

DECISION

WHOLESALE MARKETS FOR VOICE CALL TERMINATION ON INDIVIDUAL MOBILE NETWORKS

Definition of product and geographic markets, assessment of SMP and the imposition, maintenance, amendment or withdrawal of regulatory obligations

ICP-ANACOM

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1 INTRODUCTION

1.1 The conclusions of the latest market analysis and the decisions of price control

On 25.02.2005, ICP-ANACOM adopted a decision on the analyses of the wholesale markets for voice call termination on individual mobile networks in operation in Portugal (hereinafter 2005 Market Analysis Decision)¹.

This document conducts the definition of product markets and geographic markets, the assessment of Significant market power (SMP) and the imposition, maintenance, amendment or withdrawal of regulatory obligations in the wholesale markets for voice call termination on individual mobile networks, whereby the following three active mobile operators have been identified as having SMP on their respective networks:

- TMN - Telecomunicações Móveis Nacionais, S. A. (TMN)
- Vodafone Portugal - Comunicações Pessoais, S. A. (Vodafone)
- Optimus - Telecomunicações, S.A. (Sonaecom - Serviços de Comunicações, S. A. (Sonaecom)²

A set of regulatory obligations was then imposed on these operators with a view to a set of objectives, as described in Table 1.

Table 1 - Regulatory obligations included in the 2005 market analysis

Respond to reasonable requests for access	This obligation aims to ensure that situations do not occur where, without basis, there is refusal to negotiate or refusal to grant access. It ensures, specifically, that other operators can complete calls which originate on their networks and terminate on the networks of the mobile network operators concerned.
Non-discrimination in the offer of access and interconnection and in the respective provision of information	This obligation aims to ensure that the operators which benefit from the provision of access and interconnection are not unfairly disadvantaged, insofar as the capacity of these operators to compete is not impacted by any discriminatory behaviour of the mobile network operators. It should be interpreted so that the prices of call termination on a mobile network should be identical, regardless of whether the origin of the call is the fixed network, another mobile network or an international call, given that the service provided is the same.
Transparency in the disclosure of	Operators are required to submit to ICP-ANACOM, within 10 days, a copy of all Interconnection agreements to which they are

¹ Available at <http://www.anacom.pt/render.jsp?categoryId=216283>.

² It should be noted that Optimus, following the Market Analysis decision merged with the operator Novis (operator of the same economic group also controlled directly and indirectly by Sonaecom SGPS, S.A.); the entity which resulted from this merger is now named Sonaecom - Serviços de Comunicações, S.A.

information	party and shall publish the prices of voice call termination services on their networks and respective changes. They shall also provide interconnection applicants with all the information and specifications required for interconnection, including changes with significant impact, whenever their execution is planned.
Price control and cost accounting	This obligation is embodied in an obligation of cost orientation and in the adoption of a cost accounting system.
Separation of accounts	The accounting separation obligation, including the obligation to report financial information (accounting records), is essential for the regulator to ensure compliance with the obligations of non-discrimination and transparency. It is also important in the context of the obligation of implementing a cost accounting system.

On the same date, ICP-ANACOM took another decision regarding the obligation to control prices in the wholesale markets of voice call termination on individual mobile networks³ (hereinafter 2005 Price Control Decision) which set out the terms governing the implementation of the price control obligation during the years 2005 and 2006.

ICP-ANACOM opted for a gradual reduction in prices (Glide-Path), whereby the evolution of maximum termination pricing was fixed, as outlined in Table 2.

Table 2 - Evolution of mobile termination price reductions (2005 Price Control Decision)

	Fixed-Mobile Termination		International – Mobile Termination	Mobile-Mobile Termination
	TMN and Vodafone	Sonaecom		
Previous price	0.1850 €	0.2779 €	0.1870 €	0.1870 €
7 March 2005	0.1400 €	0.2050 €	0.1400 €	0.1400 €
1 July 2005	0.1350 €	0.1950 €	0.1350 €	0.1350 €
1 Oct 2005	0.1300 €	0.1820 €	0.1300 €	0.1300 €
1 Jan 2006	0.1250 €	0.1700 €	0.1250 €	0.1250 €
1 Apr 2006	0.1200 €	0.1500 €	0.1200 €	0.1200 €
1 Jul 2006	0.1150 €	0.1300 €	0.1150 €	0.1150 €
1 Oct 2006	0.1100 €	0.1100 €	0.1100 €	0.1100 €

Source: ICP-ANACOM

³ Available at http://www.anacom.pt/streaming/dec.contrprecos_2.pdf?categoryId=201963&contentId=258996&field=ATTACHED_FILE

On 07.02.2008, concurring with the validity of the conclusions and regulatory obligations included in the 2005 Price Control Decision and noting that, after more than 18 months, no reduction in practised prices had occurred in terms of the cap stipulated in said determination, ICP-ANACOM decided to intervene again in setting maximum prices for voice call termination on individual mobile networks, taking a further decision on the matter (hereinafter 2008 Price Control Decision).

The view was taken at that time that to maintain very high prices for termination on mobile networks in comparison to costs, as measured through international comparisons, constitutes a factor of distortion of competition between these networks and fixed networks. This consequently led to the maintenance of artificially high prices charged to end-users for electronic communications which originated on fixed networks and which terminated on mobile networks.

It was therefore deemed important to correct these aspects, whereas there were grounds for a more substantial immediate reduction in the maximum prices for termination on mobile networks, in light of the fact that the practised prices had been maintained over a long period of time. As such, it was decided to maintain a regulatory approach - in line with the 2005 Price Control Decision - which would ensure the progressive evolution of termination rates in order to allow operators to adapt as required and avoid disruptive alterations, leading to the establishment of a new *Glide-Path*.

Additionally, provision was made for a longer transition period for Sonaecom to reduce its termination rates, resulting in a moderate and transitory asymmetry in termination rates charged by this operator in relation to TMN and Vodafone. This provision aimed to reduce problems arising from market failure due to high differentiation between *on-net* and *off-net*⁴ rates which, heightening the effects of network externalities, contributed to cause that operator a significantly unfavourable level of traffic imbalance.

The *Glide-Path* established in the 2008 Price Control Decision is shown in Table 3. It is noted that the asymmetric termination rates were eliminated in the last quarter of this regulatory intervention, and accordingly, as of 1 October 2009 (and until the present time) equality is seen in the maximum prices for call termination on the mobile networks of the three operators.

⁴ *On-net* calls correspond to calls originating and terminating on the same network, while *off-net* calls are those originating and terminating on different networks.

Table 3 - Evolution of mobile termination price reductions (2008 Price Control Decision)

	Fixed-Mobile, Mobile-Mobile and International-Mobile Termination	
	TMN and Vodafone	Sonaecom
15 Jul 2008 ⁵	0.0800 €	0.0960 €
1 Oct 2008	0.0750 €	0.0900 €
1 Jan 2009	0.0700 €	0.0840 €
1 April 2009	0.0650 €	0.0780 €
1 July 2009	0.0650 €	0.0720 €
1 Oct 2009	0.0650 €	0.0650 €

Source: ICP-ANACOM

At the moment when the first price reduction stipulated in the 2008 Price Control Decision entered into force, the average for mobile termination rates in Portugal was the 13th lowest among the countries comprising the *benchmark* of the European Regulators Group (ERG), and is close to the average the rates reported for these countries.

1.2 Market developments

The main events and developments in the mobile electronic communications market occurring since the approval of the Market Analysis of 2005 are presented below.

Announcement of concentration

On 06.02.2006, Sonaecom, SGPS, S.A. - which at the time controlled a 50.94 percent stake in Optimus - and Sonae, SGPS, S.A. made the preliminary announcement to make a bid for the shares representing the capital of Portugal Telecom. SGPS, S.A. On 07/02/2006 they presented a preliminary announcement to launch a bid for the shares representing the capital of PT Multimédia, SGPS, S.A. - holding of Grupo Portugal Telecom (Grupo PT) for the area of multimedia and audiovisual businesses. Following the bids, Sonaecom announced its intention "to *merge, consolidate or otherwise integrate the business and operations of Optimus and TMN*"⁶.

⁵ Only required from 23 August 2008.

⁶ Communication of Material Fact, available at <http://www.cmvm.pt/NR/rdonlyres/A017ACA9-6D55-4F0E-BEFB-FEC6F25E7739/6069/FR8388.pdf>

The operation was subjected to an assessment by AdC - Autoridade da Concorrência (Competition Authority), which issued its final decision of non-opposition on 22.12.2006⁷. However, the operation was rejected by the shareholders of Portugal Telecom SGPS S.A., at the General Assembly of Shareholders held on 02.03.2007 and was not completed.

Throughout the period that elapsed between the announcement of the bid's launch and the final decision of PT's General Assembly of Shareholders, there was a large degree of uncertainty regarding the future developments of the structure of the mobile market, which is understandable given the complexity of the procedures involved and the associated legal process.

ICP-ANACOM participated actively throughout the process, providing AdC with legal consultation and issuing several opinions, including ruling on the obligations which it deemed suitable for any approval of the acquisition operation. ICP-ANACOM also carried out a market consultation regarding this acquisition operation.

New entities in the market

The three mobile operators identified as having significant market power in the 2005 Market Analysis decision remain the same, even while the Optimus has been integrated into the fixed operator Novis S.A. (Operator of the same economic group), whose name was later changed to Sonaecom - Serviços de Comunicações, S.A.

Additionally, no new operators entered the market with their own mobile networks, and as such, the only operators providing wholesale services, such as the service of voice call termination, remained the three operators identified in the 2005 Market Analysis.

ICP-ANACOM sought to create conditions to enhance market contestability, through the publication of the document on the clarification of the regulatory framework governing the activity of virtual mobile network operator (MVNO) in February 2007⁸, as well as through the availability of spectrum in various frequency bands:

- In January 2007, in the context of the process of consultation on the rights of use of frequencies in the 450-470 MHz band, ICP-ANACOM decided to enable providers of mobile trunking services (SMRP), through the amendment of the respective authorisation titles and upon request, to offer the publicly available mobile telephone service in the 450-470 MHz band, upon completion of the tender for the allocation of

⁷ Available at http://www.autoridadedaconcorrenca.pt/Download/2006_08_final_net.pdf

⁸ Available at <http://www.anacom.pt/render.jsp?contentId=457460>

rights of use frequencies in these bands and subject to compliance by SMRP operators with determinations issued in the context of proceedings currently underway⁹.

- In January 2008, approval was given to a decision to limit the number of rights of use of frequencies allocated for the provision of the mobile telephone services in the 450-470 MHz band, and to the respective allocation procedure¹⁰.
- Furthermore, in January 2008, ICP-ANACOM decided to allocate, by means of auction, rights of use of frequencies reserved for broadband wireless access (BWA) in the 3400-3800 MHz frequency bands (4 blocks of 2 x 28 MHz) from a perspective of technological and service neutrality, whereas it was established that as a first phase of the auction, operators with SMP in the broadband market and mobile operators would not be eligible for frequency allocation.

It is noted that the first two initiatives did not result in new mobile network operators entering the market. With respect to the third initiative, it is noted that recent approval was given to the allocation of frequency rights to Bravesensor, Unipessoal, Ltd. and Onitelecom, Infocomunicações, S.A. In any event, given that the frequencies in question are intended to be used by operations in different modes (fixed, nomadic and mobile), it is not clear how these entities will influence the market.

With respect to the activity of mobile virtual network operator, it should be mentioned that after ICP-ANACOM's publication of the document on MVNO, the first operator emerged in Portugal with these characteristics (Phone-ix), as a result of the conclusion of an agreement between TMN and CTT at the end of 2007. Later, in October 2008, a second MVNO emerged (Zon Mobile), following the agreement concluded between Vodafone and ZON Multimédia¹¹.

It is noted, however, that the impact of the entry into the market of MVNOs on the markets of voice call termination on mobile networks depends on these entities having some network infrastructure or generating customer termination revenues, whereby they would be able to provide the wholesale call termination service. According to the information available at ICP-ANACOM, neither Phone-ix nor Zon Mobile have such conditions.

⁹ Available at <http://www.anacom.pt/render.jsp?categoryId=267062>

¹⁰ Available at <http://www.anacom.pt/render.jsp?contentId=900240>

¹¹ The entry of Zon Multimédia into the mobile market follows the "Spin-off" of PT Multimédia in late 2007.

Technological developments

In April 2006, the three Mobile Operators launched the so-called generation 5.3 - using High speed downlink packet access (HSDPA) - with the sale of cards for portable computers. Later, at the end of 2007, High-speed uplink packet access (HSUPA) technology was launched, enabling mobile operators to offer cards for portable computers with download speeds of up to 7.2 Mbps and upload speeds of up to 1.4 Mbps. It is noted, however, that these technological developments, which have a bearing on the provision of Internet access services at retail level, have no impact on the provision of voice call termination services.

New services and products

In terms of voice services, in the time elapsing between the 2005 Market Analysis and the present analysis, notwithstanding the diversity of services offered by mobile operators in business, no new services were launched which were deemed to have an impact on the definition and analysis of the market of voice call termination on mobile networks.

However, note is made, in this period, of the release by the three operators with mobile networks of electronic communications services in a defined geographic location, using GSM frequencies; these services were approved by ICP-ANACOM¹² subject to certain conditions¹³.

It is noted that these new services have no impact on the provision of call termination services on mobile networks, given that these are products which use geographic numbering ("2XX" range), and that the interconnection tariff applied to incoming calls is the fixed termination tariff. As such, the termination of these products is not included in the market now under review.

Note is also made of the launch of broadband data services, supported in particular over the UMTS network of the mobile operators, whereas, at the end of the first half of 2009, there were about 1.45 million active users accessing the service over mobile phones, PDAs

¹² The service provided by Novis was approved by ICP-ANACOM in February 2005. The same service provided by Vodafone was approved in October 2006 and the services provided by TMN and Sonaecom were approved in April 2007.

¹³ The following conditions should be noted:

- Access to the service must be provided using a terminal connected to a single, pre-determined BTS when making, receiving and maintaining calls;
- In exceptional cases, where technically justified and recognized as such by ICP-ANACOM, a terminal may be associated with two, or at most three, pre-determined BTS;
- The provider must provide clear and transparent information to end-users on the features of the service, explaining in particular that access to the service is provided exclusively at the address stated by the end user for this purpose, and also explaining any further limitations on indoor access and the implications in terms of caller location for calls made to the single European emergency number (112).

(*Personal Digital Assistant*), cards for Portable Computers and cards with USB connection (which also enable connection to fixed computers), with increasing levels of use. In any event, the launch of these services and their success has had no impact on the provision of the wholesale call termination service, and is not therefore relevant to the analysis of these markets.

Launch of new Tariffs

The most significant pre-paid products launched by mobile operators in Portugal, from 2005 until 2009, can be divided into three groups: i) "low cost tariffs"¹⁴, ii) "tailored tariffs" and iii) tariffs of the "on-net sub-group". The tariffs of the low-cost brands are undifferentiated in price with respect to on-net and off-net calls (i.e., the price for calls is the same regardless of whether they terminate on the operator's own network or on the network of another mobile operator), which is not the case with the latter two tariffs, which both have differentiated prices (i.e. prices for on-net calls and prices for off-net calls are different).

Low cost (or "no frills") products - UZO, Directo and Rede4¹⁵ emerged in late June 2005 - launched by the mobile network operators using their own brands, which then represented a change from the undifferentiated tariff depending on the destination network.

The products, which we call "tailored", were released in July 2007 by TMN and Vodafone, and were named Self-service and Online, respectively. These products enable the customer to formulate their own tariff, choosing a combination between three on-net prices, three off-net prices and two prices for text messaging (SMS). As such, the customer has 18 possible tariff options, with obligatory balance charging, which varies in inverse relation to the selected traffic prices (the lower the price of the service that users choose, the greater the value users need to charge their balance). The prices are different, with on-net prices generally lower than off-net prices. In August 2009, Sonaecom also launched a "tailored" tariff, called Online.

In April / May 2008, TMN, Vodafone and Sonaecom launched the products *Moche*, *Yorn* *Power Extravaganza* (later it also launched *91 Extreme*, practically identical to

¹⁴ "low cost"

¹⁵ UZO was the first of the three to appear on the market, on 21.06.2005, and was presented to the public as a low cost product supported over the mobile network of TMN. On 27.06.2005, Rede4 came onto the market, launched by Sonaecom as a brand operating on the Optimus network. Rede4 was initially launched with slightly different pricing from that presented by UZO, since it required an obligatory monthly charge; however a few weeks later a version was offered with a tariff which is identical to that of UZO, i.e. with no balance charging required. On 01/07/2005 Vodafone launched Directo, with two versions: one that replicates the tariff of UZO and another that replicates the initial tariff of Rede4 (with obligatory balance charging). As of September 2005, UZO also provided an offer with obligatory balance charging, replicating the initial offering of Rede4.

Extravaganza) and TAG, respectively¹⁶. The “on-net sub-group” of products, differentiated in terms of the destination network, have a structure which is different to the traditional pre-paid tariffs. Besides the differentiation of the price of calls depending on the destination network, further differentiation is introduced in term of calls to the same network where calls to customers with the same tariff are free and other calls are charged at the normal *on-net* prices.

For post-paid products, the most significant development was the launch of the Pack t tariff (August 2008) and the new Best 91 tariffs (October 2008) by TMN and Vodafone, respectively. These tariffs are differentiated, insofar as they offer free on-net calls¹⁷.

Even with four years having elapsed since the last market analysis, no significant changes have been seen in the consumption patterns of mobile operator customers in terms of the distribution of various types of calls and the proportion of on-net calls remains high «**Start of Confidential Information (SCI)**»

«**End of Confidential Information (ECI)**», with most customers associated with tariffs which have different pricing between on-net calls and off-net calls (about 60 percent of customers have differentiated tariffs, with the traffic originated by these customers representing about 76 percent of total mobile-mobile traffic). This was not significantly impacted by the launch of the low-cost products, which seem to have attracted subscriptions by customers with specific characteristics - these customers make up a relatively low proportion of calls to the same network and tend to seek a simple service with few options beyond voice communications - resulting in market segmentation but not changing it any substantial way.

1.3 Evolution of termination rates in Europe

The methodology used by ICP-ANACOM in applying the obligation of cost orientation set out in the 2005 Price Control Decision was based on benchmarking. Accordingly, in the event that no decline is seen in Portuguese termination prices, there would be clear indication that these prices remained above cost.

When ICP-ANACOM adopted the 2005 Price Control Decision, call termination rates on mobile networks in Portugal were in 29th position among the 30 countries considered in the ERG benchmark. The first benchmark published after the commencement of the glide path

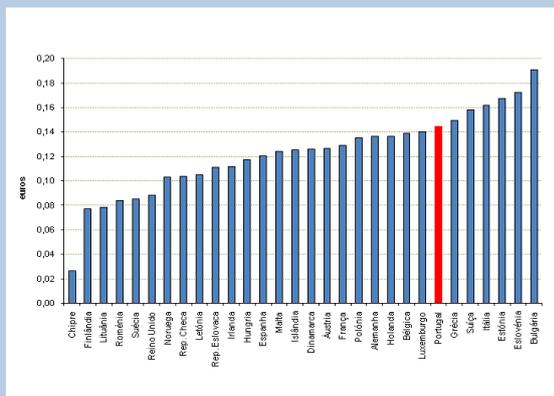
¹⁶ Sonaecom launched TAG in March 2008 while TMN and Vodafone launched their products shortly afterwards.

¹⁷ Apart from the Best 91 tariff model with the lowest monthly fee.

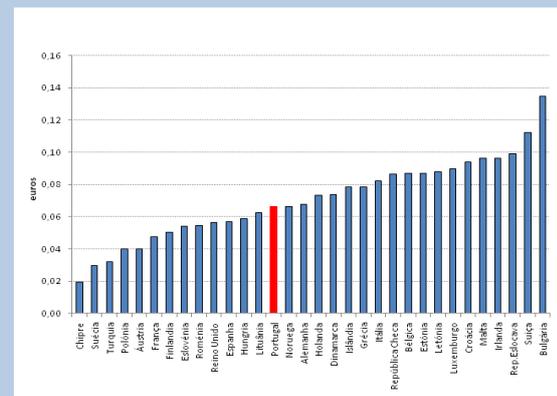
imposed by the 2005 Price Control Decision shows an improvement in Portugal's position as the country with 24th lowest termination rates (out of 30 countries), as can be seen from Graph 1. Additionally, in the last benchmark published by ERG (July 2009), which already reflects reductions imposed in the 2008 Price Control Decision, it appears that Portugal is now in 14th position (see Graph 2).

Note should be made of the dynamic nature of these benchmarks, given that several National Regulatory Authorities (NRA) are in the process of publishing decisions and drafts of decisions which cite values, which in many cases are lower than those determined by ICP-ANACOM, and it is anticipated that during 2010 and 2011 the relative position of the country will deteriorate again.

Graph 1 - Average mobile termination rates - July 2005



Graph 2 - Average mobile termination rates - July 2009



Source: ERG http://erg.eu.int/documents/docs/index_en.htm

1.4 The revision of the European Commission's Recommendation on relevant markets

On 17 December 2007, the European Commission (EC) published Recommendation 2007/879/EC¹⁸ on relevant product and service markets within the electronic communications sector susceptible to ex-ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services¹⁹ (Hereafter: the Recommendation).

¹⁸ Published in the Official Journal of the European Union (OJEU) of 28 December 2007.

¹⁹ Available at <http://www.anacom.pt/render.jsp?contentId=984081>

This Recommendation substituted Commission Recommendation 2003/311/EC of 11 February, following the evolution of markets seen over the past years. Seven markets were now seen as being susceptible to ex-ante regulation, one at retail level²⁰ and the remaining six at wholesale level²¹.

As in the previous version of the Recommendation, the revised version is accompanied by an "Explanatory Note" where the EC justifies the definition of new markets²².

Following this revision, the market under analysis (market 16 of the previous Recommendation) keeps its former name, corresponding to the same functional description: Voice call termination on individual mobile networks.

1.5 The need to review the analyses of relevant markets

In the prior market analyses, provision is already made for:

- the need to conduct a review of the markets in the event of a revision of the EC Recommendation on relevant markets; or
- if significant changes occur in the market that would alter the conditions thereof.

In this context it is appropriate to review the wholesale markets of voice call termination on individual mobile networks.

1.6 The process of market analysis

The Law of Electronic Communications (LCE) No 5/2004 approved the legal regime governing electronic communications networks and services and associated resources and services, as well as the powers and responsibilities of the National Regulatory Authority (NRA) in this area.

²⁰ Market 1: Access to the public telephone network at a fixed location for residential and non-residential customers.

²¹ As follows:

- Market 2: Call origination on the public telephone network provided at a fixed location;
- Market 3: Call termination on individual public telephone networks provided at a fixed location;
- Market 4: Wholesale network infrastructure access at a fixed location;
- Market 5: Wholesale broadband access;
- Market 6: Wholesale terminating segments of leased lines; and
- Market 7: Voice call termination on individual mobile networks.

²² "Explanatory Note" available at http://ec.europa.eu/information_society/policy/ecom/doc/library/proposals/sec2007_1483_final.pdf.

This law transposes Directives Nos 2002/19/EC, 2002/20/EC, 2002/21/EC, 2002/22/EC, all of the European Parliament and of the Council of 7 March and EC Directive No 2002/77/EC of 16 September.

Under the terms of the LCE, the NRA - ICP-ANACOM - is charged with defining and analyzing the relevant markets, identifying undertakings with significant market power and determining appropriate measures to companies which offer electronic communications networks and services (Article 18 of Law No 5/2004).

This process is carried out according to the following stages (articles 55 to 61 of the LCE)²³:

- Definition of relevant markets (article 58 of the LCE)

The NRA shall identify the relevant markets of products and services of the electronic communications sector, including relevant geographic markets, in line with the principles of competition law.

In the identification of the relevant markets, the NRA shall, according to national circumstances, have regard to the Recommendation and EC Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services²⁴ (Hereafter referred to as "The Guidelines").

- Analysis of relevant markets (Article 59 of the LCE)

The NRA is charged with reviewing the relevant markets defined under the previous point, taking into account the Guidelines.

The aim of the market analysis process is to investigate the existence of effective competition. There is no effective competition where it is possible to identify companies with SMP²⁵.

It is considered that an undertaking has SMP, individually²⁶, or jointly with others, where it enjoys a position equivalent to dominance, i.e. a position of economic

²³ See Framework Directive, articles 7 and 14 to 16.

²⁴ Available at <http://www.anacom.pt/render.jsp?contentId=985407>.

²⁵ Also according to the "Guidelines" (§ 24), "*Under the regulatory framework, markets will be defined and SMP will be assessed using the same methodologies as under competition law. (...)and the assessment of effective competition by NRAs should be consistent with competition case-law and practice. To ensure such consistency, these guidelines are based on (1) existing case-law of the Court of First Instance and the European Court of Justice concerning market definition and the notion of dominant position within the meaning of Article 82 of the EC Treaty and Article 2 of the merger control Regulation*".

strength which enables the undertaking to act largely independently of its competitors, customers and consumers.

- The imposition, maintenance, amendment or withdrawal of regulatory obligations (Article 66 of the LCE)

If ICP-ANACOM determines that a market is effectively competitive, it is bound to refrain from imposing any specific regulatory obligation, and shall remove such obligations where these exist.

If ICP-ANACOM determines that the relevant market is not effectively competitive, it is bound to impose appropriate and specific regulatory obligations on undertakings with SMP in this market or maintain or amend such obligations where these already exist.

The obligations imposed:

- shall be appropriate for the problem identified, proportionate and justified in the light of the regulatory objectives enshrined in article 5. of the LCE;
- shall be objectively justifiable in relation to the networks, services or facilities to which they refer;
- may not give rise to undue discrimination with respect to any entity;
- shall be transparent in relation to their intended purposes.

According to the methodology which continues to be adopted in the Recommendation²⁷, the starting point for the identification of markets susceptible to ex ante regulation is the definition of retail markets over a given time horizon, their geographical size and competitive pressures to which they are subject, on both the demand and supply side.

It is then appropriate to identify the corresponding wholesale markets having regard to the same geographic dimensions and to perform an assessment of any SMP in these markets. Finally, an assessment is made of the regulatory obligations which are to be imposed on undertakings with SMP.

²⁶ It is noted that, according to ECJ Judgement of 12 July 1984 *Hydrotherm*, "the term 'undertaking' must be understood as designating an economic unit for the purposes of the subject-matter of the agreement in question even if in law that economic unit consists of several persons, natural or legal".

According to article 2, paragraphs 1 and 2 of Law No 18/2003 of 11 June (approving the legal competition framework), "1 - For the purposes of this Act, an undertaking is considered to be any entity exercising an economic activity that consists of the supply of goods and services in a particular market, irrespective of its legal status or the way in which it functions. 2 - A group of undertakings is considered as a single undertaking if, though legally distinct, they make up an economic unit or maintain ties of interdependence or subordination among themselves arising from the rights or powers set out in paragraph 1 of Article 10.⁹"

²⁷ See Recommendation - Explanatory Note, Section 2.1.

The present document constitutes the final decision of ICP-ANACOM on the definition of product markets and geographic markets, the assessment of SMP and the imposition, maintenance, amendment or withdrawal of regulatory obligations in the wholesale markets for voice call termination on individual mobile networks.

This document follows the approval by the Management Board of ICP-ANACOM, on 14/01/2010, of the draft decision on the analysis of these markets. These draft measures, in conjunction with the draft measures on the "Price control obligation" imposed on those markets, was subject to public consultation²⁸ and prior hearing²⁹ for a period of 20 days, which came to be extended for a further 10 days. This consultation took place between 20/01/2010 and 03/03/2010.

Following the public consultation and prior hearing of interested parties, a report was prepared which is an integral part of the present decision on the wholesale markets for voice call termination on individual mobile networks, as well as the decision on the price control obligation.

Autoridade da Concorrência (The Competition Authority) was notified, in order that, according to the same deadline and under the terms of article 61 Law No 5/2004, it issue an opinion regarding the proposed measures. On 26/02/2010, the Competition Authority sent its opinion on the draft decision in question, having concluded that the methodology for market definition and findings reached by ICP-ANACOM were appropriate and generally consistent with Competition Law, while raising no doubts as to the identification of three operators as having SMP in these markets. With respect to regulatory obligations, it considered that, given the problems of competition identified in the absence of regulation, it was appropriate to maintain them. It concluded by stating that it does not oppose the definition of the product markets and geographic markets, nor does it oppose the assessments of SMP carried out by ICP-ANACOM.

On 10.03.2010, approval was given to the notification to be sent to the EC and the NRAs of other Member States pursuant to paragraph 1 of article 57 of Law No 5/2004, as well as the summary notification form prepared in accordance with Annex I of the EC Recommendation of 15.10.2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

²⁸ Under the terms of article 8 of Law No 5/2004 and in accordance with paragraph 1 of article 57 of the same law and with paragraph 3 of the "Consultation Procedures of ICP-ANACOM", as approved by determination of 12.02.2004.

²⁹ In accordance with the provisions of articles 100 and 101 of the Code of Administrative Procedure.

Following notification, the EC sought additional clarifications from ICP-ANACOM, which were duly provided. On 12/04/2010, the EC ruled on the analysis and presented a number of comments, which were taken into account in the present analysis, reflected in changes made to the decision concerning the obligation to control prices, contained in a separate decision document.

2 MOBILE SERVICE MARKET GROUPINGS

According to the EU regulatory framework applicable to electronic communications, which follows EU competition law, relevant markets are defined through the intersection of two dimensions: the product market and geographic market.

The objective of the process of defining the product market is to identify all those products or services which are sufficiently interchangeable or substitutable, in terms of their objective characteristics, by virtue of which they are particularly suitable for satisfying the constant needs of consumers, their prices or their intended use³⁰.

The exercise of defining the relevant product or service market should begin by grouping together products or services that are used by consumers for the same purposes or end use³¹, i.e., according to demand.

These products and services will form part of the same relevant market if the behaviour of producers or suppliers of services involved are subject to the same kind of competitive constraints on the supply side, particularly in terms of pricing.

In this context, two main types of competitive constraints are identified (i) demand-side; and (ii) supply-side substitution³².

These competitive constraints may, in isolation or in conjunction, constitute a basis for defining a particular product market.

In theoretical terms, the degree of substitutability or complementarity between two products can be estimated through the cross-elasticity of demand. However, in practice, such analysis is complex and the available data is scarce, and as such one of the forms used to determine the existence of substitutability (of demand and supply) is the application of the "hypothetical monopolist test" (SSNIP test - Small but significant non-transitory increase in price)³³.

The relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the

³⁰ See Guidelines, § 44.

³¹ See Guidelines, § 44.

³² See Guidelines, § 38. There is also a third source of competitive constraint on the operator's behaviour which is potential competition - this possibility will be considered where relevant.

³³ See Guidelines §40-43.

conditions of competition are similar or sufficiently homogeneous in relation to neighbouring areas³⁴.

The process of defining the limits of the geographic market uses the same methodology as that used in the definition of the product market, particularly through the use of the hypothetical monopolist test, which enables identification of competitive constraints with respect to substitutability on the demand side and on the supply side.

2.1 Retail services provided in mobile markets

The land mobile service in Portugal is currently provided at retail level by the mobile network operators TMN, Vodafone and Sonaecom and also by the Mobile Virtual Network Operator (MVNO) Phone ix (owned by CTT and supported over the TMN mobile network), and by the MVNO Zon Mobile (owned by Zon and supported over the Vodafone mobile network).

Additionally, there are companies which, using their own brands, offer tariffs to their customers or associates created in partnership with the network operators. Examples include the retail chain Continente, which in partnership with Sonaecom, launched the Continente Mobile tariff, the products of BenficaTelecom, Dragão Mobile and Sporting Mobile, in a partnership of the SL sports clubs, Benfica, F.C. Porto and Sporting C.P., respectively, with TMN. These initiatives are not considered as operators of mobile electronic communications, insofar as the contractual relationship with the end-user is not established at this level, but with the mobile network operators identified above.

In broad terms, it is considered that the mobile telephone service in Portugal may include the provision of retail voice service in full duplex, video-call services, short message services (SMS), data services, including MMS and broadband Internet access services, as well as a range of different features.

The services concerned are provided by all mobile network operators in business over their networks and using the GSM and UMTS technologies. The MVNOs provide some of the services listed, focusing more on voice and data services, excluding Internet access.

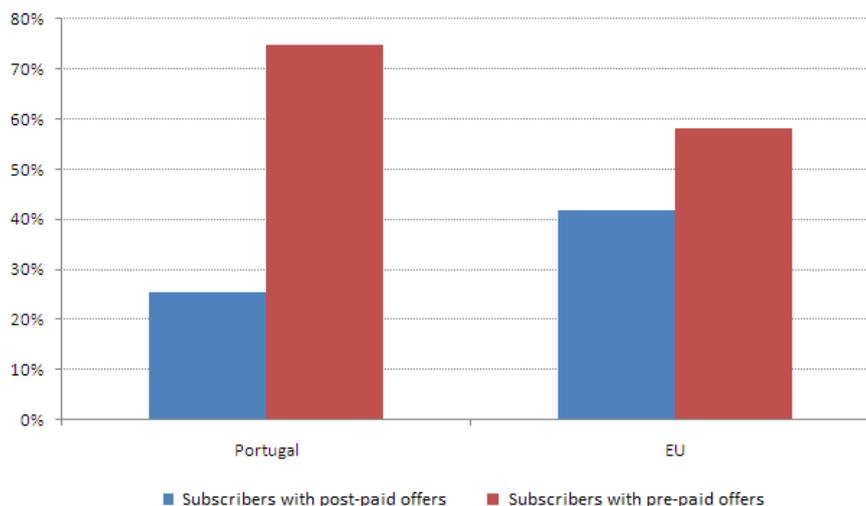
Mobile telephone services are provided to a multiplicity of business and non-business customers.

³⁴ See Guidelines § 56.

The various mobile network operators offer pre-paid and post-paid products³⁵, with the representing the highest percentage of subscribers (73 per cent in the third quarter of 2009), which makes it a major feature of the Portuguese mobile electronic communications market.

The following graph enables a comparison between the proportion of subscribers with pre-paid and post-paid offers in Portugal and the average proportion in the European Union.

Graph 3 - Proportion of pre-paid and post-paid offers in Portugal and in Europe (October 2008)



Source: ICP-ANACOM and 14th Implementation Report

The tariff plans available with the various offers usually include access to various services and, in the case of voice services, the ability to make and receive various types of calls (made to and/or received from the same operator, other mobile operators, fixed and international operators and also calls in roaming).

The mobile telephone service is mainly characterized by the fact that it provides mobility to users, who value the fact that they are always contactable and able to contact other users whenever they need to³⁶.

The mobile telephone services in Portugal has seen very significant development, with approximately 15.5 million subscribers in the third quarter of 2009, representing a penetration rate of 146.2 per 100 population (Graph 4).

³⁵ MVNOs are only provide pre-paid offers.

³⁶ According to a market survey conducted by ANACOM in December 2006, 49.1 percent of respondents consider that the possibility of always being contactable is the main advantage of the mobile service in relation to the fixed service, while 39.9 percent consider that mobility is the most important advantage. Available at <http://www.anacom.pt/render.jsp?categoryId=238402>.

Graph 4 - Evolution in Number of Subscribers and Penetration Rate of Land Mobile Service

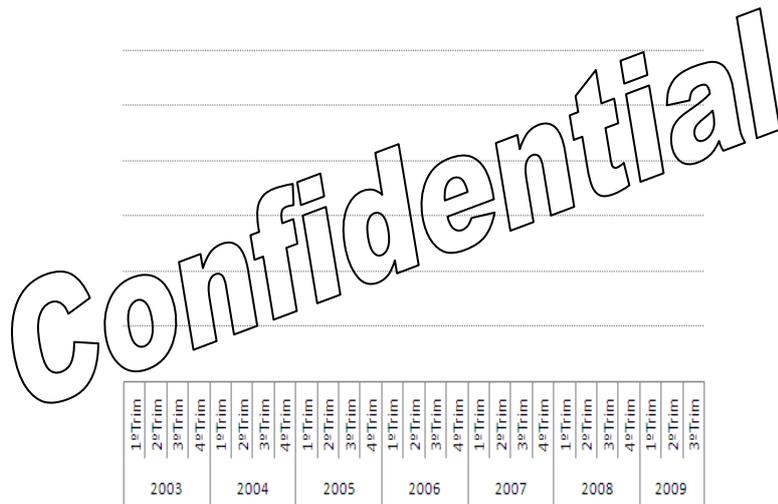


Source: ICP - ANACOM

This market growth has been the result of a very significant and sustained increase in the customer base of TMN and Vodafone, with Sonaecom manifesting some growth in its customer base from mid 2007 (as shown in Graph 5). This trend in the number of subscribers to the three operators has resulted from the maintenance of market share levels since 2006, although there has been a slight recovery by Sonaecom from mid 2007 (according to Graph 6). In this analysis, note is made of the fact that Sonaecom reported a very significant one-off increase in its customer base in the second quarter of 2008, which the operator associates with the launch of its “on-net sub-group” tariff in Portugal.

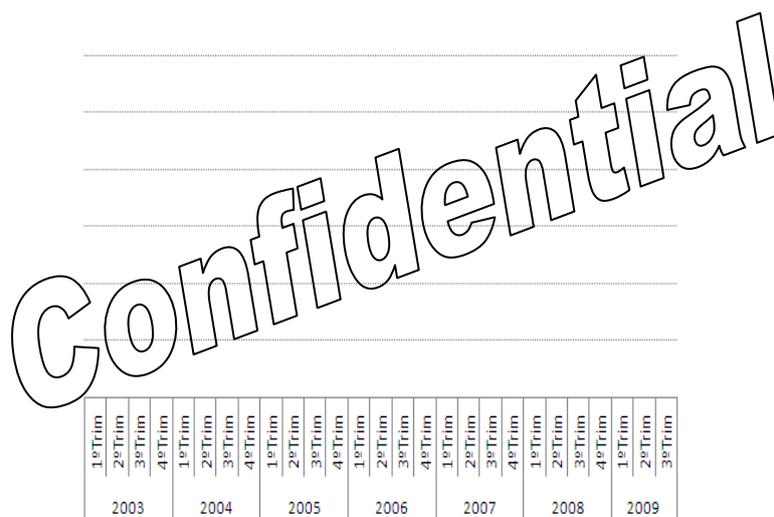
(SCI)

Graph 5 - Evolution of Number of Subscribers by Operator



Source: ICP-ANACOM

Graph 6 - Evolution of Market Share (Subscribers)



Source: ICP-ANACOM

(ECI)

The percentage of subscribers who have subscribed to the undifferentiated tariff has been increasing since 2006, and is 42 per cent overall. However, this figure differs greatly from operator to operator, whereas **(SCI)**

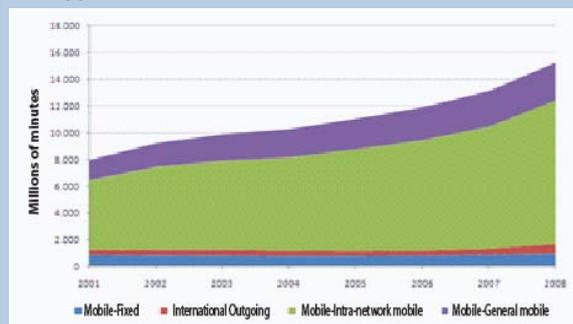
(ECI). It is also noted that in the period 2005-2009, the absolute number of subscribers on differentiated tariffs remained fairly stable across all mobile network operators, indicating that these customers (which in the first quarter of 2009 represented 58 percent of total customers) are "captives" of each operator (in light of their network of contacts), which is in line with a reported churn rate of close to 1 percent, which was seen in 2008³⁷.

In parallel with the increase in the number of subscribers to the mobile telephone service and the respective penetration rate, traffic originated by active mobile operators has also increased substantially over the years, as has traffic which terminates with these operators.

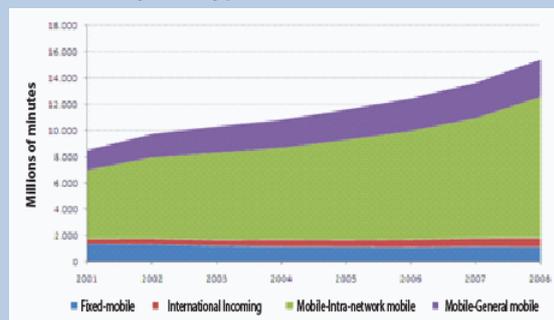
Graph 7 and Graph 8 illustrate the situation described, with note made of the fact that *on-net* has come to represent an increasing share of retail traffic with respect to calls originating on mobile networks. Between 2004 and 2008 this traffic has increased on average by 11.4 percent per year and now represents 70 percent of total traffic for calls originating on mobile networks.

³⁷ According to the results of the 2008 Survey on the Use of Electronic Communications, only around 1.1 percent individuals aged 15 or more with the mobile telephone service have switched operator (available at <http://www.anacom.pt/render.jsp?contentId=971521>).

Graph 7 - Evolution of number of minutes originating on national mobile networks by call type



Graph 8 - Evolution of the number of minutes terminated on national mobile networks by call type



Source: ICP-ANACOM

TMN and Vodafone historically (2003-2009) show a growth trend in respect of traffic minutes originated and terminated on mobile networks (therefore including on-net and off-net traffic), while Sonaecom reports values stable relatively until 2008, when it recorded an increase in this indicator (as shown in Graph 9).

(SCI)

Graph 9 - Evolution of retail mobile-mobile traffic

Confidential

1 ^o Trim	2 ^o Trim	3 ^o Trim	4 ^o Trim	1 ^o Trim	2 ^o Trim	3 ^o Trim	4 ^o Trim	1 ^o Trim	2 ^o Trim	3 ^o Trim	4 ^o Trim	1 ^o Trim	2 ^o Trim	3 ^o Trim	4 ^o Trim	1 ^o Trim	2 ^o Trim	3 ^o Trim	4 ^o Trim	1 ^o Trim							
2003				2004				2005				2006				2007				2008				2009			

Source: ICP-ANACOM

(ECI)

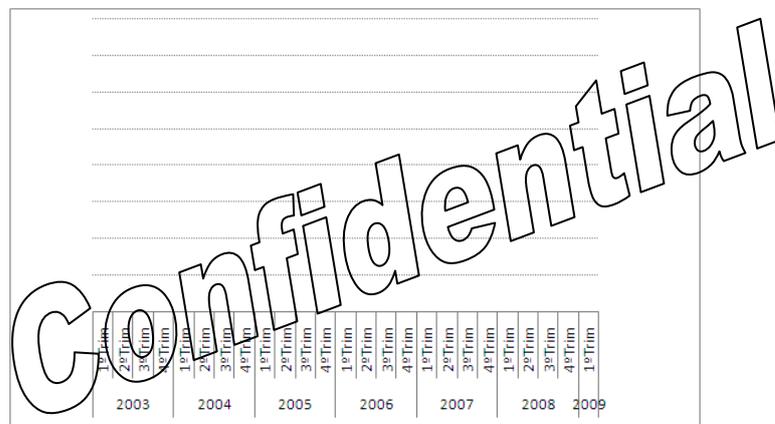
It is noted however that in the first quarter of 2009, Vodafone and Sonaecom experienced a very significant increase in the number of minutes originated and terminated on their networks; in particular Vodafone matched TMN in this indicator, while maintaining a smaller customer base. These increases in the volume of minutes are related to the increasing

contribution of the traffic originated and terminated on the same mobile network (on-net traffic) associated with differentiated "on-net sub-group" tariffs.

The evolution in revenues per minute (as seen in Graph 10 and Graph 11) shows that a high level of differentiation is maintained between on-net and off-net, which is substantially higher in TMN and Vodafone. Notes should be made of the decline in average on-net call revenues, which is particularly relevant in the case of Sonaecom, and the important decline in average off-net call revenues, for the three operators.

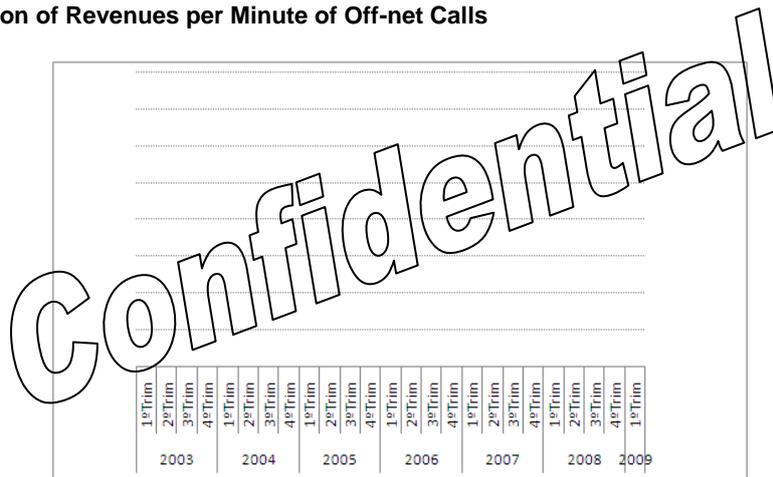
(SCI)

Graph10 - Evolution of Revenues per Minute of On-net Calls



Source: ICP-ANACOM

Graph 11 - Evolution of Revenues per Minute of Off-net Calls



Source: ICP-ANACOM

(ECI)

The evolution of off-net minutes which present a much greater weight in Sonaecom compared to other operators **(SCI)**

(ECI), has been reflected in a traffic imbalance, implying that this operator originated more traffic directed to the networks of their competitors than traffic received from them.

As shown by the following graph (Graph 12), Sonaecom's traffic imbalance has been increasing, and even deteriorated further after the second quarter of 2008, which is partly explained by the release of the TAG product through which Sonaecom added customers who make a high proportion of off-net calls³⁸. Already the overall imbalance reported with respect to Vodafone was negative until the third quarter of 2007, and became positive, continuing to increase over the course of last year.

Despite the high traffic imbalance values reported by Sonaecom, the imbalance in the termination payments made by Sonaecom to the other operators declined significantly after the 2008 Price Control Decision, due to the reduction in termination prices and due to the asymmetry imposed in the last two quarters of 2008 and the first 3 quarters of 2009. Graph 13 shows the reduction in the imbalance up to the end of the first quarter of 2009.

(SCI)

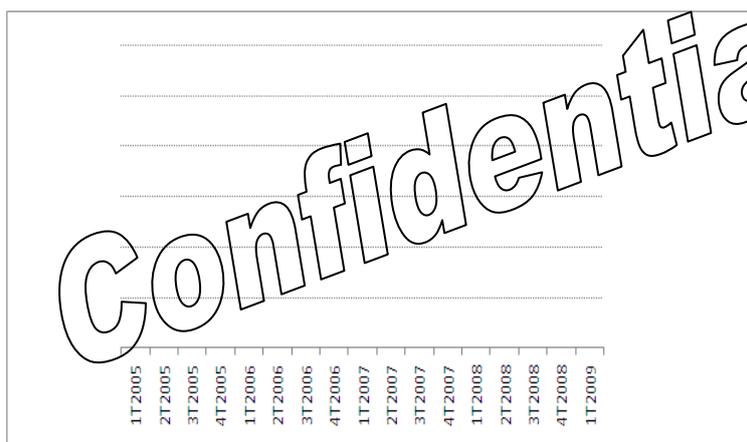
Graph 12 - Evolution of Imbalance in Minutes



Source: ICP-ANACOM

³⁸ For a more detailed analysis of the impact of this TAG product, see the Price Control Decision, which is attached hereto.

Graph 13 - Evolution of Sonaecom Financial Imbalance



Source: ICP-ANACOM

(ECI)

2.2 Characterization of the mobile market in Portugal

In the electronic communications sector, the mobile communications segment experienced the greatest level of success from the start of its operation, particularly in terms of growth. The penetration rate in Portugal at the end of second quarter 2009 was 141.5 per 100 inhabitants, comparing favourably with the average EU penetration rate of 122.4 (at the end of the second quarter of the same year)³⁹.

By comparing the relative importance of fixed and mobile services in Portugal with the European panorama, it appears that the weight of Portugal's mobile sector in the voice market is very significant. In terms of voice minutes, the weight of this sector in total voice minutes in Portugal is about 60 percent, compared with a weight of 51 percent in the European Union⁴⁰. Furthermore, in the broadband market, the mobile sector has a growing importance in Portugal at the expense of fixed sector. In July 2009, the penetration rate of mobile broadband in Portugal, in terms of dedicated cards and modems, was one of the highest in the European Union, to the order of 10.8 per 100 inhabitants, compared to the European average of 4.2. In parallel, the penetration rate of fixed broadband in Portugal - 16.5 per 100 inhabitants - was below the European average (23.8).

It is noted that, this difference in positioning of the mobile sector over the fixed sector stems in particular from the difference between the termination rates for both services. This huge

³⁹ Quarterly statistics data from ICP-ANACOM.

⁴⁰ As a reference for the European Union, revenues are used, since data on minutes is not available (assuming it is not too different).

price difference, which means that the price per minute for termination on mobile networks is currently about 10 times the price of termination on the fixed network of the SMP operator in the relevant market, has led to a cross-subsidy between these two sectors, which has justification in the initial development of mobile communications but has to be phased out, lest it contribute to a loss of competitiveness in fixed voice communications⁴¹.

It is therefore necessary to correct this situation, especially, in line with what is being done at European level, notably on account of the European Commission Recommendation ("Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU" of 7 May 2009, hereinafter "Recommendation on Terminations"⁴²), which was created precisely in order to standardize the regulation of termination in these two sectors.

Meanwhile, in the national mobile market, it can be seen that users of mobile services seldom switch operator. Note is made of the significant data resulting from the Consumer survey sponsored by ICP-ANACOM⁴³: During the last year only 1.1 percent of customers changed operator, pointing to a churn rate in the national mobile market to the order of 1 percent. In addition, the portability indicators (naturally related to churn) are very unfavourable in the domestic market when compared to the European panorama. Portugal is one of the countries with the lowest levels of ported numbers in the mobile sector: about 1.5 percent of total subscribers, compared to an EU average of 10.4 percent⁴⁴.

This situation, in terms of switching operator, is due in large part to the very specific characteristics of communications known as the "*network effect*" - a user has a preference for being a customer of the network to which most of their contacts belong. In Portugal, this network effect is even more important than in most European countries, for various reasons. First, the very strong identification of the number prefixes (91, 93 and 96) with each of the network operators (leveraged through established numbering policy, using strong marketing campaigns) made it possible to establish very different pricing between on-net and off-net calls without consumer resistance, as they can easily identify what type of call is being made. The low rate of ported numbers and the only recent advancement of sharing the new numbering range (92) of mobile services, means that this perception has not significantly changed.

⁴¹ It should be noted that the termination rates of voice communications on the network of the SMP operator in the respective fixed termination market are orientated to costs, according to the regulatory accounting in force.

⁴² Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:124:0067:0074:PT:PDF>

⁴³ Electronic Communications Services Consumer Survey, published December 2008, available at http://www.anacom.pt/streaming/consumersurveyvEC_dec2008.pdf?contentId=973946&field=ATTACHED_FILE. Note should be made of the methodological notes made on pages 13 and 14 of the document.

⁴⁴ October 2008 Data (Source: 2008 Implementation Report).

The strategies of the operators have always been very focused on differentiation between on-net and off-net pricing, which naturally intensifies this network effect and benefits the network operators with larger customer bases, since it creates a barrier to switching to a network where a customer has fewer contacts, due to call externalities⁴⁵. Even now (after operators created some undifferentiated tariffs in 2005, as already mentioned), most users belong to differentiated tariffs, and marketing strategies (particularly in terms of promotions⁴⁶) are very focused on creating a strong customer base that communicates *on-net* at very low prices (sometimes free). The very low on-net pricing practiced by larger operators harm not only the smaller mobile operators (who eventually adopt similar behaviour to try to mitigate the network effect of competitors) and potential entrants, by creating and expanding this barrier to entry, but also fixed operators, since users prefer to make calls from the same mobile telephone service network rather than use the fixed telephone service. This type of behaviour obviously has negative effects for the end-consumers of electronic communications services, in particular as regards the level of competition in the market and therefore the potential level of pricing and quality of service, as well as in terms of the options of choice that they can enjoy.

The main reason indicated by mobile network customers for the choice of operator in the Surveys on the Use of Electronic Communications (2007 and 2008), is "*most of my contacts are clients of the same operator*". This explanation was given by about 43 percent of subscribers of mobile networks in 2008, 2.8 percentage points more than in the previous year. Moreover, it is noted that this reason was identified as the major factor behind the failure to switch by about 18.5 percent of mobile network customers who have not switched network but have considered doing so, a percentage that is much higher with respect to customers of larger networks (Vodafone and TMN), which also confirms the importance of the network effect⁴⁷.

⁴⁵ Call externalities" is the term used in academic literature to reflect the utility that consumers derive from receiving calls. Literature which examines the effects of the existence of *call externalities* includes:

Armstrong, M., e Wright, J., "Mobile Call Termination", mimeo, available at <http://else.econ.ucl.ac.uk/papers/uploaded/255.pdf>; Calzada, J. and Valletti, T., "Network Competition and Entry Deterrence", Economic Journal, Vol. 118 (2008), pp. 1233-1244;

Harbord, D., and Pagnozzi, M., "On-Net/Off-Net Price Discrimination and 'Bill-and-Keep' vs. 'Cost-Based' Regulation of Mobile Termination Rates," MPRA Paper 14540, 2008;

Hoernig, S., "On-net and Off-net Pricing on Asymmetric Telecommunications Networks", Information Economics and Policy, Vol. 19 (2007), pp. 171-188.

⁴⁶ For example, the promotions launched at Christmas 2009 by the three network operators, notwithstanding some differences between them, strongly promoted *on-net calls*. In general terms, the occasional promotions that these operators have launched over time tend to promote this type of call.

⁴⁷ It is noted that studies conducted by other entities, such as the Markttest, confirm the importance of the network of contacts in choice of operator and switching operators over the last few years (as reported by some operators in the various previous public consultations on this market).

Another strategy employed by mobile operators to retain customers, and which contributes to such a low churn rate, is gaining loyalty through contracts with durations of 12 months, and often 24 months, in return for terminal equipment subsidies. This approach, though virtuous insofar as it creates conditions which improve consumer access to the market, naturally has implications, when exceeding reasonable limits, as regards competition conditions, which tend to worsen as the market evolves into stages of greater maturity.

2.3 Retail product Market

Mobile phone users usually acquire network access and communications services together, whereas the first is essential for making and/or receiving calls. Access and communications appear to complement each other⁴⁸. This translates into identical competitive constraints on access and communications, which favours the inclusion of both services in a single market. Nevertheless, there are technical differences and differences in terms of features between the two services.

The communications services provided by active operators include voice calls - specifically national, international voice calls and calls in *roaming*. Customers of mobile networks have very different perceptions about these calls as well as their pricing. However, when signing up to the service, they seek access to all call types. Similarly, all active operators offer the various types of calls identified in all the tariff plans that they sell. Therefore, it is appropriate to consider their inclusion in the same retail market.

Similar considerations can be made with regard to text messages (hereafter SMS⁴⁹). Notwithstanding the different functionalities compared to voice calls, and different pricing, it is evident that these are usually purchased in conjunction with voice communications, due to the great convenience of using a single terminal device and a single SIM card for both

⁴⁸ Their technical and physical characteristics are very different.

Access to the mobile network consists of the establishment of a radio connection between the terminal equipment (mobile phone) and the BTS (Base Transceiver Station). Terminal identification and validation is an integral part of such access.

Therefore, SIM cards (Subscriber Identity Module), in addition to storing data prior to its customization, such as the IMSI (International Mobile Subscriber Identity) and the authentication code Ki, contain other parameters that guarantee access to the network and enable calls to be made/received by recognizing the user as a subscriber of a given network.

The communications consist of the connection through a transmission channel between two or more parties, thereby enabling the issuance, emission and receipt of information (messages or signals) within a network, according to a set of predefined rules known to the entities involved.

Given the physical and technical characteristics of the services under review, it appears that there is a complementary relationship between access and mobile communications.

⁴⁹ Acronym for Short Message Service.

services. Therefore, the view is taken that may there be a degree of substitutability between voice and SMS services.

All operators have various pre-paid and post-paid offers. In the light of a small non-transitory price increase in pre-paid plans, and taking into account the reduced switching costs, customers of these plans can easily switch to a post-paid plan. The reverse is also true. Therefore, it is considered that the pre-paid and post-paid plans are included in the same product market.

In terms of the type of customers using the service, it is not clear that business and non-business customers form part of the same market. Whereas at the extremes - residential customers and large corporations- appear not to be substitutable, in practice there is great difficulty in establishing boundaries between the two segments. They are also several offers used interchangeably for business and non-business customers, whereby the usage profile of the network is the fundamental criterion in choosing a tariff plan, not the type of customer. Accordingly, the position is taken that, for purposes of this analysis, no evidence is found which gives grounds for not including business and non-business customers in a single market.

3 DEFINITION OF MARKET OF VOICE CALL TERMINATION ON INDIVIDUAL MOBILE NETWORKS

3.1 Characterization of the market of voice call termination on individual mobile networks

The wholesale call termination service corresponds to the service by which an operator terminates, on its own network, a call which is made to a terminal point of this network and which has been delivered by another operator with whom it has established an interconnection agreement.

The call termination service is essential for establishing communications between mobile network operators and between these operators and fixed network operators.

The tariff system which has prevailed in Portugal, and in Europe generally, is based on the principle of Calling Party Pays)⁵⁰. According to this principle, the realization of a determined call is paid in full by the caller. In turn, the termination rates associated with voice calls on mobile networks are defined by the operator owning the network on which each call is terminated, which is chosen by the user who is receiving the call. In this system there is therefore a separation between the person who pays for the call (the customer originating the call) and the person who chooses the network on which the call is terminated (the customer who receives the call), which is the network responsible for setting the termination price. Naturally, this price constitutes a major component in determining the final price of the call.

3.2 Definition of the product market

According to the EC⁵¹, termination services, given current technical limitations, are absolutely indispensable to the provision of retail mobile services, constituting inputs not only for the retail provision of calls originated with other mobile operators, but also for the retail provision of calls originating from fixed networks and from international fixed and mobile networks.

Since the Calling Party Pays principle is in force, and since the price of the wholesale termination service is determined by the network terminating the call, which results from a

⁵⁰ For details of the CPP system and other alternative systems used in other countries outside Europe, see the ERG public consultation on the "*Next Generation Networks Future Charging Mechanisms / Long Term Termination Issues*", available at

http://erg.eu.int/doc/publications/2009/erg_09_34_draft_cp_ngn_future_charging_mechanisms_final.pdf

⁵¹ See Explanatory Note accompanying the Recommendation on Relevant Markets, Section 4.3, available at http://ec.europa.eu/information_society/policy/ecomms/doc/library/proposals/exp_note_markets_en.pdf

choice made by the customer receiving the call, the calling party in general does not have the ability to influence termination charges; also because such charges do not depend on the originating network, whereas the customer receiving the call is reasonably unaffected by this price.

Therefore, it appears that wholesale call termination services, and retail calls as a whole, are subject to different competitive constraints, whereby there are no grounds, on the demand side, for integration into a single wholesale and retail market. In the absence of any significant increase in the concern that individual users have for the price of termination, the buying power exerted by certain groups of users (closed groups who are more affected by termination rates) may be sufficient to justify a broader product market. However, operators typically segment their customers by providing special offers to these groups of users (based on very low prices within the group), while keeping other types of offers for other groups who are less price sensitive, so that overall termination pricing on their mobile networks remains unconstrained.

A choice of product market could also comprise the definition of a single national market of termination services. However, the restrictions mentioned above, concerning the exercise of buying power of the retail customers, make such a definition unviable. Likewise, in terms of supply-side substitutability, there are technical restrictions which prevent the establishment of a national termination market. If a determined operator increases termination prices, there would be no undertakings able to enter the market in order to provide the same termination service, since this would mean access to the SIM card data of customers for which calls are terminated and its reprogramming, which is not possible. This position, which was based on the 2005 Market Analysis decision, remains valid and is even confirmed in the Commission Recommendation on Relevant Markets, and is also being followed by all European regulators.

There are, therefore, high and non-transitory barriers which impede this broad definition of the product market.

At the other extreme, it might be possible to define a market restricted to each user, given that one call does not substitute another call. It is noted, however, that from a supply perspective, this definition is not appropriate, given that it is not feasible for the mobile network operators to discriminate between each user of their network, by setting different prices for each one. Accordingly, it is considered that the size of the call termination wholesale market is at least that of each one of the mobile networks.

Given the above, the starting point for the definition of the product market is the market of each one of the individual mobile networks, whereas analysis should then move to an examination of the extent to which this product market comprises voice and data calls (with only SMS being relevant in this case⁵²), and the extent to which voice calls may be constrained by calls terminating on fixed networks and terminating on the network itself, in which case it would be fitting to extend the relevant market in order to also include this type of call. Likewise, the possibility of including call termination on GSM and UMTS networks in the same market will be examined.

3.2.1 Voice call termination on mobile networks vs. termination of data calls (SMS) on mobile networks

In terms of substitutability on the demand side, it should be verified to what extent demand for SMS may exercise some influence on the demand for voice calls, with impact on the termination of voice calls.

Taking into account the different features of voice and SMS services, as well as the different prices and trends in call volumes in recent years, there is no indication that a small increase in the termination price of voice calls to the order of 50-10 percent would lead a significant number of end-users to substitute voice calls with SMS calls; as such a price increase of this kind would not be rendered unprofitable, since only the latter can only replace the former in certain circumstances (short communications and/or where there is no need for immediate response).

On the supply side, all active operators provide voice and data (SMS) services, so that the pricing of voice calls is not constrained by the pricing of SMS calls. In these circumstances, the analysis of supply-side substitutability is not relevant.

In light of what is said on this issue in the 2005 Market Analysis decision, there are no grounds to alter the conclusions presented at that time, whereby data services (SMS), at retail level, and as a consequence wholesale level, do not exert sufficient competitive constraint on the pricing applicable to the termination of voice calls on mobile networks in order to justify its inclusion in the same market.

⁵² According to the explanatory note accompanying the Commission's recommendation, other data services are still in development.

3.2.2 Voice call termination on mobile networks vs. voice call termination on fixed networks

An assessment needs to be made of the extent to which the determination of mobile termination prices may be constrained by the completion of retail calls destined for fixed networks.

For this purpose, it would be necessary for users of calls terminated on mobile networks to give equal value to the possibility of making calls terminated on fixed networks, so that a small long-lasting and non-transitory increase, of 50-10 percent, in the termination of mobile calls, leads to the substitution of a large part of these calls with those terminating on fixed networks.

Given the different features of the telephone service provided at a fixed location and the mobile telephone service, and considering that users who originate a call to a mobile network wish to contact the other person directly and personally, regardless of their location, which cannot always be accomplished through a call to a fixed network, it does not seem viable that termination on mobile networks may be constrained by retail calls terminating on fixed networks. Moreover, there are very significant differences in the prices of termination on mobile and fixed networks which determine retail pricing with very different structures and levels, depending on the networks of origin and destination.

In terms of supply-side substitutability, it is deemed that, given the high entry barriers that characterize the mobile markets, resulting not only from limitations in available spectrum but also from the cost of developing a mobile network, it is unlikely that fixed network operators will enter the market subsequent to a small increase in the price of the call termination service on mobile networks. It is noted that the MVNOs are not currently in a position to influence termination pricing.

Given the above, there are no grounds to reach conclusions which are different from those of the 2005 Market Analysis Decision in terms of the market for termination on mobile networks constituting a market that is separate from termination on fixed networks. This is also the conclusion of the Commission Recommendation on Relevant Markets.

3.2.3 Voice call termination on mobile networks vs. on-net calls

In examining the possibilities for substitution of the termination of voice calls on mobile networks with the establishment of on-net calls (forcing customers to switch to the

destination network or to have multiple SIM cards⁵³), it must be determined to what extent the latter may make constrain the former. With on-net calls, users of mobile networks seek to benefit from lower prices than those resulting from calls terminating on other mobile networks.

Considering each operator in isolation, any replacement on the demand side of termination of mobile calls with on-net calls is not sufficient to constrain the operator in setting termination pricing. As already explained, the operators have always adopted customer segmentation strategies, identifying those who are more price-sensitive when it comes to termination on their mobile network, and providing them with offers which respond to their needs, while offering other offers to other clients, so that, overall, in the absence of sectoral regulation, they would continue to feel a lack of pressure to reduce termination pricing.

In light of the analysis, the position of the 2005 decision is maintained that on-net calls do not exert sufficient competitive constraint on the termination of calls on mobile networks, which justifies its inclusion in the same product market, which position is again aligned with the position of the European Commission.

3.2.4 Termination of voice calls on GSM networks vs. termination of voice calls on 3G networks

Mobile operators which provide the call termination service do so without differentiation in terms of GSM and UMTS network, given that all operators who provide the call termination service have GSM and UMTS networks.

Theoretically it is possible to differentiate the service, particularly in terms of price, although this would require the operator who provides the service at least to adapt its billing system, and for its wholesale customers to be able to identify which network (GSM or UMTS) would terminate the call which they originate. However, in reality, mobile operators have never expressed an intention to differentiate the termination service depending on the network terminating the call, as indeed they make no such discrimination in retail voice calls. Nevertheless, in the context of the public consultation on the latest market analysis certain operators considered that, given the then emerging nature of UMTS networks, its regulation was not justified.

⁵³ According to data from the 2008 Electronic Communications Services Consumer Survey, the number of subscribers with two or more SIM cards from different operators represents only 4.6 percent (considering the tariffs of the low-cost brands as tariffs of the respective MNOs). It is noted that this proportion has been decreasing with values of 10.2 percent and 9.4 percent presented in 2006 and 2007 respectively.

ICP-ANACOM takes the view that, from a demand perspective, regardless of whether voice calls terminate on GSM or UMTS networks, they constitute the same service, and that the end-user is indifferent as to which network terminates the call. On the supply side, since the same operators provide termination services for voice calls on GSM and UMTS networks, the position is taken that there are no grounds leading to an assessment of possible competitive constraints between the two types of termination. Furthermore, it is considered that the definition of two separate markets - one for the termination service on GSM networks and the other for the termination service on UMTS networks - would not have implications in terms of the conclusions of the analysis, since the results would be similar.

Therefore, the position is taken that there is a single market for voice call termination on individual mobile networks which encompasses the GSM and UMTS networks of each operator.

3.2.5 Definition of the product market: conclusion

In light of the above, ICP-ANACOM concludes that the product market consists of wholesale termination of voice calls in each of the existing mobile networks, encompassing termination on GSM and UMTS networks.

3.3 Definition of the geographic market

After identifying the relevant product market, it is necessary to define its geographical dimension.

According to the Guidelines "*the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different*"⁵⁴.

In the electronic communications sector, the geographic scope of the relevant market has traditionally been defined according to two main criteria:

- The existence of legal and regulatory instruments, including restrictions associated with licensing/permits, pricing obligations and provision of services.

⁵⁴ See Guidelines § 56.

In this regard it is noted that the licenses granted to mobile operators for the provision of mobile telephone service according to the GSM standard⁵⁵ and the scope of licenses granted to the same operators for international mobile telecommunications systems (IMT2000/UMTS) is national.

Additionally, it is emphasised that all mobile operators in activity practice uniform prices and provide the same offer throughout the national territory. As such, there exists, and there has always existed, uniform pricing at wholesale level.

- The area covered by a network.

The networks of the mobile operators in Portugal, with emphasis on GSM networks, are deployed throughout the national territory, providing, as already mentioned, high levels of coverage, not only in terms of population but also in terms of territory and main roads and railways.

It is also noted that, while there are no obligations of coverage which comprise the entire national territory and population, the active mobile operators have managed to ensure a high level of presence, particularly through their GSM mobile networks, with a coverage rate of the population reaching about 99 percent.

In light of the above, ICP-ANACOM considers that the size of the geographic markets for voice call termination corresponds to the dimensions of each of the networks (GSM and UMTS in conjunction) of the active mobile operators.

3.4 Conclusion

Following the analysis conducted, ICP-ANACOM concluded that the following relevant markets exist in Portugal:

- Wholesale market of voice call termination on the mobile network of TMN
- Wholesale market of voice call termination on the mobile network of Vodafone
- Wholesale market of voice call termination on the mobile network of Sonaecom

This conclusion does not differ from that previously obtained in the 2005 Market Analysis Decision.

⁵⁵ In the case of TMN and Vodafone these licenses have since been converted into rights of use of frequencies.

3.5 Markets susceptible to ex-ante regulation

The EC considers that the markets identified for the purposes of ex-ante regulation should be subject to three cumulative criteria⁵⁶:

- Barriers to entry and the development of competition: persistence of high entry barriers, whether structural, legal or regulatory.
- Dynamic aspects: the characteristics of the market are not such that it will tend in due time towards effective competition without the need for ex-ante regulatory intervention. The application of this criterion involves an examination of the state of competition behind the barriers to entry.
- Relative effectiveness of competition law and additional ex-ante regulation : insufficiency of competition law by itself to deal with the market failure.

Since the product market, defined with respect to the markets for voice call termination on individual mobile networks, is identical to the relevant market recommended by the EC and since, according to the EC, the markets listed in the Recommendation were identified based on the three cumulative criteria described above⁵⁷, it is considered that the markets defined in this analysis procedure are relevant markets for the purposes of ex-ante regulation, whereas, for this reason, an assessment is made as to the existence of SMP.

⁵⁶ See Recommendation - Explanatory Note 2.2.

⁵⁷ See Recommendation - Explanatory Note "*For those markets listed, the Recommendation creates a presumption for the NRA that the three criteria are met and therefore NRAs do not need to reconsider the three criteria.*"

4 EVALUATION OF SMP IN MARKETS OF VOICE CALL TERMINATION ON INDIVIDUAL MOBILE NETWORKS

According to article 60, Paragraph 1 of the LCE (14 of Framework Directive) "*an undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and consumers.*".

SMP may be held by only one company in the market (single dominance) or by more than one entity (joint dominance). Additionally, where an undertaking has SMP in a specific market, it may also be deemed to have SMP in an adjacent market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking (SMP leveraging).

In assessing SMP it is important to conduct the analysis with the premise that there is no current or potential regulation of SMP in the relevant market. This should be the procedure to be undertaken since the results of an assessment of SMP entails testing whether or not any regulatory intervention is required. Therefore, to assess SMP in this market, a hypothetical market must be assumed where there is no regulation of SMP (and no "threat" of regulation of SMP).

4.1 Criteria for assessing SMP

As in the previous market assessment, in assessing SMP, ICP-ANACOM takes utmost account of the Guidelines.

According to the Guidelines, "*NRAs will assess whether the competition is effective. A finding that effective competition exists on a relevant market is equivalent to a finding that no operator enjoys a single or joint dominant position on that market.*"⁵⁸

In the same document the EC indicates that "*NRAs will conduct a forward looking, structural evaluation of the relevant market, based on existing market conditions. NRAs should determine whether the market is prospectively competitive, and thus whether any lack of effective competition is durable, by taking into account expected or foreseeable market developments over the course of a reasonable period. The actual period used should reflect the specific characteristics of the market and the expected timing for the next review of the*

⁵⁸ See Guidelines, § 19.

relevant market by the NRA. NRAs should take past data into account in their analysis when such data are relevant to the developments in that market in the foreseeable future."⁵⁹

In the guidelines, the EC presents market share as an indicator of market power, whereas undertakings with market shares of no more than 25% are not likely to enjoy a dominant position on the market concerned.

In the Commission's decision-making practice, single dominance concerns normally arise in the case of undertakings with market shares of over 40 percent, whereas it is possible that there are situations of dominance even with lower market shares or cases where undertakings have higher market shares but are not regarded as dominant⁶⁰.

As the EC mentions in the Guidelines⁶¹, the existence (or absence) of a dominant position cannot be established on the sole basis of large (or smaller) market shares, whereby the NRAs should make use of other criteria. The various criteria include the following:

- Overall size of the undertaking
- Control of infrastructure not easily duplicated
- Technological advantages or superiority
- Absence of or low countervailing buying power
- Easy or privileged access to capital markets/financial resources
- Product/services diversification
- Economies of scale
- Economies of scope
- Vertical integration
- A highly developed distribution and sales network
- Absence of potential competition
- Barriers to expansion

Also according to the guidelines issued by the EC, a dominant position can derive from a combination of these criteria, which taken separately may not necessarily be determinative.

On this question of the criteria for assessing SMP, the European Regulators Group (ERG) published a working paper on the Guidelines ("*ERG SMP Position*")⁶², where other criteria are developed for evaluating SMP:

⁵⁹ See Guidelines, § 20.

⁶⁰ See Guidelines, § 75.

⁶¹ See Guidelines, § 78.

⁶² "Revised ERG Working paper on the SMP concept for the new regulatory framework", October 2004, (http://www.erg.eu.int/doc/publications/public_hearing_concept_smp/erg0309rev1_smp_working_doc.pdf)

- Excessive prices
- Ease of market entry
- Costs and barriers to switching
- Evidence of previous anti competitive behaviour
- Active competition on other parameters
- Existence of Standards/conventions
- Customers ability to access and use information
- Price trends and pricing behaviour
- International benchmarking

4.2 Criteria used in the assessment of SMP in the markets of voice call termination on individual mobile networks

In the view of ICP-ANACOM, given the specificity of the markets under consideration, which is limited to the mobile network of each operators engaged in the activity of providing the termination service, the most relevant criteria in the assessment of the voice call termination markets are the following:

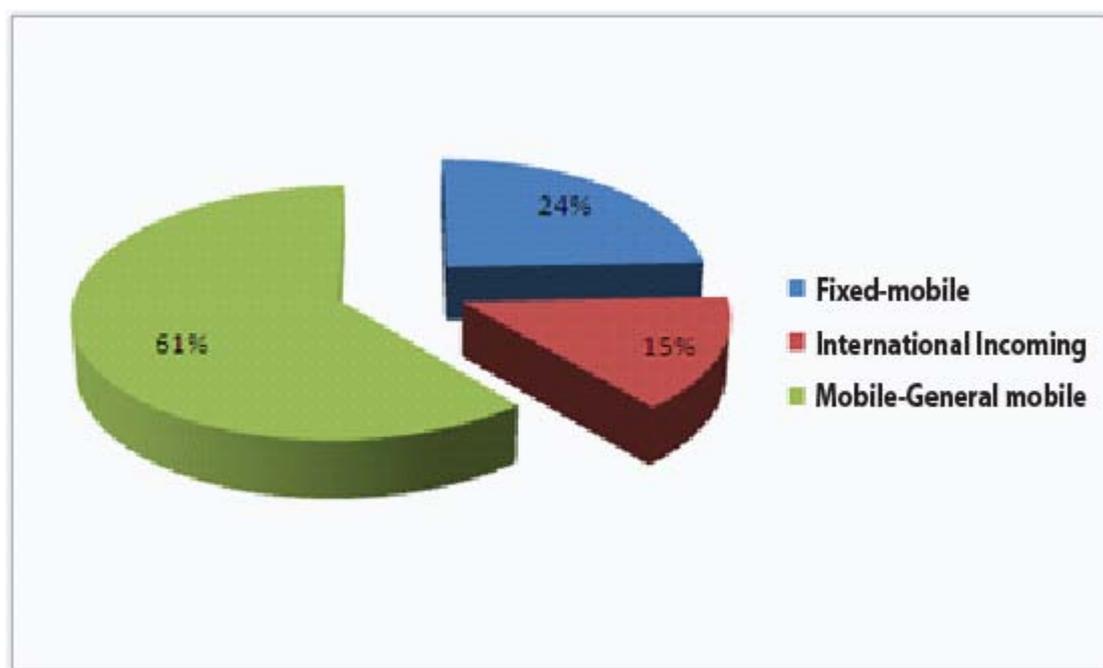
- Market shares
- Barriers to entry
- Price trends and evidence of previous anti competitive behaviour
- International benchmarking
- Countervailing buying power

4.2.1 Market shares

The mobile network operators active in Portugal have a natural monopoly situation with respect to the supply of wholesale voice call termination services on their mobile networks, where each operator, as the sole provider, has a 100 percent market share.

The following chart shows the proportion of termination and mobile traffic which comes from other mobile networks, fixed networks and international networks in 2008. Note is made of the large weight of mobile-mobile termination in the total of calls terminated in mobile operators active in Portugal.

Graph 14 - Proportion of Mobile Termination Traffic



Source: ICP-ANACOM

Despite the high percentage of market share held by each operator in the relevant market, the decision on the existence of SMP must be based on other elements, in particular on the analysis of constraints which result from the exercise of any negotiating power held by buyers of termination services, which analysis is made below.

4.2.2 Barriers to market entry

Given the specifics of the market and of the service which it comprises, there are no technological solutions which enable the substitution of the termination service provided by one operator with the termination service of another operator.

Therefore, it is not envisaged that these barriers can be overcome in the short to medium term, especially those that exist in terms of technology whereby the pricing of termination might be subject to some competitive constraints in a scenario where there is no regulation.

4.2.3 Evolution of termination rates

Regulation of prices for call termination on mobile networks has existed since October 2000 when it was determined to change the regime governing the ownership of fixed-mobile traffic. The first determination of ICP-ANACOM in this context was aimed at setting a maximum price for fixed-mobile termination. Later, in 2002, further determinations also focused on the prices of mobile-mobile and international-mobile termination, in addition to

fixed-mobile termination. The interventions were carried out pursuant to the application of the previous regulatory framework and were aimed, inter alia, at the establishment of a more balanced price structure, the protection of consumer interests, the development of balanced competition between fixed and mobile networks, and the alignment of termination prices in mobile networks applying to calls originating from fixed networks and calls originating on mobile networks.

ICP-ANACOM again intervened in call termination on mobile networks in 2005, subsequent to the entry into force of the LCE, and the previous Recommendation on Relevant Markets (published in February 2003).

During the period that elapsed between the first interventions of the regulator and the intervention of 2005, made under the current regulatory framework, (i.e. a period of about two and a half years), it was found that mobile operators kept termination rates unchanged, with the exception of a slight change in the fixed-mobile termination rates charged by TMN and Vodafone following the informal regulation conducted by ICP-ANACOM.

The track record of the mobile operators shows that in the absence of regulatory intervention, there is no incentive for termination prices to fall. The reductions that have been made since 2000 have always resulted from decisions made by ICP-ANACOM (and in one case an informal recommendation made by the regulator), and in all situations led to prices in line with the maximum levels permitted under regulation.

A similar situation resulted between the first and second intervention in the framework of the 2005 and 2008 Price Control decisions. The first decision established maximum prices for termination until the end of 2006, of around 11 cents. Operators kept these prices unchanged until the first half of 2008, when ICP-ANACOM, in the absence of any initiative by the operators to reduce termination rates, decided to intervene and define a new downward trend in rates.

Given the above, it is concluded that, in the absence of sectorial regulatory intervention, operators in the market of voice call termination continue to have incentives to act largely independently of their competitors, customers and consumers.

Additionally, the benchmark analysis available on average termination rates, published periodically by the ERG, demonstrates that the average termination rates practiced in Portugal are not yet in line with best European practice, as was the intention of ICP-ANACOM in its decisions on the relevant markets under examination. It should be noted that

the mobile network operators have been bound to cost orientation, which in turn has been evaluated using Benchmarking, in the absence of specific cost models.

4.2.4 Countervailing buying power

As set out above, the wholesale markets for voice call termination are characterized by monopolistic markets, where there are no existing competitors, nor are there likely to be, at least in the short term, any potential competitors.

The power of each one of the operators which provides the termination service, as well as being exercised in a monopoly, is further reinforced by its essential role in electronic communication. For each active operator, it is essential to ensure that their customers can not only communicate among themselves, but can also communicate with customers of other operators, which is only possible through the interoperability of services.

In the markets under analysis, the most important buyers are the operators of fixed telephone services, international operators (fixed and mobile) and operators competing in the national retail mobile market.

Considered overall, it is found that none of the operators buying voice call termination services is capable of exerting enough pressure to achieve a reduction in the price of the wholesale service provided, as detailed below.

4.2.4.1 The countervailing power of the fixed and international operators

Any operator in activity, in order to maintain a sustainable business, must make a commitment to their customers by ensuring the provision of various services, of which one of the most important is the guarantee of communications with customers of other national and foreign operators, thereby ensuring the interoperability of services. The imperative nature of this commitment, coupled with the fact that the call termination service is provided in a monopoly hinders the exercise of countervailing power by the buyer. This is particularly visible in the relationship between mobile operators and fixed operators as well as between these operators and operators (fixed and mobile) operating in other markets (which terminate calls from national mobile operators and which we define as international operators).

In relation to fixed operators, even the incumbent operator, which as a habitual holder of high market shares which could provide an increased capacity to exercise some bargaining power, does not have sufficient countervailing power to reduce the termination prices of mobile networks. This inability stems not only from the fact that the termination service on

mobile networks is provided without any competition, but above all because the incumbent fixed network operator has an obligation to provide the service of fixed-mobile calls to their retail customers, which service is regulated in the context of the respective relevant market⁶³ and because, in the Portuguese case, as in many others, this operator also has an important operation in the mobile sector.

The other fixed operators and international operators may also, in theory, have increased bargaining power, stemming from the possibility of differentiating the retail price by substantially raising the prices of calls to operators who practice higher termination rates. Although possible, for this form of pressure to have any success it would have to be applied in all tariffs of the operator that originates the call and by all operators present in the market. If it were otherwise, customers of operators who choose to increase retail prices could simply switch provider or tariff, which factors inhibit the adoption of this strategy, thereby taking away any such credibility and bargaining power.

Moreover, the mobile operators present in other international markets have every interest in maintaining prices high termination in their national markets, which discourages them from adopting strategies which might lead to a reduction in the rates charged by their termination "suppliers" due to the knock-on effect that this might have on their own termination rates.

In this context, it can be concluded that fixed and international operators, which have no alternative to the service of voice call termination provided by mobile operators, can pose no threats or credible retaliation which might pressure a reduction in termination rates, especially given that the acquisition of such services is indispensable to these buyers.

4.2.4.2 The countervailing power of the mobile operators

Mobile operators as buyers of services of voice call termination on mobile networks are in a singular situation, given that they simultaneously provide the same service to their retail competitors, so that these can terminate their customers' calls.

In this context, taking into account that negotiations on termination rates are usually bilateral and involve the definition of the two termination rates, it could be concluded that there is greater scope for the exercise of countervailing power. It is noted, however, that the history of interconnection negotiations shows that this has never resulted in an effective reduction in termination rates, unless where subject to direct or indirect regulatory pressures, whereby it

⁶³ Decision available at http://www.anacom.pt/streaming/OMR29.11.20041.pdf?contentId=246306&field=ATTACHED_FILE

is concluded that mobile operators do not have sufficient countervailing power to exert pressure which might lower termination rates.

Moreover, not all mobile operators have convergent interests in regard to this reduction, especially as there are network effects which give rise to significant imbalances in terms of traffic.

4.2.5 Assessment of SMP: conclusion

Since each operator has a share of 100 per cent in the market, as a monopolist in the offer of call termination on its mobile network, there are high entry barriers that prevent other operators from offering competing services in the short term, and there are no operators who carry sufficient countervailing power which might constrain the ability of mobile operators to act largely independently of their competitors, customers and consumers, ICP-ANACOM considers that there is no effective competition in these markets.

The need for regulatory intervention over recent years in order to impose reductions in termination prices, especially in order to bring them into line with the best practices of other European countries, confirms the conclusion that there is no effective competition in the wholesale markets of call termination on individual mobile networks.

4.3 Prospective analysis

ICP-ANACOM considers all the factors which justify the designation of SMP in the markets of voice call termination on individual mobile networks will remain in place over the short/medium term, until the next assessment of SMP⁶⁴.

4.4 Conclusion

ICP-ANACOM considers that the three mobile operators have Significant Market Power in the provision of voice call termination on their respective mobile networks:

TMN - Telecomunicações Móveis Nacionais, S.A.

Vodafone Portugal, Comunicações Pessoais, S.A.

Sonaecom - Serviços de Comunicações, S.A.

⁶⁴ The next assessment of SMP is triggered as soon as: (1) a fact emerges which significantly alters the conditions of competition in the market, and/or (2) the Recommendation is reviewed with respect to these markets, and/or (3) a period of 24 months has elapsed.

5 CHARACTERIZATION OF THE PROBLEMS OF COMPETITION

5.1 Refusal to negotiate and/or grant access

The refusal to negotiate and/or grant access, which can cover situations of outright refusal as well as situations where service is provided but under unreasonable conditions, is a behaviour adopted by undertakings seeking to leverage their market power in certain wholesale markets to benefit their position in the retail markets, so as to harm possible or potential competitors.

As regards the markets for termination on mobile networks, at stake is the provision of the interconnection service, which is vital to ensure the success of any commercial publicly available offering. It is noted that without such interconnection the retail offer of an operator (whether fixed or mobile services) would not be viable, given that the customers of that operator would be unable to communicate with customers of other operators.

This limitation is even more important where imposed on new entrants. As in the beginning of its activity, its customer base is very small, interconnection with other networks is even more essential. For the larger networks, already deployed in the market for a longer period of time, interconnection with an operator which has recently entered the market is not as important, at least while the number of subscribers of this operator remains small. In this context, the refusal to negotiate and/or grant access impedes the entry of new operators in the mobile retail markets, and as such is a practise which restricts free competition.

In this regard note is made that were problems reported in connection with Oniway and Radiomóvel that could be configured as a situation of refusal to grant access⁶⁵.

5.2 Distortions caused by excessive termination rates

5.2.1 Distortions in overall retail pricing

Excessive termination rates allow Operators to generate excessive profits at the expense of Consumers. The price of termination constitutes an integral part of the marginal cost that each operator faces when it sets out to provide a minute of off-net calls. Therefore, the retail price of an off-net call is increasingly dependent on the cost of termination, whereby if this price is too high, the first will also be high. This increase in retail prices constitutes a distortion in prices compared to the result which would be obtained in a competitive market.

⁶⁵ The case related to Oniway is set out in the 2005 Market Analysis Decision.

Several operators have argued that this excessive margin in the wholesale market is passed on to consumers through lower retail prices (through the subsidization of terminal equipment, of the subscription charge amount and/or of price of traffic which helps ensure a reduction in the customer's average monthly expenditure). However, the empirical evidence does not indicate that this effect (known as the "*waterbed effect*") happens, at least in overall terms, in the Portuguese market⁶⁶. Firstly, it is noted that between 2002 and 2009, termination prices in Portugal fell from 18.7 eurocents to 6.5 eurocents, and throughout this period there has been a general annual decline in average retail prices, whether measured by average revenue per minute of the operators, or considering the minimum monthly spend of the traffic profiles commonly used by the OECD. Additionally, as shall be seen below, the strategies of the operators following the 2005 Price Control Decision indicate that the retail prices charged previously were not yet in line with costs (since there remained scope for reductions).

5.2.2 Distortions in consumer choice and static economic efficiency

Meanwhile, excessive termination rates lead to distortions in consumer choices. If the price of a fixed-mobile call is too high, as a result of excessive prices charged for termination on mobile networks, and if mobile operators use this excess revenue to reduce the price of their own retail calls (including on-net calls), this change in relative pricing will lead to an excessive use of the asset whose price is subsidized - mobile service - at the expense of the asset whose relative price has increased - fixed service. This change in relative pricing does not reflect changes in the real marginal cost of the two services, whereby the distortion in consumer choice generates a static inefficiency. Since the termination price is about 10 times higher than the fixed termination price (which difference has no technical justification in terms of costs), this distortion is certainly one explanation for the greater use of mobile services compared to fixed services in Portugal.

These distortions are not found only in the relation of the fixed service with the mobile service. Even within the mobile service, there may be distortions in consumer choice caused by off-net and on-net price differences. Where the price of an off-net call is much higher (due to excessive termination rates) then users will tend to prefer to make on-net calls and avoid off-net calls, distorting their calling patterns without there being any alteration in the marginal

⁶⁶ Or, for the purpose in other markets. An important empirical exercise on the "*waterbed*" effect is that of Genakos, C. and Valletti, T., "*Testing the "Waterbed" Effect in Mobile Telephony*", mimeo. In this exercise it was concluded that for the sample considered, there is a "*waterbed*" effect but it is not complete. For a critique of the "*waterbed effect*", see also the Explanatory Note to the Commission Recommendation (2009/396/EC) of 7 May 2009, on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (see Section 5.2.4., pages 28 and 29), "*this relies on the assumption that operators are already operating close to the efficient cost level. Further, there is insufficient evidence as regards the magnitude of this effect.*"

costs of the two services, generating a new static inefficiency. This distortion is known in economic literature as a tariff-mediated network externality)⁶⁷.

As shall be seen below, the impact of this change in relative pricing is not limited to the allocation of resources (static efficiency) but also produces effects in terms of the level of competition in the sector (dynamic efficiency).

5.2.3 Distortions of competition (dynamic efficiency)

An analysis is now made of the potential impacts of high mobile termination rates in terms of the level of competition in the sector. If consumer choices between fixed and mobile services are distorted, in the long term this distortion will lead to a distortion in competition between these two services, at the expense of fixed services. This has been the situation seen in Portugal, with the aggravating factor that mobile operators are becoming increasingly active in business areas of the fixed services (where they can use the margins generated in the mobile service), particularly with products of the *homezoning* type, which compete with the traditional fixed service (already achieving around a 10% share of subscribers of the services provided at fixed locations), using fixed termination rates in this context (not mobile). In a scenario of future convergence between fixed and mobile networks, these competitive distortions may become more serious. For example, it is noted that, if the current prices of fixed and mobile termination remain unchanged, in a period of one year, the net transfer in interconnection payments from the fixed telephone service to the mobile telephone service would be around 67 million euros⁶⁸.

The European Commission refers to this distortion as one of the main reasons leading to the need for urgent reductions in mobile termination rates, the main reason for the publication of the Recommendation on Terminations (mentioned above). For this purpose note is made of the following passage from the Explanatory Note⁶⁹ which accompanies this Recommendation: "*While mobile termination rates are on a downward trend as a result of regulatory intervention in the EU, regulators have tended to implement glide-paths with a more gradual rate of reduction and in 2007 mobile termination rates were still on average almost nine times the equivalent fixed rate. This results in substantial transfers and an indirect subsidy from fixed operators and their customers to mobile networks and services. This may in turn be contributing to inefficiently low usage of fixed networks in some Member*

⁶⁷ As for example in "Competition in Telecommunications (Munich Lectures in Economics)", Laffont, J.J., and Tirole, J., MIT Press, 2001

⁶⁸ For this purpose use was made of data traffic recorded in 2008.

⁶⁹ Available at

http://ec.europa.eu/information_society/policy/ecom/doc/implementation_enforcement/article_7/explanatory_note.pdf

States and could prove to be a barrier to important innovations and investments in the fixed sector such as fibre roll-out and delivery of next generation networks and bundled/convergent services."

Additionally, with termination prices being above cost, retail off-net prices always tend to be higher than on-net prices. As a result, customers tend to prefer larger operators, since using these operators, a higher proportion of calls made will be to the same network. Furthermore, in the presence of call externalities, a larger operator has an incentive to raise its off-net prices (or the on-net /off-net price differential) to thereby limit the number of off-net calls and make the operator with the smallest market share less attractive⁷⁰. This competitive distortion, resulting from the differences between on-net and off-net mobile retail prices and from the existence of strong network effects, was recognized in the ERG Common Position on symmetry in fixed and mobile terminations⁷¹, and was motivation to create asymmetry in mobile termination prices in Portugal in July 2008.

Again, the Commission referenced this distortion as another reason leading to the need for urgent reductions in mobile termination prices in the cited recommendation. Note is made of this other passage from the Explanatory Note referenced above: *"Above-cost termination rates can give rise to competitive distortions between operators with asymmetric market shares and traffic flows. Termination rates that are set above an efficient level of cost result in higher off-net wholesale and retail prices. As smaller typically have a large proportion of off-net calls, this leads to significant payments to their larger competitors and hampers their ability to compete with on-net/off-net retail offers of large incumbents. This can reinforce the network effects of larger networks and increase barriers to smaller operators entering and expanding within markets."*⁷²

In a press release issued by European Commissioner Viviane Reding alongside the publication of this recommendation, it was concluded that *"High mobile termination rates are*

⁷⁰ As set forth by Hoernig, S., "On-net and Off-net Pricing on Asymmetric Telecommunications Networks", Information Economics and Policy, Vol. 19 (2007), pp. 171-188.

⁷¹ "Common Position on symmetry of fixed call termination rates and symmetry of mobile call termination rates", available at http://erg.eu.int/doc/publications/erg_07_83_mtr_ftr_cp_12_03_08.pdf

⁷² On page 18 of the Explanatory Note it is added: *"It has been further indicated in recent economic literature that in the presence of call externalities mobile networks have strong incentives to implement on-net/off-net price differentials due to (u2026) their strategic incentives to reduce the number of calls that subscribers on rival networks receive, reducing the attractiveness of rival networks, and hence their ability to compete. (u2026) According to some of this literature, termination charges which are above the marginal cost of termination result in strategically-induced network effects which may be detrimental to smaller networks."*

*thus an indirect subsidy for the larger mobile operators - a subsidy that has to be paid by all fixed operators, by small operators and by all consumers.*⁷³

5.2.4 Distributional effects among consumers

Finally, high termination rates may also cause distributive effects among different types of consumers, since these prices have an influence on the retail price and subscription and usage structure of the mobile service. For example, high termination rates can lead to high (retail) usage prices, possibly offset by lower (subsidized) subscription prices, which would disadvantage users who make a high number of calls over those who make fewer calls and benefit customers with low monthly expenses.

Moreover, the distortion between the prices of fixed and mobile services, mentioned above, might lead to advantages for one type of consumers over others, including consumers who make more use of the mobile service compared to consumers who make more use of the fixed service, whereas underlying costs are not efficiently reflected.

5.2.5 Competition problems: Conclusion

The identification of the various types of problems occurring with respect to competition and affecting the final consumers, but also the various operators in the market and adjacent markets, such as those mentioned above, justify the need for intervention in these markets. The reduction in mobile termination prices is a key measure to put an end to the distortions that currently exist in order to allow healthy competition in mobile markets and between mobile markets and fixed markets, to increase the contestability of markets by removing entry barriers and to increase the capacity for investment and innovation among the market's various agents, as well as to allow the creation of new products in the context of fixed and mobile convergence. Ultimately, this alteration will benefit end-consumers in that they will have more choice, better service and lower prices.

It is noted that these are problems which, in light of their characteristics and in some cases their persistence over time, are not surmountable by the mere application of the rules of competition law, and therefore ex-ante regulatory intervention is required through the imposition or maintenance of various remedial measures, the most relevant being the reduction in termination rates to levels which approach the costs of an efficient operator.

⁷³ This press release can be viewed at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/222&format=PDF&aged=0&language=EN&guiLanguage=en>

It should be noted that such problematic practices negatively impact the welfare of end-consumers, given that they restrict competition and thereby contribute to an increase in associated prices and a decline in the quality of service over the medium and long term.

6 IMPOSITION OF OBLIGATION ON MARKETS OF VOICE CALL TERMINATION ON INDIVIDUAL MOBILE NETWORKS

In the previous sections, the wholesale markets of voice call termination on individual mobile networks have been identified and analyzed, and it was concluded that TMN, Vodafone and Sonaecom have SMP in these markets.

When a company has SMP in a market, ICP-ANACOM is bound to impose one or more regulatory obligations or maintain or amend such obligations where they already exist⁷⁴.

In the imposition, amendment and withdrawal of obligations, ICP-ANACOM takes certain principles into consideration which result from the documents of the European Commission, the European Regulators Group, and the LCE.

It is deemed appropriate that these principles are made known to the market and taken into consideration before the imposition (amendment or withdrawal) of any obligation on the market.

6.1 Principles to be considered in the imposition, amendment and withdrawal of obligations

In order to minimise or eliminate problems of competition, ICP-ANACOM is charged with selecting the obligations which directly or indirectly affect the strategic variables of the dominant companies, ensuring that these obligations adhere to certain requirements, including that they:

- (a) are appropriate to the identified problem, and are proportional and justified in the light of the basic objectives set forth in article 5 of the LCE (article 55, paragraph 3, point a) of the LCE);
- (b) are objectively justified in respect of the networks, services or infrastructure to which they refer (article 55, paragraph 3, point b), of the LCE)
- (c) do not result in undue discrimination in respect of any entity (article 55, paragraph 3, point c), of the LCE);
- (d) are transparent in regard to their purpose (article 55, paragraph 3, point d), of the LCE).

Furthermore, ICP-ANACOM, in strict compliance with the national regulatory framework and EU Directives, is bound to favour proportional intervention, imposing the minimum

⁷⁴ See Guidelines, §21 and §114.

obligations required to overcome the problems of competition identified and to contribute effectively towards a competitive situation.

As the ultimate goal of regulation, ICP-ANACOM's objective is to promote competition in the provision of electronic communication networks and services, resources and associated services, contributing to the development of the internal market of the European Union and upholding the interests of citizens⁷⁵. In particular, it is incumbent on ICP-ANACOM to ensure that users derive maximum benefit in terms of choice, price and quality, ensuring that there is no distortion or restriction of competition in the electronic communications sector, and further to encourage efficient infrastructure investment and promote innovation;

According to articles 67 to 72 and 74 to 76 of the LCE, the obligations which might be imposed on undertakings with SMP in the identified market are:

- (a) transparency in relation to the publication of information, including reference offers;
- (b) non-discrimination, in relation to the provision of access and interconnection and the respective provision of information;
- (c) accounting separation in respect of specific activities related to access and interconnection;
- (d) respond to reasonable requests for access;
- (e) price control and cost accounting;

In the analysis and definition of the obligations to be imposed, maintained or amended account shall also be taken, as previously stated, of the principles established in the ERG Common Position on the subject, presented in the document "*Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework*"⁷⁶, May 2006.

Based on the problems of competition identified in the previous chapter, and taking as a starting point the regulatory obligations that are currently in force and were imposed under the previous market analysis, ICP-ANACOM identifies below the obligations which should be maintained, or potentially amended or withdrawn.

⁷⁵ See Law No 5/2004, article 5

⁷⁶ Available at http://www.erg.eu.int/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf.

6.2 Obligations that are currently in place

6.2.1 Respond to reasonable requests for access (Article 72 of LCE)

6.2.1.1 Consequences of any withdrawal of the obligation

In the 2005 Markets Analysis Decision, ICP-ANACOM imposed an obligation to respond to reasonable requests for access, thereby seeking to ensure that no situations occur of refusal to negotiate and/or grant access in these markets without objective reasoning.

It is noted in this respect that this obligation entails response to reasonable requests to supply voice call termination services on the mobile networks of the operators with SMP in these markets, with the terms and conditions governing such responses being reasonable.

This requirement ensures, inter alia, that other operators can complete calls originating on their networks on the networks of the mobile network operators concerned.

Bearing in mind that the activity of all providers of voice calls at the retail level is dependent on the voice call termination services provided by mobile network operators, it is essential to maintain this obligation in order to eliminate any incentives that may exist for SMP operators to deny access to their networks (termination). It should be emphasized that the level of damage resulting from such behaviour would be high for current and potential competition and may significantly affect the degree of competition in retail markets.

Accordingly, ICP-ANACOM deems that the withdrawal of the obligation to respond to reasonable requests for access would be inappropriate and may give rise to adverse to market consequences.

Additionally, in the event that ICP-ANACOM, in the exercise of its powers, determines the need and appropriateness of the imposition of specific conditions with respect to the implementation of the obligation to respond to reasonable requests for access, such may be determined by means of a separate decision which would naturally be subject to the applicable consultation procedure.

The position is therefore taken that the imposition of the obligation to respond to reasonable requests for access is objectively justified, since it guarantees that the supply of services in question ensures the development of effective and sustainable competition in the relevant markets and ensures maximum benefit for consumers.

The maintenance of this requirement was also assessed in light of the factors identified in paragraph 4 of article 72 of the LCE, in particular as regards the feasibility of the access proposed and investments made.

Since this is an obligation which has been in force for many years, having been applied since the previous regulatory framework, its technical and economic feasibility is already established and no questions remain regarding any risks in terms of the investment made for the provision of access, whereby its imposition is perfectly feasible and represents no additional cost.

ICP-ANACOM also takes the view that the requirement is non-discriminatory, is proportionate and transparent.

The proposed obligation is fitting in respect of the regulatory objectives set out in article 5 of the LCE and meets the requirements of paragraph 3 of article 55 of the same law.

6.2.1.2 Conclusions

In light of the above, ICP-ANACOM takes the view that the ex-ante regulatory obligation should be maintained, whereby operators with SMP in the markets of voice call termination on individual mobile networks are bound to respond to reasonable requests for provision of voice call termination on their networks, whereas the terms and conditions governing such response shall be reasonable. The implementation of this obligation should take into account the rights granted to companies offering publicly available networks or services set forth in article 22 of the Law of Electronic Communications.

ANACOM considers that this obligation remains justified, is appropriate to the identified problem, proportionate, non discriminatory and transparent with regard to its intended purpose.

It is noted however that the obligation of access is not in itself sufficient to deal with the competition problems identified, including those of excessive pricing and discriminatory practices. Therefore, in the next chapters, an explanation is given of additional obligations which should be imposed.

6.2.2 Non-discrimination in the offer of access and interconnection, and the respective disclosure of information (article 70 of the LCE)

6.2.2.1 Consequences of any withdrawal of the obligation

The imposition of an obligation to respond to reasonable requests for access will not be sufficient to resolve problems resulting from any discriminatory treatment adopted by operators with SMP.

Without an obligation of non-discrimination, the SMP operator will have a strong incentive to impose discriminatory terms on other companies, particularly with respect to the wholesale prices charged. This incentive will be higher when the undertakings potentially targeted by such discrimination are competitors in the retail market in which the SMP operator acts.

This can occur particularly in the relevant markets in which the undertakings with SMPs are vertically integrated, providing wholesale services to other companies with which they compete in the provision of services in retail markets. With this action the competitiveness of other operators at retail level may be substantially impacted, resulting in a form of leverage of market power at wholesale level to the benefit of their position in the retail market.

Therefore, the capacity and the possible incentive to practice such behaviour on the part of mobile network operators means that the maintenance of an obligation of non-discrimination in the provision of interconnection (termination of voice calls) is essential, ensuring certainty and predictability in terms of the functioning of the markets and reducing the capacity of the mobile network operators to harm competition. It is noted that this requirement is already in force today and will not constitute an onerous requirement for operators.

In this context, ICP-ANACOM considers that the operators with SMP in the markets for voice call termination on individual mobile networks should not discriminate between different purchasers of services for voice call termination on mobile networks which are in comparable circumstances.

This obligation should be interpreted so that the prices for call termination on mobile network should be identical regardless of whether the origin of the call is the fixed network, another mobile network or an international call, and irrespective of the operator delivering it for termination on the SMP operator, taking into account that the service provided is the same, and shall also be identical irrespective of the buyers of the service.

The obligation of non-discrimination further implies that the termination of calls delivered by an operator which did not originate them (transit traffic) is not refused, obstructed or impeded through the imposition of specific procedures or practices.

The obligation of non discrimination is objectively justified, in that it ensures that buyers of the services concerned and, consequently, consumers are not disadvantaged as a result of discriminatory practices. ICP-ANACOM considers that the obligation in question is not discriminatory since it applies equally to all mobile network operators which have SMP and which therefore they have the capacity and incentive to engage in discriminatory behaviour.

This requirement is proportionate, since the mobile network operators are prohibited from discrimination only with respect to the buyers of the services concerned who are in similar circumstances, and it is transparent since the problems which it is intended to resolve and the objectives to be achieved are identified, as well as its purpose.

The obligation of non-discrimination is in line with the regulatory objectives set forth in article 5 of the LCE, particularly with regard to promoting competition and upholding the interests of citizens, and also meets the conditions set out in paragraph 4 of article 55 of the same act.

6.2.2.2 Conclusions

Mindful of the problems of competition identified and the capacities and incentives for the practice of discriminatory conduct, ICP-ANACOM takes the position that operators with SMP in the markets for voice call termination on individual mobile networks should be prohibited from discriminating between different purchasers of termination voice call services on mobile networks which are in comparable circumstances, regardless of the origin of calls and operators delivering them.

In light of the above, it is considered that the obligation of non-discrimination is appropriate to resolve the identified problems of competition, it is justified and proportionate, non discriminatory and transparent as to its intended purpose.

6.2.3 Transparency in the disclosure of information (article 67 of LCE)

6.2.3.1 Consequences of any withdrawal of the obligation

The main objective of the imposition of an obligation of transparency on mobile network operators with SMP in the markets for voice call termination is the monitoring of any anti-competitive behaviour, and in particular the monitoring of the obligation of non-discrimination in the provision of access and interconnection.

Maintaining this requirement will enable ICP-ANACOM to continue to ensure that SMP operators do not adopt discriminatory behaviour with respect to the purchasers of network access services (voice call termination). Likewise, publication of interconnection prices, underlying this obligation, ensures that potential purchasers carry out their own verification of any discriminatory practices.

The obligation of transparency also enables ICP-ANACOM to ensure that the price control obligation is effectively enforced.

Accordingly, ICP-ANACOM considers that the SMP operators in these relevant markets should send it a copy of all interconnection agreements which are concluded or are subject to amendment, particularly with regard to interconnection prices charged, no later than 10 days following their conclusion and/or amendment.

It should be noted that, in accordance with the 2005 Market Analysis Decision, ICP-ANACOM takes the position that there continues to be lack of justification for the imposition of a reference offer that sets out the terms and conditions governing the services of voice call termination provided by operators with SMP in these relevant markets. There continues to be no situations that require this measure, whereas its imposition would not be proportionate, since it would entail additional costs for the SMP operators and for the regulator itself, outweighing potential benefits.

Nevertheless, it is considered that maintaining the obligation of transparency means that, upon request, operators with SMP are bound to provide buyers of voice call termination services with all the information and specifications required for interconnection, including alterations with significant impact whenever their execution is planned.

Furthermore, ICP-ANACOM takes the position that the obligation to publish the prices of voice call termination services on their networks, as well as any alterations thereof, with reasonable notice, should be maintained. The period of this notice may be defined by ICP-ANACOM at a later date if necessary.

The imposition of this obligation provides a guarantee of stability and predictability in the relevant markets, contributing to an increase in the confidence of buyers of voice call termination services that these services are being offered on a non-discriminatory basis and allowing them to adapt to the new wholesale prices and, in particular, reflect the changes in their retail pricing.

In this context, the proposed obligation is in line with the regulatory objectives set out in article 5 of the LCE and is objectively justifiable, particularly to promote competition and ensure maximum benefit to consumers. In addition, the obligation in question fulfils the conditions set out in article 55 of the same law.

It is also non-discriminatory, since it is applicable equally to all mobile network operators with capacity and incentive to engage in anti-competitive, and particularly discriminatory, behaviour.

Furthermore, ICP-ANACOM considers that the requirement is proportionate, since it only involves the submission and publication of information which is strictly necessary to ensure that no conditions exist which are adverse to competition and since no imposition is made to publish a reference offer. The obligation is also transparent, given that its imposition clearly results from the need to ensure compliance with other obligations, contributing to market stability.

6.2.3.2 Conclusions

Mindful of the objectives underlying this obligation, ICP-ANACOM considers that the obligation of transparency in the publication of information should be maintained and this should entail the submission to the sector regulator, by operators with SMP in these relevant markets, of a copy of all interconnection agreements which are concluded or amended, within a period of ten working days, and should further entail the prior publication of the prices of the services of voice call termination on their mobile networks. The deadline for advance publication of the termination prices may be established by ICP-ANACOM, should this become necessary.

ICP-ANACOM also considers that in due course these operators should make available to interconnection applicants, upon request, all information and specifications required for interconnection, including changes with significant impact, whenever their execution is planned.

ICP-ANACOM considers that the obligations in question are appropriate to resolve the identified problems of competition, are justified and proportionate, non discriminatory and transparent with respect to the purposes for which they are intended.

6.2.4 Price control and cost accounting (articles 74, 75 and 76 of the LCE)

6.2.4.1 Consequences of any withdrawal of the obligation

Bearing in mind that excessive termination rates constitute one of the fundamental problems of these markets, ICP-ANACOM takes the position in the 2005 Market Analysis Decision, that the obligations to respond to reasonable requests for access, non-discrimination and transparency, although fundamental, were not sufficient to ensure the containment of market power exercised by the mobile operators, particularly in terms of termination pricing.

It was also considered essential in this regard to note that the objective of this requirement was the cost orientation of prices, in order to guarantee efficient pricing and uphold the interests of consumers, and also to correct identified distortions of competition.

The view is taken that better implementation of the obligation in question is required, through the imposition of an additional obligation to develop a costing model and to adopt a cost accounting system that would allow verification of compliance with the cost orientation obligation.

It is noted that back in 2005, ICP-ANACOM determined that a system of cost accounting would be defined and costing methodologies would be developed in due course for the application of this obligation.

Internally, the pendency of the process concerning the launch of a public offer for the acquisition (takeover) of shares representing the capital of PT by Sonaecom, over the course of 2006, which had it been concluded would have had an important impact in terms of market structure, and externally, monitoring of the discussion on the harmonization process of terminations which culminated in the publication of the Commission Recommendation on Terminations⁷⁷, means that the process of defining the most appropriate costing methodology is only now begun.

Note that in paragraphs 1 and 2 this recommendation states that *"When imposing price control and cost-accounting obligations in accordance with Article 13 of Directive 2002/19/EC on the operators designated by National Regulatory Authorities (NRAs) as having significant market power on the markets for wholesale voice call termination on individual public telephone networks (...) as a result of a market analysis carried out (...), NRAs should set termination rates based on the costs incurred by an efficient operator. This*

⁷⁷ Commission Recommendation (2009/396/EC) of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:124:0067:0074:PT:PDF>

implies that they would also be symmetric (...). It is recommended that the evaluation of efficient costs is based on current cost and the use of a bottom-up modelling approach using long-run incremental costs (LRIC) as the relevant cost methodology."

In this context, ICP-ANACOM recently launched a public tender for the development and implementation of a costing model for mobile termination⁷⁸ involving the provision of various services, including a study on the implications of the Commission Recommendation on the national mobile market in order to better equip ICP-ANACOM in making decisions which are appropriate to the national market and regulatory interests, consistent with the Commission Recommendation, providing a sensitivity analysis tool or model to facilitate this Authority's decision-making process, support for the launch of a public consultation on the characteristics of the cost model to be implemented with a view to determining the efficient incremental costs of mobile terminations and the development of cost models which are able to respond to the regulatory requirements of ICP-ANACOM in the assessment of efficient incremental costs of mobile termination in Portugal. It is hoped that this methodology might be implemented, following notification to the European Commission, and deliver results in order to make further reductions in termination rates in 2011.

In light of the above, in relation to the identified problems of competition and given the need to comply with the Commission Recommendation on the Terminations, it is considered essential to maintain the established price control obligation, reflected in the cost orientation of prices and cost accounting.

It should be noted that this decision was also considered in the light of the concerns referred to in paragraph 2 of Article 74 of the LCE, whereby the position is taken that this obligation is a proportional, appropriate and objectively justifiable, and that it is in line with the objectives set out in Article 5 of the LCE, including those arising from the application of paragraph 1 points a) "*To promote competition in the provision of electronic communication networks and services (...)*" and c) "*To promote the interests of citizens (...)*" and paragraph 2, b) "*Ensure that there is no distortion or restriction of competition (...)*" and c) "*efficient infrastructure (...)*".

⁷⁸ Tender Specifications Available at http://www.anacom.pt/streaming/caderno_encargosmodelocusteiomovel.pdf?contentId=984495&field=ATTACHED_FILE

6.2.4.2 Applicability of the obligation pending determination of the efficient incremental costs of mobile terminations

Given that the costing methodology to be applied in the determination of mobile termination rates is not yet prepared, ICP-ANACOM will make use of benchmarking to determine a new downward movement in prices.

It is to be noted that the Commission Recommendation on Terminations states that "*without prejudice to previous regulatory decisions taken by NRAs in respect of the matters raised herein [the Recommendation]. Notwithstanding this, NRAs should ensure that termination rates are implemented at a cost-efficient, symmetric level by 31 December 2012, subject to any objective cost differences identified (...).*"

In this context, while the determination of incremental costs of efficient mobile operators has not been finalised, ICP-ANACOM will set the termination rates, taking account of the stated objectives and the identified problems of competition, seeking to bring them closer into line with European best practices. In this respect, it is noted that the new downward movement in pricing will be accomplished bearing in mind the need for operators to adapt gradually to the efficient termination rate that will apply from December 2012.

In a separate document, which was subject to public consultation in parallel with this market analysis, further reductions are determined in termination rates, effective from May 2010.

6.2.4.3 Conclusions

Considering that the existence of termination rates which exceed cost is a fundamental problem identified in these markets, generating various distortions, it is deemed essential to maintain the obligation of price control, embodied in the cost orientation of prices, and the obligation of cost accounting.

It is also considered fundamental to begin the process of defining the costing methodology that will determine the efficient incremental costs of mobile terminations, taking into account the Commission Recommendation on the Terminations, which process, when completed, will enable the establishment of efficient termination rates which are effectively orientated to costs.

On a transitory basis, it is essential to continue the downward trend in termination rates, which will allow a gradual transition between current prices and those that will result from the application of the Recommendation, at the latest from the end of 2012.

In light of the above, ICP-ANACOM considers that this obligation and its embodiment is appropriate, proportionate, non discriminatory and transparent as to its intended purposes.

6.2.5 Accounting separation (article 71 of LCE)

6.2.5.1 Consequences of any withdrawal of the obligation

In view of the fact that ICP-ANACOM deemed the imposition of an obligation of accounting separation to be essential, supporting the obligations of non-discrimination, transparency, and cost accounting, its withdrawal would impede the ability to clearly identify the costs associated with the regulated services.

Noting likewise that the SMP operators are also operators which are vertically integrated, providing wholesale and retail services, accounting separation takes on an added importance.

In this context, it is essential to maintain this obligation, including the obligation to report financial information (accounting records) pursuant to paragraph 3 of article 71, whereby the position is taken that it is appropriate and objectively justifiable.

6.2.5.2 Conclusions

The obligation of accounting separation, including the obligation to report financial information enables the verification of compliance with the obligations of non-discrimination and transparency. It is also important in terms of the implementation of the cost accounting system.

6.3 Obligations to be imposed on operators with SMP - Conclusion

The mobile network operators with significant market power in the wholesale markets of voice call termination on individual mobile networks will remain subject to the following obligations already established in the determination of 25.02.2005, with the specifications referred to in the preceding paragraphs:

- Respond to reasonable requests for access (article 72 of LCE)
- Non-discrimination in the provision of access and interconnection and in the respective provision of information (article 70 of the LCE)
- Transparency in the publication of information (article 67 of LCE)
- Price control (cost orientation) and cost accounting (articles 74, 75 and 76 of the LCE)
- Accounting separation (Article 71 of LCE).

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