2. ELECTRONIC COMMUNICATIONS

2.1. Market analyses

By the end of 2007, ICP-ANACOM had concluded the analysis and notified the EC in accordance with the terms of article 7 of the Framework-Directive (Directive 2002/21/EC) on the relevant markets identified on the Recommendation of the Commission (2003/11/EC) for the purpose of ex-ante regulatory intervention, with the exception of markets 15 and 17. It should be noted, however, that the publication of the new Recommendation of the EC (2007/879/EC)[2], on 17 December, only identifies 7 relevant markets, not including former markets 15 and 17, and therefore their analysis and notification to the EC[3] is no longer mandatory.

Notwithstanding, namely regarding market 15 (call access and origination in public mobile telephone networks wholesale market), for which ICP-ANACOM developed several preliminary works during 2007, a decision may be adopted for a notification, should there be the need for a regulatory intervention in order to reduce possible competition problems identified in that market.

In fact and in this context, it should be highlighted that the non-inclusion of a given market on the list of markets identified by the EC as being eligible for ex-ante regulation does not mean that this market cannot be subject to regulatory interventions. In fact, the EC, in the explanatory note of the new Recommendation[4], mentions that possibility and urges national regulators to specifically follow-up that market and its competition dynamics.

[2] Recommendation of the Commission, regarding relevant product and service markets in the electronic communications sector eligible for ex-ante regulation according to Directive 2002/21/EC of the European Parliament and the Council
http://ec.europa.eu/information_society/policy/ecomm/doc/library/proposals/rec_markets_en.pdf

[3] Besides former markets 15 and 17, the Recommendation of the EC (2007/879/EC) no longer includes on the list of relevant markets the retail markets for telephone services (former markets 3 to 6), leased lines retail and wholesale markets (former markets 7 and 14), the transit services market (former market 10) and the broadcasting services market (former market 18).

[4] Explanatory Note SEC(2007)1483 final
http://ec.europa.eu/information_society/policy/ecomm/doc/library/proposals/exp_note_markets_en.pdf

2.1.1. Market 18 – Broadcasting transmission services to deliver broadcast content to end users

ICP-ANACOM's Board of Directors approved, on its determination of 11 January 2007[5], this Authority's draft decision regarding the definition of the wholesale market of broadcasting transmission services to the delivery of broadcast contents to end users, the assessment of SMP in that market and the imposition, maintenance, change or suppression of regulatory obligations, which preparation work took place in 2006, as mentioned in the corresponding Regulation Report, and also approved on that occasion sending this decision to AdC. After receiving this Authority's opinion, a determination of 22 February approved the launch of a public consultation procedure regarding the mentioned draft decision.

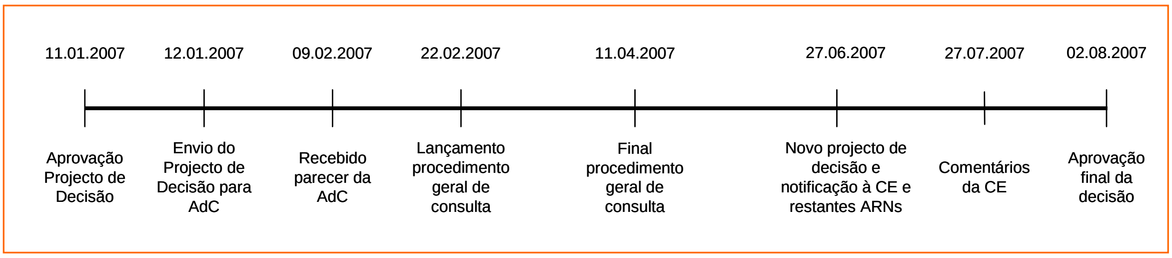
After weighting the analysis made to the received proposals, a determination of 27 June approved the new draft decision regarding market 18 for notification to the EC and to the national regulatory authorities of the remaining Member States.

On July 27th the EC stated its opinion on the notified analysis, It only referred that emerging technologies such as fixed wireless access (FWA) and the set of DSL (xDSL) / Internet Protocol (IP) technologies may increasingly become a competitive restriction to cable television broadcasting services. It therefore invited ICP-ANACOM "to monitor developments in this market and to re-evaluate the situation if necessary", which did not change the analysis that had been carried out, since the decision already foresaw that follow-up.

ICP-ANACOM's Board of Directors approved on August 2nd the final decision on market 18, the analysis' main conclusions being already described on Regulation Report 2006. Figure 1 summarizes the entire schedule associated to market 18, which shows the typical schedule of the market analyses under the framework established by the EU.

[5] ICP-ANACOM's determinations and draft decisions (DD) mentioned throughout this Report are available at this Authority's web site, on the "ANACOM - ANACOM Determinations" area (http://www.anacom.pt/render.jsp?categoryId=69000&languageId=1).

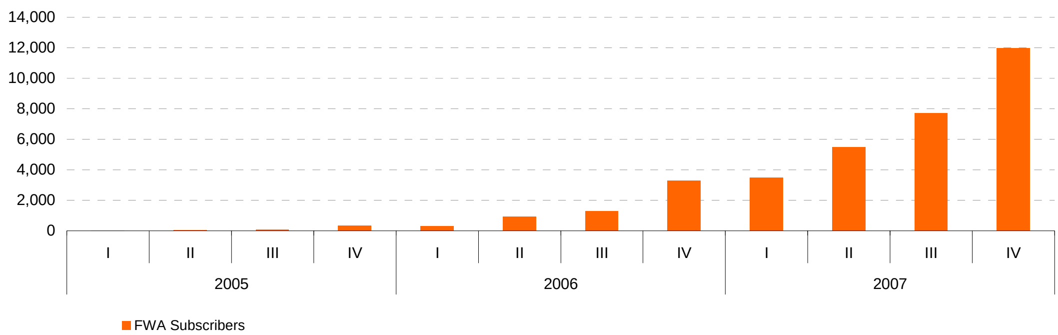
Figure 1. Schedule associated to the approval of the final decision on market 18



As mentioned on the final decision on market 18, ICP-ANACOM closely monitored, during 2007, the developments concerning emerging broadcasting technologies, such as FWA and xDSL/IP.

Regarding the FWA technology, as shown on Graph 1, it registered a considerable increase in the amount of accesses which, supported on this technology, enabled the provision of triple-play services, including paid TV. In absolute terms, however, the number of accesses is still relatively low.

Graph 1. Evolution in the number of subscribers of FWA triple-play offers



Source: ICP-ANACOM

Regarding the internet protocol Television service (IPTV), over ADSL (asymmetric digital subscriber line) accesses, a considerable evolution on this type of offers was also registered, with new and more competitive conditions. One of the alternative operators having included in its broadband Internet and fixed telephone bundled offer the possibility to reach around 20 TV channels while maintaining the offer's global price. Also regarding these technologies, the start of IPTV service provision (in the pack named Meo) by the incumbent operator should be mentioned, in the year when PT Multimédia's spin-off from Grupo Portugal Telecom (PT Group) took place.

Also regarding the monitoring of alternative broadcast technologies it is important to mention the beginning of the provision of direct to home (DTH) services by a cable television distribution operator, enabling the increase of competition in the provision of the paid television service in the whole national territory.

Lastly, it should also be mentioned that 2007 witnessed the start of the consultation procedure in connection with the introduction of DTT in Portugal, as further developed in section 2.4.6. Following this process there will be an evolution towards the beginning of the provision of services based on this technology, which will completely replace the broadcasting service using terrestrial analogue networks.

2.1.2. Market 15 – Access and call origination on public mobile telephone networks

In 2007, several events took place that may have an important impact on market 15's competitive situation and contribute to a more sustained decision on the need of regulatory intervention. In this context, the signature of an agreement regarding the creation of conditions for the provision of an MVNO service with postal operator CTT stands out.

In addition, mention should also be made to the activities started by ICP-ANACOM on the granting of frequencies for broadband wireless access systems (BWA) in the 3.4-3.8 GHz band and for rights of use of frequencies in the 450-470 MHz band, mentioned on sections 2.4.3. and 2.4.4 of this report, which will expectedly foster the entry of new players into the market, which will hopefully lead to increased competition.

2.1.3. MVNO activity's regulatory framework

The fact that the analysis of market 15 is not yet concluded and that, therefore, no operator has been notified with SMP with the obligation to provide access to its networks, does not hinder the possibility for entities to emerge operating as MVNOs, following free negotiations between the parties.

Therefore, and in order to clarify some doubts placed by potential interested parties in the operation of MVNO activity, ICP-ANACOM decided to publish, in February 2007, a summary of the regulatory framework in force applying to MVNOs[6], particularly concerning the general authorization regime, and issues concerning rights and obligations regarding numbering and interconnection. Thus, the entry into the market of MVNOs became more

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[6] Available at http://www.anacom.pt/render.jsp?categoryId=235942&contentId=455223&languageId=1.

efficient and transparent, recognizing their potential contribution to increasing the mobile market's competitive level.

In this context, ICP-ANACOM considered that there are several economic operations that may be included under the designation MVNO, with the common factor that they are not based on rights of use of frequencies and, consequently, on own infrastructure connected to the radio access network, and should therefore be supported on radio means provided by the network operators holding the corresponding right of use.

The notion of MVNO implies that there is at least a contractual relation between the MVNO and the end customer, in connection with the provision of the service, not including activities such as the simple distribution of services or its representation, where the contractual relationship between the end customer and the mobile network operator is maintained.

Another MVNO characteristic is the design and marketing of an own retail offer, with the freedom to differentiate it from the offer of the mobile network operator on which they are supported, and defining their own commercial strategy autonomously. But even sharing the mentioned characteristics, different operations may be within the framework of MVNO, depending on the degree on which they use their own infrastructure, and in either case the use of numbering rights can be granted, including blocs in the level "9" numbering range.

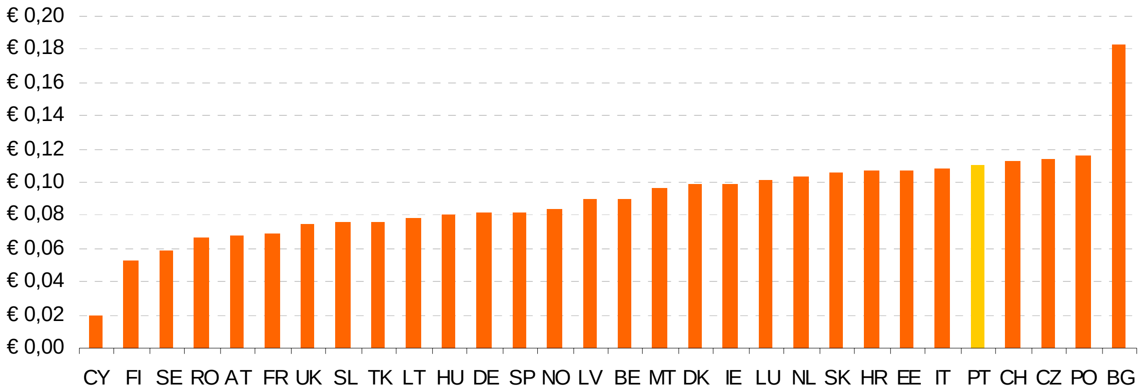
Following these clarifications provided by ICP-ANACOM, four entities registered as MVNO, still in 2007, while CTT was the only one who started providing the service, as mentioned above.

2.1.4. Market 16 – Voice call termination on individual mobile networks

In October 2007, ICP-ANACOM published a draft decision (DD) specifying the obligation of cost control of prices within the wholesale markets of voice call termination on individual mobile networks. The EC was simultaneously notified, according to the legally foreseen specific consultation procedure. It should be noted that in 2006 ICP-ANACOM notified the decision on the analysis of these relevant markets, which is still in force, as well as all its conclusions, including the obligations established at that time.

The absence of any termination price fall between October 2006 and the end of 2007 led Portugal's relative stand, in January 2008, to decline versus the remaining European countries. It became the 5th country with the highest price levels, as shown on Graph 2[7].

Graph 2. Average termination prices (January 2008)



Source: IRG

The final decision was adopted in July 2008 taking into account the replies received to the public consultation on the DD, which took place until 11 December 2007.

2.1.5. Market 17 – Wholesale national market for international roaming on public mobile networks

Regarding market 17 (wholesale national market for international roaming on public mobile networks), considering the recent developments in this area, particularly the entry into force of the Regulation of the Council and of the European Parliament on international

[7] The abbreviations contained in the following table will be adopted throughout this document:

Germany	DE		France	FR		Malta	MT
Austria	AT		Greece	EL		Norway	NO
Belgium	BE		Netherlands	NL		Poland	PO
Bulgaria	BU		Hungary	HU		United Kingdom	UK
Cyprus	CY		Ireland	IE		Czech Republic	CZ
Denmark	DK		Iceland	IS		Slovak Republic	SK
Slovenia	SL		Italy	IT		Romania	RO
Spain	ES		Latvia	LV		Sweden	SE
Estonia	EE		Lithuania	LT		Switzerland	CH
Finland	FI		Luxembourg	LU		Turkey	TR
Portugal – PT							

roaming[8], its pan-European nature, and its removal from the list of markets eligible for *ex-ante* regulation, ICP-ANACOM considered that its analysis was not justified.

2.2. Regulated offers

ICP-ANACOM pursued its activity of regulating the incumbent operator's reference offers, reviewing and consolidating offers already available on the market for some time (such as the reference interconnection offer (RIO), the leased lines reference offer (LLRO) and the "Rede ADSL PT" offer, regarding broadband wholesale access), and closely following-up the development of other more recently implemented offers (such as the reference conduit access offer (RCAO) and the wholesale line rental offer (WLRO)).

Below is a summary of the main activities implemented in 2007 for each of these offers:

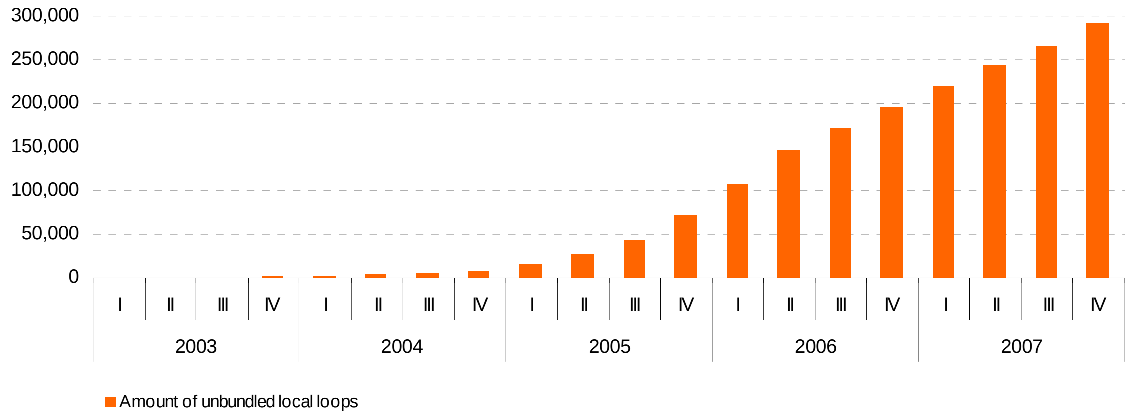
2.2.1. Reference unbundling offer (RUO)

The reference unbundling offer (RUO), which gives alternative operators physical access over the copper pairs to the facilities of end customers, continued to develop considerably and consistently during 2007.

The other service providers (OSP) maintained their interest and investment on the offer, which can be measured by the number of unbundled loops that, by the end of 2007, amounted to 291,175, which translated into a 49 per cent increase regarding the 195,752 unbundled loops existing in the end of 2006 (Graph 3).

[8] Regulation 717/2007 of the Council and of the European Parliament, of 27 June 2007, regarding international roaming, available at
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:171:0032:0040:EN:PDF

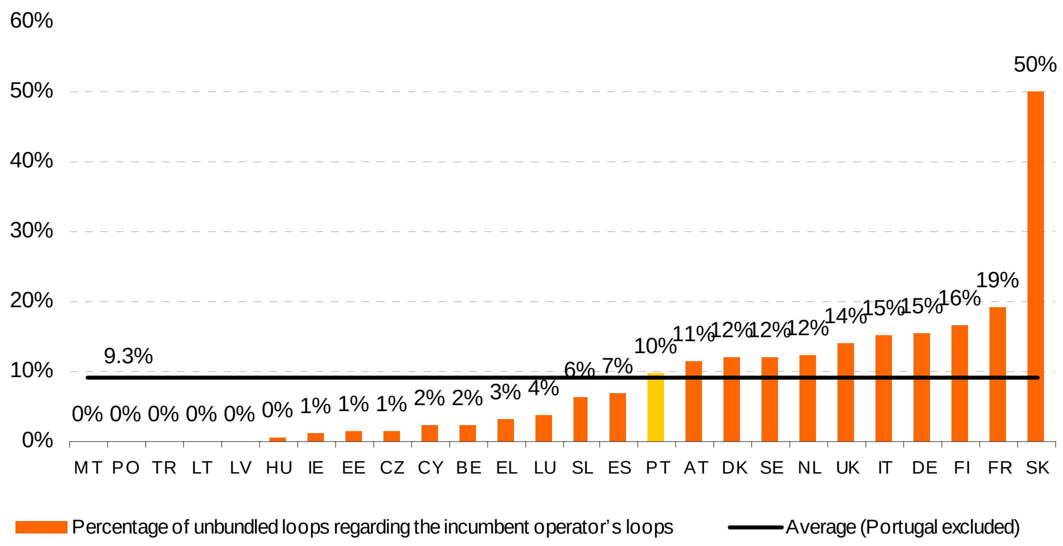
Graph 3. Evolution of the number of unbundled local loops



Source: ICP-ANACOM based on PTC data

Weighting the number of unbundled loops versus the incumbent operator's total loops, the conclusion is that Portugal had by the end of 2007 a ratio above the average of the considered countries (excluding Portugal) – see Graph 4.

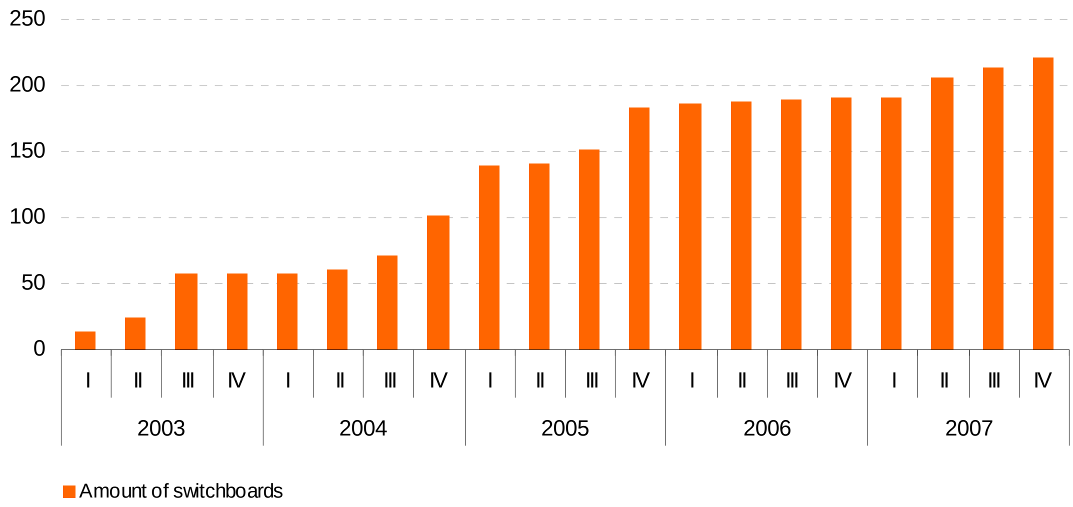
Graph 4. Percentage of unbundled loops regarding the incumbent operator's loops



Source: ICP-ANACOM based on data from the European Competitive Telecommunications Associations (ECTA) Broadband Scorecard, end of 3rd quarter 2007

Together with the increase in the number of unbundled loops, there was also an increase in the number of exchanges with co-located operators, which increased from 191 in December 2006 to 221 by the end of 2007 (Graph 5).

Graph 5. Evolution **in the number** of exchanges with co-located operators

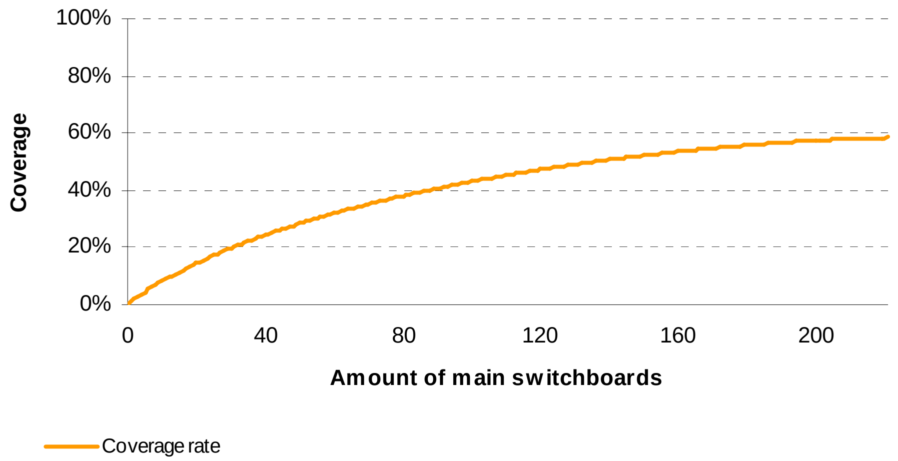


Source: ICP-ANACOM based on PTC data

Highlight should be made to the fact that the increase in the amount of exchanges enables the increase in the coverage of the new operator's wholesale offers based on LLU. At the end of 2007, the coverage rate was close to 60 per cent of the total amount of FTS subscribers, from PTC – see Graph 6.

It should also be mentioned that the distribution of accesses by PTC's exchanges – there are exchanges with thousands of accesses and others with only a few dozen accesses - explains the shape of the curve of Graph 6, since the marginal contribution of each exchange for the growth of LLU's coverage becomes smaller.

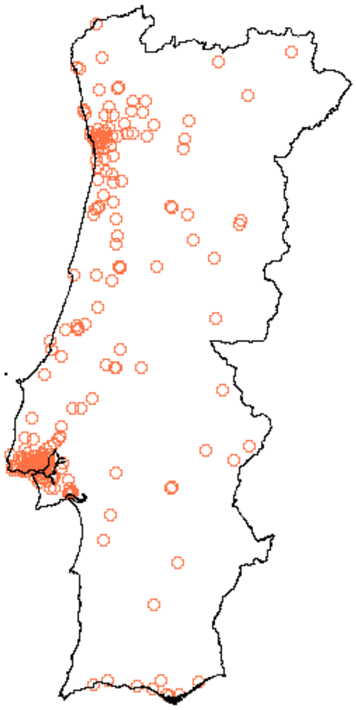
Graph 6. LLU's coverage in terms of FTS subscribers – main exchanges ordered decreasingly regarding the number of loops in use



Source: ICP-ANACOM based on PTC data

It should be noted that the increase in coverage does not correspond only to an increase in the amount of loops that can be unbundled, but also to the broadening of the geographic areas where users can now have access to new offers, particularly inland. Figure 2 shows the location of the exchanges where OSPs were co-located by the end of 2007 and from which they can offer retail services based on the LLU.

Figure 2. Location of the exchanges where OSPs enjoy LLU in Mainland Portugal (4th quarter 2007)



Source: ICP-ANACOM based on PTC data

It should be noted that, by the end of 2006 and during 2007, two new operators started providing retail services based on LLU, with positive effects regarding the competition that was introduced in the offer of communications services, particularly those regarding broadband Internet access.

On the other hand, the increase in the amount of co-located operators on each exchange contributed to increase the impact of some constraints that had already been detected on PTC exchanges, thus imposing a stronger regulatory intervention by ICP-ANACOM on this matter during 2007, within the framework of the regulation goals foreseen in Law no. 5/2004 of 10 February (Electronic Communications Law - ECL). Particularly standing out on this matter are the goals concerning the promotion of competition in the offer of electronic communications networks and services, the guarantee that users have the maximum benefit in terms of choice, price and quality, and the fostering of efficient investment on infrastructure and the promotion of innovation.

This intervention was noticed by means of a preventive and continuous action, mainly related to the close follow-up of the quality of service provided by PTC, but also, when necessary, with the implementation of measures aiming to solve specific obstacles timely identified by this Authority.

As previously mentioned, one of the obstacles already identified before 2007 was the fact that PTC had started to show a set of constraints, on several exchanges, preventing a quick availability of the conditions for the co-installation of equipment or for enlarging the modules already contracted by the OSPs, thus hindering the development of alternative offers and, in the final instance, end users. These constraints mainly regarded space availability on PTC's main exchanges' facilities and in the main exchanges, and concerning the availability of direct current (DC) power for supplying these operators' equipment.

In this context, this Authority implemented several supervisory actions on these exchanges in order to verify and contribute to solve these constraints.

Following these actions, and in order to foster a more efficient use of the RUO, it became necessary to establish additional rules for the reference offer. Under these terms, ICP-ANACOM approved on 12 April 2007, further to a previous hearing of the interested parties, a final decision on co-installation procedures.

Through that decision, ICP-ANACOM tried to minimize the above-mentioned constraints, establishing rules for an efficient and rational use of resources, having as main actions:

(i) To implement a *use it or loose it* rule, preventing the abusive maintenance of a space that is not being used by the OSP in situations where they are clearly not present;

(ii) Not to allow refusals or delays in co-location based on DC power constraints, when the OSP has sent demand forecasts;

(iii) To render possible the installation of smaller-sized modules, thus maximizing the use of the available space;

(iv) To ease and give credibility to demand forecasts by the OSPs.

Following the said determination, and taking into account the proposals for changes the RUO presented by PTC, ICP-ANACOM approved on 6 June 2007 another determination in order to further increase the efficiency of procedures and services connected to co-installation.

At the same time, there was also a decision on a new procedure for the resolution of malfunction repair on loops[9], resulting from a malfunction on internal cables or on the handover distribution frame (HDF), enabling PTC to chose that procedure, obviously in a non-discriminatory way.

On 20 July 2007, ICP-ANACOM issued a clarification on the procedures to adopt regarding the sharing of costs in connection with the total replacement of DC power systems, establishing that that cost sharing must take into account the total space occupied by all active equipment of all operators in that exchange, including PT Group companies.

Finally, a determination of 19 October 2007 approved the launch of a limited consultation for the performance of an audit to the quality indicators of the local loop access services provided by PTC, in order to identify the procedures for their determination and to guarantee their credibility, since the existence of an adequate and properly supervised quality of service will be increasingly crucial in maintaining LLU's sustained development.

During 2007, this Authority did not determine any change to the prices applying to the RUO. Notwithstanding, an analysis and constant monitoring was carried out regarding existing prices, not only taking into account the changes occurring in other wholesale offers (on "Rede ADSL PT", for example), but also by properly weighting the prices charged in other European countries.

International price comparisons show that the prices charged in Portugal in 2007 continued to be, in any case, best practices at the community (EU15) level, as shown on the following graphs:

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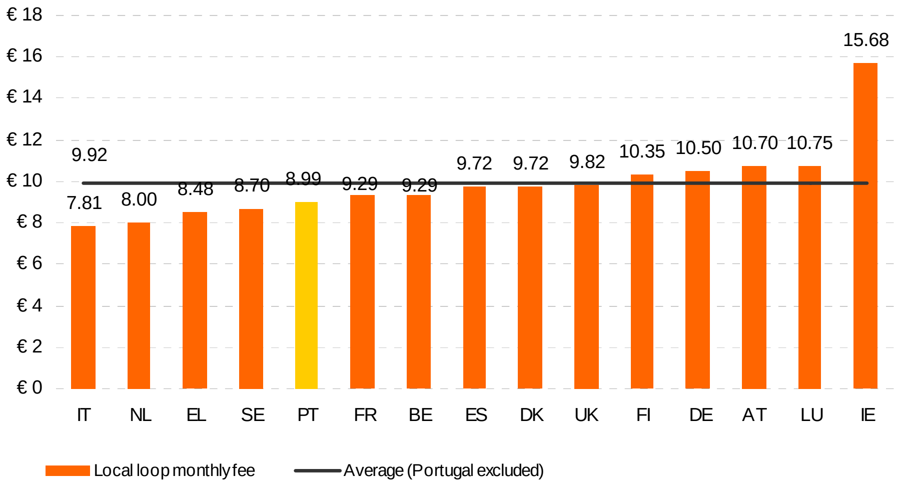
[9] Characterized by the following procedures:

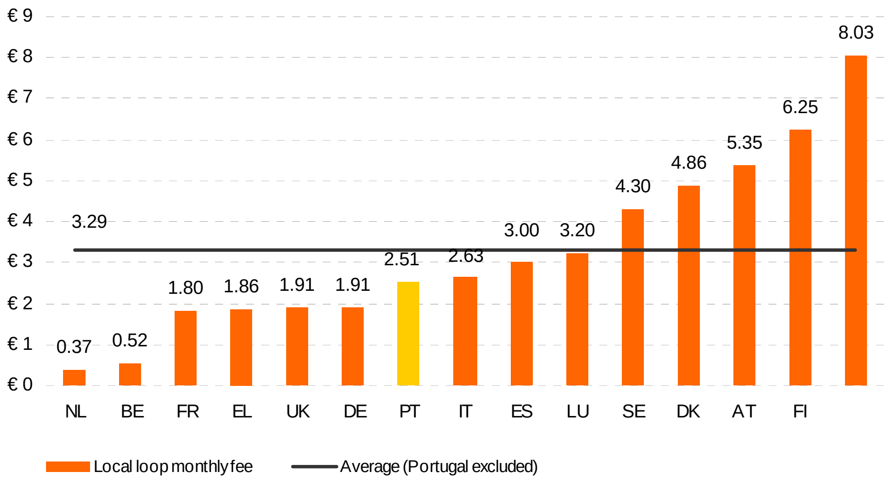
- Each operator should reserve, for each module or set of adjacent modules at a given exchange, a bloc of 50 or 100 pairs, and the corresponding HDF positions, to be used only in case of failure;
- In this situation, the exchange's positions become available, only in the event of failure of a pair, in a cable or in the exchange's borne, in which case the operator is requested to name the new HDF position to be used;
- Any possible costs in connection with the internal connection will be supported by PTC.

Graph 7. Local loop monthly fee (full access) – EU15 comparison



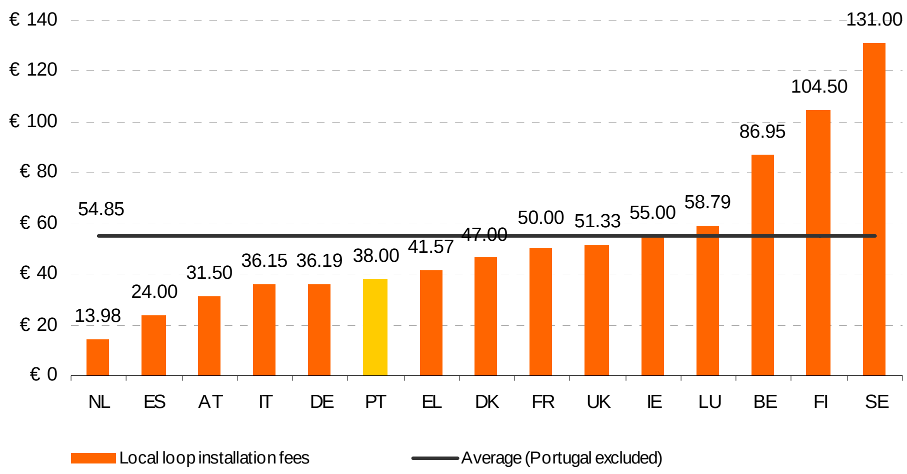
Source: Cullen International, "Cross-country analysis" (November 2007)

Graph 8. Local loop monthly fee (shared access) – EU15 comparison



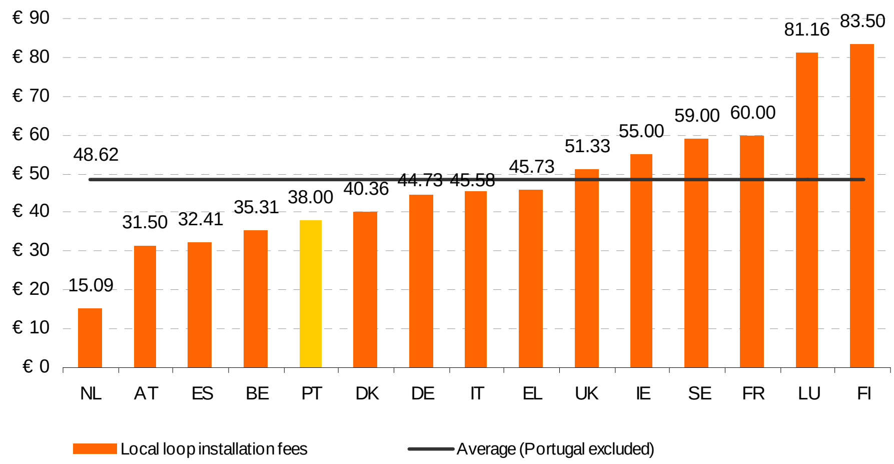
Source: Cullen International, "Cross-country analysis" (November 2007)

Graph 9. Local loop one-off charges (full access) – EU15 comparison



Source: Cullen International, "Cross-country analysis" (November 2007)

Graph 10. Local loop one-off charges (shared access) – EU15 comparison



Source: Cullen International, "*Cross-country analysis*" (November 2007)

In addition, highlight should be given to the impact of LLU's development on the market structure, with important benefits for end users. It should be noted that the retail offers based on LLU have maintained a high level of innovation and flexibility, making it not only possible to access broadband Internet and the FTS, but also paid television services based on IPTV technology.

Within this framework, this Authority developed in 2007 preliminary works on the reformation of the RUO giving particular attention to the issues of service levels, access to exchanges and proceedings in general.

ICP-ANACOM was also asked to intervene, under the terms of article 10 of the ECL, in the resolution of a dispute on power consumptions in the scope of the RUO, having issued a DD on this matter on 31 October 2007, with the final decision being adopted already in 2008.

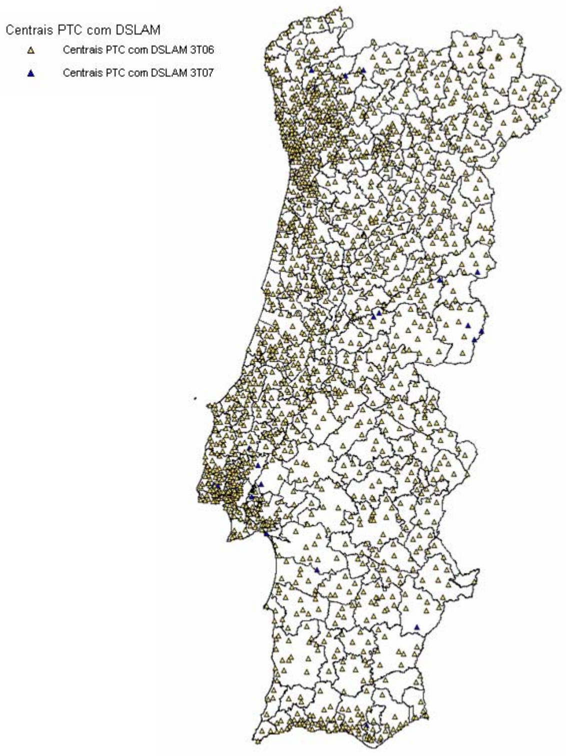
2.2.2. “Rede ADSL PT” wholesale offer (broadband access)

The “Rede ADSL PT” offer is an essential element in fostering universal access to broadband Internet and in fostering the development of wholesale conditions ensuring the sustained and competitive development of ADSL services provided to end users. This way, the adequacy and good operation of the “Rede ADSL PT” offer is obviously a priority for ICP-ANACOM.

In fact, in order to encourage the offer of services, such as broadband Internet access, highly important for the development of the information society, this Authority considers that ensuring adequate competitive conditions in the provision of the wholesale broadband Internet access service is an important goal of its regulatory action.

This offer’s importance is also greater given the fact that it is the only wholesale offer, since 2006, to assure full country coverage regarding PTC’s exchange areas (Figure 3), thus enabling alternative operators to provide service in the entire national territory, without having to be co-located, mandatorily, in all of those company’s exchanges, which is not economically viable.

Figure 3. Location of exchanges with DSLAM (digital subscriber line access multiplexer) and subscribers (evolution from 3rd quarter 2006 to 3rd quarter 2007)



Source: ICP-ANACOM, based on PTC data

ICP-ANACOM's regulatory action in the scope of the "Rede ADSL PT" offer during 2007 took into account the previously explained importance, trying to guarantee a set of conditions fostering the development of the new operators' activity, in connection with the promotion of end users' interests and the fostering of broadband penetration on the entire national territory.

Thus, besides a continuous follow-up of the conditions under which the services connected with the offer were provided, namely regarding the guaranteed quality of service and the amount of accesses provided to alternative provides, ICP-ANACOM considered it was paramount to intervene on the market in order to clarify the methodology for evaluating the existence of margin sequeeze on PT Group's broadband offers.

In fact, the determination of 3 October 2007 on this matter not only aimed at the adjustment or systematization of the methodology already being used by this Authority, but also to address the need to clarify with all the interested parties the methodology's detail, increasing transparency and regulatory certainty for all market players.

In the mentioned determination, this Authority understood that, on always-on retail offers[10], the minimum difference between the monthly profits by access and the monthly costs by access in the “Rede ADSL PT” wholesale offer should be measured with a combination of an absolute figure and a relative figure, considering its best adaptation to the several real costs connected to the provision of the several wholesale offers.

It is not possible to separate this determination’s approval, resulting in higher market predictability, from the changes that were introduced by PTC on the conditions of the “Rede ADSL PT” wholesale offer that where in force on the entire national territory, specially regarding considerable reductions in their prices[11].

The table below shows the percentage reductions in the prices charged for the IP traffic aggregation mode.

Table 1. Percentage of price reductions in the local access classes for the IP aggregation mode and for aggregated access (with IP aggregation)

Item	Price variation
Monthly fee per local access class in the IP aggregation mode	between -15% and -30%
Monthly fee per IP aggregated access – physical access	-60%
Monthly fee per Mbps[12] of the total bit rate of IP aggregated access – logical connections	-32%

PTC also made a 32 per cent reduction in the monthly fees connected to the ATM (asynchronous transfer mode) traffic aggregation mode, and a 5 per cent drop in the monthly fee of ATM local access.

Together with the reduction of wholesale prices and resulting from the intervention in them, broadband access retail offers based on the “Rede ADSL PT” offer had important price reductions or a considerable increase in the maximum bit rate, whilst maintaining the same retail price.

Naked DSL

By determination of 4 April 2007, ICP-ANACOM’s Board of Directors approved the launch of a public consultation on the wholesale offer of an exclusive line for broadband services

[10] Always on.
[11] Changes made to version 29.6 of the “Rede ADSL PT” offer, of 30 October 2007.
[12] Megabit per second (million bits per second).

(naked DSL), which is a wholesale offer mode that makes it possible to provide an ADSL service to the end user without this one having to establish a contract or keep the traditional FTS.

By launching this consultation, this Authority aimed to assess the market's interest regarding the introduction of an offer that could contribute to promote broadband Internet access services in Portugal, by fostering:

(a) The reduction of overall costs to end users in the access to broadband Internet access services;

(b) Info-inclusion and social wellbeing;

(c) Increased competition;

(d) The recovery, recruitment or maintenance of customers possibly interested in broadband Internet but who have communications consumptions that do not justify the setting up of a fixed network line and its corresponding cost;

(e) Offerings' innovation through the promotion of conditions favouring fixed and mobile communications integrated offers (fostering the MVNO market nation-wide) and triple or quadruple-play.

There was great interest in the consultation, with a high number of comments received from operators and other entities. The majority of the entities that replied shared ICP-ANACOM's understanding, considering naked DSL as an important contribution to stimulate broadband services penetration and competition, namely in areas with lower population density and with populations with lower incomes, by contributing to reduce total costs of broadband Internet access to end users.

ICP-ANACOM analysed the received comments and presented its understanding on the issues mentioned on the public consultation's report, approved as per determination of 25 July 2007.

At the same time and under a soft law regulation approach, ICP-ANACOM decided to recommend PT to introduce a modification on the "Rede ADSL PT" offer in order to include naked DSL. It was then established as a regulatory goal that PTC would develop an implementation schedule for the offer so that naked DSL would be operational as of 1 February 2008.

Following this Authority’s recommendation, PTC changed the wholesale offer in order to introduce the naked DSL function, within the recommend schedule, and Portugal now belongs, since the beginning of 2008, to the group of European countries where this offer is available.

Table 2. Naked DSL availability in several Member States

AT	BE	DK	FI	FR	DE	EL	IE	IT	LU	NL	ES	SE	UK
✓	✓	✓		✓			✓	✓		✓		✓	✓

Source: Cullen International, “*Cross-country analysis*” (November 2007)

2.2.3. Leased lines reference offer (LLRO)

Within the offer of leased lines services foreseen in LLRO there are the “interconnection support components” and the “internal extensions for interconnection”. These services, as their names reveal, exist to enable OSPs to use their own lines more extensively and efficiently in the connection to PTC’s network, to other operators or even to end customers.

Given the market development registered since the approval of the determination defining the conditions applying to these services (determination of 27 May 2004), this Authority understood it was necessary – aiming at an optimum use of the infrastructure rolled-out by the OSPs in PTC’s switchboards, and in the scope of promoting efficient investment at a global level – to safeguard the possibility of a co-located OSP in a PTC building to be able to interconnect with another OSP co-located in that same building, or to Group PT companies that have interconnection points therein.

In this sense, ICP-ANACOM approved on 7 November 2007, and after consulting the interested parties, the final decision regarding the changes to adopt in the scope of the RIO to be in force in 2007 and of the LLRO that, regarding the interconnection conditions inside PTC exchanges, led to removing the restrictions that prevented interconnection in the mentioned situations.

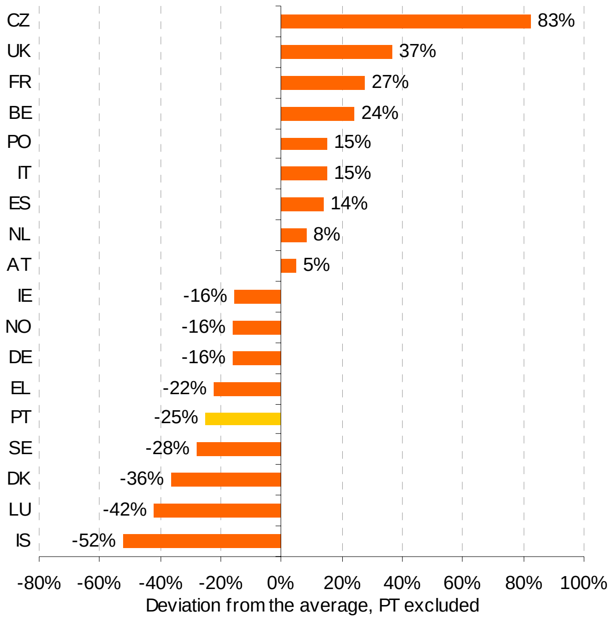
At the same time it was restated, as mentioned by ICP-ANACOM on a clarification issued on 5 March 2007, that the interconnection support component service is not limited to PTC’s local exchanges that are geographic interconnection points identified by the RIO. Thus, as long as there are no technical restrictions, PTC must provide the support components at all its exchanges, allowing co-locatedd OSPs to also benefit from this service in order to establish connections between the modules of the co-installed OSPs, among other goals.

It should also be highlighted that, as per determination of 19 October 2007, the launch of a limited consultation was approved for the performance of an audit to the quality of the leased lines service provided by PTC, and that ICP-ANACOM carried out in 2007 draft works to reshuffle the service levels and the maximum prices of the leased lines service.

In European terms, according to a price comparison by Teligen based on data from November 2007, prices in Portugal for lines of lower bit rate (64 Kbps[13] and 2 Mbps) were below the average of the analysed countries, unlike those of the higher bit rate lines (particularly 34 Mbps lines).

The graphs below compare prices of some types of lines, measured as deviations from the average (Portugal excluded).

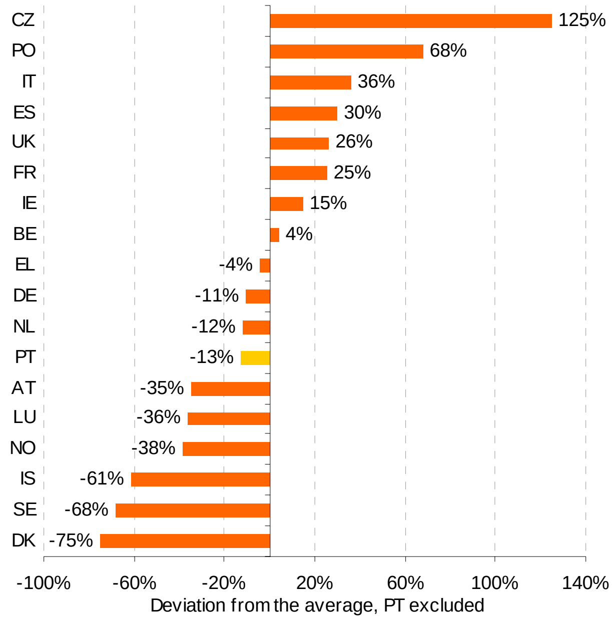
Graph 11. Annual price of 64 Kbps digital lines in Europe (November 2007)



Source: Teligen, November 2007 (based on OECD's distance basket, prices without tax and not considering purchasing power parity)

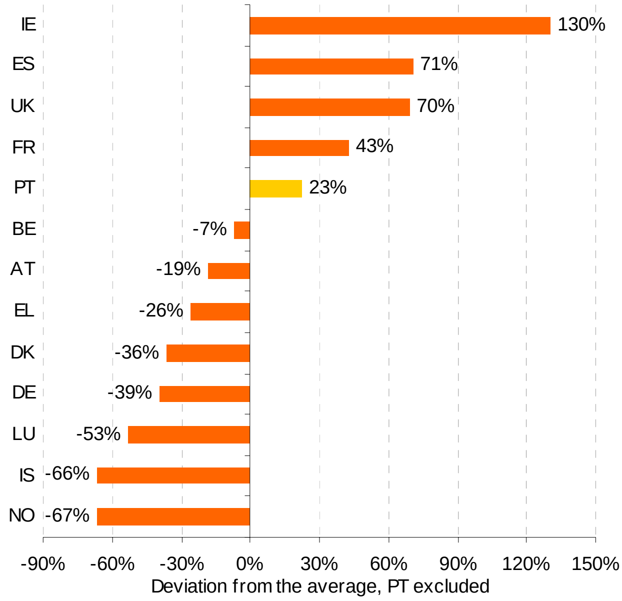
[13] Kilobit per second (thousand bits per second).

Graph 12. Annual price of 2 Mbps digital lines in Europe (November 2007)



Source: Teligen, November 2007 (based on OECD's distance basket, prices without tax and not considering purchasing power parity)

Graph 13. Annual price of 34 Mbps digital lines in Europe (November 2007)



Source: Teligen, November 2007 (based on OECD's distance basket, prices without tax and not considering purchasing power parity)

2.2.4. Reference interconnection offer (RIO)

ICP-ANACOM approved on 31 October 2007 the decision on the changes to be made to the RIO, to enter into force in 2007, and the new interconnection conditions within PTC's exchanges.

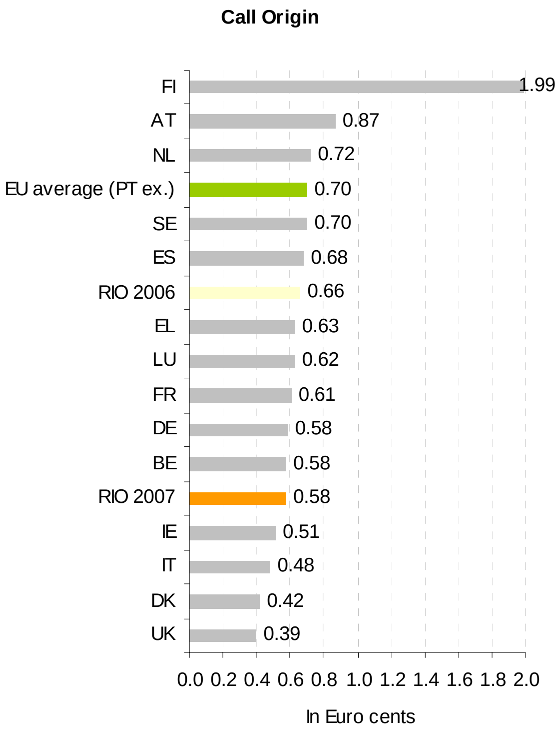
a) Call origination and termination prices

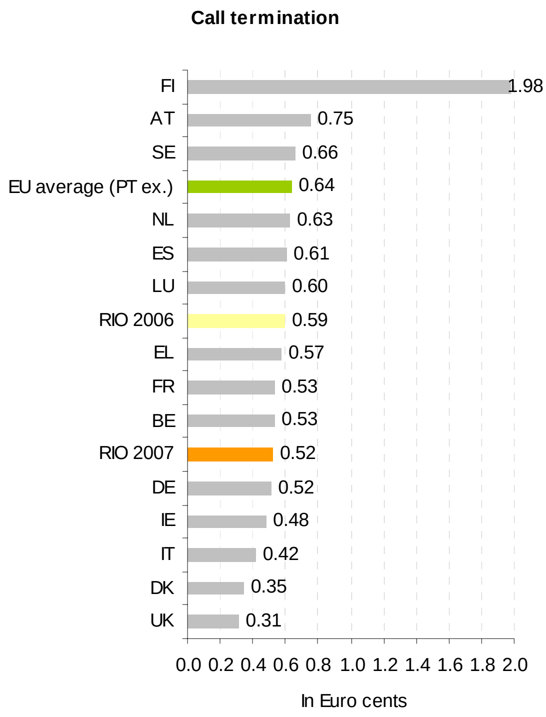
It should be noted that with this decision, which already includes the reduction following the determination of 28 February 2007 regarding the implementation of the US tariffs, the market enjoyed in 2007 an average reduction of about 12 per cent in interconnection prices with PTC.

These reductions were base on two components of the interconnection prices: call set-up price (reductions of about 0.07 to 0.1 Euro cents) and price per minute (reductions between 0.02 and 0.14 Euro cents), depending on the type of interconnection.

Thus, in terms of European comparisons, the established interconnection prices stand for a considerable improvement in Portugal's position regarding the community (EU15) average, both regarding call origination and termination, as well in comparison with several EU15 countries.

Graph 14. European comparisons – fixed interconnection prices (call origination and termination)[14]





Source: ICP-ANACOM

This price drop, determined according to the principle of price orientation to costs, helped improve competition in the sector. Records show that, at the local and single tandem levels, the most used in the market, and in the peak period, termination prices in Portugal in 2007 became lower than the EU15 average (Portugal excluded) in about -18 and -12 percent, respectively (in 2006 these deviations were -4 and +1 percent, respectively), while in the off-peak period, favourable deviations surpass 20 per cent.

[14] Figures presented above for each country were obtained by applying the estimated interconnection traffic weightings to the interconnection tariff scheme in force in each Member State (average price per minute for a three minute call), in order to obtain, both for call origination and call termination, an indicator which is liable to evaluate the several interconnection elements in an aggregated way.

Table 3. Comparison of interconnection prices with EU15 in 2007 (price per minute of a three minute call)

Countries	Origination						Termination					
	Local		Single Tandem		Double Tandem		Local		Single Tandem		Double Tandem	
	N.T.T.	E.T.T.	N.T.T.	E.T.T.	N.T.T.	E.T.T.	N.T.T.	E.T.T.	N.T.T.	E.T.T.	N.T.T.	E.T.T.
Germany	0.52	0.36	0.88	0.59	1.36	0.89	0.52	0.36	0.88	0.59	1.36	0.89
Austria	0.82	0.48	1.28	0.71	2.90	1.10	0.82	0.48	1.28	0.71	2.25	0.87
Belgium	0.62	0.32	0.87	0.46	0.87	0.46	0.62	0.32	0.87	0.46	1.12	0.59
Denmark	0.43	0.27	0.56	0.35	0.80	0.50	0.38	0.23	0.56	0.35	0.80	0.50
Spain	0.67	0.40	1.00	0.60	1.39	0.84	0.67	0.40	1.00	0.60	1.39	0.84
Finland	1.99	1.99	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98
France	0.53	0.34	1.00	0.65	1.25	0.81	0.53	0.34	1.00	0.65	1.25	0.81
Greece	0.52	0.49	0.85	0.79	1.09	1.02	0.52	0.49	0.85	0.79	1.09	1.02
Netherlands	0.70	0.43	1.06	0.66	1.50	0.87	0.71	0.45	0.90	0.55	1.15	0.70
Ireland	0.54	0.30	0.73	0.41	0.92	0.51	0.56	0.31	0.76	0.42	1.03	0.57
Italy	0.42	0.28	0.74	0.49	1.18	0.80	0.42	0.28	0.74	0.49	1.18	0.80
Luxemburg	0.76	0.38	0.76	0.38	1.00	0.50	0.76	0.38	0.76	0.38	1.00	0.50
Sweden	0.67	0.54	0.90	0.72	0.97	0.76	0.67	0.54	0.90	0.72	0.97	0.76
United Kingdom	0.39	0.18	0.56	0.25	1.54	0.70	0.36	0.16	0.52	0.24	1.50	0.69
RIO 2006	0.64	0.41	0.93	0.58	1.44	0.88	0.64	0.41	0.93	0.58	1.44	0.88
RIO 2007	0.56	0.37	0.82	0.51	1.27	0.78	0.56	0.37	0.82	0.51	1.27	0.78
EU Average (PT excluded)	0.68	0.48	0.94	0.65	1.34	0.84	0.68	0.48	0.93	0.64	1.29	0.82
RIO 2007 deviation vs. average	-18.7%	-24.2%	-12.9%	-21.1%	-5.2%	-7.0%	-18.1%	-23.8%	-11.7%	-20.1%	-1.5%	-5.1%
Average excluding extremes and PT	0.60	0.38	0.89	0.57	1.25	0.77	0.60	0.38	0.87	0.56	1.25	0.75
RIO 2007 deviation vs. average excluding extremes	-7.3%	-4.5%	-7.5%	-10.1%	1.3%	0.7%	-6.9%	-4.1%	-6.3%	-8.8%	1.5%	3.7%

Euro cents

Source: ICP-ANACOM

b) Capacity interconnection (interconnection flat rate)

The capacity interconnection model is the transparent and non-discriminatory offer, by PTC to the OSPs, of a given capacity of interconnection services at a fixed monthly price, as an alternative to the traditional time-based interconnection model, thus establishing an interconnection flat rate.

Following the mentioned price reduction decided for time-based interconnection, monthly fees connected to capacity interconnection were also reviewed, considerably improving the conditions associated to this offer.

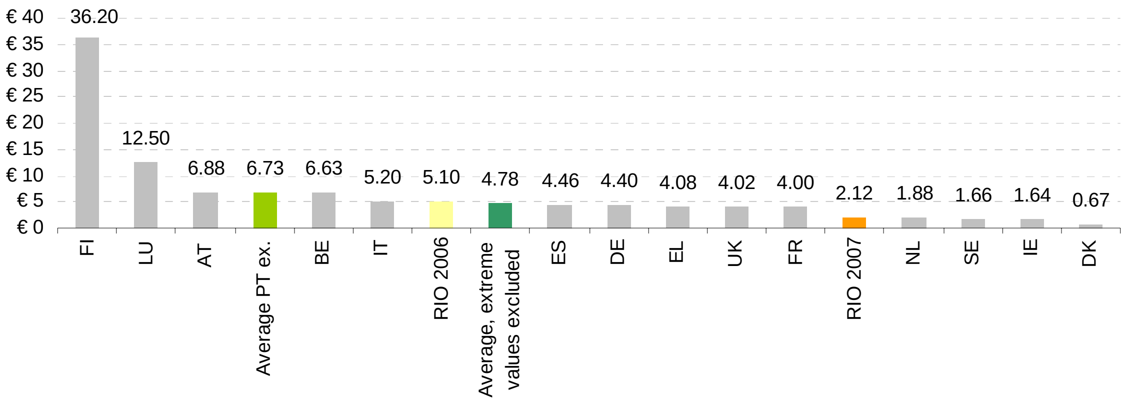
c) Billing, collection, and non-collection risk service prices

With the mentioned determination of 31 October 2007, it was decided to maintain the maximum prices of PTC's billing, collection, and non-collection risk service established on RIO 2006, considering its associated costs.

d) Pre-selection activation price

A new price was set for pre-selection activation, establishing a 58 per cent reduction, which changed from 5.10 Euros to 2.12 Euros, a figure that stands among the best European practices and 69 per cent below the EU15 average (Portugal excluded), as shown on the following graph.

Graph 15. European practices regarding the pre-selection activation price (2007)



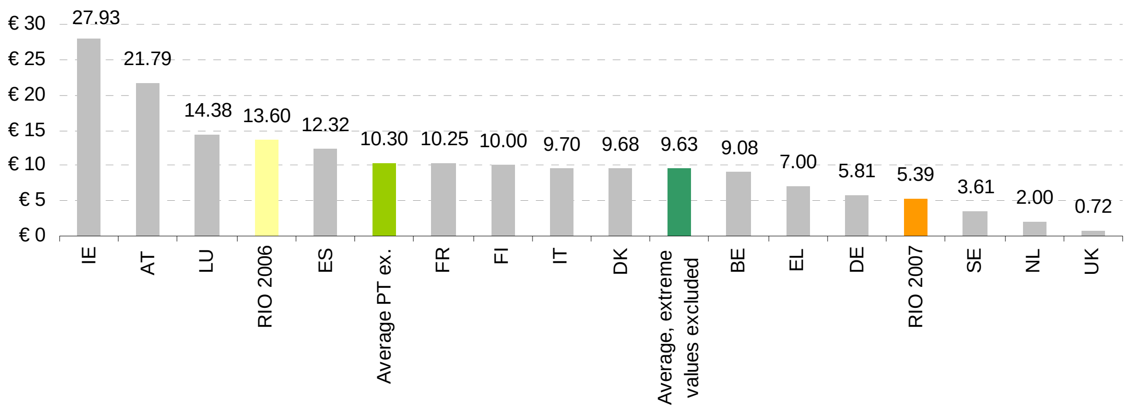
Source: ICP-ANACOM

e) Number portability activation prices

Number portability is an important function in the promotion of increased competition in telephone service, since it attenuates one of the barriers concerning changes in this market.

There was a 60 per cent reduction (from 13.60 Euros to 5.39 Euros) in the individual number portability price that placed Portugal among the lowest EU15, and about 44 per cent bellow the corresponding average (Portugal excluded), as shown on the graph bellow.

Graph 16. European practices regarding individual number portability price (2007)



Source: ICP-ANACOM

It was also decided to considerably simplify the tariff scheme applying to the portability of number blocs. It is no longer in connection with the total amount of portations during the previous quarter and to the figures set by the Reference Entity. Reductions were established which, in the higher numbering ranges, surpassed 50 per cent.

This measure also made it possible to considerably improve Portugal's stand in this matter regarding the EU15, while also contributing to a favourable position on the amount of ported numbers, as analysed on section 2.5.5.1.

Graph 17. European comparisons – portability prices (2007)

Source: ICP-ANACOM

f) <u>Interconnections within PTC's exchanges</u>

As mentioned regarding the LLRO, an important measure was adopted regarding the conditions of interconnection at PTC's exchanges among OSPs co-located therein or with PT Group companies with an interconnection point installed at the same building.

RIO – Interconnection standard agreement model

Determination of 12 July 2007 approved the DD on the changes to the interconnection standard agreement model included in PTC's RIO. The approval of the mentioned determination aimed to assure a greater compatibility between the interconnection standard agreement model included in the RIO and the applying regulatory framework, in order to adopt transparent, efficient and non-discriminatory procedures, the mentioned DD also promoting a specific consultation on this matter.

In the context of the previous hearing concerning the mentioned DD, several comments were received that justified a proper weighting and delayed of the final decision to 2008.

2.2.5. Wholesale line rental offer

a) Changes to the reference offer and evaluation of the conditions for its implementation

Having surpassed by the end of February 2007, the amount of 150,000 equivalent analogue loops with activated WLRO, excluding activations from PT Group companies, foreseen in the determination of 14 December 2005, on the conditions of the provision by PT Group companies of offers aggregating network line and traffic, ICP-ANACOM determined, as per determination of 22 March 2007, that PT Group companies may provide retail offers aggregating telephone access, as long as:

- They request the beneficiaries to bill and collect all services provided by PT Group companies or by other companies, when billed and charged by PT Group companies, on the accesses with activated WLRO, according to the maximum prices established by ICP-ANACOM.
- The WLRO reference offer would be modified, fulfilling ICP-ANACOM's determination of 15 March 2007, on the conditions of the inclusion of ISDN (integrated services digital network) accesses in the WLRO reference offer;
- Offers that aggregate telephone access and traffic fulfilling the applying obligations, namely of cost-orientation of prices, non-discriminations and transparency.

Under these terms, ICP-ANACOM concluded that the WLRO was being efficiently and effectively implemented, not hindering a progressive and gradual improvement in the offer, namely considering the market's evolution and dynamics, the experience gained and the needs of end users.

In this sense and on the same determination of 22 March 2007, ICP-ANACOM decided to introduce several changes to the WLRO, namely related with:

- Quality parameters and corresponding compensation for non-fulfilment;
- WLRO suspension for lack of subscriber payment;
- Codes associated to the rejection of WLRO activation requests;
- The maximum deadline for WLRO suspension by lack of subscriber payment;

- The possibility to activate the WLRO based simultaneously on pre-selection and broadband internet access services;

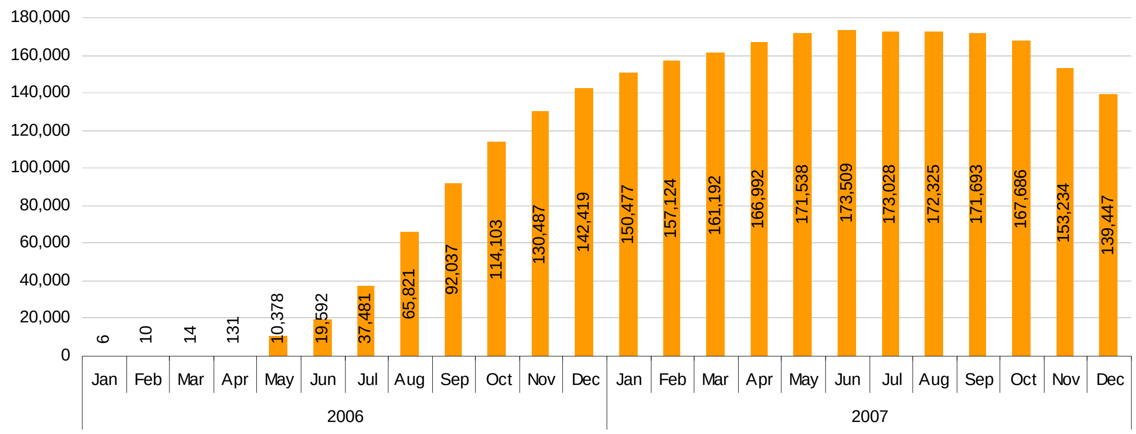
- The price for reporting undue failures in the scope of the WLRO;

- The price and deadlines applying to external changes;

- Documents to demand from WLRO subscribers.

In this context it should be highlighted that the amount of WLRO activation requests has considerably increased since the beginning of this offer in 2006, as shown on the graph below, a trend that started to reverse by the end of 2007. This reversion may be related to a change in the business model of OSPs who benefit from the WLRO, in order to base their offers on the LLU.

Graph 18. Information presented by PTC on analogue accesses with activated WLRO, excluding activations from Group PT companies



Source: PTC

b) <u>Inclusion of ISDN accesses in the WLRO reference offer</u>

As per determination of 15 March 2007, ICP-ANACOM approved the conditions of the inclusion of integrated services digital network accesses (ISDN) in the WLRO reference offer.

This measure established changes to the offer, namely concerning the following items and for ISDN accesses:

- Maximum WLRO activation price in the case of ISDN accesses equal to the pre-selection price;

- Maximum WLRO monthly fees for ISDN accesses according to the following table;

Table 4. Maximum WLRO prices for ISDN accesses (figures in Euros, excluding VAT)

Basic ISDN access monthly fee	21.72
Basic plus ISDN access monthly fee	23.42
Primary ISDN access monthly fee	172.96
Fractioned primary ISDN access	
- Monthly fee (includes 15 B channels)	105.84
- Monthly fee additional B channel	4.56

- Implementation of the parameters, quality of service levels and penalties for non-fulfilment currently defined in the WLRO reference offer, with the possibly needed and properly supported adaptations;

- Implementation of the processes of the ISDN WLRO to equivalent processes of the WLRO for analogue access, with the possibly needed and properly supported adaptations.

2.2.6. Reference conduit access offer (RCAO)

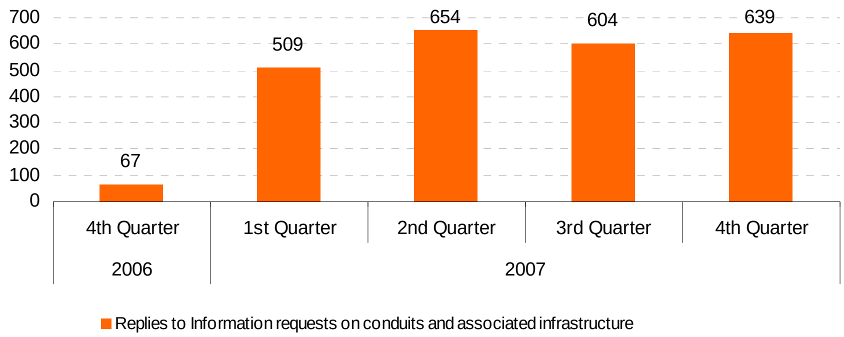
PTC's obligation to give access to conduits that it owns or mandatorily manages is established by no. 1 of article 26 of the ECL. Article 26, no. 4, also determines the concessionaire's obligation to release an offer for access to conduits, which must include the terms of access and use, as defined by ICP-ANACOM. This placed Portugal at a unique situation at European level since this offer's importance has only recently been acknowledged, explicitly, as an important tool fostering competition, namely within the scope of the development of NGNs, and while other regulators began activities in order to implement that obligation.

Using the RCAO is, in fact, an important factor in reducing the barriers to the implementation of alternative networks, making it possible to overcome physical and economic obstacles in connection with underground saturation or with logistical and bureaucratic constrains to the development of conduit rolling-out activities, and with the lack of efficiency related to its duplication in a high number of geographical areas.

An effective and updated implementation of a RCAO is thus a vital tool in promoting competition by assuring that investment on conduits and associated infrastructure is guided by economic efficiency criteria, avoiding unnecessary doubling of resources, and minimizing inconveniencies for both citizens and economic activities in general, that come with frequent works on the public way leading to issues with traffic, citizen's comfort and safety and even the environment itself.

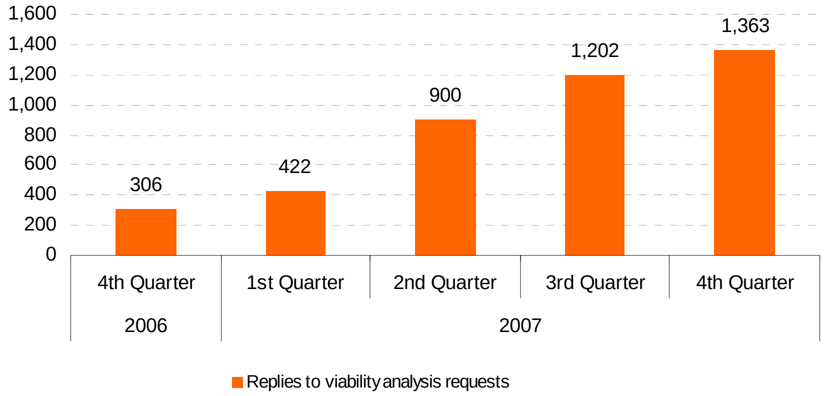
2007 was characterized by a certain stabilization of the conditions stated on the RCAO concerning the services foreseen in that offer, further to the decisions made in the previous years. This stabilization translated into the increase in the amount of replies to information requests on conduits and associated infrastructure and in the amount of replies to viability analysis requests (see Graph 19 and Graph 20). The increased interest from operators in using this offer also led to more conduit works by PTC, as shown on Graph 21.

Graph 19. Amount of replies to information requests



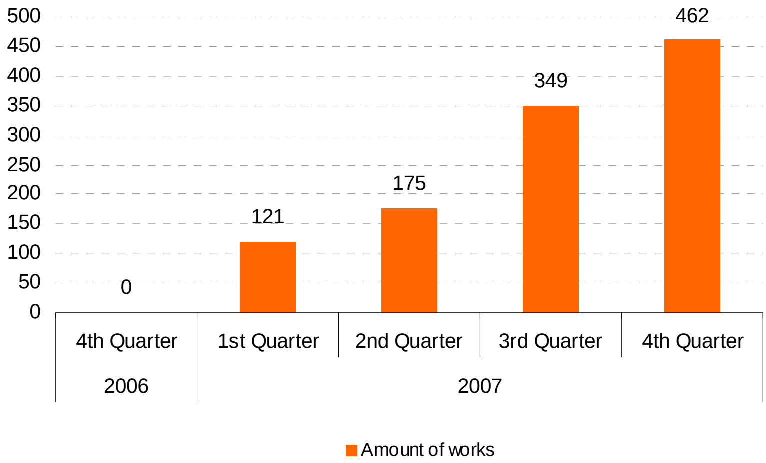
Source: ICP-ANACOM based on PTC data

Graph 20. Amount of replies to viability analysis requests



Source: ICP-ANACOM based on PTC data

Graph 21. Amount of works within the scope of the RCAO



Source: ICP-ANACOM based on PTC data

Therefore, ICP-ANACOM's intervention in the RCAO during 2007, besides the constant monitoring of the quality of service of the several services foreseen in the offer, mainly translated into the resolution of few very specific situations or obstacles in connection with the offer.

Among these situations is the determination of 15 March 2007, which established the monthly price for the space of each connection point, and the monthly price for the space of cable clearance.

Regarding the monitoring of the levels of quality of service provided by PTC, albeit the existence of some situations of non-fulfilment of the goals defined in the RCAO, there was a considerable improvement in the disclosed indicators.

At the end of 2007, PTC disclosed information on its extranet regarding the maps with the layouts of conduits, access pipes to buildings and the locations of the visiting shafts, for the entire conduit network that it owns or it manages, following previous ICP-ANACOM determinations on this matter.

2.3. Next generation networks

The roll-out of NGNs, further to fostering innovation in the provision of services to citizens, also raises an important set of questions concerning the promotion of sustained competition, the assurance of non-discriminatory conditions, and the safeguard of information inclusion conditions.

In this context it is important to determine how development towards the NGNs may affect the existing competition scenarios and specifically the broadband offers by alternative operators, to end customers, based on the unbundled local loop and sub-local loop wholesale offer, by evaluating its effects on a possible change of the minimum optimum scale and/or on the alternative operators' capacity to benefit from economies of scale.

Complementarily, the investment level foreseen by the (incumbent and alternative) operators should be assessed, including the areas with lower population density, and the advantages for operators as well as for end users (namely in terms of innovative services and of packages that could better fit their consumption pattern) should be evaluated, which requires a deep study of the issues concerning users and the preservation of competition.

Thus, in order to better support ICP-ANACOM's futures interventions on this matter within its powers, this Authority started in 2007 the preparatory works for a public consultation that was launched in 2008 on this issue and requested a consultancy company to conduct a study, which it published[15], on the impact of NGNs on the operators' business economy, cost structure, network topology and offers.

At the same time, ICP-ANACOM actively participated on the ERG's works on the NGN issue, transposed into the document "ERG Opinion on Regulatory Principles of Next Generation Access", which analyses the impact of NGN development at the regulatory level and how the principles and regulatory approach may be adapted in order to assure both transparency and predictability for operators.

2.4. Radio spectrum management

2.4.1. National Frequency Allocation Plan (NFAP)

Regarding spectrum planning, NFAP's annual revision, made in compliance with the ECL, has great importance nationally. The ECL gave ICP-ANACOM the tasks of frequency planning, in compliance with the spectrum availability criteria, of assuring effective competition in the relevant markets and concerning the effective and efficient use of frequencies.

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[15] Available at
http://www.anacom.pt/streaming/estudo_ngn_jun08.pdf?contentId=595631&field=ATTACHED_FILE

As per determination of 8 March 2007, in compliance with articles no. 15 and 16 of the ECL, ICP-ANACOM approved a public consultation of the NFAP to be implemented in 2007, which contemplated the elements defined in the ECL and, particularly, after hearing the market on their possible interest in using the spectrum identified as a reserve for frequency bands to be used by the land mobile service (on the 450 MHz, 900 MHz and 1800 MHz bands), from a standpoint of technological neutrality.

Following this consultation, all comments received were taken into account, ICP-ANACOM analysed them according to the regulatory goals set by the ECL and to each of the respondent's positioning on the communications.

Among the report's main conclusions, the following stand out:

- ICP-ANACOM will maintain the approach towards a steady adoption of technological neutrality, only limited by the need to prevent interferences, to assure the compliance with standards that are relevant for the creation of a European single market, and to respect the international agreements of which Portugal is part of, always respecting the need to safeguard the effective and efficient use of the radio spectrum;

- ICP-ANACOM understands that there is a need to assure compatibility between the use of these frequency bands, by the entities that are still not on the market – which is considered positive from a challenge perspective and in order to contribute to create effective competition in the market – and the fact that current mobile operators may need additional spectrum, in order to provide innovative services and increase investment efficiency, thus benefitting end users.

Simultaneously, more specific action lines were launched for the 450 MHz and 900 MHz bands to be used by land mobile service systems, in order, respectively:

- To consider granting rights of frequency use in the 450 MHz band under a technological neutrality perspective, considering the contest as a selection method and considering to prevent access to entities that are already installed in the market, in order to increase the competition level in the mobile market;

- To authorize the use of frequencies already granted in the 900 MHz band to operate UMTS (universal mobile telecommunications system) system – the so-called refarming – that will enable considerable savings on its implementation.

ICP-ANACOM also considered to introduce, in NFAP 2007's final version, an exemption of individual radio licence for AIS (automatic identification system) receiving stations, and to mention ultra-wideband (UWB) technologies, as a result of developments at the international level (particularly, the Decision of the EC 2007/131/CE, of 21 February 2007, regarding the harmonized use of radio spectrum for devices using ultra-wideband technology in the Community).

2.4.2. Fixed wireless access

Following the rights of use reformation process, in 2007 radio licences were modified and sent to operators, duly updated according to the data regarding the corresponding networks.

2.4.3. Broadband wireless access (BWA)

Considering the interest stated, by several market players, in introducing BWA applications in Portugal, ICP-ANACOM launched in 2006 a pubic consultation on its introduction in Portugal. The corresponding report, approved on 14 June 2007, presents the conclusions and the action plan foreseen by ICP-ANACOM, considering several items, particularly frequency bands, technologies and types of use, spectrum allocation modes and indicative timetable.

As a consequence, ICP- ANACOM promoted, as per determination of 31 October 2007, a general consultation procedure on the draft decision regarding the setting of limits to the amount of rights of use reserved for BWA, in compliance with the general consultation procedure foreseen in article 8 of the ECL, for the 3.4-3.8 GHz the band. It also established the corresponding granting procedure, which analysis report approval and final decision took place in 2008, establishing, as foreseen, the granting of two rights of frequency use in the 3.4-3.6 GHz band and of two other in the 3.6-3.8 GHz band, for each of the areas defined in the Annex to the Administrative Rule no. 1026/2004 of 25 August, and setting an auction as the procedure to grant those rights.

2.4.4. Limiting the rights of use in the 450 MHz band

Following the approval of the NFAP 2007 and of the action plan stated in section 4 of the corresponding analysis report, a plan containing an indicative timetable of the activities regarding the granting of spectrum in the 450-470 MHz band for the provision of the publicly available land mobile service, ICP-ANACOM, as per determination of 4 October 2007, carried out a general consultation procedure on the limitation of rights of use in the frequencies to be granted. The approval of the analysis report resulting from the launched consultation took place in 2008, as per decision of 17 January 2008, which confirmed the measures proposed on the DD, namely:

- To limit to one the amount of rights of frequency use to be granted in 450-470 MHz frequency band for the provision of the publicly available land mobile service;

- To define the public tender mode as the procedure for granting this right of frequency use;

- To allow terrestrial trunked radio service (mobile trunking) operators, further to a modification to their corresponding titles and at their own request, to offer publicly available land mobile services in the 450-470 MHz band under the terms of the tender mentioned in the previous paragraph, notwithstanding the fulfilment, by mobile trunking operators, of determinations to be issued by ICP-ANACOM within the scope of the current procedures.

2.4.5. Mobile television (DVB-H)

The three nation-wide networks planned for mobile reception in the context of the Conference carried out in mid-2006 and which led to the 2006 Geneva Plan, can only be fully developed and implemented after the switch off of analogue TV broadcast, which is expected to take place until 2012, at the most.

Because the market showed interest in developing a network for this kind of technology in a near future, i.e., before 2012, ICP-ANACOM started the necessary electromagnetic compatibility studies, considering the possibility of allocating spectrum for a network of this kind. However, when the switch off of analogue television broadcast occurs, the frequencies identifies in this study should be changed for the frequencies planned in the 2006 Geneva Plan.

2.4.6. Digital terrestrial television (DTT)

In 2007 ICP-ANACOM pursued its activity of monitoring the developments in the field of terrestrial television, particularly regarding the terrestrial platform in countries with operations already ongoing, and by analysing the impacts of the new legal regime for access to the television broadcasting activity according to the models and solutions foreseen for the introduction of DTT in Portugal. In this field, ICP-ANACOM developed all the work necessary to launch a public consultation on the implementation of DTT. Thus, notwithstanding the studies and draft works carried out in 2006, following the publication of Law no. 27/2007 of 30 July (new Television Law), the impacts of the new legal regime for access to the television broadcasting activity according to the models and solutions foreseen for the introduction of DTT were analysed.

Considering the powers shared between the Government and the Regulator, on 29 August 2007 ICP-ANACOM approved and submitted to the proper consultation procedures the following tools:

- Draft decision on the limitation of the amount of rights of frequency use reserved for digital terrestrial television broadcasting and the definition of the corresponding granting procedure, under the terms of article 31 of the ECL; and

- Draft regulation of the public tender for granting a nation-wide right of frequency use for the digital terrestrial television broadcasting service, to be associated to Multiplexer A, under the terms of article 31, no. 5, of the ECL.

Simultaneously, ICP-ANACOM, in its role as Government advisor and in cooperation with the Office for the Media (GMCS)[16], followed-up the making of a draft regulation of the public tender for the grating of five rights of use of frequencies reserved for the digital terrestrial television broadcasting service, corresponding to two nation-wide licences and to three licences covering parts of the mainland territory, to be associated, respectively, to Multiplexers B and C and to Multiplexers D, E and F, as well as the distribution operator responsible for the television activity which is the selection and aggregation of free or paid access TV program services, to be provided to the public on the mentioned Multiplexers B to F.

This draft regulation was subject to public consultation further to a joint order of the Minister of Public Works, Transport and Communications and the Minister of Parliamentary Affairs (Order no. 19,973-B/2007 of 27 August 2007) published in the 2nd series of the Official Journal (*Diário da República*) of 31 August.

During the last quarter of 2007, ICP-ANACOM analysed the received comments and produced the consultation report following the procedures within its powers, in order to support its final options regarding the mentioned decision and the regulation of the public tender that will be associated to Multiplexer A, also having assisted the Government, in

[16] Former Instituto da Comunicação Social (ICS).

articulation with the GMCS, in analysing the comments and preparing the grounds for the options concerning the regulation of the public tender that will be associated to Multiplexers B to F, in order to publish the consultation report, which was carried out in the context of that process, as well as the conclusion of all regulatory tools giving shape to both public tenders, including the corresponding tender specifications, at the beginning of 2008[17].

2.4.7. Telephone services at a fixed location using GSM[18]/UMTS frequencies

TMN – Telecomunicações Móveis Nacionais, S.A. (TMN) submitted to ICP-ANACOM, on 14 November 2006, in compliance with article 21 of the ECL, a communication regarding the beginning of the offer of a new electronic communications service.

Since this service was identical to the electronic communications service notified by Novis Telecom, S.A. (Novis) on 7 December 2004, to which ICP-ANACOM did not oppose, as per determination of 25 February 2005 (Optimus Home service), and by Vodafone Portugal – Comunicações Pessoais, S.A. (Vodafone Portugal), which offer was also approved by a determination of 8 August 2006 (homephone service), the analysis of TMN's service offer notification focused on the same issues that were previously analysed:

After the general consultation procedure mentioned in article 8 of the ECL, and the previously hearing of TMN, ICP-ANACOM decided, on 19 April 2007, to authorize the use of GSM and UMTS frequencies of TMN's land mobile network on the local access network for the provision of FTS by the company, as long at it fulfils some conditions detailed in the decision.

2.4.8. Study on secondary trade of spectrum

Following the conclusion of the study on the applicability of secondary trade of spectrum in Portugal, considering the comments received during the NFAP's public consultations process, ICP-ANACOM carried out the analysis and the preparation of scenarios for the implementation of the secondary trade of spectrum. Special focus was particularity given to the preparation of a public consultation concerning this issue.

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[17] The mentioned regulations were published on 25 February 2008 (see Regulation no. 95-A/2008 and Administrative Rule no. 207/2008, respectively).

[18] Global system for mobile communications.

2.4.9. Study on the review of spectrum fees

ECL's publication redefined, in its article 105, the fees regime applying to electronic communications in general, and, particularly, to frequency use.

In order to propose changes to the current tariff model, compatible with the ECL-defined goals, ICP-ANACOM promoted a study on the European radio spectrum tariff scenario, complemented by an independent view on the tariff model to adopt.

Taking into account some of this study's recommendations and also the national context of the telecommunications industry, ICP-ANACOM developed a proposal for the review of the general tariff scheme, including that related to spectrum use, which it sent to the Government, within is advising activity.

2.5. Numbering, portability and pre-selection

2.5.1. Electronic numbering (ENUM)

Following the public consultation launched in 2006 on the ENUM[19] service, ICP-ANACOM approved, by a determination of 11 January 2007, the public consultation report and a set of measures, with highlight to the promotion, by ICP-ANACOM together with other entities, of a working group on ENUM, in order to analyse its introduction in Portugal, including the development of a pilot project.

Thus, operators and other entities responding to the public consultation were invited to a meeting, aiming to start the process of building this working group and to establish its terms of operation, including the objectives, tasks and responsibilities of the parties, as well as establishing the schedule, goals and financing for the pilot project to be developed within its context.

Albeit most participants recognized ENUM's interest and stated their availability to participate on the works to be carried out in order to implemented a pilot project, it was also realized that with ENUM there was a confrontation between two business models – one, stemming from the public switched circuit telephone network, and another from the Internet, leading to two possibly different positions or interests. Additionally, some

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[19] ENUM is a function that makes it possible to establish a correspondence between E.164 telephone numbers and electronic communications applications connected to those numbers. For that purpose, it uses a protocol that employs an architecture supported on DNS (Domain Name System). This is a service that makes the convergence between the telecommunications and Internet networks possible.

positions stated it was convenient for ICP-ANACOM to lead the process, although recognizing that the nature of the matters at stake, particularly operational, would render a regulator's intervention unadjusted, due to its lack of vocation and of technical skills.

The action points foreseen in that meeting later received very little response from the participating companies, and ICP-ANACOM now considers the opportunity and possibility of having a more active intervention, resuming the discussion of this matter in 2008.

2.5.2. Designation of new ranges in the national numbering plan (NNP)

2.5.2.1. Numbering range for the mobile telephone service (MTS)

In the context of the regulatory framework of the MVNO activity (see section 2.1.3.), it was considered as adequate to allocate the right of use of the E.164[20] numbers to MVNOs (light and full) that will establish as autonomous companies, with their own offer of a publicly available telephone service, and which present, namely, the access agreement with the supporting operator. This allocation, made in blocs of 10,000 numbers, is dependant on the foreseen and reasoned demand of numbers. In the lack of the mentioned agreement, reserve of the numbering resources for a period of 6 months, renewable upon request, was considered.

Determination of 12 July 2007 decided to approve the framework regarding the designation of a new numbering range ("92") of the NNP for the MTS and to establish its management under the terms currently defined in the "Principles and criteria for the management and allocation of numbering resources".

The determination made it possible to address the lack of free ranges for the mobile services according to the established criteria regarding a usage rate above 60% of previous allocations. Under these conditions, should their be the need for numbering, both from players already in the market and from other that might install, ICP-ANACOM decided to broaden the numbering capacity for the MTS on free ranges that were adjacent to those already in use by the existing mobile operators, choosing range "92".

[20] Recommendation of the ITU-T (International Telecommunication Union, Telecommunication Standardization Sector)

2.5.2.2. Range "116" for social value harmonized services

A determination of 5 September 2007 approved the designation of NNP's range "116" to host social value harmonized services, and the designation of each NNP's "116xxx" number for the corresponding service, in compliance with the items established at the EU level on Decision 2007/116/EC, of 15 February 2007.

It also decided to approve and publish the procedure for grating rights of use of numbers in the "116" range, as well as the allocation and usage conditions associated to these numbers.

In light of that Decision, complemented by Decision 2007/698/EC, which reserved new numbers beginning with "116" and which modified the first decision, number 116000 was reserved in the NNP for the "Free line for missing children cases" service, and numbers 116111 and 116123 were reserved for the "Child support line" and the "Emotional support line" services, respectively. The designation of the service lodged in number 116000 was also changed to "Missing children free number" and its description was included.

2.5.2.3. New "761" and "762" codes for flat rate tariff services

A determination of 4 April 2007 decided to create the "761" and "762 codes, with a 1 Euro and 2 Euro maximum tariff per call, respectively (figures not including VAT), and to designate them as a flat rate per call service. It also decided to characterize the services identified by these codes and to define the specific conditions for granting rights of use of numbers in those codes.

The flat rate per call service means access to goods, services or content, which payment is made by establishing a telephone call, and which tariff is defined by the service's access code. This service has the following characteristics:

- Flat rate services enable the access, always the same way, by setting a price per call from any point in the country, to a given number corresponding to this service's access code;

- Maximum tariffs applied are independent from the duration and time of the call, which retail prices vary with the service's access code, as follows:

    - "761" – 1 Euro, maximum, per call (price excludes VAT);

    - "762" – 2 Euro, maximum, per call (price excludes VAT);

2.5.3. Allocation of rights of use of numbers

Below is data on the evolution of the allocation of rights of use of numbers, with highlight to the increase in the amount of numbers resulting from 2007 allocations, particularly resulting from the opening of new NNP ranges, namely ranges “761”, “762” and “92”.

Table 5. Geographic numbers – evolution of the national stand

Year	Allocated and/or Reserved (A) or Recovered (R)	Geographic numbers[21]		
		Lisbon geographic area	Porto geographic area	Remaining geographic areas
2000	A	130,000	70,000	1,580,000
	R	0	0	0
2001	A	180,000	60,000	350,000
	R	0	0	0
2002	A	140,000	50,000	530,000
	R	10,000	10,000	0
2003	A	30,000	20,000	20,000
	R	50,000	50,000	310,000
2004	A	30,000	30,000	190,000
	R	0	0	0
2005	A	130,000	100,000	610,000
	R	20,000	10,000	20,000
2006	A	180,000	100,000	1,940,000
	R	0	0	0
2007	A	110,000	50,000	420,000
	R	10,000	0	0

Table 6. Non-geographic numbers – evolution of the national stand

Year	Allocated and/or Reserved (A) or Recovered (R)	Non-geographic numbers				
		VoIP[22] Nomadic[21] Services	Short Numbers[23]	Translation and voice mail services[21]	Data Services (ISP)[24]	Mobile Telephone Service[25]
2000	A	-	15	300,000	600	0
	R	-	0	0	0	0
2001	A	-	18	1,320,000	200	0

[21] Numbers are allocated in blocs of 10,000 with the exception of range 80080, which is allocated per unit. Translation services are provided in ranges 707, 708, 760, 761, 762, 800, 808 and 809 of the NNP, while the voice-mail service is provided on range 600.

[22] Voice over Internet Protocol.

[23] Corresponds to the 10xy, 116xyz, 14x (y), 15xy, 16xyz and 18xy ranges. They are allocated per unit with the exception of range 16xyz, which is allocated in blocs of 10.

[24] Numbers are allocated in blocs of 100, since the last three digits are predefined for the 67 range (data services).

[25] Numbers are allocated in blocs of 10,000 to the “92” range. Rights of use of numbers are allocated by default in the “609” and “669” ranges for access to the voice service, respectively, to check the mail box and to leave messages, and numbers in the “639” and “659” ranges to access, respectively, mobile fax and data services.

Year	Allocated and/or Reserved (A) or Recovered (R)	Non-geographic numbers				
		VoIP[22] Nomadic[21] Services	Short Numbers[23]	Translation and voice mail services[21]	Data Services (ISP)[24]	Mobile Telephone Service[25]
	R	-	0	0	0	0
2002	A	-	3	110,000	100	0
	R	-	7	0	200	0
2003	A	-	8	100,000	300	0
	R	-	7	0	400	0
2004	A	-	5	100,020	100	0
	R	-	4	0	0	0
2005	A	-	8	120,000	200	0
	R	-	11	0	800	0
2006	A	110,000	3	100,000	0	0
	R	0	1	0	100	0
2007	A	180,000	9	120,000	0	1,400,000
	R	0	4	0	400	0

Table 7. Audiotext non-geographic numbers – evolution of the national stand

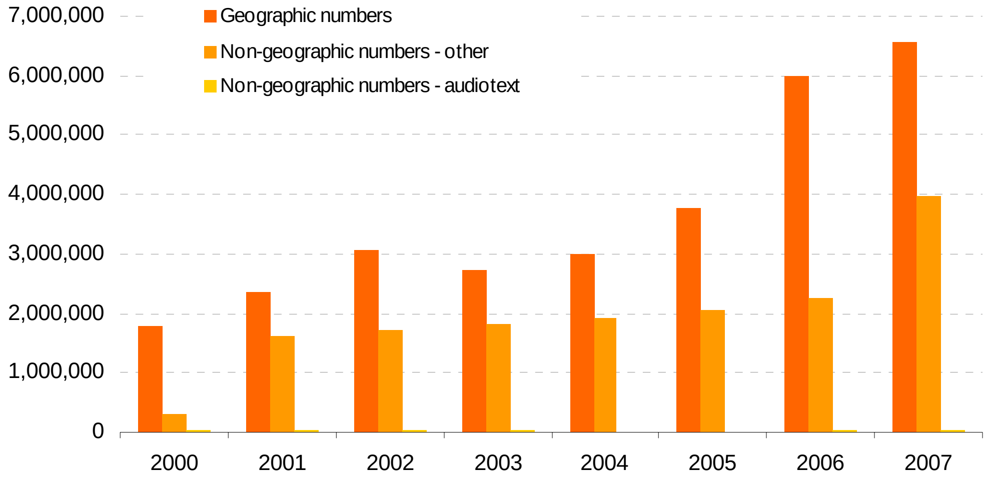
Year	Allocated and/or Reserved (A) or Recovered (R)	Audiotext non-geographic numbers[26]				
		General 601	Televoting 607	Sales 608	Contests and Pastimes 646	Erotic 648
2000	A	10,000	7,000	8,000	7,000	8,000
	R	0	0	0	0	0
2001	A	1,000	0	0	0	0
	R	0	0	0	0	0
2002	A	2,000	2,000	1,000	1,000	2,000
	R	0	0	0	0	0
2003	A	0	1,000	0	0	0
	R	1,000	1,000	1,000	1,000	0
2004	A	1,000	0	0	0	0
	R	9,000	7,000	7,000	6,000	7,000
2005	A	1,000	2,000	2,000	2,000	8,000
	R	4,000	2,000	2,000	2,000	3,000
2006	A	1,000	2,000	1,000	1,000	3,000
	R	0	0	0	0	0
2007	A	2,000	1,000	1,000	1,000	9,000
	R	1,000	2,000	1,000	1,000	0

[26] Numbers are allocated in blocs of 1,000.

Table 8. Accumulated amount of numbers distributed nation-wide since 2000

Year	Geographic Numbers	Non-geographic Numbers		Totals
		Other	Audiotext	
2000	1,780,000	300,615	40,000	2,120,615
2001	2,370,000	1,620,833	41,000	4,031,833
2002	3,070,000	1,730,729	49,000	4,849,729
2003	2,730,000	1,830,630	46,000	4,606,630
2004	2,980,000	1,930,751	11,000	4,921,751
2005	3,770,000	2,050,148	13,000	5,833,148
2006	5,990,000	2,260,050	21,000	8,271,050
2007	6,560,000	3,959,655	30,000	10,549,655

Graph 22. Accumulated amount of numbers distributed nation-wide since 2000



Source: ICP-ANACOM

2.5.4. Transmission of rights of use of numbers

By a determination of 24 October 2007, ICP-ANACOM approved a final decision concerning the authorization request for the transmission of rights of use of frequencies and numbers allocated to Optimus – Telecomunicações, S.A. (Optimus) to the ownership of Novis. This transmission regarding the numbers was authorized with the condition that the obligation to use the numbers effectively and efficiently is fulfilled, as foreseen in article 38 of the ECL. This was thus an attempt to balance that goal with the goal of assuring the minimum inconvenience to the users of the several codes involved in the operation.

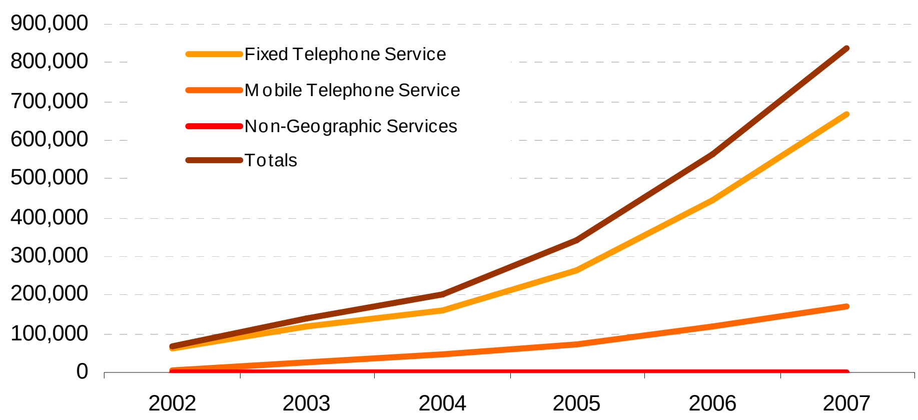
2.5.5. Portability

2.5.5.1. Evolution of ported numbers

On 31 December 2007, there was a total of 837,637 ported telephone numbers. From that amount, 664,684 were geographical numbers, 172,214 were mobile numbers and 739 were non-geographic numbers.

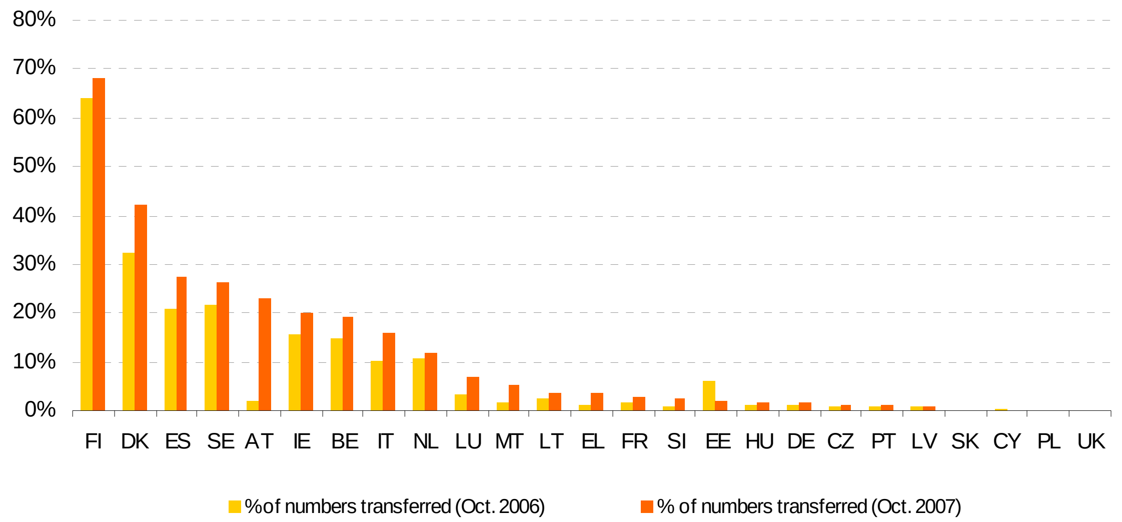
Portability was introduced in Portugal in 2001 for geographic numbers and in 2002 for mobile numbers, with a higher rate of ported numbers after 2004, mainly as a result of the competition in the FTS – Graph 23.

Graph 23. Evolution in the number of ported numbers



Source: ICP-ANACOM

Graph 24. Cumulative amount of mobile numbers transferred as a percentage of the total amount of mobile numbers (October 2006 and 2007)

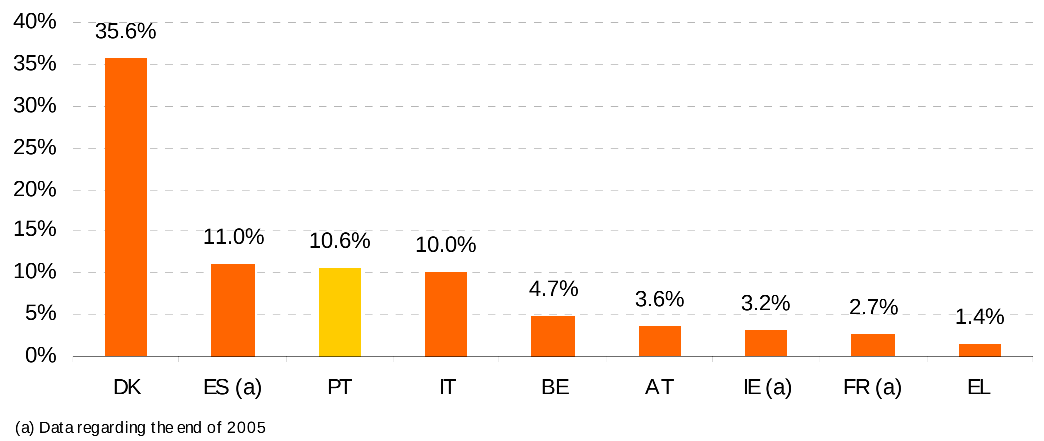


Source: EC's 13th Implementation Report

There is still a very low adoption of ported mobile numbers. Portugal has one of the lowest figures in the entire EU, according to the EC's 13th Implementation Report, which raises some worries.

On the contrary, regarding ported fixed numbers, it is important to stress Portugal's position in the European context, where its stands out as one of the countries with higher rates of ported fixed numbers, as shown on the following graph:

Graph 25. Percentage of fixed numbers versus total main telephone accesses (cumulative values until the end of 2006)



Source: ECTA Regulatory Scorecard 2007

2.5.5.2. Monitoring the evolution of prices and the fulfilment of obligations in portability

Concerning the measures established in article 21 of the portability Regulation, ICP-ANACOM collected the necessary information to monitor the effective availability:

- Of the free online warning notice by MTS providers for national voice calls between MTS networks and addressed to ported numbers, whenever those providers practice tariff schemes where a call to a ported number may become more expensive than before its portability;

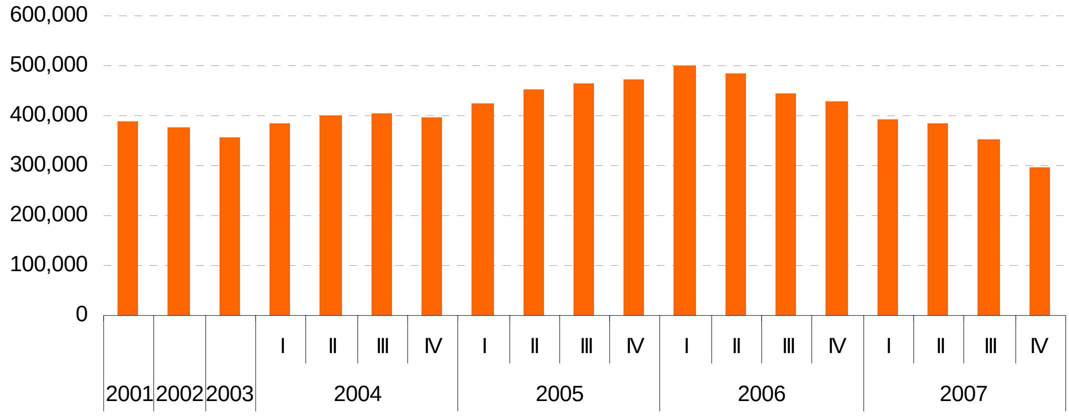
- Of the fulfilment of the obligation to implement the information service on the prices of calls to ported numbers, foreseen on no. 6 of article 21 of the portability Regulation.

ICP-ANACOM has also been monitoring the evolution of the wholesale and retail prices charged by companies in the portability context, considering a possible intervention on this matter and notwithstanding what has been established about it within the RIO.

2.5.6. Selection and pre-selection

2007 registered a considerable reduction in the amount of customers with indirect access through pre-selection as a result of greater investment by new operators in offers based on LLU, as shown on the graph bellow:

Graph 26. Evolution in the amount of indirect access customers using pre-selection



Source: ICP-ANACOM

2007 recorded a growing number of complaints concerning the procedures for withdrawing pre-selection. Following theses complaints, several supervision initiatives were carried out. They proved the existence of malfunctions regarding the presentation of forms for withdrawing pre-selection.

Since these practices violated article 10 of Regulation no. 1/2006 of) of 9 January[27], ICP-ANACOM approved two decisions, on 8 March 2007 and on 27 July 2007 (further to a previous hearing of the interested parties on the draft decision), on which it decided:

- To immediately stop any deactivations that were not originated on requests transmitted by the pre-selected provider, based on the change or withdrawing of the contract by the subscriber to this provider (on 8 March 2007);

- To remove PTC's Internet website with information concerning the procedures for withdrawing pre-selection under the terms stated there at that time. This information should be published in compliance with article 10 of the Regulation (on 8 March 2007);

- The non-acceptance, by PTC, of any requests concerning the change or withdrawing of pre-selection contracts submitted by subscribers of the pre-selected providers, thus not fulfilling the procedures established on the Regulation for the deactivation procedure (on 25 July 2007); and

- To compel the involved OSP to contact, within 10 working days, all the subscribers whose deactivation requests it received from PTC, to verify their effective willingness to change or terminate the corresponding contracts (on 25 July 2007).

ICP-ANACOM also intervened in two dispute settlement processes between operators, started under article 10 of the ECL, concerning pre-selection deactivation procedures in the same scope of the mentioned determinations.

In the context of selection and pre-selection, through Regulation no. 268/2007 of 15 October, a change was introduced in Regulation no. 1/2006 of 9 January – selection and pre-selection regulation. This change aimed to accomplish two main goals: (1) to strengthen the idea that the contract relationship between pre-selected providers and the subscribers should be preferred, in which the direct access provider should not have any intervention; and (2) to allocate greater responsibility to providers, both among them, in the implementation of pre-selection processes, and regarding subscribers, particularly in

[27] Selection and pre-selection Regulation.

the fulfilment of the maximum deadlines established in the regulation, and setting the compensations for end users in the case of non-fulfilment.

A determination of 10 May 2007 approved the draft regulation, which final text was approved on 13 September 2007.

2.6. Universal service

2.6.1. Quality of service parameters and levels

Determination of 30 March 2006 approved the quality of service parameters and performance objectives applying to the US, which the US provider (USP) is obliged to fulfil, notwithstanding the application of the Basis for the Telecommunications Public Service Concession stated in the annex to Decree-Law no. 31/2003 of 17 February,

Under the terms of this determination, the USP is obliged, namely, to annually provide information on the performance levels reached the year before, and information on the performance levels it intends to offer throughout the year.

Thus, the following table show the targets established and the levels achieved by the USP for each of the indicators:

Table 9. Universal service quality of service parameters

Universal service quality of service parameters	Target	2007 Values
QSP1. Supply time for initial network connection		
(a) Average delay in the supply of a connection when the customer does not set a target date (days)		
(a1) corresponding to 95% of the swifter installations	21	17
(a2) corresponding to 99% of the swifter installations	43	39
(b) Rate of supply requests fulfilled up to the date agreed with the customer, when the customer does not set a target date	85%	85%
(c) Rate between the number of initial connections provided with the customer setting the target date and the total number of initial connections supplied	n.a.	24%
QSP2. Rate of faults per access line	0.10	0.12
Total amount of reported faults per access	n.a.	305,508
QSP3. Fault repair time (hours)		
(a) Fault repair time of the local access network		
(a1) corresponding to 80% of the swifter repairs	72	69
(a2) corresponding to 95% of the swifter repairs	165	120
(b) Other faults repair time		
(b1) corresponding to 80% of the swifter repairs	47	43
(b2) corresponding to 95% of the swifter repairs	108	73
(c) Rate of repairs carried out within the repair time limit intended to be offered to customers by the universal service provider	80%	78%
QSP4. Average response time for operator services		
(a) Average response time for operator services (seconds)	11.0	17.0
(b) Rate of calls taken by the operator within 20 seconds	80%	93%

Universal service quality of service parameters	Target	2007 Values
QSP5. Unsuccessful calls		
(a) Number of eligible calls for PQS5 calculation purposes		
- national calls	n.a.	1,640,910,962
- international calls	n.a.	
(b) Rate of unsuccessful calls in the case of national calls	n.a.	0.13%
(c) Rate of unsuccessful calls in the case of international calls	n.a.	
QSP6. Time to set up calls		
(a) Total number of eligible calls for PQS6 reckoning purposes:		
- national calls	n.a.	n.A.
- international calls	n.a.	n.A.
(b) Time needed to set up national calls (seconds)		
(b1) corresponding to 100% of the swifter calls	n.a.	n.A.
(b2) corresponding to 95% of the swifter calls	n.a.	n.A.
(c) Time needed to set up international calls (seconds)		
(c1) corresponding to 100% of the swifter calls	n.a.	n.A.
(c2) corresponding to 95% of the swifter calls	n.a.	n.A.
QSP7. Response time for directory enquiry services		
(a) Directory enquiry services average response time (seconds)	5,0	4,3
(b) Rate of calls answered within 20 seconds by operators or equivalent response systems	95%	94.2%
QSP8. Rate of coin and card operated public pay-telephones in working order		
Rate of whole days during which the public pay-telephones are in full working order versus the potential number of operational days of the average public pay-telephones park	96%	98%
QSP9. Bill correctness complaints		
Rate of bills claimed relatively to the total number of bills issued	0.04%	0.02%

n.a. Not applicable
n.A. Not available

Depending on the USP's report, the performance objectives applying to the US's quality of service parameters were not met for some indicators, and ICP-ANACOM is now analysing the situation in compliance with the mentioned determination of 30 March 2006.

2.6.2. USP's strategy for public payphones

In compliance with the determination of 15 July 2004, PTC presented a development strategy statement for the public payphone services, regarding 2007. Later on, it, also submitted to this Authority the report on the accomplishment of objectives concerning 2007.

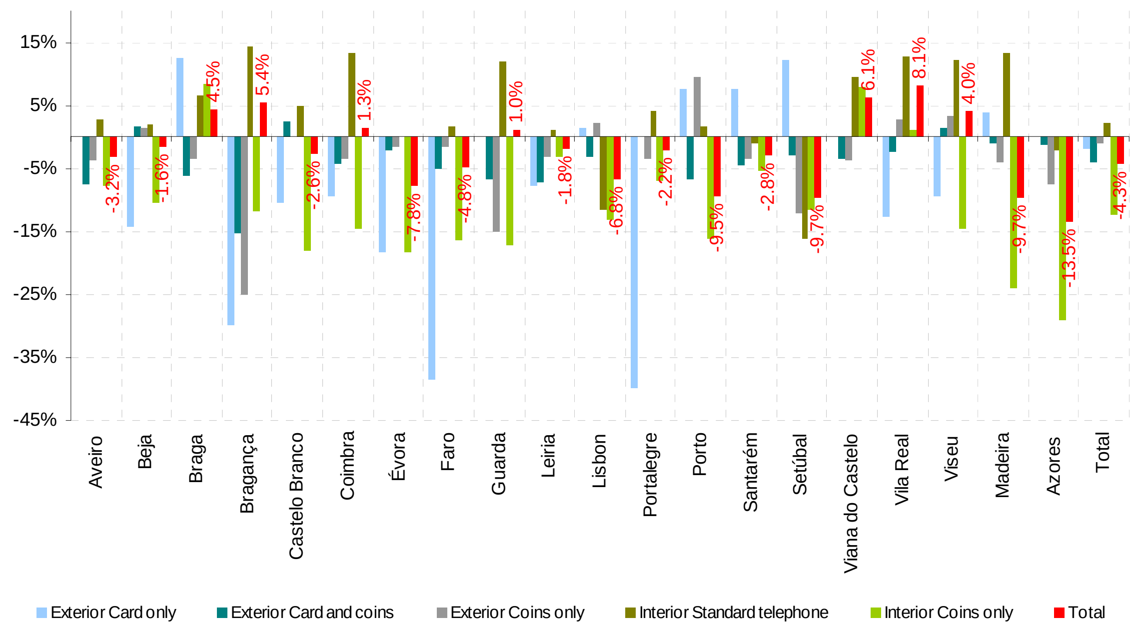
From the development strategy statement for 2007 presented by PTC to what was effectively accomplished during that year, the following table and graph show the relevant data for each of the modes available, according to their geographic distribution.

Table 10. Amount of public payphones foreseen and effectively accomplished in 2007

	FORESEEN 2007						ACCOMPLISHED 2007					
	Exterior		Interior		Total		Exterior		Interior		Total	
	Card-only	Card and coins	Coin-only	Standard telephone	Coin-only	Total foreseen	Card-only	Card and coins	Coin-only	Standard telephone	Coin-only	Total Accomplished
Aveiro	5	382	190	779	677	2,033	5	353	183	801	625	1,967
Beja	7	181	148	386	260	982	6	184	150	393	233	966
Braga	16	342	146	1,015	621	2,140	18	321	141	1,082	674	2,236
Bragança	10	65	28	494	110	707	7	55	21	565	97	745
Castelo Branco	19	116	77	606	340	1,158	17	119	77	636	279	1,128
Coimbra	21	309	112	829	474	1,745	19	296	108	940	405	1,768
Évora	11	136	128	142	241	658	9	133	126	142	197	607
Faro	26	798	200	1,194	648	2,866	16	757	197	1,215	542	2,727
Guarda	18	88	66	557	231	960	18	82	56	623	191	970
Leiria	26	276	94	853	435	1,684	24	256	91	862	421	1,654
Lisbon	214	3,838	1,456	2,177	2,867	10,552	217	3,715	1,489	1,927	2,490	9,838
Portalegre	5	76	87	149	172	489	3	76	84	155	160	478
Porto	65	1,810	448	837	3,681	6,841	70	1,690	491	852	3,089	6,192
Santarém	13	223	139	749	414	1,538	14	213	134	742	392	1,495
Setúbal	33	1,164	501	899	903	3,500	37	1,131	440	755	798	3,161
Viana do Castelo	3	140	78	500	244	965	3	135	75	548	263	1,024
Vila Real	8	84	36	705	288	1,121	7	82	37	795	291	1,212
Viseu	21	137	95	1,052	426	1,731	19	139	98	1,181	364	1,801
Madeira	27	184	125	180	474	990	28	182	120	204	360	894
Azores	12	141	66	137	244	600	12	139	61	134	173	519
Total	560	10,490	4,220	14,240	13,750	43,260	549	10,058	4,179	14,552	12,044	41,382

Source: PTC

Graph 27. Deviation rate of the accomplished amount of public payphones in 2007 versus the foreseen amount



Source: ICP-ANACOM based on PTC data

As shown on the graph above, in most districts the amount of public payphones stood below the foreseen amount, although these deviations are not significant (with the exception of Porto, Setúbal and Madeira, which have negative deviations of about 10 per cent; and of the Azores, which recorded the greatest deviation regarding the foreseen amount, around 14 per cent).

Concerning the allocation of public payphones to social interest locations, the following table summarizes the information disclosed by PTC regarding forecasts and effective accomplishments in 2007, as well as the deviation recorded for each location.

Table 11. Deviation in the amount of public payphones accomplished in 2007 and the amount foreseen by PTC for that year

Location Type	Amount of PP		Deviations between the foreseen and accomplished amounts for 2007	
	Foreseen 2007	Accomplished 2007	Absolute deviation	Deviation rate
Hospitals and health centres	1,360	1,235	-125	-9.2%
Education establishments	1,700	1,413	-287	-16.9%
Airports	225	192	-33	-14.7%
Prison facilities	330	326	-4	-1.2%
Road terminals	110	109	-1	-0.9%
Railway terminals	280	264	-16	-5.7%
Metro stations	170	161	-9	-5.3%
Courts and Justice Halls	40	43	3	7.5%
Hotels, Pensions and Hostels	580	562	-18	-3.1%
Total amount in public interest locations	4,795	4,305	-490	-10.2%

Source: PTC data and ICP-ANACOM reckoning

The table above thus shows that, concerning the total amount of public payphones, there was a -10.2 per cent deviation in the effectively accomplished amount versus the forecast for 2007 (which stands for 490 payphones), mainly resulting from deviations in the amount of devices installed at education establishments and airports.

Regarding users with special needs, the amount of public payphones enabling the entrance and exit of wheelchairs that was effectively accomplished stood 50.5 per cent below the foreseen amount, in spite of the effective increase that was registered.

ICP-ANACOM will follow-up this matter's evolution in 2008.

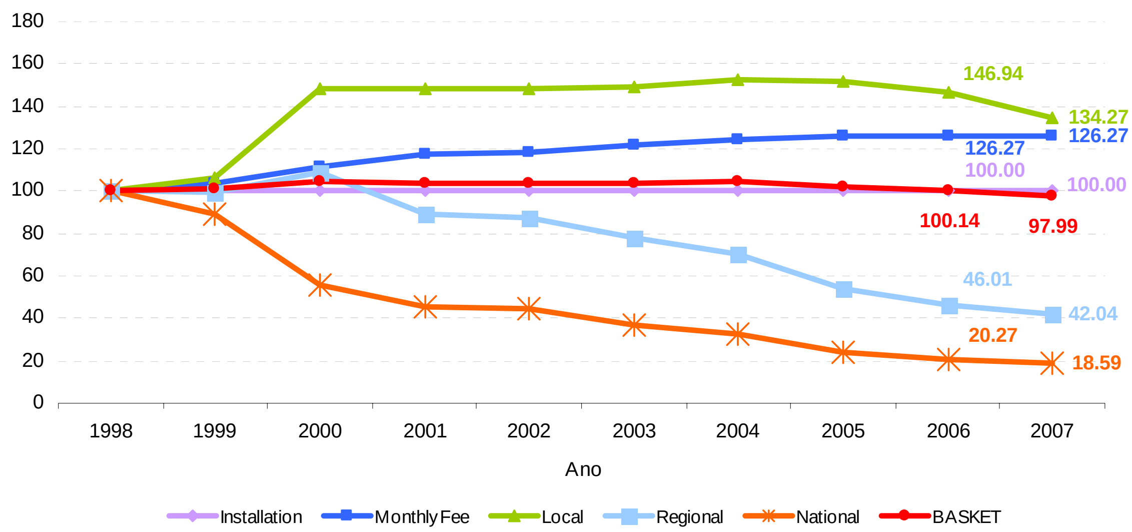
2.6.3. Price accessibility

2.6.3.1. Residential tariffs of the FTS provided in the scope of the US

Following the process started in August 2006 that was detailed in that year's Regulation Report, and as a result of ICP-ANACOM's final determination of 28 February 2007, the US tariff scheme entered into force on 26 March 2007, further to the verification of several conditions established in the mentioned determination.

Thus, 2007 continued to record a decrease in the prices charged by the incumbent operator, with the reduction of traffic's nominal prices and the maintenance of monthly fees[28]. Versus 1998, the incumbent operator's average price decreased about 2 per cent in nominal terms.

Graph 28. Evolution in nominal terms of FTS prices for residential customers (base year = 1998)



Source: ICP-ANACOM estimate based on the tariff scheme in force for each period and on PTC traffic data

In real terms, there was a generalized decrease of call prices for several traffic destinations since 2000.

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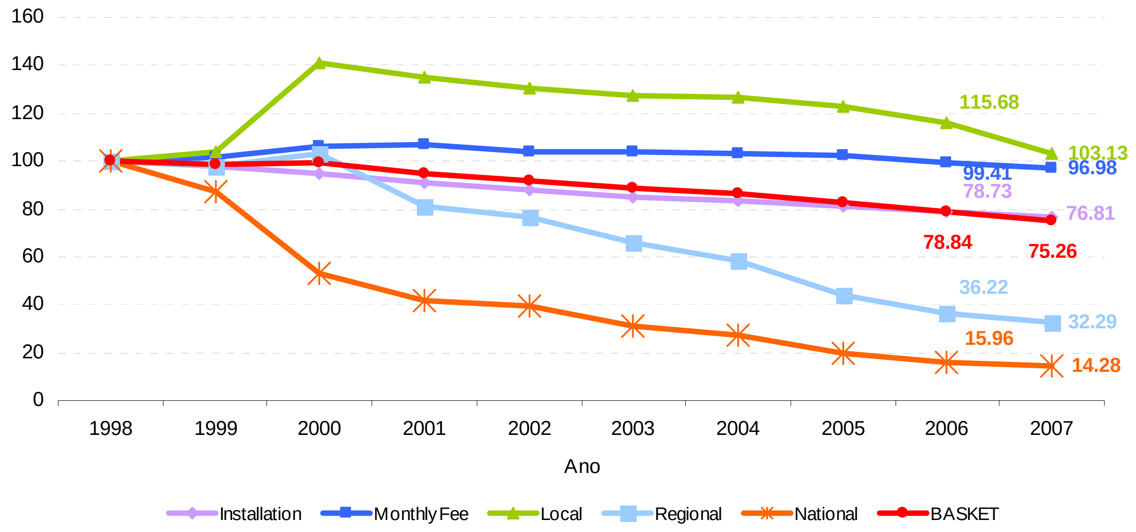
[28] Evolution analysis considering the traffic profiles provided by PTC and assuming, for 2007, the basic tariff applied by default.

Graph 29. Real evolution of FTS prices for residential customers (base year = 1998)



Source: ICP-ANACOM estimate based on the tariff scheme in force for each period and on PTC traffic data

2.6.3.2. Specific conditions for retired subscribers and pensioners

In compliance with article 158 of Law no. 53-A/2006 of 29 November, which approved the State's General Budget for 2007, Decree-Law no. 20-C/86 of 13 February was revoked. In the context of this Decree-Law, PTC was obliged to grant retired people and pensioners, with a monthly household income equal or below the minimum wage, a 50 per cent discount on the subscriber line's monthly fee, while, in compliance with article 4 of the mentioned Decree-Law (with the amendments by Decree-Law no. 18/2003 of 3 February), PTC would be annually reimbursed by the State for the profit losses resulting from granting that discount. Following the publication of that legal diploma, PTC submitted to ICP-ANACOM, on 13 February 2007, two alternative price plans, which were analyzed by this Authority in the determination of 17 May 2007.

In order to safeguard price accessibility for consumers with lower incomes and considering that the Government removed from the 2007 General Budget the 50 per cent subsidy in force until then, ICP-ANACOM decided not to accept the mentioned plan presented by PTC and established that:

- Within the scope of the US, PTC must provide retired people and pensioners subscribing a single analogue network line, with a household monthly income equal to or lower than the minimum wage, a 50 per cent discount on the network line's monthly fee (in reference to the US's default basic tariff scheme). PTC may also provide, as a commercial option, an additional 10 per cent discount on the analogue access's monthly fee and a traffic credit not exceeding 2.30 Euros (VAT excluded);

- The 50 per cent discount on the network subscriber's line would have an output on the WLRO accesses that support the services provided to retired people and pensioners subscribing a single analogue line, with a household monthly income equal to or lower than the minimum wage, under the same conditions that currently apply.

2.6.4. Net costs of the universal service provision (USNC)

On 7 December 2007, ICP-ANACOM's Board of Directors approved the DD on the USNC assessment, according to the understanding that there were no conditions to accept the USNC estimates for 2003 and the estimate reviews for 2001 and 2002 presented by the USP.

The Board of Directors of ICP-ANACOM also decided to start a process for the detailed specification of the methodology to be applied in reckoning the USNC and the definition of the conditions under which its provision may represent an excessive burden for the corresponding provider, thus justifying the creation of a compensation mechanism. This process will take into account, among other aspects, the information available on this issue, namely in terms of benchmarking, as well as the specific characteristics of the Portuguese FTS market and the process of designating the USP.

The DD was submitted to PTC's previous hearing, in compliance with article 100 and 101 of the Administrative Procedure Code, the final decision being approved already in 2008 (determination of 30 January 2008).

2.7. User protection

2.7.1. Subscription contracts

Under the terms of the ECL, it is up to ICP-ANACOM to approve the subscription contracts for the provision of electronic communications services, following the opinion of Direcçção-Geral do Consumidor (Consumer's General-Directorate). During 2007, ICP-ANACOM approved eight new subscription contracts for the provision of different services.

2.7.2. Dispute concerning the recruitment and deactivation of cable TV network customers

On 10 August 2007 and after hearing the interested parties, there was a decision on a dispute between CATVP – TV Cabo Portugal (TV Cabo) and Bragatel – Companhia de Televisão por Cabo de Braga (Bragatel), Cabovisão – Televisão por Cabo (Cabovisão), Pluricanal Leiria – Televisão por Cabo (Pluricanal Leiria), Pluricanal Santarém – Televisão por Cabo (Pluricanal Santarém) and TVTEL Comunicações (TVTEL), concerning the customer recruitment processes and the intervention on cable TV infrastructure in order to disconnect the services.

In the context of this decision, operators were recommended to:

a. Inform customers who move to another operator about the need to fulfil the contract clauses regarding contract termination, namely on the way to communicate the termination and the time in advance;

b. Reach agreement on the proper proceedings for disconnecting and activating the services, and to uninstall the pre-existent infrastructure, in order to safeguard any situation that may hinder the integrity of cable distribution networks and consumers' interests.

It was also decided that, within 3 months after being notified of this process's decision, operators should inform ICP-ANACOM on the efforts made following this recommendation and on the results achieved towards the establishment of the agreement.

After an extension of the originally foreseen deadline, operators came to an agreement and subscribed in 2008 a Code of Conduct on this matter, which regulates the basic terms applying to cooperation among the several operators in the scope of the interventions on electronic communications networks for the purpose of disconnecting and activating/installing electronic communications services.

2.7.3. Regulation no. 46/2005 on quality of service

Determination of 4 October 2006 launched a public consultation on a draft Regulation aiming to change the Regulation on quality of service currently in force (Regulation no. 46/2005 of 14 June), in order to also include in that regulation the definition of parameters that apply to companies providing the Internet access service.

Following that consultation, ICP-ANACOM developed in 2007 the corresponding consultation report which supported, at that time, not to change the mentioned Regulation[29], albeit continuing the activity it has been developing in order to improve the quality of service in the scope of the Internet access service and the information provided about it, and a set of other additional activities on this domain.

Simultaneously, in the context of the same Regulation, ICP-ANACOM continued in 2007 to supervise the information regarding the quality of the provided service, presented to this Authority and to end users, by companies providing the fixed telephone service, aiming to improve their mode of disclosure to end users.

2.7.4. International roaming

Regulation of the EC no. 717/2007, of 27 June, approved by the Council and the European Parliament, intended to considerably decrease the prices paid by public mobile telephone network users when travelling throughout the Community, thus imposing operators several tariff obligations both at the wholesale and retail level, having achieved the offer of a “eurotariff” since the Summer of 2007.

This “eurotariff”, valid all over Europe, established the maximum prices of 0.49 Euros and 0.24 Euros (figures excluding VAT), respectively, for voice calls set up or received in roaming, within the EU. The Regulation also foresees new price reductions for the second and third years after their entry into force, while the average wholesale offer, in compliance with the Regulation, may not exceed 0.30 Euros per minute. Price reductions are also foreseen for 2008 and 2009.

The regulation also foresees measures to increase the transparency of the retail tariffs applying to roamed voice calls, both made and received, inside the EU, namely by forcing operators to automatically make available to their customers who are roaming in the EU a free message service that provides customized information on the roaming tariffs applying to calls set up and received on the visited Member States.

In compliance with the Regulation, ICP-ANACOM developed, since its publication, several activities, namely in terms of:

- Following-up and supervising its fulfilment on the national territory;

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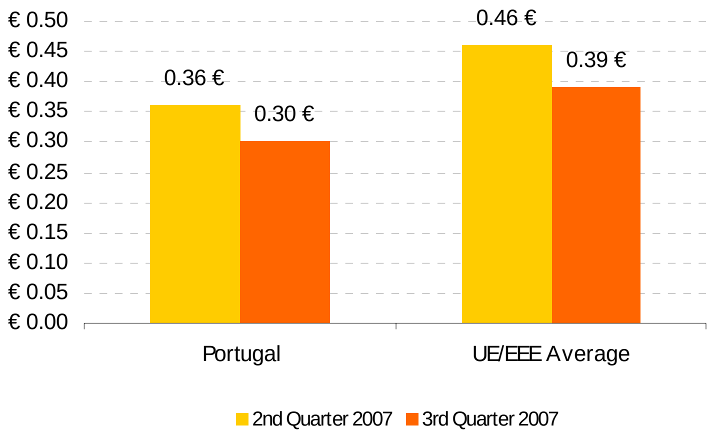
[29] The report was approved by final decision already in 2008.

- Disclosing information to the public on the regulation's implementation;
- Monitoring tariffs and the use of traffic orientation techniques that are harmful to customers;
- Following-up involuntary cross-border roaming situations;
- Collection, handling and reporting data on its application concerning national operators;
- Cooperating with other national regulatory authorities (NRAs) in the scope of the ERG, preparing several forms to be used by the NRAs to collect harmonized information, and defining the orientation guidelines on the Regulation's implementation.

ICP-ANACOM also gave its contribution to the report published by the ERG[30], in 2008, which shows some decreases in roaming prices, at the European level, even if the maximum price limits set by the Regulation only entered into force, regarding wholesale prices, on 30 August 2007, and regarding retail prices, on 30 September 2007.

Graph 30. Comparison of average wholesale prices (revenues per invoiced minute) of the calls made outside the groups, in the EU (2007)



Source: ICP-ANACOM and IRG

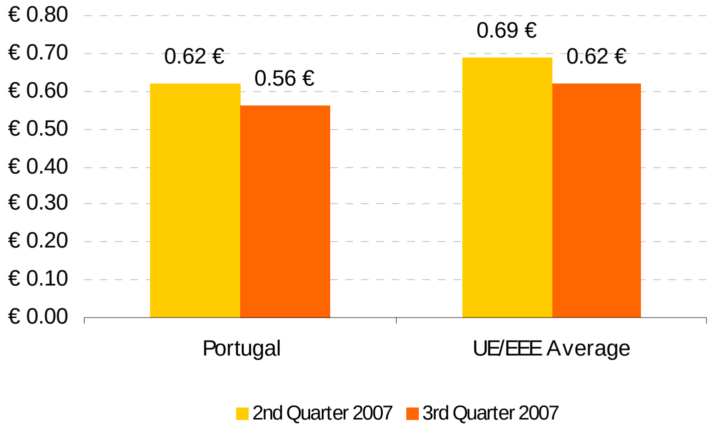
Graph 30 shows a comparison of roaming wholesale prices practiced by national mobile operators versus the average prices practiced by European operators. It is worthy pointing out that the average prices charged by national operators during the third quarter of 2007

[30] Document ERG(07)85, available at http://erg.eu.int/doc/publications/erg_07_85_intl_roaming_rep.pdf

were already within the maximum limits established by the Regulation, roughly 0.30 Euros.

Concerning the retail prices for made calls, the comparison with the European average is also favourable to Portugal. While average prices practiced in Europe dropped from 0.96 Euros to 0.62 Euros from the second to the third quarter of 2007, average prices of calls set up in roaming by customers of the national mobile operators, in the same period, went from 0.62 Euros to 0.56 Euros.

Graph 31. Comparison of average retail prices (revenue per invoiced minute) of calls made in the EU (2007)



Source: ICP-ANACOM and IRG

2.8. Communications safety

ICP-ANACOM's activity in this matter – an issue which importance led to the creation of a specific unit within this Authority – in 2007, focused mainly on the location of calls to the national emergency number 112 (112L) and was mainly developed under the global coordination of the 112L number implementation project, based on a working group that was set up for that purpose. This group includes the electronic communications companies that provide (fixed and mobile) publicly available telephone services and which, through 112, provide access to emergency services, and to the entities responsible for these services.

The following tasks were developed within the mentioned working group:

- Development and finishing of the technical documents supporting 112L solutions, both for fixed telephone networks and services, and for mobile telephone networks and services;

- Testing and implementation plans for each solution.

The works previously mentioned led to the successful conclusion of the 112L's implementation project, as detailed bellow:

- Calls to 112 started to be located using a central database, as from 1 June 2007;

- Calls to 112 placed from mobile networks started to be located according to the timetable proposed by the Ministry of Internal Affairs for the different 112 Attendance Centrals:

  - In the Mainland, between 28 May and 14 June 2007;

  - In the Autonomous Regions of the Azores and Madeira, on 30 July 2007.

It should also be stressed that, besides providing all the relevant information to the Government, ICP-ANACOM also informed the EC, in a detailed and thorough way, on the entire 112L's implementation process, thus helping to discharge the ongoing process against the Portuguese State for not implementing the Community rules concerning this matter.

ICP-ANACOM also participated in the working group of the European Telecommunications Standards Institute (ETSI) – OCG ECN&S (Electronic Communications Networks & Services Directives) – which was given the powers, by the EC, to update the list of standards mentioned in articles 17 and 18 of the Framework-Directive (transposed by article 29 of the ECL) and, during 2007, cooperated in the making of a special report[31] that is an intermediate analysis work which may have results on the next standard's listing update.

2.9. Cooperation with other entities

According to the competition's juridical regime (Law no. 18/2003 of 11 June), whenever a company concentration operation takes place with impact on a market subject to sector regulation, AdC, before making its decision, asks for the opinion of the corresponding regulatory authority.

[31] ETSI SR 002 586 – "Electronic communications networks and services; Consequence on the NGN standardization activity from the EU ECN&S regulatory view point".

Within this framework, during 2007, ICP-ANACOM gave opinions on: (1) the previous notification of a concentration operation according to which Sonaecom, S.G.P.S., S.A. (Sonaecom), through its holding Novis, gained exclusive control over a set of assets that correspond to the residential segment of the fixed network communications retail business (voice and Internet) of OniTelecom – Infocomunicações, S.A. (OniTelecom); (2) the previous notification of a concentration operation according to which Sonaecom gained exclusive control over the entire share capital of Telemilénio, Lda. (Telemilénio); and (3) the previous notification of a concentration operation according to which CATVP gained exclusive control over Bragatel, Pluricanal Leiria and Pluricanal Santarém.