ANACOM

ICP - Autoridade Nacional de Comunicações
Av. José Malhoa, nº12 - 1099-017 Lisboa
Portugal

Internet - http://www.anacom.pt
e-mail - info@anacom.pt
Telephone - +351 217211000
Fax - +351 217211001

The information is also available in Anacom's Internet website in:

http://www.anacom.pt/template31.jsp?categoryId=216283

Determination of 25.2.2005

DECISION

WHOLESALE MARKETS FOR VOICE CALL TERMINATION IN INDIVIDUAL MOBILE MARKETS

PRICE CONTROL OBLIGATION

ICP-ANACOM – February 2005

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1. Regulatory Framework

Law no. 5/2004 of 10 February[1] ("Electronic Communications Law") approved the legal regime applicable to electronic communications networks and services and to associated resources and services, defining the responsibilities of the National Regulatory Authority (NRA) in this area.

This Law substantiates the principles set out in the new community regulatory framework, which establishes a new legal framework for the electronic communications sector meant to respond to the trend towards convergence, encompassing all electronic communications networks and services. In this regard, in line with the precepts in articles 18 and 56 of the Electronic Communications Law, the NRA is responsible for defining and analysing relevant markets, declaring undertakings with significant market power (SMP) and determining appropriate measures for companies that offer electronic communications networks and services.

More specifically, the procedure for market analysis and obligations imposition envisaged in articles 55 through 61 of the aforementioned Law is basically subject to three procedural moments:

a) the definition of relevant markets (article 58);

b) analysis of the relevant markets (article 59);

c) the imposition, maintenance, amendment or withdrawal of ex ante regulations for undertakings with SMP (articles 55 and 59).

In wake of the ICP-ANACOM analysis undertake with regard to the three above points[2], substantiated in the document "Wholesale Markets for Voice Call Termination in Individual Public Mobile Telephone Networks – Definition of Relevant Markets, SMP Assessment and Obligations Imposition", this document tangibly sets out the specific terms to govern implementation of the price control obligation in 2005 and 2006.

2. Price control

The most important competition problem identified in the document on "Wholesale Markets for Termination in Individual Mobile Markets"[3] is the setting of excessive prices. The market power over call termination held by the mobile network operators derives from the fact that any operator who wants to terminate calls in a mobile network end user is forced to use the services of that specific mobile network operator. In addition, consumers are less sensitive about the price of calls made to them. This

[1] Available at http://www.anacom.pt/template16.jsp?categoryId=97279
[2] Available at http://www.anacom.pt/template2.jsp?categoryId=124219
[3] Available at http://www.anacom.pt/template2.jsp?categoryId=124219

situation is due to application of the calling party pays principle[4], which implies a disassociation between person paying for the calls (the caller) and the person who chooses the termination network. This enhances the lack of incentives to lower termination prices.

The market power the mobile network operators have in setting the termination prices for voice calls in the respective networks can only be attenuated if there are sufficiently widespread alternative means to terminate voice calls and if buyers are endowed with a substantial business countervailing power.

The imposition of obligations to respond to reasonable access requests, of transparency and of non-discrimination, although fundamental, is not enough to lead to efficient prices in the wholesale markets for voice call termination in individual mobile networks.

ICP-ANACOM understands that, given the competition problem identified in these markets, only the setting of termination prices oriented to costs via gradual approximation to the prices at efficient level can aid the promotion of competition and defence of the interests of public mobile network end users.

As there is a need to impose termination prices oriented to costs, ICP-ANACOM shall establish price control based on international benchmarking, at least while there is no duly implemented costing model.

ICP-ANACOM understands, in line with the position set out in the documents drawn up in the ERG context[5], that a single and immediate move to lower termination prices to values close to costs could cause some instability in the activity of the mobile network operators and is thus a disproportionate measure. With this in mind, a gradual price evolution is deemed appropriate, from the initial values set in March 2005 to the values that should be reached at the end of 2006 (gliding path). ICP-ANACOM will thus set quarterly values for the voice call termination price during this period.

2.1. Background

The prices of voice call termination in mobile networks have been subject to regulation in the past, specifically ICP-ANACOM intervention upon request by the parties as per the terms of Decree-Law no. 415/98.

By means of the determinations dated 3 August 2000[6], 24 January 2002[7] and 29 May 2002[8], ICP-ANACOM set the average maximum mobile termination prices for calls originating in fixed networks (fixed-mobile termination), for calls originating in mobile networks (mobile-mobile termination) and for calls originating abroad (international-mobile termination).

[4] Calling party pays principle – rule whereby the price for making a call is entirely paid by the caller.
[5] European Regulators Group.
[6] Available at http://www.anacom.pt/template13.jsp?categoryId=7973
[7] Available at http://www.anacom.pt/template12.jsp?categoryId=31459
[8] Available at http://www.anacom.pt/template12.jsp?categoryId=37147

The ICP-ANACOM interventions were always carried out with one fundamental concern, that of promoting conditions to stimulate the development of balanced competition between the fixed networks and mobile networks and to limit the development of barriers blocking the use of network externalities by end users, particularly fixed network customers.

To that end, ICP-ANACOM was mindful of the need to promote lower termination prices, often called for by the fixed operators (fixed-mobile termination), and to make the various termination prices converge, eliminating arbitration opportunities such as tromboning and commercial usage of GSM Gateways, which generate economic inefficiencies.

As until mid-2003 the mobile operators charged the highest termination prices allowed by regulatory intervention, ICP-ANACOM sought by informal regulation to obtain agreement from TMN and Vodafone to lower the respective fixed-mobile termination prices.

In June 2003, as a result of that informal regulation, Vodafone and TMN agreed to lower the respective termination prices for voice calls originating in fixed networks by 7% per quarter over four quarters, effective from 1 July 2003. The operators in question implemented the first three cuts agreed, on the following dates: July 2003, October 2003 and January 2004. However, the last cut, scheduled for April 2004, did not happen.

In 2004 ICP-ANACOM continued to encourage, now with the three mobile operators, lower mobile termination prices and their approximation to values close to European averages. This process lasted from April to mid-September 2004; it was not possible to reach a solution that satisfied the three mobile network operators.

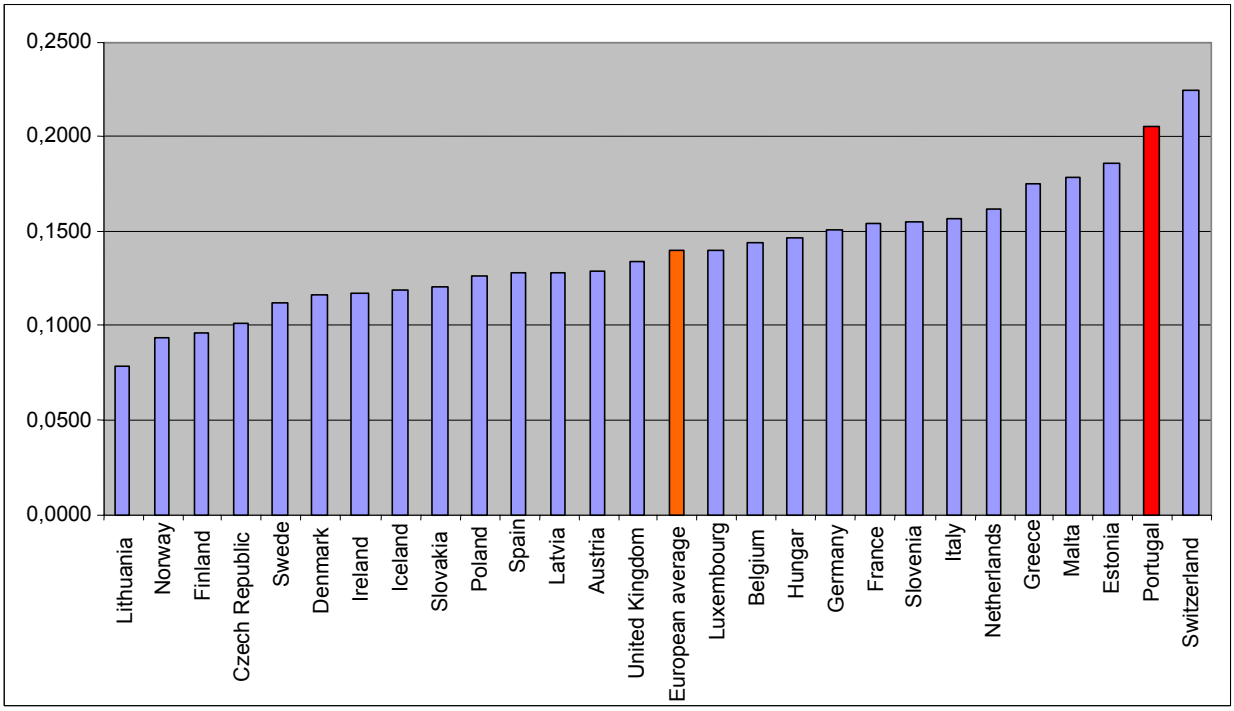
ICP-ANACOM considers that the problem of obtaining consensus on mobile termination prices, which means keeping the high prices charged to date, strengthens its understanding on the existence of significant market power by each one of the mobile operators in the respective wholesale markets for voice call termination in individual mobile networks, and on the need for regulatory intervention by means of an obligation to control prices and for orientation to costs.

2.2. International benchmark

Bearing in mind that the orientation to costs principle implies the root development of a costing model by the mobile operators, ICP-ANACOM shall in a first stage, and until the costing systems produce cost information, set the mobile termination prices based on recourse to international benchmarking. To that end it will use the figures provided by the IRG – International Regulators Group. Some of the countries considered already have price control obligations in force, specifically orientation to costs obligations based on LRIC models.

ICP-ANACOM aims by its intervention to lower the average termination prices charged in Portugal, which in July were ranked next to last among the IRG member countries (see Graph 1).

Graph 1 – Average fixed-mobile termination prices (July 2004) *



Source: IRG July 2004

* Average price per minute for a three-minute call.

2.3. Price discrimination as market foreclosure strategy

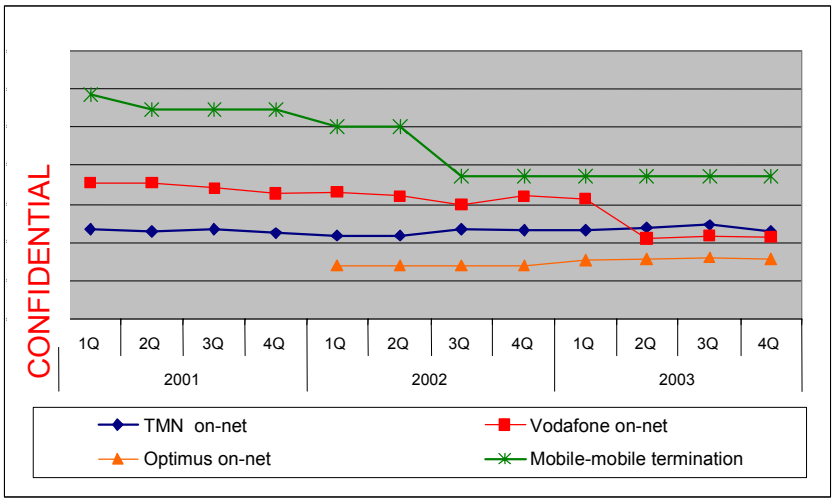
Besides the market fault that results from charging excessive termination prices, there is another potential market fault worth bearing in mind with regard to the national mobile communications market.

As stated in the ERG document, the bigger operators can charge the other operators high termination prices (above costs), while they implicitly practice very low internal transfer (termination) prices. This situation leads to high off-net prices and low on-net prices which place the operators with smaller customer bases at a disadvantage due to the "network externalities". The higher the termination price the greater the disadvantage and therefore a greater difference between the price of an off-net call and an on-net call. The ERG recognises that this situation very likely occurs in the case of mobile-mobile

interconnection, where it is common for operators to discriminate between on-net and off-net prices in retail[9].

It is worth examining whether this market fault occurs in the national mobile market. The evidence at ICP-ANACOM's disposal indicates that this market fault exists. In the Portuguese market the average retail prices of on-net calls are on average less than the termination price. Graph 2 depicts the on-net retail prices of the mobile network operators, comparing them with the evolution of termination prices. Although the latter have been dropping in the last few years, they are still at much higher levels than the on-net retail prices.

Graph 2 – On-net retail prices vs. mobile-mobile termination prices [10]



Source: ICP-ANACOM

The existing "network externalities" in the mobile networks should be considered in this context. The more customers belonging to a given mobile the higher the value of belonging to that same network, given that more people can be contacted. If the price tables were uniform – with no differences between on-net and off-net calls – the network externality would be applied to all existing mobile networks, i.e., the more the customers in all the mobile networks the higher the value of possessing a mobile telephone, regardless of which operator is chosen.

[9] Document "ERG Common Position on the Approach to Appropriate Remedies in the New Regulatory Framework", Available at http://erg.eu.int/doc/whatsnew/erg_0330rev1_remedies_common_position.pdf, pages 40 and 119.

[10] To calculate average call prices, for each operator the revenue associated to those calls was divided by the respective number of minutes. In this regard, the figures are slightly under-valued, as they do not take into account revenue from the monthly fees for post-payment plans, whereby the average effective revenue should be a bit higher, though in any case less than the termination price (the post-payment plans correspond to a total customer percentage ranging from 16% to 32%). The information used to draw up this graph was provided by the operators on a confidential basis.

This network externality becomes beneficial for an operator through the practice of on-net prices different from off-net prices. By thus differentiating the retail prices, an operator increases the relative economic value that a consumer gains from belonging to that operator's specific network[11]. This practice, associated to high termination prices, thus becomes an instrument that can be used by bigger operators to drive off smaller operators – foreclosure.

It is worth noting that this issue becomes more significant in a market that is saturated or close to saturation, as the Portuguese mobile market is at present. When there is still a large potential market (i.e., the penetration rate is low), the smaller operators also benefit. The strategy of differentiated prices will serve to attract groups of new customers to mobile service, who join together to benefit from lower prices for communication between themselves.

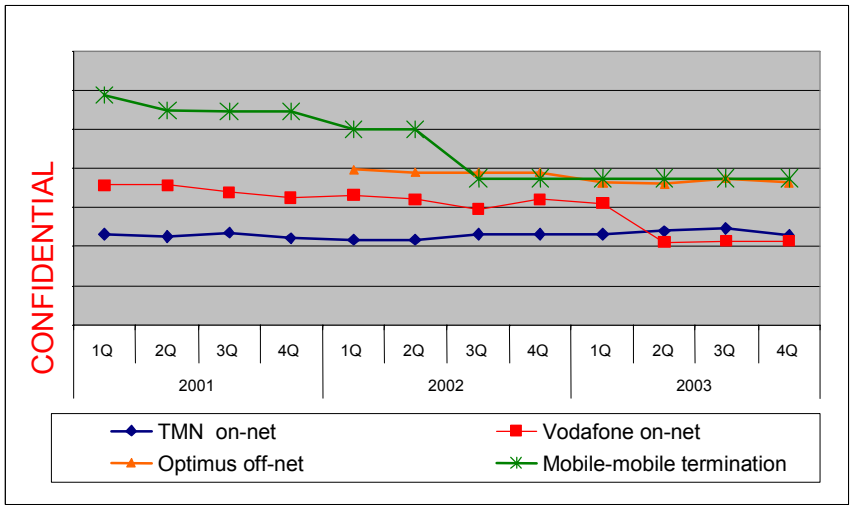
But in a situation of market saturation, with a penetration rate of 90% and market shares (subscribers) of 51%, 31% and 17%, the externalities tend to more benefit the bigger operator(s), as there are few customers who can join mobile service for the first time.

To compete with the bigger operators, the smaller operator is led to practice off-net retail prices that approach the on-net prices of its competitors. Optimus states that it follows such strategy as a way to avoid customer loss to the bigger operator(s). However, the termination price functions as a minimum limit regarding its off-net retail price. The high mobile-mobile termination price may thus constitute a barrier to lower retail prices in off-net calls.

[11] This is a kind of externality that Laffont and Tirole have called "tariff-mediated network externalities" (see Laffont, J.J. and J. Tirole, "Competition in Telecommunications" (2000)).

The data available to ICP-ANACOM indicates that Optimus may have indeed followed that strategy. The graph below shows that Optimus's average off-net retail prices have approached the average on-net prices of Vodafone and TMN. On the other hand, it can also be verified that the off-net prices of Optimus are very close to the mobile-mobile termination prices, showing that the termination price functions as a bottom limit for the Optimus off-net price (see Graph 3).

Graph 3 – Off-net retail prices (Optimus) vs. on-net retail prices (TMN and Vodafone)

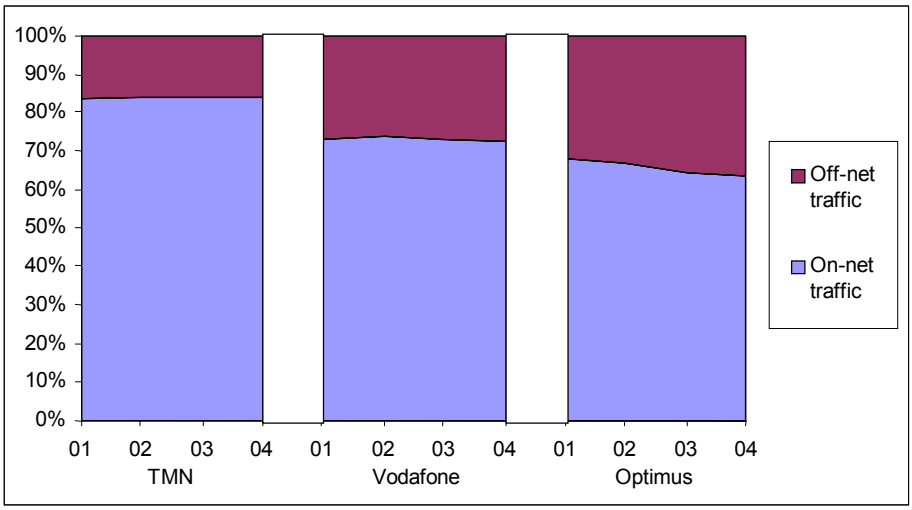


Source:ICP-ANACOM (Information provided by the operators on a confidential basis).

The Optimus strategy of lowering the off-net retail prices has another effect which is to aggravate the traffic imbalance in favour of the bigger operator(s). If Optimus has off-net retail prices for the other operators that are lower than those operators' off-net prices for Optimus, this creates an incentive for Optimus customers to make more calls than they receive, increasing the traffic imbalance even more in favour of the bigger operators.

Graph 4 shows the evolution of the weighting of on-net traffic compared to off-net traffic (mobile-mobile) for each of the three operators. In the first half of 2004 the weighting of on-net calls was 64% for Optimus, 73% for Vodafone and 84% for TMN.

Graph 4 – On-net traffic vs. off-net traffic



Source: ICP-ANACOM

2.4. Obligations appropriate for market price discrimination fault

As described in the point above, the mobile communications sector currently faces a potential market fault associated with the charging of different on-net and off-net retail prices and high mobile-mobile termination prices. The ERG document on remedies[12] indicates two possible correction remedies. The first consists of imposing a price control and cost accounting obligation. It is understood that termination prices oriented to costs should also resolve this market fault.

However, the ERG also considers another possibility, which consists of imposing a non-discrimination obligation, in which the SMP operator would be forbidden to practice on-net retail prices lower than the termination prices, with provision that the latter should be oriented to costs.

ICP-ANACOM examined the possibility of applying a measure of this type. However, its imposition was deemed unjustifiable with respect to the identified problem. The obligation would imply controlling the prices practiced in the retail market. Bearing in mind that this market is not identified as a relevant market for ex ante regulation, such imposition would be improper. On the other hand, the obligation would be disproportionate by being overly intrusive, and would excessively limit the commercial strategies of the mobile operators.

Optimus has presented a possible alternative to resolve this market fault. Regarding mobile-mobile termination prices, this operator has been calling for the introduction of wholesale termination prices that are asymmetric vis-à-vis the other operators. ICP-

[12] Available at http://erg.eu.int/doc/whatsnew/erg_0330rev1_remedies_common_position.pdf .

ANACOM holds that introduction of an asymmetry does not help resolve the problem in question, and could rather aggravate same.

The introduction of asymmetry in the mobile-mobile termination price could penalise the operators with lower termination prices, given the relative impact on their cost structure, vis-à-vis the operator (Optimus) who would eventually benefit from higher prices. Such distortion would likewise lead to fewer incentives to provide efficient mobile service, distorting even more the competition conditions in these markets.

Regarding Optimus, in the short term the introduction of asymmetry would be positive, as its termination revenue would not be cut so much. Nevertheless, in the middle term two negative effects should be taken into consideration:

- The imposition of asymmetric termination prices would create incentives for less efficient operation, and as such it would find it harder to adapt to the market when the asymmetry ended;
- On the other hand, the setting of a higher termination price for Optimus than for TMN and for Vodafone would help increase the network externalities promoted by the latter two mobile networks and driven by the on-net off-net differentiation strategy. If TMN and Vodafone had to pay a higher price to terminate calls in Optimus they would have more incentive to reflect that increase in the retail prices they charge their customers (mobile-mobile calls terminating in Optimus). The off-net price of those operators would thus be even higher, increasing the value for the customer belonging to those networks.

The eventual revenue increases for Optimus might not compensate for the effects of that strategy on its competitors. Asymmetry in the termination prices would tend to increase the traffic imbalance even more, as the ration between on-net and off-net prices would probably grow.

3. Decision on price evolution

Taking the above into consideration, ICP-ANACOM decided to establish the termination prices shown in Table 1 and **Graph 5**.

Table 1 – Termination prices set by ICP-ANACOM

(March 2005 to December 2006)

	Fixed-Mobile Termination		International-Mobile Termination (all operators)	Mobile-Mobile Termination (all operators)
	TMN and Vodafone	Optimus		
Current price	*€0.1850*	*€ 0.2779*	*€ 0.1870*	*€ 0.1870*
7 Mar 2005	€ 0.1400	€ 0.2050	€ 0.1400	€ 0.1400
1 Jul 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

The following sub-chapters develop the aspects ICP-ANACOM took into account when drawing up this price control, with respect to the pricing rule to apply, convergence of the various termination types and the principles underlying the evolution of fixed-mobile termination, mobile-mobile termination and international call termination.

3.1. Pricing rule

In the determination dated 3 August 2000[13], ICP-ANACOM decided on invoicing by the second only after the first minute for fixed-mobile termination. For the other termination types (mobile-mobile and international-mobile) the imposed pricing rule was that of invoicing by the second from the first second on.

Regarding the pricing of fixed-mobile termination, the mobile network operators were obliged to follow two rules:

- Charging would have to be by the second after the first minute; and
- The average maximum termination price per minute would have to be calculated based on a 100-second call.

[13] Available at http://www.anacom.pt/template13.jsp?categoryId=7973

The aim was to thus give the mobile network operators some flexibility in setting their termination prices. This pricing flexibility allowed the operators to maximise revenue by means of a practice of setting a price for the first minute less than the price of the following minutes.

This pricing system practiced by the mobile network operators is a system that may be contrary to the logic underlying the costs that an operator supports for a telephone call. On the other hand, the said pricing system leads to very complex retail pricing schemes, with different prices for the first minute and following minutes and for normal and off-peak hours, thus making it not very transparent for consumers. Besides, it is hard to monitor compliance.

Bearing in mind the said disadvantages regarding the pricing rule for fixed-mobile termination, ICP-ANACOM considers that the new mobile termination prices indicated in Table 1 should all follow the rule of charging by the second from the first second on.

3.2. Price convergence of the various terminations

The first aspect to bear in mind are the price asymmetries between different termination types and the price asymmetries between operators.

Regarding the first kind of asymmetries, ICP-ANACOM holds that there is no justification whatsoever for differentiating the various termination types. From the demand standpoint, mobile termination service is always the same, irrespective of the origin of calls delivered to the operator providing the service. Likewise, from the supply standpoint, and taking into account the orientation to costs principle, the termination cost of a call in a given network does not depend on the network in which the call originates.

ICP-ANACOM also holds that differentiation of the various termination types can stimulate arbitration phenomena, harmful for the operators and end consumers.

Regarding the price termination differences among operators, in some countries such as the United Kingdom it was considered adequate to set asymmetric termination prices depending on the radio frequencies used by the mobile operators. It was thus understood that the operators providing mobile service in GSM 1800 networks have higher network costs and may thus charge higher termination prices than the mobile operators providing the service in GSM 900 networks or GSM 900/1800 combined networks.

This situation does not apply to Portugal, where all mobile operators provide service supported in GSM 900/1800 networks, using practically the same number of frequency bands.

ICP-ANACOM's first aim in applying the price control obligation is thus to end all asymmetries in the provision of mobile call termination service which for historic reasons still exist in Portugal. The idea is to gradually move towards a situation of mobile termination price convergence, to be achieved within about two years, where there are no differences whatsoever in the mobile termination prices between the active operators and between the various kinds of mobile termination.

An identical termination price for the various call types that terminate in the mobile network, regardless of origin and identical for the three market operators, is the situation leading to a more efficient disposition of resources, and should thus be the regulator's objective.

3.3. Fixed-mobile termination

Regarding fixed-mobile termination, and as explained above, the prices practiced are deemed excessive. ICP-ANACOM thus aims to substantially lower the fixed-mobile termination prices.

The lowering means to approximate the termination prices to values more in line with those practiced in the European Union. The initial price, set for March 2005, is close to the average price registered in Europe in July 2004, which was € 0.1398. Note, however, that given the drops envisaged in most European countries, the value now set should in March 2005 still be above the European average. Subsequently, a gradual lowering of fixed-mobile termination prices is to be implemented, until the end of 2006.

Bearing in mind that fixed-mobile termination has been an important source of revenue for the mobile operators, ICP-ANACOM holds that a non-gradual price reduction for fixed-mobile termination could have undesirable consequences on the mobile operators' financial equilibrium. The ERG document on remedies[14] states that in cases where immediate implementation of the price control obligation implies setting prices at a competitive level that might cause disproportionate problems for the mobile operators, the NRA may apply a price cap system or a glide path to reach a more efficient level within a given time period.

At present, the fixed-mobile termination prices charged by Optimus are higher than the fixed-mobile termination prices charged by the other two operators (TMN and Vodafone). ICP-ANACOM holds that this asymmetry is not justified and is harmful for the fixed operators and end consumers. However, bearing in mind the financial impact that the asymmetry's immediate elimination might have on Optimus, ICP-ANACOM deems it should be gradually eliminated and that the fixed-mobile termination prices charged by the three mobile operators should converge in October 2006.

Indeed, ICP-ANACOM took into account that Optimus entered the market in 1998, six years after the first two operators. For this reason, ICP-ANACOM holds that it is proportional to allow an additional transition period until October 2006, during which Optimus may enjoy use of fixed-mobile termination higher than that of its competitors.

[14] Available at http://erg.eu.int/doc/whatsnew/erg_0330rev1_remedies_common_position.pdf .

From that date on, Optimus's fixed-mobile termination price should be the same as the other operators', as the transition period shall be considered over.

3.4. Mobile-mobile termination

ICP-ANACOM considers that the best way to deal with the market fault associated to price discrimination consists of substantially lowering the mobile-mobile termination price, so as to improve competition conditions for all mobile network operators, enabling attenuation of the effects of eventual commercial strategies that increase the traffic imbalance or of on-net off-net differences not motivated by cost. The proposed reduction, from the current 18.7 cents to 14 cents, is significant and not only helps improve conditions for competition between the mobile operators, but also facilitates control over eventual practices that harm competition.

An operator who is unable to approximate his off-net retail prices to the competition's on-net retail prices, due to the 18.7 cent mobile-mobile termination price, will with the new termination prices (closer to effective costs) have enhanced opportunities to develop the commercial strategies deemed most appropriate with respect to retail prices. The other operators should likewise see the possibilities of adopting commercial strategies different from the current ones increase.

3.5. International-mobile termination

Also with regard to the mobile termination of calls originating abroad, there is likewise no justification whatsoever for maintaining excessive prices. ICP-ANACOM thus holds that the respective prices should be aligned with the fixed-mobile termination prices set for TMN and for Vodafone. Note to that end that ICP-ANACOM recently had occasion to note the practice of arbitration between fixed-mobile termination and international-mobile termination, due to differences in the prices charged. The aim of establishing equal prices for fixed-mobile and international-mobile termination, to be fully achieved in October 2006 when Optimus's fixed-mobile termination price equals that of the other operators, is to entirely eliminate the incentives for such arbitration practices to appear.

Graph 5 – Evolution of mobile termination prices in Portugal