels at 56 MHz in the 7 and 13 GHz bands), P-P links in the 74-76 / 84-86 GHz bands (fixed service), OE and EXP-S (**Annex 3**);
- d) Update of equipment exempt from licensing (Annex 4):
  - Inclusion of detection, tracking and data acquisition systems in the 169.4-169.475 MHz band;
  - Inclusion of medical applications in the 401-402 MHz, 405-406 MHz, 30-37.5 MHz and 12.5-20 MHz bands:
  - Inclusion of a set of bands restricted to exempt equipment operating on a "non-interference and non-protection" basis;
- e) A separate annex was introduced for "UWB devices", comprising "generic" UWB equipment (moved from Annex 4) and specific UWB equipment added for GPR / WPR and BM (Annex 5);
- f) A new Annex 6 was created containing the frequency bands and conditions of use (maximum allowed power) by the various amateur categories, as well as the status of the amateur and amateur satellite services:
- g) Editorial alterations were made to the numbering, changing the previous Annex 6 to Annex 7 and respective references throughout NFAP 2008 V1.

If the information contained in this publication raises any queries, requests for clarification should be sent to the following email address:

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