

Decision

DTT - Renewal of temporary network license

1. Decision to award temporary network license

By ICP-ANACOM determination of 18 May 2012¹, PT Comunicações, S.A. (hereinafter PTC) has been granted a temporary license network², for a period of 180 days and comprising 3 stations, to be implemented on the following terms:

- a) Monte da Virgem Transmitter: channel 42 (638-646MHz);
- b) Lousã Transmitter: channel 46 (670-678 MHz);
- c) Montejunto Transmitter: channel 49 (694-702MHz).

In this determination, ICP-ANACOM further ordered PTC:

- *«To optimize the technical characteristics of the network supported on channel 56, with a view to an effective decrease of self-interference zones, on a priority basis in areas not covered by the network to which temporary licensing is allocated under the present decision»;*
- *"To send a report to ICP-ANACOM, on a monthly basis, detailing the alterations made in the technical characteristics of the network, with a view to reducing potential zones of self interference, also indicating areas where an increase in the Signal/Noise ratio (S/N) is guaranteed compared to the previous situation";*
- *" To put in place (...) appropriate procedures to eliminate the costs incurred by users as a result of having to make adjustments to the network now licensed, which procedures shall be reported to ICP-ANACOM";*
- *"To put in place (...) a plan for communication to affected DTT users, which is suitable to disclose such information as is necessary due to the operation of the network now licensed, which plan shall be reported to ICP-ANACOM".*

This temporary network license was issued, on legal terms, valid until 15 November 2012.

¹ <http://www.anacom.pt/render.jsp?contentId=1127427>

² Under Article 13 of Decree-Law no. 151-A/2000 of 20 July, as amended by Decree-Law no. 264/2009 of 28 September.

2. Developments

2.1. Decision oversight

Subsequent to ICP-ANACOM's decision of 18 May 2012, PTC undertook deployment and licensing of the three stations in question, respecting the technical characteristics established therein.

With a view to reducing areas of self-interference and, thereby, increasing the proportion of the population covered by the single frequency network transmitting on channel 56, PTC has developed a set of actions for the purpose of network optimization; these actions were summarised in monthly reports submitted to ANACOM on 30 July, 3 September, 1 October and 31 October 2012.

PTC, in the optimization of its network, and further to "launch delays" for some stations, has essentially developed four types of procedures:

1. Installation of new transmitters with relatively low power;
2. The implementation, on several stations, of lower vertical radiation lobes;
3. Transformation of transmitter gap-fillers;
4. Modification of the horizontal radiation pattern of some stations.

These procedures enable effective network optimization because:

1. Installation of new transmitters with relatively low power improves coverage in areas where the signal intensity is near the reception limit and/or in areas with self-interference caused by multiple transmitters;
2. Implementation, at several stations, of lower vertical radiation lobes, by focusing radiated energy into an area in proximity to the respective transmitters, improves coverage in areas with self-interference on the network due, principally, to the high signal from the transmitters themselves;
3. With the transformation of transmitter gap-fillers, coverage of these stations is now much more stable, eliminating reception instability, since the stations are supplied by the transport network and not by the signal received from other stations on the network, thereby avoiding any reception problems subsequently passed on to the transmitter; and

4. modification of the horizontal radiation pattern of some stations redirects the radiated energy to areas where signal strength was insufficient to provide correct reception or attenuates the radiated energy to areas distant from the transmitter where the transmitter's signal was of an intensity that degraded service reception.

From the beginning of the optimization process and up to 25 October, PTC (1) installed 12 new stations (Vila Franca de Xira, Alter do Chão, Alverca, Sátão, Nisa, Gavião, Moura, Melides, Cerdeira, Vilar Formoso, Castelo de Vide and Porto de Mós), (2) lowered vertical radiation lobes of 11 stations (Palmeira de Faro, Monte Franqueira, Alto do Galeão, Viana do Castelo, Santiago do Cacém, Candeeiros, Santo Tirso, Abrantes, Óbidos, Lousa-Torre de Moncorvo and Estremoz), (3) transformed 9 transmitter gap-fillers (Ribeira de Pena, Fornos de Algodres, Pombal, Montemor-o-Novo, Termas de Monfortinho, Mira de Aire, Alcácer do Sal, Vieira do Minho and Couço); and (4) modified the horizontal radiation pattern of three stations (Marvão, Portalegre and Sines). These changes entailed intervention corresponding to approximately 20 percent of the network.

According to ICP-ANACOM estimates, these procedures have expanded DTT broadcasting coverage on channel 56 on the mainland territory by about 30,000 people.

Furthermore, by letter dated 25 May 2012, and following a request for clarification addressed to ICP-ANACOM, PTC reported on the adopted communication plan, which was found to be consistent with the determination, and also on the reimbursement procedure as regards user-incurred costs.

On the latter aspect, ICP-ANACOM further determined that reimbursements by PTC were to be performed in line with the terms adopted for the payment of DTT subsidies, and not by bank transfer only, as the company had proposed.

2.2. Recent communications from PTC

Recently, ICP-ANACOM received two letters from PTC, with the following content.

a) By letter dated 23.10.2012 PTC, set out, in summary, the following:

Pursuant to the determination in question, PT Comunicações was made subject to a set of obligations that have been met and continue to be met; these include development of actions to optimize the technical characteristics of the DTT network supported on channel 56 and submitting monthly reports with a description of the actions undertaken. Furthermore, the obligations relating to the specific communications plan and to the reimbursement of costs incurred by persons who re-pointed aerials towards these transmitters were fulfilled in full (...) ».

It was further stated that «*While it remains necessary to monitor the DTT network, in terms of both the SFN and MFN components, and to perform subsequent optimization, the need to rectify situations where problems are detected is increasingly infrequent, and it could be concluded that all transmitters operating on all channels complement each other and contribute to the transmission of TV channels without disruptions. (...)*

PTC also claims that the current status of DTT in Portugal is "*demonstration that ICP-ANACOM, together with PT Comunicações, found the best solutions to help people with the transition to DTT, and is also and principally in order to minimize the impact of natural phenomena, which, in fact, constitute one of the main problems in terms of network operation, especially when there is only one SFN network for the national territory*".

In this context, PTC took the view that "*the option of operating an MFN network, operating on three channels identified above in coordination, in a complementary and integrated manner with channel 56, is shown to be a fitting, efficient and effective way to minimize the impact on the population of natural phenomena [as impact propagation conditions]*".

In conclusion, PTC considers *"it timely and urgent to conduct a reassessment of ICP-ANACOM's act of granting the license, with a view to renewing the respective 180-day period as provided for in Law (See Article 13 of Decree-Law no. 151-A/2000 of 20 July). "*

And in light of the above, PTC seeks *"the action that ICP-ANACOM considers to be the most appropriate in order to proceed with the maintenance of the MFN network currently in use, not omitting its configuration, together with the network operating on channel 56 (see DUF ICP-ANACOM no. 06/2008), as a united and integrated DTT network, with the aim and purpose of serving the population with quality and without any impact or disruption in the use of DTT in Portugal"*.

b) By letter dated 31.10.2012 and in compliance with the requirements laid down in determination of 18 May 2012, PTC sent ICP-ANACOM a report, covering the period between 28.09.2012 and 25.10.2012 and detailing concluded, ongoing and planned actions, as well as indicating the target areas of optimization actions.

In this context, it is to be noted that PTC describes a set of DTT network optimization actions in respect of which diagnostics and solutions have not yet been identified, but which remain in the planning stage.

The described actions refer to areas (Alentejo and Algarve) where there have been complaints which are not permanent or systematic in character and in respect of which PTC is taking ongoing action, but, in respect of which it has not yet been possible to conduct final characterization enabling identification of the respective diagnoses and solutions.

3. Analysis of the application for temporary network license renewal

Under the legal regime applicable to the licensing of radiocommunications networks and stations³ (hereinafter "the legal regime governing radiocommunications"), it is determined that *"Temporary radiocommunications station or network licences may be granted for a period not exceeding 180 days and may be renewed once for a like period"⁴.*

³ Decree-Law no. 151-A/2000 of 20 July, as amended and republished by Decree-Law no. 264/2009 of 28 September.

⁴ Article 13, paragraph 1.

In the cases referred to in the preceding number, licensing applications shall be submitted to the ICP-ANACOM at least 10 days prior to the date on which it is proposed the licence should come into force⁵.

Subsequent to PTC's submission of an application for renewal of its temporary network license - valid until 11/15/2012 - by letter dated 23.10.2012, received at ICP-ANACOM on the same date, the requirement under the legal regime governing radiocommunications, on which assessment of the application for the single permitted renewal depends, is fulfilled.

ICP-ANACOM considers that, to date, the solution adopted under its decision of 18 May has proved very useful, insofar as it has helped achieve a reduction in situations of self interference, improving and stabilizing the conditions of service reception in large geographic areas, and simultaneously enabled execution of the process of optimising the technical characteristics of the network supported on channel 56.

This solution has therefore made it possible to eliminate many of the existing difficulties, which is evidenced by a reduction over time in the number of complaints and by the level of complaints that ICP-ANACOM currently receives about DTT; these complaints are at their lowest level since the first phase of the analogue switch off was begun in January 2012.

However, optimization is not yet fully concluded. Given that the network currently consists of 215 stations on the mainland territory, deployment of this process takes some time, especially since the network is a single frequency network, with all the demands that this entails, in terms of technical transmission characteristics of the stations comprising it. Therefore, some time was required after the switch off, such as has happened in countries that have already made the digital transition, to achieve stabilization and optimization of the DTT network.

In this context, it is noted that in its most recent report, sent on 31 October, PTC stated that (i) optimization actions are ongoing, including the installation of a new transmitter in Arronches and

⁵ Article 13, paragraph 2.

the lowering of vertical radiation lobes (Bufão and Gardunha stations), and (ii) actions to take place in Alentejo and Algarve remain in study and planning phases.

Accordingly, ICP-ANACOM recognizes that conditions do not exist at this time as would provide for the non-renewal of the temporary license, given that such a course would result in difficulties of service access. However, over the coming months, it will be necessary to reach a definitive solution which must be efficient and suitable, subsequent to advancement of network optimisation work, accomplishing greater stabilization/consolidation of DTT coverage areas versus DTH, and necessary also to reach a sounder understanding of service access difficulties resulting from the adaptation and state of conservation of reception installations and from signal instability.

Given the above, ICP-ANACOM considers it warranted to grant one-off renewal, as permitted by law, of the temporary network license, for a period of 180 days, subject to the terms and conditions set forth in its decision of 18 May 2012.

Considering that the assumptions as warrant the renewal requested by PTC, have been fulfilled since 15.11.2012, the date until which the temporary network license was valid, this renewal decision should have effect from that date.

4. Request "MFN network maintenance"

As mentioned earlier, in its letter of 23 October 2012, PTC sought "*the action that ICP-ANACOM considers to be the most appropriate in order to proceed with the maintenance of the MFN network currently in use, not omitting its configuration, together with the network operating on channel 56 (see DUF ANACOM no. 06/2008), as a united and integrated DTT network (...)*".

On this point, and as mentioned above, it is emphasised that temporary network licensing is, by definition, a temporary solution and, as such, prolongation of the present situation beyond expiry of the 180 day one-off licence renewal period - which appears to be the situation sought by PTC - requires proper consideration and thorough analysis; it also requires a special framework, the definition of which, should prolongation prove warranted, is to be prepared and developed in a

timely manner which is in line with the applicable legal procedures governing ANACOM's decision-making process.

In this context, and since several scenarios are possible in theory, with corresponding advantages and disadvantages, ICP-ANACOM deems it fitting that PTC be bound to provide notification within 15 days, as to the definitive solution which it proposes for the future, formulating this proposal on a reasoned basis.

5. Decision

Accordingly, in light of the above, pursuant to the powers set out in article 6, paragraph 1, points c) and h), and considering the provisions of article 16, paragraph 3, both of its Statute, as published in annex to Decree-Law no. 309/2001 of 7 December, in pursuit of the objectives of regulation as laid down in article 5, paragraph 1, point c) and paragraph 4, point d) of the *Lei das Comunicações Eletrónicas* (Electronic Communications Law), under the terms of articles 15 and 16 thereof, under article 13 of Decree-Law no. 151-A/2000 of 20 July, as amended and republished by Decree-Law no. 264/2009 of 28 September, and under article 26, point l) of ICP-ANACOM's Statutes, and furthermore with a view to the provisions of article 103, paragraph 2, point b) of the *Código do Procedimento Administrativo* (Administrative Proceeding Code), the Management Board of ICP-ANACOM determines:

1. To renew the temporary network license granted to PTC, in accordance with the terms and conditions set forth in ICP-ANACOM determination of 18 May 2012, for a period of 180 days, having effect from 15 November;
2. To order PTC that, within a period not exceeding 15 days, it shall inform ICP-ANACOM as to the definitive solution which it proposes for the Digital Terrestrial Television network, upon expiry of the present temporary network license, which proposal is to be formulated on a reasoned basis.