COMISIÓN DEL MERCADO DE LAS TELECOMUNICACIONES

IGNACIO REDONDO ANDREU, Board Secretary of the Comisión del Mercado de las Telecomunicaciones (Telecommunications Market Commission, CMT), by means of those capacities bestowed on him by article 40 of that Commission's Regulations, approved by Spanish Royal Decree 1994/1996, of 6 September,

HEREBY CERTIFIES:

That Board Meeting No. 28/09 of the Telecommunications Market Commission held on 29 July 2009, did adopt the following

AGREEMENT

By this motion, in file no. AEM 2009/967, we hereby approve the following

RESOLUTION APPROVING THE ESTABLISHMENT OF A GLIDE-PATH TO SET PRICES FOR VOICE TERMINATION CONNECTION SERVICES ON MOBILE NETWORKS BELONGING TO OPERATORS DETERMINED TO HAVE SIGNIFICANT MARKET POWER, AND THE MOTION TO NOTIFY THE EUROPEAN COMMISSION OF THE SAME.

FACTUAL BACKGROUND

ONE. Analysis of termination markets in individual mobile operators' networks

On 18 December 2008, the Telecommunications Market Commission adopted the Resolution approving the definition and analysis of voice termination markets for individual mobile networks, designating an operator with significant market power, and enforcing specific obligations, and agreed to notify the European Commission of the same.

The abovementioned Resolution was published in the Spanish Official Journal (BOE) on 13 January 2009.

TWO. Approval of the cost accounting results from the 2007 financial year

On 30 April 2009, the Telecommunications Market Commission approved the resolution regarding the verification of cost accounting results presented by France Telecom España, S.A. (hereinafter, Orange) for the 2007 financial year.

On 4 June 2009, this Commission approved resolutions regarding the verification of cost accounting results presented by Vodafone España, S.A. (hereinafter, Vodafone) and Telefónica Móviles España, S.A.U. (hereinafter, TME), both corresponding to the 2007 financial year.

THREE. Start of the process and announcement of the Draft Measure

On 23 June 2008, the Commission agreed to open the procedure for determining a glide-path to set voice termination connection prices on mobile networks belonging to operators determined to have significant market power, and to open the procedure for public inquiry. This report listed the reasons by which it was considered necessary to apply this measure to the procedure, which is currently undergoing urgent processing according to article 50 of Law 30/1992, dated 26 November, regarding the Legal System for Government Bodies and the Common Administrative Procedure (hereinafter LRJPAC). Urgent processing shortens time frames established for the ordinary procedure by half.

The same act agreed to send the Draft Measure to the Spanish Ministry of Industry, Tourism and Commerce, the Ministry of Economy and the Treasury, the European Commission and the National Regulatory Authorities of the European Union member states so that they could make remarks within the time frame of one month. The European Commission was informed of the Draft Measure on 23 June 2009.

The bulletin was published in the Spanish Official Journal No. 153 of 25 June 2009.

FOUR. Allegations in the public inquiry

The following entities presented allegations during the public inquiry: Xfera Móviles, S.A (hereinafter Xfera), Orange, E-Plus Móviles Virtuales España S.L.U. (hereinafter E-Plus), Vodafone, TME, Euskaltel, S.A. (hereinafter Euskaltel), Cableuropa, S.A.U. and Tenaria, S.A. (hereinafter ONO), R Cable and Telecomunicaciones Galicia, S.A. (hereinafter R Cable), Telecable de Asturias, S.A.U. (hereinafter Telecable) and Jazz Telecom S.A.U. (hereinafter Jazztel).

Annex 2 includes a summary of the main allegations claimed by the above parties and the response to each one.

FIVE. European Commission Summons

On 2 July 2009, the Register received the EC's requirements regarding the Draft Project about which it had been notified. That summons was duly answered by the CMT on 6 July 2009.

SIX. Requests for information

On 2 July 2009, TME, Vodafone and Orange were ordered to provide certain information regarding the breakdown of the monthly termination traffic on their respective mobile networks and on networks belonging to third-party operators. Those orders were duly followed by the listed operators.

SEVEN. Draft Measure. Remarks by the European Commission

On 23 July 2009, this Commission's Register received a letter from the European Commission stating its remarks regarding the Draft Measure about which it had received notice.

LEGAL BASIS

One - Authorisation for Competition

Articles 10, 48.2 and 48.3.g of General Telecommunications Law 32/2003 of 3 November (hereinafter known as LGTel), states that the Telecommunications Market Commission has the capacity to: (i) define and analyse markets of reference, (ii) determine which operators have significant market power, and (iii) impose, enforce, modify or suppress operators' specific obligations.

In particular, LGTel article 10 grants the Telecommunications Market Commission the ability to define those markets of reference for networks and electronic communication services whose characteristics may call for imposing specific obligations. This must be done considering the Commission's Guidelines on market analysis and the assessment of market power under the Community regulatory framework for electronic communications networks and services (hereinafter, the Guidelines), as well as the Commission Recommendation of 17 December 2007.

Article 10.4 in the LGTel states that specific obligations "will be based on the type of problem that is identified, and will be proportional and justified in order to comply with the objectives of article 3 in this law. These obligations will remain in effect during such time as shall be strictly necessary". Likewise, according to article 4.2 in the Market Regulations "the specific obligations that the Telecommunications Market Commission may impose, enforce or modify shall be those listed in Chapter III of this document in the case of wholesale markets, and those listed in Chapter IV for retail markets".

Articles 2 through 5 of the Market Regulations state the procedure that the Telecommunications Market Commission must follow in order to identify and analyse markets of reference for network operations and providing electronic communication services, and also describe its capacity to impose specific and appropriate obligations upon those operators holding significant power within each market being examined.

On 18 December 2008, a resolution by the Telecommunications Market Commission Board approved the definition and analysis of voice termination markets on individual mobile networks, the designation of operators with significant market power and the enforcement of specific obligations. That Resolution was published in the Spanish Official Journal no. 153 of 13 January 2009.

The above Resolution, after defining and analysing the abovementioned markets, concludes that they are not truly competitive. It identifies the following operators as having significant power in those markets: TME, Vodafone, Orange, Xfera, Euskaltel, S.A. (hereinafter Euskaltel), Cableuropa S.A.U. y Tenaria, S.A. (hereinafter ONO), Cable y Telecomunicaciones Galicia, S.A. and R Cable y Telecomunicaciones Coruña, S.A. (hereinafter, R Cable[1]), E-Plus, Telecable de Asturias, S.A.U. (hereinafter Telecable), BT España, Compañía de Servicios Globales de Telecomunicaciones, S.A.U. (hereinafter BT), Jazz Telecom, S.A.U. (hereinafter Jazztel), BEST SPAIN TELECOM, S.L. (hereinafter Best Telecom) and FONYOU TELECOM, S.L. (hereinafter Fonyou), and imposes the obligations corresponding to each of them.

Specifically, Annex 1 b) in the abovementioned Resolution states that TME, Vodafone and Orange must offer termination services to operators requesting them, at prices based on their production costs. As that Resolution states, that obligation will be implemented according to the following schedule:

- *“Resolution regarding the verification of 2007 cost accounting results for TME, Vodafone and Orange before 30 April 2009.*
- *Resolution regarding setting mobile termination connection charges for TME, Vodafone and Orange before 30 July 2009. This Resolution will establish the duration and the target termination rate at the end of the new glide-path's effective period, which will be the same for TME, Vodafone and Orange.*
- *Termination rates approved in July 2009 will become effective beginning 15 October 2009[2].*

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[1] On 26 May 2008, a merger took place between the companies R Cable y Telecomunicaciones, S.A. (the takeover company) and R Cable y Telecomunicaciones Coruña, S.A. (the absorbed company), which was recorded in the Companies Registry of La Coruña.

[2] Up until that moment, termination rates approved by this Commission on 28 September 2006, within the framework of dossiers AEM 2006/724, AEM 2006/725 and AEM 2006/726, will be effective.

This means that TME, Vodafone and Orange must invoice only such traffic as is actually consumed, that is, by the second, beginning with the first second of communication, according to a single nominal price."

With regard to Xfera, one of the obligations imposed by the above Resolution is that of offering reasonable prices for providing termination services. The means to implement reasonable prices, according to that agreement, is as follows:

"Before 30 July 2009, the CMT will adopt a resolution regarding setting Xfera's mobile termination connection charge, which will determine the means of reducing the current margin compared with the average termination price offered by TME, Vodafone and Orange as a result of the new glide-path. This mobile termination connection charge, approved in July 2009, will become effective beginning on 15 October 2009[3]

This means that Xfera, for the same reasons that apply to TME, Vodafone and Orange, must invoice only such traffic as is actually consumed, that is, by the second, beginning with the first second of communication, according to a single nominal price."

Regarding full MVNOs, the agreement imposes obligations, including that of offering reasonable prices for providing termination services, according to the following terms:

"The price set by full MVNOs for providing termination services must be proportional and based upon objective criteria. Under no circumstances may the price the full MVNO offers to third parties be excessive, nor may it reduce the operating margin of the requesting operator in such a way as to prevent it from entering the market efficiently.

Specifically, with regard to the termination service provided by full MVNOs to any operator requesting that service, reasonable prices will correspond to the new average fees CMT approves for host MNOs[4]

[3] Until that moment, termination rates approved by this Commission in its Resolution of 4 October 2007 will be in effect. That Resolution addressed the definition and analysis of voice termination markets on the mobile network belonging to Xfera Móviles, S.A., identifying that operator as having significant market power, and imposing obligations.

[4] Until that moment, termination rates approved by this Commission in its Resolution of 7 February 2008 will be in effect. That Resolution addressed the definition and analysis of voice termination markets on individual mobile networks belonging to Full Mobile Virtual Network Operators (hereinafter, full MVNOs), the identification of operators with significant market power, and the imposition of obligations.

Therefore, due to the same reasons that apply to MNOs, full MVNOS must invoice only such traffic as is actually consumed, that is, by the second, beginning with the first second of communication, according to a single nominal price."

This Commission will direct its actions according to that stated in the dispositions of the LRJPAC. That legal text regulates the practice of the public functions entrusted to this Commission by virtue of that stated in article 48 of the LGTel and article 2 of the Regulations for the Telecommunications Market Commission.

Two. – Object of the procedure

The object of the present procedure is to comply with that stated in this Commission's resolution of 18 December 2008 regarding the definition and analysis of call termination markets in individual mobile networks, the designation of operators with significant market power and enforcement of specific obligations (hereinafter Market 7 Resolution).

In particular, this measure lists the obligations imposed within Market 7, which are oriented according to the costs of the termination rates for the TME, Vodafone and Orange mobile networks, and also sets reasonable termination service fees for Xfera and full MVNOs[5].

The end goal of using price control obligations, whether by establishing a principle of orienting termination rates by costs or imposing reasonable prices, is to make operators in a dominant market position incapable of employing anti-competitive behaviours such as setting excessive prices. Without a doubt, this effort creates a stronger defence of the users' interests and fosters effective competition.

In order to reach its goal, the CMT has opted for a glide-path as a means of implementing price control. The convenience of using a glide-path comes from the need for orienting termination rates according to costs, or imposing reasonable prices in a stepwise manner in order to avoid a disproportional shock for the operator and benefit the consumer according to the way in which these cost reductions reach the end user.

[5] Within that resolution, full MVNOs' obligation to offer reasonable prices is described as follows: "specifically, regarding termination service provided by full MVNOs to any operator requesting the same, reasonable prices will correspond to the new average prices that the CMT approves for host MNOs".

As a result, in the following sections we will proceed to develop the design and relevant variables to be taken into account when implementing such a glide-path.

Three. Regarding the convenience of setting a multi-annual price framework (glide-path)

Article 13 of the Access Directive[6], as well as articles 13 in the LGTel and 11 in the Market Regulation contemplate the possibility of imposing price control obligations, consisting of cost oriented prices or reasonable prices, on those operators determined to have significant power within a certain market. In compliance with these measures, as previously stated, the Market 7 Resolution imposed the obligation of orienting termination rates according to costs on SMP operators, as was the case for TME, Vodafone and Orange, and also obliged Xfera and full MVNOs to set reasonable prices.

To do so, Article 11.1 in the Market Regulations states that the Telecommunications Market Commission will see that the price control methods that it imposes serve to foster efficiency and sustainable competition, thus maximising benefit to consumers.

As the European Regulators' Group (ERG) indicates, there is an array of methods for determining an appropriate wholesale price; in general, selecting a specific regulatory step will require examining a set of factors, leading us to a case by case analysis. However, this will always follow the list of common principles set forth in the regulatory framework, including proportionality, which is mentioned by the ERG. The price established in accordance with article 13 of the Access Directives may therefore adopt various forms, including glide-paths or multi-year price evolution frameworks.

For European regulators, regulating termination rates by means of this type of schema is justified "where an immediate implementation of charge control that sets charges at a competitive level could cause disproportionate problems for mobile operators"[7]. As a result, implementing a multi-year framework for mobile network termination rates will be justified according to the impact that immediate cost-based price orientation could have on the operator, to name an example.

[6] Directive 2002/19/EC of the European Parliament and Council, dated 7 March 2002, regarding interconnection and access to electronic communications networks and associated facilities.

[7] Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework Final Version May 2006.

This tool permits regulators to graduate the impact of reductions in termination rates while taking into account the projected cost evolution. In this context, a large number of European countries have implemented such a glide-path: France, Italy, the United Kingdom, Ireland, Denmark, Greece, Malta, Poland, Germany, Hungary, Austria, the Czech Republic, Bulgaria, Belgium, the Netherlands, Portugal, Sweden, Luxembourg, Finland, Cyprus, Slovenia, Romania, Estonia and Norway.

Calculating the termination charge in this way, according to projected costs from the cost accounting that was audited and verified by the CMT and based on estimates of each operator's coverage and traffic, as well as the projected demand based on the total number of mobile telephone lines and consumption per line and per year, is completely consistent with ERG criteria and regulatory practices used by other neighbouring countries.

In this sense, the Commission has been using operators' cost accounting as a basic reference for setting termination rates. Nevertheless, it also takes other factors into account when setting termination rates, including the dynamism of the demand, competition, and international comparisons. This is done with a view to adjusting not only to the current situation, but also to the future national and European situation where possible, thus taking a prospective approach.

In this cost-based orientation process, it is important that we consider that the cost structure of an operator providing cost accounting from a certain financial year or the previous one should not be the sole and final element in this dynamic process. Accounting presents a static view of the cost structure situation. However, the dynamic environment in which operators and the services they offer interact makes it necessary for us to consider other factors when establishing connection charges. These factors include dynamics of demand, the competition, and lastly, the production processes. Therefore, when establishing termination rates, the Commission cannot consider only those cost variations that operators present periodically for a specific financial year; rather, it must also consider the successive adjustments that must be made in cost accounting processes so that they reflect market reality.

In the case in question, the mobile communications market, we must consider any variable that could exert an influence, since cost function sensitivity is determined by such variables as each operator's level of penetration in the market, demand behaviour and technological changes.

For this reason, our Commission has created a model that departs from the accounting data provided by each operator and enables us to project the evolution of the different functions for each mobile operator's production costs. The Commission concludes that, based on the results obtained through that model, the target price for TME, Vodafone, Orange and the full MVNOs will be 0.04 euros at the end of the regulation period, as is described in a later section.

At this point, it is necessary to stress that the EC Recommendation on accounting separation and cost accounting systems [8] of 19 September 2005, indicates the following in sections 6 and 7 of its preamble:

> *"Any mandated cost accounting (…) methodology used in particular as a basis for price control decisions should be specified in a way that encourages efficient investment (...) and should be in accordance with the national regulatory authority's policy objectives as set out in Article 8 of Directive 2002/21/EC.*
>
> *The implementation of a new or revised costing methodology may indicate that current levels of regulated charges and/or price mechanisms are inappropriate or misaligned in some way. If a national regulatory authority believed corrective action is required then due regard should be taken of the commercial and economic environment to minimise risk and uncertainty in the relevant markets.*
>
> *This action could include, for example, spreading any price adjustment over a reasonable period of time."*

In line with the above, section 3 of the Recommendation establishes that:

> *"It is recommended national regulatory authorities take due regard to further adjustments to financial information in respect of efficiency factors, particularly when using cost data to inform pricing decisions since the use of cost accounting systems (even applying CCA) may not fully reflect efficiently incurred or relevant costs. Efficiency factors may consist of evaluations of different network topology and architecture, of depreciation techniques, of technology used or planned for use in the network."*

In this respect, the Resolution of 30 April 2009 verified the results of the cost accounting Orange presented for 2007, and the Resolutions of 4 June 2009 verified the cost accounting presented by Vodafone and TME respectively, also for 2007.

[8] OJEU L266/64, of 11 October 2005.

As will be explained in Annex 1, the expanded model's basic data are the cost accounting results approved for each of the three mobile operators mentioned in the previous paragraph. It projects production cost functions for these operators in such a way as to provide an estimate for average termination costs until 2012.

When we consider the charges that are currently in force, there is a clear difference between the fees that these operators offer for termination services and the costs for that service which can be calculated using the model. It is therefore necessary to adjust termination rates according to production costs for providing that service. However, orienting operators' prices according to those costs on a one-time immediate basis would create so large an effect that, according to the EC recommendation and the ERG, it would be recommendable to set up a multi-year framework that takes into account the array of factors guaranteeing cost-oriented prices, in order to benefit consumers without affecting investment incentives.

Four. Glide-path design Parameters to be taken into account

Implementing a glide-path implies tackling certain matters of design, which in some cases are similar to those for a price cap. Examples include the following:

- Duration
- Definition of target price
- Whether one or more termination rates should exist for each mobile operator
- The reduction rate for current prices until reaching convergence level
- How often prices should be reduced
- A means of verifying that the prices offered by the operator comply with regulated prices

I PARAMETERS TO BE TAKEN INTO ACCOUNT

I.1 Duration

We must consider various factors in order to determine the appropriate duration for the period. Firstly, the duration must be long enough for operators to receive real incentives for reducing costs.

The Commission Recommendation of 7 May 2009 regarding the regulatory treatment of fixed and mobile termination rates in the EU[9] indicates that the NRAs must establish termination rates based on the costs undertaken by an efficient operator, and therefore recommends that cost efficiency assessment be based on current costs and on the use of a bottom-up model using forward-looking long-run incremental costs (LRIC) as its model for pertinent costs.

That Recommendation indicates that "*a period of transition until 31 December 2012 should be considered long enough to allow NRAs to put the cost model in place and for operators to adapt their business plans accordingly, while, on the other hand, recognising the pressing need to ensure that consumers derive maximum benefits in terms of efficient cost-based termination rates.*"

The model currently being used is a top-down estimate model based on the cost accounting approved by the CMT, which enables us to estimate costs up to 2012. However, considering that the CMT has begun elaborating a bottom-up model designed according to that established in the EC Recommendation, our Commission feels that the duration of the new glide-path, in a later version, must enable us to consider both the above model, and also the Recommendation where applicable, before the deadline that it mentions.

In the report submitted for review, divisions within our Commission expressed that the glide-path should last for two years. However, considering the allegations voiced by the operators, and particularly the fact that a two year glide-path would last a year and a half in practice (the time between the date of the first price drop in October 2009 and the date of the last price drop according to the hearing report, which is April 2011), our Commission feels that it is appropriate to extend the length of the glide-path to two and a half years. This new duration, according to which the regulatory period will be extended to 15 April 2012, is still fully compatible with the regulation objectives expressed in the European Commission's recommendation of 7 May 2009, which establishes 31 December 2012 as a target date.

Meanwhile, the extension of the regulatory period's duration will also be accompanied by a sharper drop at the time of the first regulatory stage, as was requested by some operators. The terms of this plan will be explained in a later section.

To summarise, our Commission believes that the glide-path approved herein should have a duration of two and a half years and expire on 15 April 2012.

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[9] OJEU L124/67, of 20 May 2009.

I.1.1 EC remarks regarding accounting methodology for calculating mobile interconnection rates

The European Commission has stressed the need to set termination rates at an efficient cost level, as well as the importance of a long-run incremental cost model. It recalls that costs which would not be avoided if the wholesale call termination service was no longer provided, such as retail costs or non-traffic related spectrum costs should not be attributed to wholesale termination services.

With regard to the EC's remarks, our Commission has expressed that it is in the middle of developing a bottom-up LRIC model in line with that established in the EC Recommendation of 7 May 2009. However, until this model is completed, our Commission understands that the projection model employed for the present glide-path, which is based on mobile operators' most recent audited cost accounting (2007), is a good tool and a valid reference for cost-based price orientation.

Regarding the attribution of retail costs such as those relating to market development or income fee schedules, this model is useful since its costs are completely distributed. In the particular case of market development costs, the CMT, based on resolutions addressing mobile operators' cost accounting from the 2002 financial year, believes that the criteria for distributing market development costs should attempt to contemplate two relationships: firstly, the direct relationship between subsidising handsets and customer loyalty with an increase in retail traffic, and secondly, the indirect relationship between that subsidy and customer loyalty with an increase in connection traffic, supported by an increase in mobile telephone users.

Furthermore, part of the market development costs are attributed to termination services in recognition of the network externality that this creates, permitting operators to cover incremental costs caused by new customers as they create a new market. Therefore, since 2003, the CMT applies a weight to assign market development costs for connection services, but it is smaller than that used for end-customer services.

The method by which market development costs are assigned for voice termination services is by means of an initial operation according to the connection traffic divided by the total traffic. We apply a weight, consisting of the net increase in functioning lines, to this operation. This means that if an operator has no net increase in functioning lines during a year, termination service costs contain no market development costs, and are fully attributable to end-customer services. The result of the above in Spain's current mobile market situation, where the penetration rate is greater than 100%, is that the costs for that item which mobile operators attribute to voice connection services are hardly significant.

Therefore, although model such as the one described in the EC Recommendation should not contain such costs, we consider it reasonable not to adjust the results from the cost systems at this time. This way, no distortions are introduced in the contrast methodology for elaborating this type of models; meanwhile, we will continue developing the new model according to EC recommendations, which will enable us to make the proposed adjustments in the most appropriate way, according to the characteristics of bottom-up LRIC models.

I.2 Definition of target price

The present Resolution shall carry out an objective analysis enabling us to set an average connection termination charges, based on real income and traffic data provided by TME, Vodafone and Orange, at the end of the period regulated by the glide-path. The specific obligations that are imposed will ensure price orientation according to the real cost of providing the connection, or where applicable, by setting reasonable prices for Xfera and full MVNOs.

As indicated previously, the 2007 cost accounting results from TME, Vodafone and Orange have already been verified by this commission. Nevertheless, our Commission has no information on Xfera, due to the fact that its Market 7 Resolution did not oblige that entity to present its cost accounting or accounting separation information.

As we can see from data obtained from the cost model, listed in Annex 1 of this Resolution, the estimate for the average weighted unit cost of mobile termination at the end of 2012 is 0.0245 euros/minute. Based on these projections, our Commission believes that a reasonable, gradual and proportional means of reaching that cost in the 2012 financial year would be to establish a biannual transition schedule for termination rates, as we did with the previous glide-path. While we are mindful of the possible margin of error for this estimate, we would be able to start from an initial price of 0.07 euros/minute and reach the above approximate cost in 2012 by applying price reductions. As a result of those actions and applying reductions to the initial price, we will reach a mobile termination price of 0.04 euros/minute for TME, Vodafone and Orange in the last step of the new glide-path. In this way, we will be in compliance with the obligation to orient prices according to cost.

It is therefore fitting to reduce TME's Vodafone's and Orange's average connection prices during each of the established six-month periods, until reaching the target price of 0.04 euros/minute in the last stage of the regulation period, which will become effective on 16 October 2011.The decision not to set a termination rate of 0.0245 euros/minute for TME, Vodafone, Orange and full MVNO networks (recall that this price would correspond to the cost estimate generated by the 2012 financial year model) is justified by the need to develop a bottom-up model like that specified in the EC recommendation of 7 may during this time, as stated in section I.1 of this Resolution.

Since 16 April 2009, Xfera's rate has been 0.104174 euros/minute. This is 48.82% higher than the rates of other mobile networks on the market, but it is not possible to use a model like the one mentioned above to estimate future costs, as this company has no cost accounting or accounting separation obligations.

Xfera began operating in December 2006. Its current customer base is very small compared with those of its competitors, and for this reason it has not yet attained economies of scale; this means that its termination rates have to be noticeably higher than those for established networks. However, our Commission feels that the price increase occurring in Xfera's first glide-path cannot remain unchanged, and that its voice termination rate must approximate that of other mobile networks in the near future.

At this time, it is appropriate to compare Xfera with other 3G-only operators in Europe at a moment when all are involved in price-regulating processes using glide-paths. We can observe Xfera's position compared with other operators in the following table:

Table 1: International comparison of European 3G-only operators

Country	Full 3G operators	Target at end of regulatory period		Beginning of operation	Market share by lines
Austria	**Hutchinson**	0.0201	From January 2011	May-03	6.1% (2008)
Denmark	**DK3 (Hi3G)**	0.0992	From May to December 2009	Oct-03	4.9% (4Q 2007)
Ireland	**H3G**	0.0799	From December 2013	Limited service in October 2003. Began commercially in July 2005	5.8% (3Q 2008)
Italy	**H3G**	0.0450	From July 2012	Mar-03	9.1% (2007)
Sweden	**Hi3G**	0.0348	From July 2012	May-03	6% (1S 2008)
United Kingdom	**UK 3UK (Hutchinson)**	5.9 pence (7 cents)	From April 2010 to March 2011	Mar-03	3.7% (2007)
Spain	**Xfera**	To be determined by current proceedings	From October 2009 to October 2011	Dec-06	2.08% (April 2009)

After seeing the differences between European 3G-only mobile operators, which have a much higher market share than Xfera's due to entering the market three years before, price convergence for Xfera must be delayed so as to be reached in approximately four years.

For that reason, we believe it would be correct to reduce the margin that Xfera is currently receiving so that it will be half of the present amount in the final stage. In this way, Xfera’s price on 16 October 2011 should be 0.049764 euros/minute, which would be 24.41% higher than the price approved for the other operators.

The result estimated for Xfera in this manner is completely coherent with the objectives set forth in the EC recommendation of 7 May 2009 and in the ERG Common position with regard to termination rates. This refers to the fact that termination rates must be symmetrical in the medium- and long-term, as asymmetrical rates will only be justified in transition periods during which emerging operators must reach a minimum efficiency scale to permit them to reduce their unitary production costs.

However, given the fact that the Spanish 3G operator entered the market several years later than most of the 3G operators in neighbouring countries (see table 1), our Commission feels that it is appropriate to maintain a certain degree of asymmetry in that company's termination rates throughout the duration of the glide-path mentioned in the present Resolution. In this way, during that period, Xfera will reach a similar market share to those of established 3G operators in other countries, whose 2012 mark-up was eliminated; at the same time, achieving such a market share will enable the company to lower its highest mean unit costs.

I.2.1 EC Remarks regarding the asymmetrical rates granted to Xfera

In its letter of comments, the EC issues its reminder that, as stated in its Recommendation, termination rates should in principle be symmetrical, and any asymmetry should be properly justified. The European Commission recognises Xfera's relatively late entry into the market (for which reason it could be incurring higher incremental costs due to not having reached the minimum scale of efficiency), as well as its higher network costs owing to space and the characteristics of the spectrum it has been assigned. However, the European Commission feels that the CMT has "*not identified or estimated the magnitude of such exogenous cost differences when justifying the asymmetry for Xfera, nor has it specified a target date for achieving symmetry between Xfera and the other operators*". On this subject, the EC states that "*the proposed margins allowed for Xfera may reduce Xfera's incentives to expand and become efficient over time*".

Regarding what termination rates may be applicable to Xfera, the European Commission "*concurs with the CMT's objective to progressively eliminate the asymmetry in the MTRs of Xfera, but invites CMT to revise, in its final measure, the proposed price control methodology and margin for Xfera and to set the glide-path in such a way which takes account of the above and will consequently result in steeper reductions in Xfera's termination rates. The Commission considers that this would also facilitate future compliance with the Termination Rates Recommendation […]*"

Regarding the European Commission's remarks, assessing the magnitude of the exogenous differences to which the EC refers will not be in order, given that there is no cost accounting model for Xfera since it was not obliged to provide one. Rather, its obligation is to set reasonable prices, as stated in the Market 7 Resolution.

However, considering what has happened in other European countries with 3G-only operators such as Xfera who have not been obliged to converge their wholesale rates with those of the rest of the mobile market until reaching a customer base and a market share enabling them to reach minimum efficiency levels (and therefore reduce their average unit costs), we believe it appropriate to gradually reduce Xfera's current margin (48.82%) to 24.41% by the end of the new glide-path. In this way, during the transition period, we anticipate the operator being able to gain the market share that would permit it to reach the level of efficiency referred to in the EC recommendation. In this sense, we consider that the time span of approximately four years could be sufficient for the operator to reach that level.

Our Commission feels that it has demonstrated its intention to reach symmetrical pricing across all networks in the near future. In this way, by the measure adopted in this Resolution, Xfera's mark-up will be reduced by 50% in two and a half years. On the other hand, Our Commission does not find that the abovementioned margin is so high as to discourage investment. As stated in section III.2.2 of Annex 2, during the time when the operator benefited from an even higher differential margin, it also made a greater investment than the other MNOs.

Therefore, our Commission considers that in its final measure, it is appropriate to maintain the 24.41% margin over other operators' prices at the end of the new glide-path.

I.3 One or several termination rates

As stated in the obligations imposed by the Market 7 Resolution, the target termination price for TME, Vodafone and Orange at the end of the glide-path should be the same. This has been the case since 16 April 2009, the effective date of the most recent stage of the glide-path imposed by the previous market definition, which set a converging rate of 0.07 euros for each of the three operators.

While that Resolution stated that prices along each stage of the glide-path would be the same for full MVNOs and their host operators, the MVNO glide-path will be according to the same terms as for host network mobile operators.

Nevertheless, the Resolution states that Xfera must offer reasonable prices for providing termination services, and that the CMT will adopt a decision to set Xfera's connection price for mobile termination. The decision will determine steps for reducing the actual margin (48.82%) with respect to the average termination price for TME, Vodafone and Orange as a result of the new glide-path.

The resolution does not determine whether Xfera's network termination rates at the end of the glide-path presently being defined should converge with those of all other operators.

We should keep in mind that a glide-path's advantage is that it reduces the impact an abrupt price reduction could have on operators. In this case, significant reductions suggest a longer glide-path. As stated above, when we consider Xfera's current margin, which is 48.82% higher than those of other operators, plus the drop in rates that the rest of the operators have had to apply and Xfera's scant customer base compared with the three established mobile operators due to it entering the market at a later date, it does not seem reasonable to advocate identical rates for all operators by the end of the glide-path.

This does not imply that Xfera's current margin should continue indefinitely. As stated in the previous section, the reductions that should be applied to Xfera's rates during this stage of the transition should be higher than for TME, Vodafone, Orange and full MVNOs so as to reach complete symmetry in approximately four years.

I.4 Variation path

The variation path is the rate at which current prices will converge to reach future prices. In particular, this variation path was designed to take into account not only the foreseeable evolution in production costs, but also the impact that these would have on different operators' different results, whether in mobile or fixed markets.

In this sense, it is important to state that the elaborated cost model gives a prediction of what operators' costs will be according to the 2007 cost accounting results that were approved by the Commission.

In the same line, and with the aim of minimising the financial impact to mobile operators' accounts, the variation path for termination rates on mobile networks belonging to TME, Vodafone, Orange and full MVNOs will decrease toward a target price of 0.04 euros/minute at the end of the regulatory period.

For the proposal submitted for public inquiry, our Commission designed a four-stage decrease with the understanding that the decrease would be linear. However, as the Commission feels it would be prudent to lower prices in five stages due to the reasons explained above, it seems appropriate to respond to the allegations made by some operators who feel that the decrease should be more significant in the early stages. On this subject, the Commission feels that it is proportionate and in accordance with the necessary legal guarantees to establish a first stage as a prolongation of the reductions that were implemented during the previous glide-path. Next, constant percentage reductions can be applied beginning in the second stage and continuing until the target price is reached. This way, with a duration lasting six months longer than the initially planned period, a larger decrease is applied during the first stages of the glide-path. The result is shown in the following table.

	Oct 09-April 10	April 10-Oct10	Oct 10-April 11	April 11-Oct 11	Oct 11-April 12
TME, Vodafone, Orange and full MVNOs	0.061270	0.055074	0.049505	0.044500	0.040000

In the report submitted for public inquiry, Xfera, like other operators, will have its mark-up reduced until it reaches 24.41% in the last milestone of the glide-path. This does not imply a constant linear reduction as would be the case with other mobile networks.

Xfera believes that the variation path being imposed upon it is arbitrary, since it is not linear like those of the rest of the operators (as we see reflected in the report submitted for public inquiry), and that, in addition, there is no objective reason to justify this.

Likewise, the operator states that the future model for linear price reduction with identical values in the early and final stages of the glide-path will create higher termination rates for Xfera during the intermediate stages.

Therefore, it proposes an evolutionary path like the following:

Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11
0.090572	0.076969	0.063367	0.049764

With regard to Xfera's allegation, we must first state that the definitive Resolution ratified herein does not establish a linear price reduction path for the other mobile operators, as we explained previously. In any case, if we follow the same line of reasoning described above for Xfera, the evolution path for that operator would be as follows:

	Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11	Oct 11-April 12
Xfera	0.091182	0.078372	0.067361	0.057898	0.049764

Here, we observe that the first stage maintains the mark-up that was established for Xfera during the previous glide-path, and then reduces it proportionally with respect to the other operators until it reaches 24.41% at the end of the regulatory period.

I.5 Same price regardless of home network

The service being regulated is call termination on mobile networks. In this respect, and in accordance with that stated in the Market 7 Resolution where this potential competition problem is emphasised, the price must be the same regardless of the mobile or fixed home network.

As a result, the voice termination price on a mobile network will be the same whether or not the service originates on a fixed or mobile network, by virtue of the obligation of non-discrimination.

I.6 Adjustment periods

Regardless of the length of the multi-year glide-path period, we still face the question of how many price changes there should be per year.

When we increase the adjustment frequency, the regulator faces the dilemma of either passing eficiencies to the consumer or the impact on incentives for cost reduction on operators. When the revisions are more frequent, there is more benefit for consumers, but there are also fewer incentives for the operators to lower costs.

Therefore, we propose a six-month adjustment period in order to maximise customer benefits while seeking a balance with the impact on mobile operators.

II MODEL PARAMETERS AND VARIATION PATH

Having seen the parameters for the glide-path, we will now present the variation path for termination rates for TME, Vodafone and Orange[10] while keeping the following design for different model variables in mind:

- Regulation period: Two and a half years
- More significant biannual decreases during the first stages.
- Price: €0.04/min at the end of the regulatory period
- Single nominal price

Considering the above, the variation path for termination rates for the above operators (single maximum nominal prices, expressed in euros/minute) will be as follows:

[10] And as a result, for full MVNOs.

Table 2: Evolution path for termination rates for TME, Vodafone, Orange and full MVNOs

	Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11	Oct11-April 12
TME, Vodafone, Orange and full MVNOs	0.061270	0.055074	0.049505	0.044500	0.040000

In Xfera's case, the variation path of its termination rates is characterised by:

- Regulation period: two and a half years
- Greater biannual decreases during the first six-month periods.
- Price: €0.049764/min at the end of the regulatory period
- Single nominal price

Considering the above, Xfera's variation path for termination rates (single maximum nominal prices, expressed in euros/minute) will be as follows:

Table 3: Evolution path for Xfera's termination rates

	Oct 09-April 10	April 10-Oct 10	Oct10-April 11	April 11-Oct 11	Oct 11-April 12
Xfera	0.091182	0.078372	0.067361	0.057898	0.049764

Five. Notification and publication of the Measure

According to that stated in article 7.5 of the Framework Directive and article 5.4 of the Market Regulations, the Telecommunications Market Commission will endeavour to the best of its ability to consider the remarks made by the European Commission and the NRAs, and will adopt the resulting Draft Measure, at which time the European Commission will be notified of the same.

In turn, article 10.1 in the LGTel states that the Telecommunications Market Commission will define "*the markets of reference for electronic networks and communication services (...) and the geographic scope for each of the above, the characteristics of which may justify imposing specific obligations, according to the resolution published in the Spanish Official Journal.*"

By virtue of the stated factual and legal considerations, the *Telecommunications Market Commission*

HAS DECIDED

First. To set the price for voice termination connection service for networks belonging to Telefónica Móviles España, S.A.U., Vodafone España, S.A., France Telecom España, S.A., Euskaltel, S.A., Cableuropa, S.A.U. y Tenaria, R Cable y Telecomunicaciones Galicia, S.A., E-Plus Móviles Virtuales España, S.L.U., Telecable de Asturias, S.A.U., BT España Compañía de Servicios Globales de Telecomunicaciones, S.A.U., Jazz Telecom, S.A.U., Best Spain Telecom, S.L. and Fonyou Telecom, S.L. throughout the regulatory period between 16 October 2009 and 15 April 2012, according to the following table (single maximum nominal prices, in euros/minute):

	Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11	Oct 11-April 12
TME, Vodafone, Orange and full MVNOs	0.061270	0.055074	0.049505	0.044500	0.040000

Second. Set the price for voice termination connection service for networks belonging to Xfera Moviles, S.A. throughout the regulatory period extending between 16 October 2009 and 15 April 2012, according to the following table (single maximum nominal prices, in euros/minute):

	Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11	Oct 11-April 12
Xfera	0.091182	0.078372	0.067361	0.057898	0.049764

Third. All operators with such an obligation will offer these approved connection prices to all connected operators through 11 October 2009.

If the connected operator does not object to the prices offered by operators with obligations by 24.00 hours on 15 October, it will be understood that the connected operator accepts the new prices approved in the present resolution.

New connection termination rates will become effective at 0.00 hours on 16 October, whether the interconnected operator accepts them expressly before they become effective or if that operator has not objected to the proposed prices before 24.00 hours on 15 October.

New termination connection charges for different mobile networks under obligations will require modifications to operators' current General Agreements or Addenda with other operators. Any modification must be made in writing within ten working days of the effective date for the new prices.

The procedure described herein will also be applicable to different adjustment periods proposed by the present Resolution.

Fourth. The European Commission will be notified of the approval of the glide-path for setting voice termination connection charges for mobile networks belonging to operators determined to have significant market power.

Fifth. The present act will be published in the Spanish Official Journal, according to that stated in article 10.1 of the General Telecommunications Law (LGTel) 32/2003 of 3 November.

Sixth. The present Resolution will be effective on the date of its publication in the Spanish Official Journal.

This certificate is issued under the provisions of article 27.5 of Law 30/1992, dated 26 November, and article 23.2 of the Consolidated Version of the Internal System Regulations approved by the Commission Board Resolution of 20 December 2007 (Spanish Official Journal of 31 January 2008), prior to the approval of the Act of the corresponding session.

Furthermore, it is hereby stated that a voluntary appeal for review may be lodged against this deed with this Commission within one month from the day following its notification or, directly, an Administrative-Contentious appeal before the Administrative-Contentious Division of the Spanish National Court, within two months as of the day following its notification, in accordance with the provisions of article 48.17 of Law 32/2003, dated 3 November, the General Telecommunications Law, the fourth additional Disposition, paragraph 5, of Law 29/1998, of 13 July, governing the Administrative-Contentious Jurisdiction, and Article 116 of Law 30/1992 of 26 November, of Legal Regime of Public Administration and of Common Administrative Procedure, and without prejudice to the provisions of number 2 of Article 58 of the same Law.

The present document bears the electronic signature of Secretary Ignacio Redondo Andreu, with the approval of the President, Reinaldo Rodríguez Illera.

ANNEX 1

METHODOLOGY FOR ESTIMATING THE VARIATION PATH FOR MOBILE NETWORK TERMINATION RATES

We have implemented a cost calculation model and a technical model for dimensioning the mobile network that will be necessary to conduct the estimated traffic for different services, with the coverage and service quality specified by mobile operators.

I COST MODEL

The purpose of the cost model is to calculate each operator's unit cost for voice termination during each financial year from 2008 to 2012.

The model is based on an estimate of the operator’s total costs and considers two fundamental cost types:

- Network costs: calculated according to the network dimensioning and the cost of its elements; obtained from cost accounting and other data provided by operators.
- Non-network costs: estimated according to cost accounting and projected cost evolution.

The resulting costs are assigned to voice termination services by applying each operator's imputation factors obtained from the cost accounting results.

The unit cost is obtained by dividing the total cost of voice termination by the estimated number of minutes of traffic for voice termination in each financial year.

The services for which a model exists are:

- Voice termination – Fixed group operators.
- Voice termination – Fixed non-group operators.
- Voice termination – Mobile operators.

In addition, the combined cost of voice termination services is also calculated.

I.1 Network costs

The network costs that can be attributed to voice termination are indicated in the following table. They are based on the network elements that were homogenised according to the Resolutions of 19 June 2008[11]:

Table I-1 Network elements for the cost model

BTS	BSC
B NODE	RNC
Transcoder	Transit and access MSC
PTS	MSC Server
MGW	HLR
EIR/AUC	BTS-BSC Link
BSC-MSC Link	Node B- RNC link
BSC-MSC Link	MSC – MSC Link
Signalling links	IP Transport
ATM transport	National interconnection
International interconnection	Voicemail
Prepaid services platform	Invoicing platform
Other network costs	

The number of network elements up to 2008 is real data taken from information provided by operators. Beginning in 2009, they will be estimated with the technical network model, as indicated in section I of this annex.

[11] Resolutions regarding adaptation to the New Regulatory Framework and homogenisation of the cost accounting systems used by France Telecom España S.A., Telefónica Móviles España, S.A.U., and Vodafone España, S.A. (Dossier AEM 2008/261-263).

Based on the network elements added during each financial year since 1995 and on their useful life, we obtain the following for each period included in the model:

- Gross value: the result of listing the total elements included in that financial year and multiplying each by its unit value.
- Net value: net value for each financial year is determined by subtracting the amount of accumulated depreciation for all assets from the gross value.
- Depreciation amount: calculated by dividing the gross value of the element by its useful life. This cost is only attributed for those network elements that are not fully written off.
- Weighted average cost of capital (WACC): calculated by applying each financial year's WACC to the net value for each network element.
- Operating cost: calculated by applying a percentage obtained from cost accounting results to the gross value of network elements.

We must stress that each element's cost is the total cost, including cost of other sub-elements such as licences, Tic, construction in progress, etc. This means that it is similar to the amount for the Network Components' Activity Centres (NCAC) in cost accounting, not to the value of the Calculated Cost (CC).

Therefore, the calculated cost of the network elements is made up of the following:

Table I-2. Cost of network elements

Depreciation amount
Cost of capital
Operating cost
Total cost per element

I.2 Other non-network costs (ACDAS/ACNDAS)

The rest of the costs that are attributed to the voice termination service are as follows:

Table I-3. No-network elements of the cost model

Income tariff
Spectrum tariff
Market development
Third-party operator invoicing
List of third-party operators
Material
Structure/ACNDAS

These costs are estimated using the cost accounting results and projected evolution until 2012. The model only estimates the total cost of these items, without distinguishing between depreciation, capital cost and operating costs, since most costs are operating costs.

The listed costs correspond to "activity centres directly attributable to services" (ACDAS) and "activity centres not directly attributable to services" (ACNDAS), and are homogenised from the 2007 cost accounting systems, except for:

- Market development: includes ACDAS for handsets, commissions, sales, handset's purchasing and logistics and new services.
- Structure/ACNDAS: Corresponds to ACNDAS for structure, other taxes and financial costs, where applicable.

I.3 Attributing costs to services

Total costs are attributed to services according to the imputation factors gathered from the cost accounting results. We must highlight the fact that although the operator's total costs are calculated, only the cost of voice termination service is calculated during this phase.

Next, we present a general diagram of the cost model that is used:

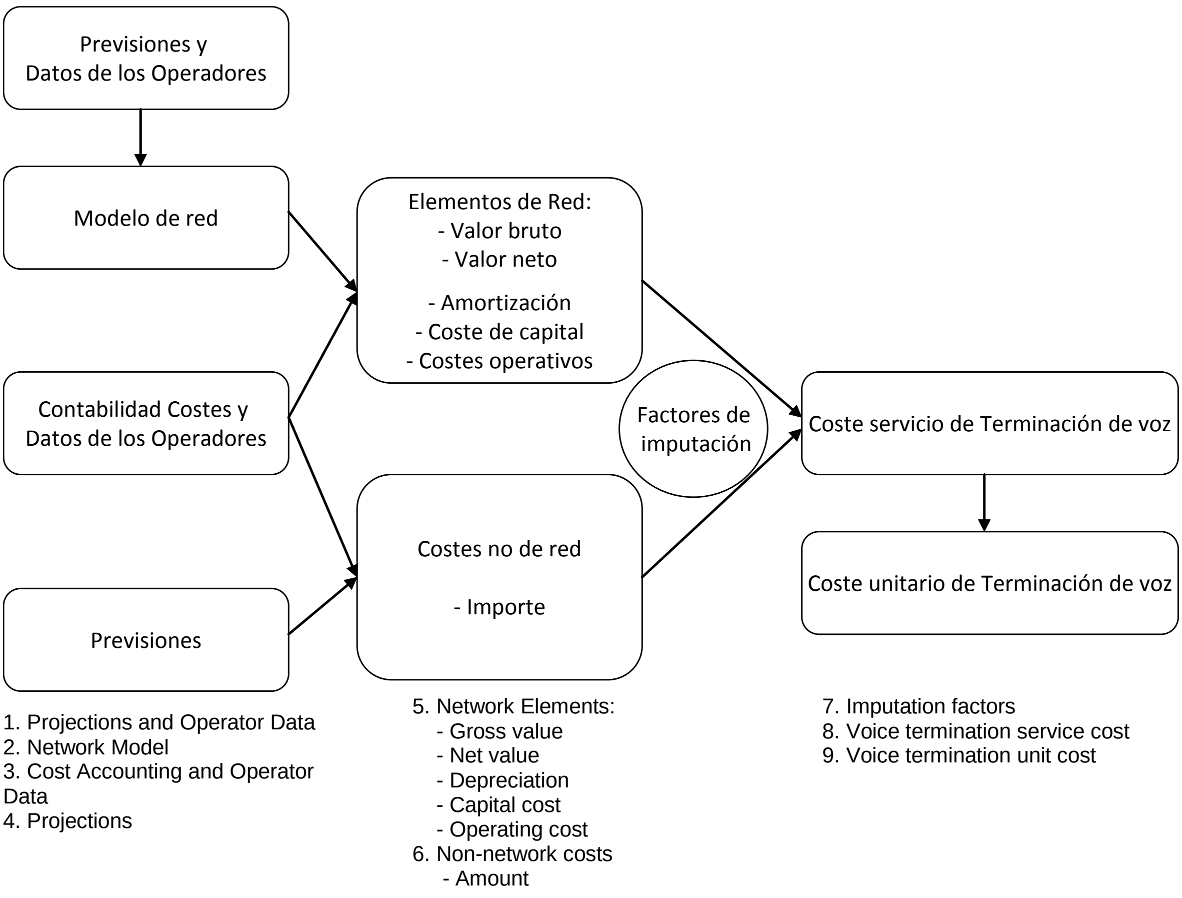


Figure I-1 Diagram of cost model

I.4 Reconcilation of the model

Operators' costs were calculated for the financial years from 2007 to 2012. The 2007 results were compared with the cost accounting results from all three operators, giving the following result:

Table I-4 Reconcilation of cost model with cost accounting

Operator	Difference with respect to 2007 CAS
TME	-0.1%
Vodafone	1.1%
Orange	-2.2%

As we can see, the cost accounting and cost model results correspond.

II TECHNICAL MODEL

II.1 Traffic at the start of the model

Initial traffic data used in the model were obtained from mobile operators' cost accounting results for 2007 and the data for CMT's 2008 annual report[12]. Based on 2007-2008 traffic data and the available historical information, we estimated initial traffic data for 2009-2012 per service and operator.

The process can be described as follows:

1. Total traffic estimate
2. Division of traffic among operators

II.1.1 Total traffic estimate

For the technical model, we estimated the evolution of the following variables for 2009 to 2012. This includes all services provided by mobile operators:

[12] At the date when the model was created, not all data for financial year 2008 were available. The model uses real data whenever possible. Where real data was not available, estimated data are used.

- Retail and wholesale voice and videoconference traffic.
- Retail and wholesale short message SMS traffic.
- Retail and wholesale short multimedia message MMS traffic.
- Data traffic (Mbytes)

To do so, we estimated the two factors upon which the variation of those services depends:

- Total number of mobile telephone lines
- Annual consumption per line for each of the above services.

The product of the number of lines and the consumption per line/year gives us the total traffic for the different services.

The total number of lines was estimated based on its previous growth rates. For 2012, penetration was estimated at 125.6 lines/100 inhabitants based on a population estimate of 46.96 million inhabitants provided by the Spanish Institute of Statistics (INE)[13].

[13] The population evolution path was calculated based on the Spanish Institute of Statistics' (INE) short-term population projections for 2008-2018. The INE provides two figures, one low and one high. This study uses the value of the mean of the two figures.

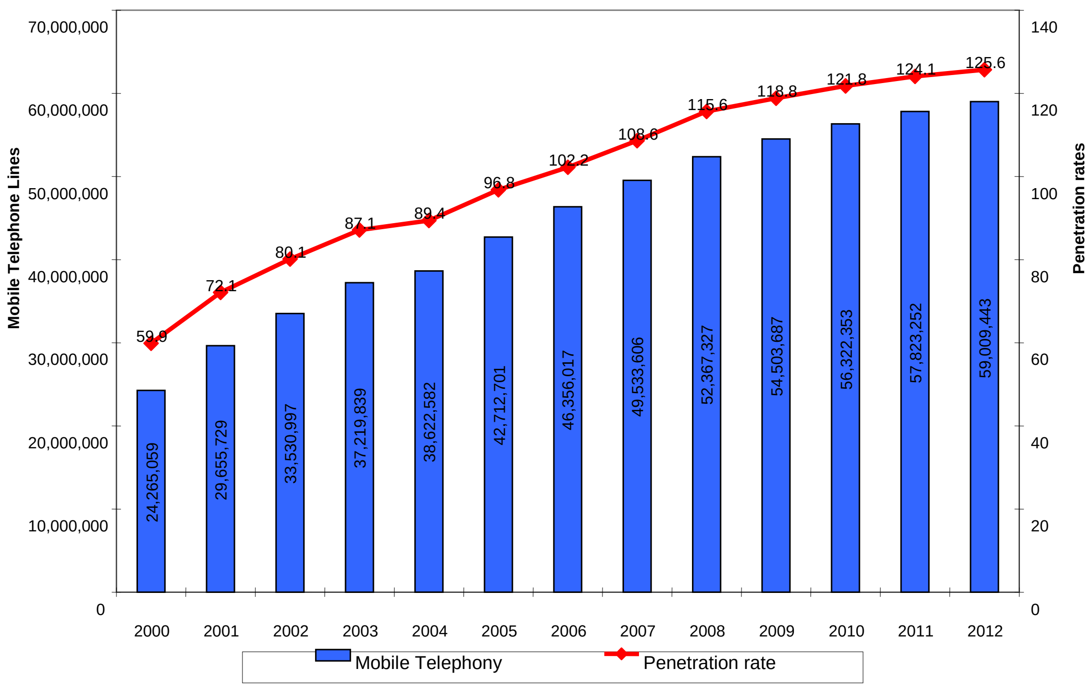


Figure II-1 Mobile telephone lines and penetration rate

Likewise, the evolution of service consumption per line was also determined based on its tendency lines, with the exception of the data traffic in Mbytes. Given the lack of historical data traffic information (only 2007 and 2008 data available), this estimate was given based on operator-provided projections for the increase in 3G service subscribers. We estimate that the number of 3G subscribers will multiply by 2.2 between 2008 and 2012. The same increase is applied to give us 2012 data traffic with respect to that in 2008.

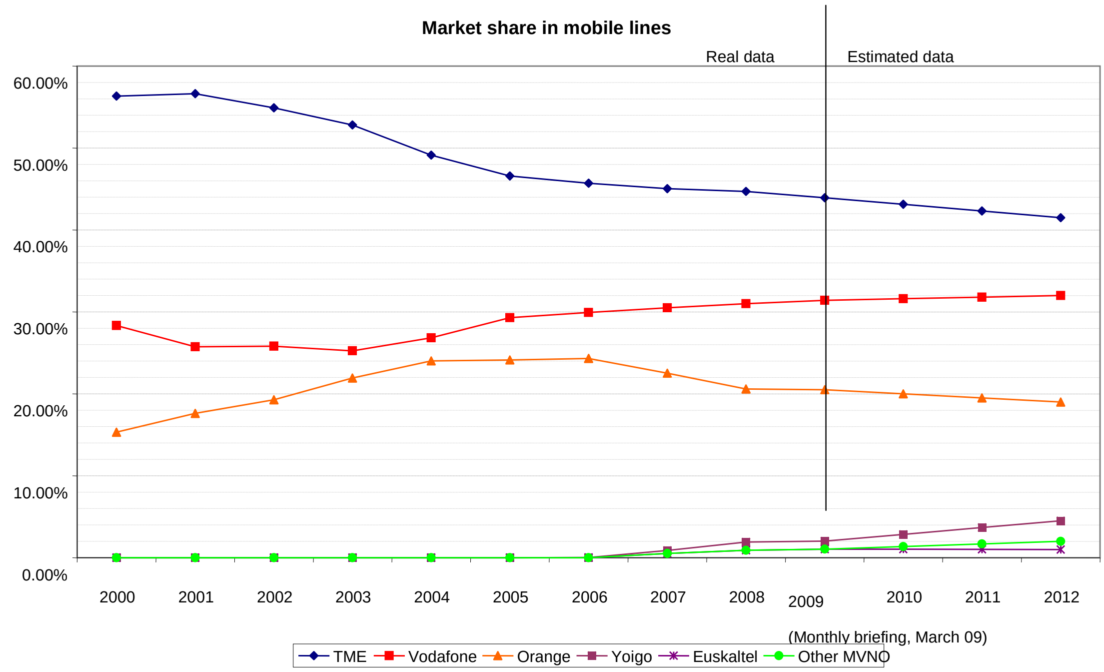
In general, by observing historical data we observe an evolution path for each different service. Nevertheless, that tendency shows a rupture in 2008, which could be due to decreased consumption resulting from economic downturn. We suppose that this trend will continue through 2009 and return to its course in 2010.

II.1.2 Division of total traffic among operators

Once the evolution in total traffic for each different service is calculated, we estimate the traffic corresponding to each operator. Dividing total traffic for each different service by operator is carried out using the evolution of the mobile line market share as the proxy variable. In other words, it is implicitly assumed that if an operator reaches a larger share of the market, measured in mobile telephone lines, it will also reach a larger market share for voice traffic, SMS, MMS, data services, etc.

As we saw before, an exception exists with data for the market share of data traffic measured in Mbytes. The market shares are unstable, as this is still quite a nascent service. In this case, it is assumed that each operators' market share for data traffic tends toward the market share for their mobile telephone lines in 2012.

To sum up, we determined the evolution of the market shares for mobile lines and established market shares for mobile lines per operator in 2012. Based on the variation percentages for the market shares for lines, we determined the evolution of the market shares for other services.



Source: CMT Annual Reports 2000-2007 and Monthly Briefing 2008 - March 2009

Figure II-2 Market shares per line

Once the market share for services is determined per operator, and total traffic has been estimated for those services, we get the result for total service traffic per operator, which will be used in the model for dimensioning each operator's future network.

II.2 Mobile network dimensioning

The technical model was used to dimension those elements having to do with voice termination services, namely:

- 2G and 3G access network components (BTS base station, node B, BSC and RNC drivers, links, transcoders).
- 2G and 3G switching elements (MSC, MSC Server, MGW).
- Subscriber and visitor registers.

Network elements that do not conduct voice termination traffic, such as those specific to data, SMS or MMS, were not dimensioned. The technical model does not estimate the core transport network or the prepaid platforms and voicemail. Evolution of those services is estimated based on operator-provided historical data for the listed elements.

When dimensioning the necessary elements, the model considers the following factors:

- The evolution of the projected degree of coverage for 2G and 3G services for each one of the mobile network operators.
- The evolution of the quality of service offered by each network, measured by the blocked call probability.
- The projection for offered and conducted traffic for each element being modelled.
- The evolution of the percentage of traffic conducted through the 2G or 3G network.
- The evolution of mobile broadband services.

The number of network elements for sizing is calculated according to both the coverage requirements in those units that depend on the coverage to be reached, and on peak-time traffic.

To forestall increased broadband service, mainly in cities with a greater population density, the model provides for the use of cells supporting increasing amounts of service and a gradual increase in the capacity of all node Bs offering coverage in these zones throughout the modelled period.

II.2.1 Coverage

The coverage for each base station has been estimated taking into account maximum coverage range according to different mobile technologies. To this end, we used each operator's specific range for GSM 900, DCS 1800 and

UMTS according to the following geographic areas defined by population density:

Table II-1 Geographic area and population density

Geo. Area	Population density
Dense urban	≥ 1,000 inhabitants/km^2
Urban	1000 > inhabitants/km^2 ≥ 300
Suburban	300 > inhabitants/km^2 ≥ 100
Rural	< 100 inhabitants/km^2

Each base station's coverage is calculated by taking the area of a hexagon (found by 2.6 x r^2), taking into account each operator's radius for the 2G and 3G network in each of the geographic areas.

II.2.2 Traffic

II.2.2.1 GSM radio network

For sizing the 2G radio network, we considered the following parameters, according to data provided by mobile network operators for 2006-2008 and their projections up to 2012:

- Peak-time 2G radio network traffic measured both in Erlang and in call attempts, according to the proportion of annual traffic generated by peak-time as provided by the operator.
- Number of necessary 2G channels during peak-time. This figure is obtained from the peak-time network radio traffic and the voice and data channel throughput.
- Blocked call probability percentage during the modelled period.
- Percentage of total traffic represented by traffic on the 2G network.
- Traffic distribution by geographic area, calculated according to the number of inhabitants in each area according to the most recent data from the INE.
- Number of transceivers per base station in each defined geographic area, according to operator-provided data.

- Number of effective traffic channels per transceiver, minus channels reserved for signalling.
- Number of sectors per base station, estimating 3 sectors per station.

Based on each operator's assigned radio spectrum on 900MHz and 1800MHz bands, we calculated the maximum number of transceivers per BTS, which is always higher than the number of transceivers for the geographic area the operator indicates.

The number of BTS necessary for each operator to conduct peak-time traffic is determined by to the mean number of transceivers per BTS in each geographic area and the total 2G traffic conducted per station, according to the call blocking probability the operator specifies.

To estimate the number of BSCs, we assumed that capacity is measured in terms of managed GSM transceivers; a maximum of 512 GSM transceivers is considered per BSC.

II.2.2.2 UMTS radio network

For sizing the 3G network radio, we considered the following parameters, according to data provided by mobile network operators for 2006-2008 and their projections up to 2012:

- Peak-time 3G radio network traffic measured both in Erlang and in call attempts, according to the proportion of annual traffic generated by peak-time as provided by the operator.
- Percentage of total traffic represented by traffic on the 3G network.
- Blocked call probability percentage during the modelled period.
- Total capacity per node B.

The number of node Bs necessary for conducting peak-time traffic for each operator is calculated based on the capacity per node B in Mbit/s.

It is assumed that the capacity of RNC drivers depends on the number of node Bs and the throughput they support.

II.2.2.3 Dimensioning transport links

The model estimates what 2G and 3G access network transport links are necessary to conduct projected 2G and 3G traffic during 2009-2012. It is assumed that these links are formed by E1 equivalent links with a 2Mbit/s capacity.

II.2.2.4 Dimensioning switching elements

Switching elements in the 2G MSC network and the 3G MSC Server network are dimensioned according to the total demand of traffic measured in call attempts at peak-time for 2G and 3G traffic.

We assume that MSC switching elements include the visitor location register function, VLR.

The number of peak-time call attempts is obtained from the data each mobile network operator provides regarding the mean duration of a voice conversation, and the percentage of completed calls throughout the 2006-2008 period as well as projections up to 2012.

MGW units are dimensioned according to the total demand for 3G traffic at peak-time, measured in Erlang.

II.2.2.5 Dimensioning switching elements

As with switching elements, HLRs are dimensioned according to the total demand for traffic measured in call attempts during peak-time.

III COST MODEL RESULT

Unit costs for each operator have been calculated according to traffic, projected demand and network dimensioning as explained in sections preceding this annex.

By calculating weighted termination traffic, we arrive at a mean weighted cost of €0.0245/minute for 2012.

ANNEX 2: ALLEGATIONS IN THE PUBLIC INQUIRY.

I GENERAL CONSIDERATIONS

I.1 Summary of allegations

In general, TME and Vodafone consider that the measures proposed by the CMT are too abrupt, given that the final termination rates are very low, placing Spanish operators well below the European average. For that reason, both operators feel that the regulated decreases in connection charges should not be pronounced or aggressive, and could be resolved with higher rates over two years, or using the rates proposed by the CMT over the span of three years.

Likewise, they believe that adding more regulatory decisions in a time of economic crisis could diminish operators' competitive and financial positions, meaning that the proposed measure could seriously damage company profits, which could lead to lack of incentives for new investments (mobile broadband, NGAs) or, according to Vodafone, the so-called waterbed effect. Such decisions include the contribution to financing universal service, municipal fees for using local public domain, the 0.9% contribution listed in the proposed measure to finance the public entity RTVE (currently being debated in parliament) and the 5% fee mentioned in the Audiovisual Draft Bill approved by the Spanish Council of Ministers on 26 June.

Vodafone also maintains that the impact of lowering rates would be much more serious for that company than for its competitors, particularly the Telefónica group. Vodafone states that according to historical trends. “*a large part of the decrease in termination rates will be directly compensated by raising the margin for fixed-to-mobile calls; in this market, Telefónica de España (hereinafter, TESAU) held a share percentage of 67.4% of the traffic in 2008*".

Vodafone believes that an aggressive decrease in mobile termination rates, like that planned by the CMT, will not provide any benefit to users of fixed-to-mobile traffic; since TESAU has no legal obligation with regard to customer prices, it is not likely that there will be a significant decrease, or even one that is identical to the drop in customer rates. Rather, TESAU will directly increase the retention (margin) for fixed-to-mobile calls, and as a result, the Telefónica Group will reinforce its dominant position.

On the other hand, we cannot ignore the operator's claim that the proposed aggressive decrease in mobile termination could have such a strong impact on full mobile virtual network operators that it could eliminate some of the new operators trying to gain ground in the mobile market.

In turn, Orange, E-Plus, Euskaltel, ONO, Jazztel, R Cable and Telecable are also opposed to the proposed measure, as they consider that the decrease is very slight, meaning that the excessive margins of the operators making a profit would be maintained over more time. They request quicker reduction in their competitors' margins.

Specifically, Euskaltel, R Cable and Telecable believe that the slowness of the gradual descent is actually a direct subsidy for the profits made by dominant operators in the Spanish mobile market. In this sense, they maintain that MNOs have been and are still being subsidised, and the income from connection fees did and does make up as much as 30% of the income of mobile operators with their own network (60-70% of their EBITDA).

This imbalance is such that for a fixed network operator which also is a full MVNO, competition is impossible considering that mobile termination rates are still so high that on-net price offers from dominant operators become insurmountable barriers to offering competitive prices to the end customer.

The problem lies not only in reinforcing the dominant position of MNOs by subsidising their connection income, but also in the MNOs' convergent offers which are obviously weakening fixed-network operators who are not in a position to equal those offers because frequency limiting makes it impossible to create new mobile networks.

E-Plus indicates that it is very important to significantly lower mobile termination rates for those mobile network operators with a higher market share due to repercussions for the competition arising from the fact that the three main operators control around 98% of the retail market. This is directly related to the same question, since mobile-to-mobile call prices clearly fall into two different categories, on-net and off-net.

In this type of situation, the most recent operators to have penetrated the Spanish market, and which therefore have smaller market shares, experience difficulties in competing with on-net mobile-to-mobile prices offered by operators such as TME, Vodafone and Orange. Those operators benefit from the network effect caused by each holding a significant share of the market (45, 30.5 and 22.5, respectively), and by controlling 98% of the retail market as a group.

Low on-net prices combined with high off-net prices and high termination rates create a closed-market effect for newcomers, and only provide benefit to the most important operators with the largest economies of scale.

In addition, E-Plus believes that the largest mobile operators' off-net prices do not faithfully reflect the decrease in termination rates arising from the glide-path. In conjunction with the significant difference in its on-net call prices, this creates a network effect that discourages any end user from considering switching to any other operator without a high market share; this reinforces their oligopolistic position and prevents new operators from entering or remaining in the market.

Xfera, for which CMT Services proposed setting a price at the end of the glide-path that would provide a margin of 24.41% from the price proposed for all other operators, deserves a special mention. Xfera itself maintains that the above margin is very low, given that its costs are much higher; as a result, its contribution margin is still negative. It also believes that there is no need for a glide-path spanning two years, and that it should be extended to three.

With respect to the termination rate on Xfera's network, TME, Vodafone, Orange and E-Plus all disagree with the proposal of maintaining a margin above that of other operators' rates at the end of the glide-path.

I.2 Response to the allegations raised in the public inquiry

The allegations relating to the glide-path duration have already received a response. In any case, it is fitting to add that the reduction in the proposed prices should not come as a surprise to operators declared as having SMP in the market of reference, given that this is basically a continuation of the last glide-path. For that reason, the CMT does not share the opinion that this decrease is an abrupt one. Rather, it believes that the rate of decrease is gradual; by the second regulatory stage, it will reach the descent rate found in the current glide-path.

On the other hand, although TME and Vodafone are correct in stating that the general economy is in a moment of crisis and that operators in the e-communications sector have to face different fiscal and financial burdens, the CMT does not believe that reducing termination rates will lower operators' competitive and financial position. The entire economy is passing through a period of crisis that is affecting all operators in the e-communications sector; one might even think that it would affect smaller companies more severely. Nevertheless, those operators are not asking for a smaller reduction in termination rates; on the contrary, they request a larger, more abrupt decrease in those rates. In fact, operators with a smaller market share consider high termination rates to be a barrier to entry, and one that prevents them from competing with operators with SMP. Therefore, TME's and Vodafone's argument is not acceptable; many operators believe that reducing termination rates does not weaken operators' competitive position; rather, it strengthens it by granting competitive ability to operators with a smaller market share (and smaller economies of scale).

This argument also serves to partially refute Vodafone's claim that reducing wholesale termination rates transmits no benefit to end consumers for fixed-to-mobile calls, and merely reinforces the Telefónica Group's dominant position. It is possible that reducing wholesale termination rates has not benefited end users as completely and quickly as was hoped, but it cannot be denied that whether directly or indirectly, end users have benefited from more and better offers. In fact, full MVNOs argue that the termination rates are exactly what prevents them from offering more competitive off-net services, which are highly necessary because these operators have such a small customer base. This increase in competition will certainly benefit end customers.

Neither can it be argued that reducing termination rates will have such an impact on full MVNOs as to make their business unviable. As we have stated, MVNOs themselves show the most interest in a quicker, more drastic reduction in termination rates.

The Market Regulations state that the CMT will ensure that the price control methods that are imposed serve to foster efficiency and sustainable competition and grant maximum benefit to customers. On the other hand, cost accounting results indicate that there is a clear difference termination service rates and the costs for those services; the CMT has been using the glide-path to gradually reduce this difference. The CMT's proposal aims to find a balance between the objective of reducing termination service prices in such a way as to foster efficiency and sustainable competition and grant maximum benefit to customers, and that of applying this price reduction in a gradual, predictable way for operators in order to provide real incentives for reducing costs.

There is no doubt that reducing termination rates is in keeping with the listed objectives. On the one hand, reducing prices will create strong incentives for operators to reduce costs and improve their efficiency. On the other hand, in the case of operators who have recently entered the market, it will improve their ability to compete, making their initiatives sustainable over time. Improved, long-term competition will mean better, more diverse, and more economical services which will benefit consumers.

In this sense, and in response to the general questions raised by the operators, the CMT believes that the glide-path is adequate under the terms proposed in the present Resolution. Allegations regarding more concrete matters will be answered in a later section.

II DURATION

II.1 Summary of allegations

ONO agrees with CMT's approval of a two-year glide-path and also believes that there are other arguments, related to technology and the evolution of mobile networks in the short and medium term, that justify that decision. These possibilities include the development of technological neutrality on the 900MHz band, deployment of femtocells by mobile operators, and the introduction of LTE technology.

On the contrary, Xfera maintains that the duration of this measure could be extended to three years, so as not to make the new glide-path impossible. It would begin on 16 October 2012, and could be set up according to the results of the bottom-up model that the CMT will have developed by that time, thus complying with the EC's target date. This alternative would somewhat soften the impact caused by reducing the income mobile operators receive for termination traffic on their respective networks and modulating the incentives for investment that they will encounter.

TME believes that this is not a two-year proposal, but rather, one spanning a year and a half with an average annual reduction of 31%, while in the most recent market analyses carried out in other countries, such as Malta and Estonia, the glide-path's course toward the termination rates published by the ERG had a maximum yearly decrease of 10%. For this reason, it questions whether the CMT's proposed decision is excessively harmful for the network operators involved and for the development of the Spanish mobile communications market.

It therefore believes it necessary to extend the duration of the regulatory period up to October 2012, the date when operators must reach the proposed target level of 0.04 euros, and not finalise it earlier. This date ensures a stable environment that will give operators certainty until the development of the new cost model that will be in effect at the end of 2012. At the same time, it allows operators to reach 2012 with an appropriate level for facing the results of the new model, with mean annual reductions in line with those in other countries, while avoiding excessive penalties for the Spanish market and mobile operators.

II.2 Response to the allegations raised in the public inquiry

As stated above, our Commission, in response to the allegations that were raised, has decided to prolong the length of the glide-path by six months.

III DEFINITION OF TARGET PRICE

III.1 For TME, Vodafone, Orange and full mobile virtual network operators

III.1.1 Summary of allegations

According to the allegations that we received, none of the operators considers the target rate to be appropriate. Nevertheless, the termination rate for networks belonging to TME, Vodafone, Orange and full MVNOs must be considered separately from Xfera's rate.

In the first example, operators such as Orange, ONO, E-Plus, Euskaltel, Jazztel, R Cable and Telecable believe that the established termination rate is very high. On the contrary, Vodafone and TME feel that the rate set for their networks is very low.

Furthermore, Vodafone maintains that there is an error in the glide-path's initial rate, and that it is in fact higher than 0.07 euros/minute; therefore, if this point is not reviewed, the real decrease would be considerably greater than that projected in the CMT's report.

According to that operator, that higher rate is based on the fact that for the current glide-path, operators used a billing model with a first-minute surcharge, and as a verification method they used a typical rate model that "*does not offer a perfect model of the telephone traffic's statistical behaviour; instead, it distorts the verification process in such a way that the true effective rate is higher than the target rate shown on the typical rate model.*"

Vodafone alleges that by eliminating free choice of differing rates according to the time of day and the different rate structures that were created with the Market 7 Resolution, these distortions can be prevented in the future, but we cannot ignore the important effect of such distortions in the first stage of the new glide-path being discussed. Therefore, it believes that the initial rate for measurement should be 0.0725 euros/minute for TME, Vodafone and Orange and 0.1061 euros/minute for Xfera, instead of the price in the proposal, which is affected by the distortion from the statistical verification method.

III.1.2 Response to the allegations raised in the public inquiry

The target price proposed in CMT Services' report for TME, Vodafone, Orange and the full MVNOs is indeed appropriate, despite operators' arguments, since it would enable us to reach the average weighted unit cost of 0.0245 euros/minute for mobile termination, as estimated by the model, by 2012. This way, by applying a six-month reduction to the current maximum average price, 0.07 euros/minute, and with a glide-path spanning two and a half years, we reach the target price of 0.04 euros/minute in the last stage (the period from October 2011 to April 2012).

By these means, as established in the regulatory framework, the production costs for the voice termination service and its projected evolution over the period will be considered when determining the target price. At the same time, the impact of the price reduction will be modulated by applying stepped reductions during the length of the glide-path. Based on the 2007 cost accounting results from TME, Vodafone and Orange, the estimation model projects the termination costs up to 2012, considering the variations in demand, services, coverage and service quality that may be present during this period.

The planned initial price of 0.07 euros/minute coincides with the mean maximum price of the last stage in the glide-path (spanning April to October 2009), which was approved for TME, Vodafone and Orange by the Resolution of 28 September 2006. Therefore, despite Vodafone's statement, there is no error in adopting this mean price as an initial value for calculating the new variation path.

Our Commission feels that the present dossier cannot be used for reviewing any possible distortions in the verification method that was used to create the previous glide-path, and in any case, according to Vodafone's statement, the company benefited from that distortion throughout the length of that glide-path.

III.2 Regarding Xfera's price differential

III.2.1 Summary of allegations

With the exception of Xfera, nearly all operators believe that the proposed price is excessively high and unjustified.

Orange indicates that Xfera is in a privileged position, since its lack of any obligation to maintain a cost accounting system enables it to maintain a regulated differential that is not permitted for other operators.

Orange criticises the use of a criterion such as a company's date of appearance on the market, and states that we fail to mention that Xfera has had its licence since 2000, although it freely and willingly decided to delay its operations until 2006 with the idea that that moment would be more beneficial to its strategy.

Orange believes that out of all operators, Xfera has the most efficient network deployment from a cost perspective, and that this is increased by its not having to comply with any short- or medium-term network obligations. Orange maintains that its national roaming agreement must include some extraordinarily competitive prices since it has changed providers and deployed its network only in those places where it is more profitable than using national roaming; in addition, it has kept its deployment in step with its commercial needs and growth, and for these reasons, Orange believes that Xfera's costs must be quite low.

Orange believes that Xfera is benefiting from the most efficient economic combination possible (national roaming, deploying own network) in order to offer service to its clients, and furthermore, has the obvious added advantage of having the best available coverage in places where it has taken no steps to deploy its network, such as rural areas and secondary roads.

Based on the above, Orange feels that it is not appropriate to maintain the differential proposed in the Draft Measure.

In turn, E-Plus believes that Xfera should not be permitted to have asymmetrical voice termination rates, given that some full MVNO operators who entered more recently are being subjected to the obligation of setting the same symmetrical rates that apply to operators such as TME, which holds more than 40% of the market.

E-Plus does not understand why Xfera is permitted to have an asymmetrical option that was not permitted for MVNOs. The operator believes that Xfera has spent more than eight years enjoying a multitude of means for compensating its subsequent entry on the market, and that its current business model differs only slightly from that of a MVNO, since it provides services through national roaming agreements, which are comparable to a full MVNO's access agreements.

Therefore, according to E-Plus, if MVNOs may not enjoy asymmetrical termination rates that are in fact cost-oriented, the asymmetry permitted for Xfera is not well-grounded and should either be eliminated, or its glide-path slope accelerated, so that its prices may converge more quickly with other operators' termination rates.

Regarding the asymmetry the CMT proposes for Xfera, Vodafone feels that reducing the margin over each stage of the glide-path is a positive step, but believes that the glide-path's last stage, on 16 April 2011, should result in convergence.

According to TME, the fact that Xfera has a smaller market share than other European 3G operators does not necessarily imply that it requires more time to benefit from overpricing. This is because an operator which makes a very small investment requires less time in order to make its investment profitable, and also has fewer market share and customer needs.

TME views Xfera’s situation as much more favourable than that of other European 3G operators, who have a higher market share, but whose CAPEX per customer is also much higher than Xfera's. Therefore, TME believes that it is neither coherent not appropriate for Xfera to continue enjoying a mark-up when operators with higher CAPEX/customer ratios (such as H3G Italia) are going to converge their termination rates with those of other mobile operators in their market before the end of 2012.

TME strongly maintains that Xfera is Europe’s third largest 3G-only operator in terms of number of customers and that it has had a very high new customer addition rate, particularly during this financial year. In gross numbers, it receives the most benefit from portability, and for that reason, it does not seem justifiable for the CMT to delay its convergence with other network operators for four years if we carry out a prospective analysis of its recorded evolution. Its margin should be eliminated no later than by the end of the glide-path currently being discussed.

In turn, Xfera mentions that unlike the other three network operators, its company does not have audited analytic accounting to as a reference for it to set reasonable rates. Due to this reason, the CMT is drawing on an international comparison of 3G-only operators in order to finally indicate that Xfera's rates should converge with those of other mobile operators within four years beginning from the time the current glide-path expires.

Xfera indicates that it hired a consulting firm to carry out a study, which appears in its allegations, in order to estimate Xfera's future termination costs based on the same top-down cost model that the CMT used.

Xfera states that based on that data, we can observe that providing wholesale call termination service generates negative gross margins, while these margins vary between 100 and 300% for other operators at different points along the glide-path.

According to that operator, regardless of the fact that it receives a certain premium on top of the termination price for other MNOs, the truth is that the contribution margin that it would in fact generate with the termination rates proposed in the Draft Measure would be substantially lower than that received by its direct competitors, whether in absolute or in relative terms. The operator understands this to be a competitive disadvantage to which the multiplicative effect of the scale must be added.

For this reason, Xfera asks the Commission to take into account the future costs of providing termination service and establish the wholesale termination rates in line with avoiding the unheard-of situation in which Xfera's gross margin would become negative.

In that company's opinion, the analysis carried out in the international comparison is extremely simplistic and fails to mention cases such as Hutchinson in Italy, which currently serves 10 million clients while benefiting from a termination rate that is 6% higher than Xfera's. Moreover, it was decided that this operator would retain a 43% premium on top of Telecom Italia's regulated termination rate until July 2010.

Furthermore, Xfera would like to point out that the glide-path approved in Italy allows Hutchinson a horizon for linear convergence with other operators beginning in July 2012, that is, more than nine years after having begun operations. Meanwhile, if the situation described in the Draft Measure comes to be, Xfera would arrive at the convergence point six years after its commercial launch, three years earlier than Hutchinson, and four years earlier than another Spanish operator, Orange.

III.2.2 Response to the allegations raised in the public inquiry

In the Market 7 Resolution, the CMT established that Xfera's asymmetrical termination rates should be subjected to a reduction process and subsequently converge with other incumbent MNOs' termination rates.

The present Resolution aims to comply with that approved in the Market 7 Resolution, where it states that "*a higher termination price than that imposed on MNOs by the CMT must still be recognised for traffic to Xfera's customers, in such a way for this company to be able to recover the investments it has made and receive reasonable returns while accumulating enough critical mass and scale to reach the efficiency levels that will enable it to compete on more equal terms with other MNOs*." Therefore, we conclude that during the new regulatory period that will begin in October 2009, Xfera's actual termination price, which is 48.82% higher than TME, Vodafone and Orange's price, must be reduced gradually.

With regard to the arguments delivered by TME, E-Plus and Orange concerning Xfera’s asymmetry, we must state that the reasons for maintaining asymmetry between Xfera and the other operators in the Market 7 Resolution are based on the assessment of Xfera's investment efforts and the convergence periods established for similar operators in neighbouring countries.

As we explained in CMT Services’ report, the market shares for European 3G-only operators are significantly higher than Xfera’s, since they launched their businesses approximately 3 years earlier than that operator did. The approximate time span of four years that was proposed for reaching price convergence among MNOs operating in Spain is congruent with convergence periods applied to 3G operators in neighbouring countries. This period begins with a company's commercial launch and continues until the convergence point is reached.

The measurement for Xfera’s investment effort over time was calculated in the Market 7 Resolution based on the inversion ratio per mobile line. As shown in Table VI-1, Annual investment per mobile line (euros), which is based on data from the 2008 Annual Report, Xfera’s investment per line is still higher than of other MNOs, and it is the only operator among the MNOs whose total investment volume for 2008 is higher than it was in 2007 (a 10% increase, according to data in the 2008 Annual Report).

Table VI-1. Annual investment per mobile line (euros)

	2006	2007	2008	2006-2008
TME	35.40	34.17	31.94	101.39
Vodafone	61.87	64.84	47.44	173.50
Orange	64.44	59.33	53.32	177.52
Xfera	5,069.42	181.03	87.61	510.54

Note: The ratio is calculated by dividing the investment by the mean number of lines during the 2006-2008 period.
Source: 2008 Annual Report

Therefore, we believe that the Market 7 Resolution’s rationale for keeping Xfera's termination rates asymmetrical is still applicable to this procedure, regardless of the reduction process for the termination price and the period for convergence with other MNOs' termination rates as established in the present Resolution.

With regard to Xfera’s allegation that its proposed termination rates will create negative gross margins during the span of the glide-path, we must repeat that the Commission has no audited accounting information from Xfera that would permit it to evaluate the current cost level or the evolution of its termination service. In this regard, the study provided by Xfera regarding its termination costs cannot under any circumstances be considered as a substitute for a cost accounting system that has been audited and approved by the CMT.

Furthermore, as the operator is well aware, (i) the obligation imposed on Xfera is that of setting reasonable rates, not cost-oriented rates and (ii) were the second standard to be imposed, under no circumstances would the reference be an operator without concrete efficiency standards.

Therefore, we opted for a gradual reduction of the mark-up over the approximately four-year period established for reaching convergence, in such a way that the mark-up will be reduced by 50% in two and a half years. This must serve as a reference so that Xfera will improve its production efficiency while reaching the necessary economies of scale during the proposed convergence period.

Xfera emphasises the case of Hutchinson in Italy so that its mark-up and convergence deadline may be treated similarly to that operator's. Nevertheless, as shown in Table 1, there are operators in other countries that could be used as a reference, such as Hutchinson in Sweden (Hi3G) or in Austria, which achieved price convergence in periods shorter than six years from the date of their commercial launch (Xfera would reach convergence a minimum of seven years from its commercial launch). We also have Hutchinson in the United Kingdom, which will have a mark-up of 15.69% in March 2011 (Xfera's mark-up will be 24.41% in the stage between April and October 2011). For these reasons, we find that the mark-up and the convergence deadline established in this Resolution are appropriate, given that they are similar to mark-up levels and convergence deadlines that have been applied to 3G-only operators in other neighbouring countries.

IV ONE OR SEVERAL TERMINATION RATES

IV.1 Summary of allegations

In general, almost all operators agree that the final termination price should be the same for all networks, except for Xfera, which believes that its target price should be higher at the end of the glide-path.

However, E-Plus states that there is a substantial difference between a network operator's costs and a mobile virtual network operator's costs, since in practice, each host MNO proposes wholesale service prices to its respective full MVNOs, and these prices are not directly related to the costs associated with each MNO's access network. Rather, the differences that are present in the commercial conditions that each one offers to third parties are due to the different margins that they apply. Therefore, E-Plus’s conclusion is that the margins for full MVNOs are higher than those received by host operators.

In addition, MVNOs’ commercial costs are higher than those of long-standing operators as a result of attempting to penetrate a very saturated, oligopolistic market. These costs mainly consist of advertising, marketing and customer attraction investments, rather than network infrastructure, and these companies must compete with operators which have been in the market for more than ten years.

For the same reason, and in light of the CMT's decision that termination rates for full MVNOs' mobile networks must be equal to those of host operators, E-Plus does not agree that Xfera should be permitted to remain in an asymmetrical situation, as stated in the previous section.

Vodafone believes that maintaining price symmetry between TME, Vodafone, Orange and full virtual mobile operators is fundamental.

Xfera agrees with the CMT that it is convenient to be permitted to maintain higher connection prices than other operators at the end of the new glide-path, considering that only two and a half years have passed since it launched its commercial operation in the Spanish market. For that reason, it has not had time to obtain benefits from economies of scale, and on the other hand, its market share is about 2% of the Spanish market in terms of clients. Therefore, it is still far from approaching the European Commission's concept of the minimum efficient scale, which would reach at least 15% of the market share, or a market share equal to 1/n where n = number of existing MNOs; by no means does it reach the minimum efficient scale.

IV.2 Response to the allegations raised in the public inquiry

While nearly all of the operators have expressed their disagreement with Xfera's being permitted to maintain an asymmetrical termination rate at the end of the glide-path, the Commission has already shown how this is justified in section III.2.2 of Annex 2 in this Resolution.

With regard to E-plus's allegations about price symmetry between TME, Vodafone, Orange and full mobile virtual network operators, and Vodafone's petition that such symmetry be maintained, the arguments used by this Commission in the Market 7 Resolution apply. Full MVNOs are lessees of the mobile access network, and for this reason, when determining their termination rates, there are no relevant differential circumstances that do not have to do with the termination rates set by host MNOs.

Therefore, as the object of this Resolution is to set voice termination rates for mobile networks, we consider that the termination service provided by a full MVNO is the same as that provided by its host MNO, since the full MVNO delivers calls to the host operator so that the latter may finalise them through its access network. Therefore, according to that established by the Market 7

Resolution, our Commission maintains the link between the termination rates established for full MVNOs and for host MNOs.

V VARIATION PATH

V.1 Summary of allegations

Orange expresses its total opposition to a glide-path with biannual reductions according to costs verified by the CMT and the state of traffic in the connection market. It believes that its only result will be to extend the excessive margins of those operators making a profit in that market over an increased length of time; it inexplicably provides six months of additional margins to operators who do not have to make any effort to adjust their costs to the regulatory rate, since these are much lower than the established connection rates.

Therefore, Orange requests a more rapid reduction of its competitors' margins and termination rates. The operator indicates that it feels forced to renounce efforts to receive margins from the connection business, as its only objective is to improve, at least partially, the negative cash flow which is caused by the current policy to regulate termination rates. It believes that its competitive ability in the retail market its being adversely affected.

Orange presents various proposals as alternatives to CMT Services' report.

Orange's first proposal is a drastic and rapid reduction of termination rates that would take place as follows:

Oct 09-April 10	April 10-Oct 10	Oct 10-April 11	April 11-Oct 11
0.040000	0.037500	0.035000	0.032500

In its second proposal, Orange suggests that a marginal price be established for unbalanced traffic. The operator feels that it is completely unfair and disproportionate to have to pay its competitors the amounts that they are currently charging as connection fees, and that these charges are mainly due to unbalanced traffic flows between networks.

It therefore believes it fitting to pay a different and truly cost-oriented rate for 30% of the excess outgoing traffic. This rate should be no higher than 0.04 euros given the cost evolution, assuming that the rates stated in the report for the mean weighted amount of TME, Vodafone and Orange traffic are correct.

Orange's practical proposal is a measure enabling compliance with the principle of a single termination rate regardless of the source network by using a differential between regulated prices for Orange, TME and Vodafone to precisely reflect a lower price for excess traffic.

According to its proposal, the new glide-path would be as follows:

	October 09-April 10	April 10-October 10	October 10-April 11	April 11-October 11
Vodafone/TME	0,060700	0,053800	0,046900	0,040000
Orange	0,069600	0,059700	0,049900	0,040000

In addition, the operator states that the marginal price indicated for excess traffic is not an absolute break with the CMT's principle of symmetry at the end of the regulatory period, given that prices will converge at the end of that period.

Lastly, Orange believes it necessary for all operators to include the same connection fee in their termination rates so that, even while maintaining whichever average termination rate will be determined, the disappearance of the first-minute charges and the different time of day rates will be partly neutralised.

For its part, ONO supports a linear path, although it considers it necessary and justifiable to anticipate the adjustment to operators' real average cost by means of a faster transition.

Based on approved public cost accounting data, the operator estimates average cost in 2007 according to the weighting criteria for each mobile operator's percentage of termination traffic. Thus it concludes that the average cost in 2007 was 0.04 euros, and that if the same cost estimated for 2012 is 0.0245 euros, then it is significantly less than 0.04 euros in 2009.

It believes that the only a priori reason for not adjusting the average cost more quickly would be the high cost that, according to its cost accounting, Orange would bear. However, since that operator has publicly taken the position in favour of a more drastic reduction in termination rates due to its traffic imbalance, there is no significant reason that could prevent a more rapid adjustment of the termination price to CMT's calculated average cost.

ONO believes that a faster adjustment should be applied to reduce the distortion that Vodafone's and TME's excessive margins have brought into the voice service market. It proposes two alternatives for this adjustment.

The first option is for annual adjustment periods and is the option it considers to be the most fitting, since by adhering to the price of 0.04 euros, it reaches a more equitable evolution path. This way, the yearly reduction would decrease the rates more quickly and bring the average target rate closer to the regulated termination rate in each stage than would be the case using biannual reductions (in the biannual model, the regulated average price is always higher than the target price aimed for in the linear reduction, except for in the last stage where the two converge).

The second alternative consists of adjusting the variation path to the price of 0.03 euros per minute in April 2011, that is, considering a price reduction path with a steeper slope from October 2009 to April 2011 and a gentler slope from 2011 to 2012.

The result of this proposal, according to ONO, would be that during the CMT's proposed two-year glide-path, a linear, constant variation path would be maintained with biannual reductions, while at the same time, there would still be an opportunity to adjust the reductions after this glide-path so as to reach the target price of 0.0245 euros per minute.

E-Plus believes that the glide-path as designed in the Draft Measure is correct in its final objective. However, it believes it would be fitting to create a steeper slope in the early stages in order to somehow accelerate dynamic competition in the retail market and make it possible for alternative operators to compete with the three long-standing operators for off-net calls. The objective for 2012 is a situation which has been excessively set up in the long-term for such a dynamic market as mobile telephony.

Therefore, although a glide-path's purpose is to avoid abrupt drops when reducing rates, this operator believes that the need for dynamising competition in the retail market would justify more abrupt measures in the early stages, so that recently-arrived operators would be able to compete.

In turn, Jazztel requests a more significant reduction in connection prices for voice termination on the mobile network. It proposes reaching the average weighted price of 0.0245 euros/minute in 2012, or else reducing the prices to a maximum of 0.04 euros/minute as first stage of the glide-path, beginning 15 October 2009. Likewise, it asks for updates to the prices in the glide-path to be approved every six months according to traffic, demand projections and network dimensioning from the moment when the prices would become effective.

On the other hand, TME proposes reaching the price of 0.04 euros in 2012, not in 2011, as stated in the allegation regarding the length of the glide-path.

Vodafone believes that the basic principles which prices must follow are:

- No particularly aggressive values
- Position comparable to neighbouring countries so as to be coherent with the EC recommendation
- Orientation with the reductions in retail prices produced by competition on the mobile market

According to the operator, these conditions will be achieved with a glide-path whose final target price will be 0.05 euros/minute in the last stage (from 16 April 2011 to 15 October 2011) for TME, Vodafone, Orange, and MVNOs, with constant rates and converging with Xfera at the end of the period.

Euskaltel, R Cable and Telecable do not agree with the CMT's belief that the objectives of the glide-path will be achieved in rhythm with the planned decreases, based on the need to lower prices gradually in order not to cause disproportional impact to the operator.

They believe that disproportionate impact on operators has been occurring since 1999 with a significant and unjustified asymmetry between termination rates for fixed and mobile networks, which is what allowed the three principal operators to accumulate numerous benefits which they use to slow the initial competition from the MVNOs in order to compete aggressively with fixed line operators. They maintain that a possible solution would be to eliminate the interior connection market in the sense of removing call termination rates between operators' own networks (obviously, certain prices for services provided through operators who do not have their own networks would be maintained), taking into account the general symmetry between calls and traffic that arises between different established networks.

For these reasons, they believe that this measure would lead to balancing forces in the fixed and mobile markets, while at the same time having a positive effect on end users, who believe they are being penalised by invoices with an artificial and theoretical cost structure.

Alternatively, if the course marked by the glide-path should remain within the proposed parameters with slow and insufficient decreases, we should urgently consider the possibility of raising termination rates on fixed networks at least until they are comparable and symmetrical to, if not higher than, set rates for mobile operators, with enough additional mark-ups for new NGA networks.

Xfera, in turn, proposes a variation path for termination rates on its network in order to receive positive contribution margins throughout the entire period:

- Duration of three years
- Linear price decrease trajectory
- Bonus to Xfera of 30% over the rates imposed on other mobile operators in the last stage of the glide-path

October 09-April 10	April 10-October 10	October 10-April 11	April 11-October 11	October 11-April 12	April 12-October 11
0,095478	0,086783	0,078087	0,069391	0,060696	0,052000

The operator believes that this would be the minimally acceptable situation for rates; more significant or drastic reductions would inevitably lead to generating negative contribution margins for Xfera, since rates would be lower than the costs of providing call termination service.

V.2 Response to the allegations raised in the public inquiry

As indicated above, our Commission believes it reasonable to modify the variation path by establishing more pronounced steps at the beginning.

According to the European Regulators' Group, there is an array of methods for determining the appropriate wholesale price. The price established in accordance with article 13 of the Access Directives may therefore adopt various forms; some of the most common in European countries are those termed glide-paths or multi-year price evolution frameworks.

For European regulators, regulating termination rates by means of this type of schema is justified "*where an immediate implementation of charge control that sets charges at a competitive level could cause disproportionate problems for mobile operators*". As a result, implementing a multi-year framework for mobile network termination rates can be justified according to the impact that immediate cost-based price orientation could have on the operator, to name an example.

A glide-path permits regulators to scale down the impact of termination rate reductions while taking the projected cost evolution into account. In this sense, the CMT believes that the glide-path established here softens the impact of price reduction and avoids abrupt changes that could cause disproportional impact to the operator.

The choice of variation path has its implications. According to orthodox economic theory, if the larger part of the decrease occurs at the beginning of the period, then we reward passing efficiency on to the consumer at the expense of granting incentives for lower costs. If the opposite occurs, we magnify rewards for cost reduction at the expense of passing benefits on to customers in the years following the multi-year period. Likewise, drastic initial decreases in termination rates can lead to abrupt changes in operators' financial resources. Nevertheless, as seen in the allegations, the implications are much deeper, and directly affect the competition dynamics in the retail market.

The CMT believes that the glide-path it proposes, with its previously-described biannual variations and reduction path, combines the goal of fostering efficiency and sustainable competition and maximising benefits to consumers with the goal of avoiding abrupt changes that could affect operators in a disproportionate manner. In fact, in many ways, the new glide-path is a continuation of the glide-path ending in October 2009. This way, price decreases will remain at similar levels to those in the current glide-path, and we will continue having biannual revision periods. This is done precisely to avoid very abrupt changes that could affect operators disproportionately. Therefore, the CMT does not agree with the allegations presented by ONO, E-Plus, Euskaltel, R Cable, Telecable and Jazztel regarding making larger, more abrupt price decreases or annual price adjustments.

Euskaltel, R Cable and Telecable state that if the course of the current glide-path is to be maintained, we should urgently consider the possibility of raising termination rates for fixed networks until they are comparable and symmetrical to the mark-up for new NGA networks. Our response is that this is not the purpose of the present dossier. The analysis of the fixed termination market (Market 3 in the new EC Recommendation) is where those concerned may make the statements that they deem appropriate regarding termination rates on individual fixed telephone networks.

Likewise, the CMT does not share Orange and Jazztel's opinion in favour of more abrupt decreases in termination rates; the first step advocated by these operators is a decrease from €0.07/min to €0.04/min (a 43% reduction).

The CMT does not agree with the idea of maintaining the call connection charge, introducing new rate schemes for unbalanced traffic, or introducing a new, temporary asymmetrical scheme for Orange's termination rates. The obligations imposed by the Market 7 Resolution establish that the target termination rate at the end of the glide-path must be identical for TME, Vodafone and Orange, in accordance with the long-term objective of symmetrical prices. For this reason, introducing different prices for equal termination services would not be justified.

In fact, the Market 7 resolution specifically states:

[…] it would be necessary to impose the obligation that all operators declared to have SMP invoice only such traffic as is actually consumed, that is, per second, beginning with the first second of communication, and without setting price differences according to the time of day. This change would make it easier to verify compliance with the obligation of price control, while providing a greater transparency to the rest of the connected operators as regards the obligation of cost orientation. It will become effective with the new glide-path to be approved by the CMT."

Regarding Xfera's petition to extend the glide-path to three years, and permit Xfera a mark up of 30% in the end stage, the CMT has already justified its reasons for having a glide-path lasting two and a half years in section II of Annex 2. On the other hand, Xfera's proposal to maintain a margin of 30% in the last stage of a 3-year glide-path is not in line with the objective of reaching complete convergence in approximately four years. Therefore, Xfera's proposal is overruled.

VI REGARDING THE PROCEDURE FOLLOWED BY THE CMT AND THE LEGAL UNFAIRNESS FOR OPERATORS

VI.1 Summary of allegations

In their respective allegation statements, TME and Vodafone criticise the supposed lack of transparency shown by CMT Services in ruling over the present procedure.

In particular, these two operators state that affected operators were not notified about the principles and the hypothesis of the cost model, which was created by the CMT to determine mobile termination rates, prior to proposing the glide-path. This would have given rise to an unjust situation of defencelessness if the operators had been lacking sufficient judgment to be able to state their allegations.

On the other hand, according to TME and Vodafone, the time span of ten days in which the affected operators were allowed to state their allegations for public inquiry was not sufficient, since the reasons for justifying urgent treatment of the present procedure were not adequately demonstrated.

In particular, TME states that the situation could have been avoided if the Commission had initiated this process at an earlier date, thus avoiding passing its own time limitations on to other concerned parties.

VI.2 Response to the allegations raised in the public inquiry

In response to TME and Vodafone's statement alleging a lack of transparency, based on not having been granted access to the technical and cost estimation model created by the CMT, we must state that data was made public in the Draft Measure according to two considerations: firstly, the necessity of providing third parties with all relevant information enabling them to formulate the allegations they deem necessary, with a full knowledge of the judgment criteria leading to the proposal in question, and secondly, the necessity of retaining that information that would reveal commercial secrets belonging to third-party operators.

In other words, the CMT must apply the principle of proportionality when deciding to make certain information public, and thus always takes into account the intended purpose of publishing such information.

On this topic, the model is constructed upon a base of accounting data and information provided by each of the operators. This information is strictly confidential, given that its transmission to third parties could arise in severe damage to the commercial interests of the entity providing that information. In this respect, Article 9.1 of the General Telecommunications Law 32/2003 of 3 November (hereinafter LGTel) states in its final aside that "*the National Regulatory Authorities guarantee confidential treatment of information that is provided and which could affect commercial or industrial secrecy*". On the other hand, according to that stated in article 37.5 of Law 30/1992 of 26 November, the Legal System for Government Bodies and the Common Administrative Procedure (LRJPAC), "*the right to access cannot be applied to the following dossiers:* (d) *those concerning subjects protected by commercial or industrial secrecy*".

Given the necessity of safeguarding operators' legitimate interest in maintaining secrecy for such information as could be considered confidential, our Commission has opted for a route that ensures this right. On the one hand, it respects the principle of transparency regarding actions by government administrations, and on the other, the right of each operator to access all relevant information in order to formulate the allegations it deems appropriate.

With this in mind, Annex 1 of the Draft Measure adopted on 23 June 2009, which was forwarded to the affected operators, contains a technical, detailed description of the premises upon which the technical and cost models are based. It was according to these premises that we estimated termination costs for each mobile operators' network. The abovementioned Annex 1 therefore explains the mechanism for implementing a cost calculation model and a technical model for determining the mobile network dimensioning necessary for accommodating the estimated traffic for different services, with the coverage and service quality specified by mobile operators.

With regard to the cost model, Annex 1 specifies the network costs that are attributable to voice termination service and the other non-network costs (ACDAS/ANDAS) that can be attributed to that service, as well as the method for attributing costs to services and the reconciliation of the cost model with the three main mobile network operators' cost accounting results. As for the technical model, Annex 1 lists the criteria for the method to calculate incoming traffic (including the total traffic estimate, as well as total traffic distribution among operators) and the criteria for mobile network dimensioning (including elements for 2G and 3G network access, 2G and 3G switching elements, and subscriber and visitor registers).

This reconciles the two interests listed above, and ensures that concerned operators are provided with all legal information in order to formulate the appropriate allegations, by virtue of the document submitted for public inquiry, including its Annex 1.

In any case, in light of TME and Vodafone's petitions for access to the technical model and the cost model, we must also remember that the listed petitions were answered on 9 July 2009, with the response that access could be granted as long as TME and Vodafone consented to sharing the model (which contained the data those operators sent to the CMT to that end) with the rest of the operators involved in the procedure. However, access under such conditions was refused by both TME and Vodafone. Equal treatment of the different affected parties is particularly relevant in a procedure such as this one, which explains the rates that third-party operators should pay to mobile network operators for call termination on their networks. They should therefore also be provided with the same judgment criteria as those operators requesting access to the model.

Regarding use of the urgent processing for this procedure, the Draft Measure's goal is to specify the obligations imposed within Market 7 relating to orienting termination rates by production costs for TME, Vodafone and Orange's mobile networks and setting reasonable prices for providing termination service in the cases of Xfera and full MVNOs, all before 30 July 2009.

Nevertheless, prior to determining the present measure, Market 7 itself established the need for verifying cost accounting results for TME, Vodafone and Orange, in accordance with the obligation to orient rates by cost, for the 2007 financial year. On this basis, Orange's 2007 cost accounting results were verified by Resolution of 30 April 2009, and Vodafone's and TME's cost accounting results for the same year were verified by the Resolutions of 4 June 2009.

Therefore, given that it is necessary to examine each operator's accounting data in order to determine termination rates, and considering that these data were not available until 4 June 2009, TME's allegation that the Commission showed lack of diligence by opening the present dossier at the moment when it did cannot be justified.

Meanwhile, we must examine the CMT's motive for declaring this procedure as urgent. Here, we must reiterate that this Commission's interest in complying with the deadline established in the Market 7 Resolution is in the market's favour, and its purpose is to ensure that operators affected by the resolution being determined have enough time to study the new rates that will be in effect throughout the regulatory period before that period begins on 15 October 2009, the ending date for the current glide-path's regulatory period. In this sense, given the economic impact that can arise from changing mobile termination connection charges, it is extremely important that companies in the sector have sufficient warning of such modifications. This way, those companies can make the necessary projections in their nominal accounts for the financial years affected by those changes.

Urgent processing for this procedure is also reasonable when we consider the fact that its purpose is not to define the market and designate operators with significant market power within the same, but rather to specify the concrete obligations within the abovementioned revision of the market. In response to TME's allegation, understanding the importance of this dossier for mobile operators and the rest of the sector –as the CMT logically does- is not inconsistent with the fact that in this procedure, we do not clarify such questions as the definition and analysis of the market of reference, the designation of operators with SMP and the imposition of concrete regulatory obligations that are applicable to those operators. Rather, we are clarifying a regulatory measure already submitted for public inquiry within the framework of reviewing Market 7, that is, establishing voice termination rates for the mobile network.

As a result, given the circumstances described, our Commission believes that in accordance with that stated in article 50.1 of the LRJPAC, enough items of evidence are present in this case for it to warrant treatment by means of the urgent processing procedure.

VII REGARDING THE COST MODEL EMPLOYED

VII.1 Summary of allegations

Vodafone believes that there is an inconsistency in the results obtained using CMT's model which, despite being a top-down model departing from the verified cost accounting results and estimating costs until 2012, obtains results similar to those of a bottom-up model of incremental costs for that date.

It alleges that the most relevant characteristics of the bottom-up model that regulators should implement for 2012 are as follows:

- It must include only incremental costs, that is, avoidable ones.
- It must exclude all costs that are unrelated to traffic
- Rather than including costs related to providing coverage, it will only list those that provide capacity, given that this is necessary for providing wholesale voice termination service.
- Rather than including costs of using the electrical spectrum, it will include only those costs incurred in order to provide call termination capacity beyond providing mobile service to the subscribers themselves.

We can see that the model the CMT has created is not a bottom-up model that meets these conditions, but nevertheless, the result lies within the range recommended by the model.

One of Vodafone's concerns is that it should receive a guarantee that the rates during the glide-path will never be lower than production costs according to a top-down model.

For this reason, Vodafone urges the CMT to eliminate the reference rate of 0.0245 euros/minute at the end of 2012 (calling it risky and unjustified according to anyone's judgment) which leads us to set a price of 0.04 euros/minute in the last stage of the glide-path. In its place, it suggests the less drastic reference of 0.05 euros/minute as a target price for the last stage of the glide-path (from 16 April 2011 to 15 October, 2011).

For its part, TME alleges that the model includes assumptions that have a direct implication on cost estimations and raise doubts about its validity over such a long-term scenario. These situations include demographic projections that may be overvalued due to the economic situation, mobile service penetration which may also be very optimistic, and the traffic evolution which it notes may be a case of under-dimensioning in the GSM network. This leads to a nearly direct effect on access costs and the possible growth of data traffic which, according to the operator, was estimated in a very simplistic way.

Orange also alleges problems in the method for estimating costs associated with termination service. It provides a simulation using ARCEP's bottom-up model to conclude that there is an objective cost difference that will not disappear as long as the DCS network is not dismantled, that is, until having passed the write-off period for the investments corresponding to eight years for the electronic equipment and 25 years for civil works investments in base stations, which were installed in 2005.

The existing cost differences are structural; according to the operator, 50% of the termination costs on its network are associated with coverage and spectrum, 40% can be explained by the cost of the backbone and access network costs that depend on conducted traffic, such as links and TRX, and the remaining 10% of the cost is non-network cost.

VII.2 Response to the allegations raised in the public inquiry

In response to Vodafone's allegation, we would like to point out that there are no inconsistencies in the results obtained using the top-down model. The data verified by this Commission reveals that termination costs for some operators are close to 0.03 euros/minute (lower curve of the bottom-up model according to Vodafone) and at even lower levels according to audited accounting data from 2007. This means that according to audited accounting data, not any theoretical model, some operators' costs are situated close to or within the curve that Vodafone points outs as a possible result of the bottom-up model. Therefore, the average weighted cost obtained from the top-down model cannot be said to be inconsistent, and using that model is not risky or unjustified, as Vodafone claims. Likewise, we must point out that, using the model for all three operators, at no time are termination rates lower than the average weighted cost of producing termination service.

In response to TME's allegations, it is true that predictions are always connected with a margin of error or a confidence interval, to speak in terms of statistics. The real value, which will only be known in the future, may be higher or lower than the estimate, but it is not possible to find any sign of errors at present.

Nevertheless, estimates have been made using conservative values and taking the current economic situation into account. Also, the CMT believes that the population estimates are adequate. These estimates were prepared by the INE and they establish a high figure and a low figure according to potential variations due to migratory effects (the most difficult variable to estimate). For the model, we use the mean of the two figures. The result is a population estimate of 46.96 million inhabitants in 2012; when we take into account that on 1 January 2008, there were 46.16 million people registered as Spanish residents according to Spanish Royal Decree 2124/2007 of 26 December, it seems that the population estimates cannot be considered excessively optimistic.

Regarding the penetration of mobile service, called excessively optimistic by TME, we must point out that both voice lines and machine-to-machine or datacard connections must be taken into account. For network dimensioning, one has to consider all connections. Nevertheless, when determining total traffic, the difference between the connection types was noted according to how the average traffic per line was calculated using the connection total. Lastly, regarding traffic evolution, our starting point was all available historic data, and not the 2006-2008 traffic as TME indicates. Nevertheless, we have taken into account the very special circumstances in which the market finds itself at present, and which are clearly reflected in the 2008 data, with significant traffic decreases per line; this trend is thought to hold through 2009. In this respect, TME's statement is incorrect: we considered the 2008 data, and thus are not overestimating unit traffic per line.

TME believes that costs for the GSM radio network could be underestimated by 25%, due to not using coverage range area for a 3-sector base station. On this topic, we must state that the model calculates the minimum number of base stations needed to provide the coverage range the operators bring to each geographical area. It then calculates the number of elements that are necessary for offering and conducting traffic per geographical area. In fact, the model takes into account the fact that coverage is provided by means of omnidirectional antennas and hexagonal surface cells. The simulation considers that, for network establishment phases, making coverage predominant is the priority, so fewer and larger cells are established; next, the model simulates the following step for network planning as traffic increases, and applies sectoring to the cells so as to attend to traffic needs in each geographical area. In this way, the final number of elements is calculated by considering coverage and traffic needs for each period.

Regarding Orange's allegations, we state that the CMT is currently developing a bottom-up model according to that stated in the EC recommendation. Once the new model has been implemented, we will be able to evaluate Orange's termination rates according to the criteria recommended by the EC. Termination costs for operators obtained from that model will be considered by the CMT when establishing termination rates for mobile operators with SMP.