

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. 27/09 of the Telecommunications Market Commission held on 23 July 2009, did adopt the following it was resolved to adopt the following agreement.

AGREEMENT

By this, in file no. MTZ 2008/1944 we hereby approve the following

RESOLUTION BY WHICH THE DEFINITION AND ANALYSIS OF THE MARKET OF THE MINIMUM SET OF RENTED LINES IS APPROVED, AS WELL AS THAT OF THE MARKET OF SEGMENTS OF TERMINATION OF LINES RENTED WHOLESALE, THE APPOINTMENT OF THE OPERATOR WITH SIGNIFICANT MARKET POWER, THE ENFORCEMENT OF SPECIFIC OBLIGATIONS AND BY WHICH ITS NOTIFICATION TO THE EUROPEAN COMMISSION IS AGREED UPON.

FACTUAL BACKGROUND

First. Initiation of Procedure

On 15 January 2009, the initiation of the procedure for the definition and analysis of the market of minimum set of rented lines and of the market of segments of termination of lines rented wholesale, the appointment of an operator with significant market power and the enforcement of specific obligations was agreed upon, as well as the opening of the procedure for public consultation and the request for a report to the Spanish Competition Commission.

Notification of the cited act was published in the Spanish Official Journal number 23 dated 27 January 2009.

Second. Report by the Spanish Competition Commission

The Report drafted by the Spanish Competition Commission with regards to the definition of the market of minimum set of rented lines and of the market of segments of termination of lines rented wholesale has been sent to the Telecommunications Market Commission.

Said report was included in the register of the Commission on 2 March 2009.

Third. Allegations in the public inquiry

The following operators presented allegations during the public inquiry: Cableuropa, S.A.U y Tenaria, S.A. (hereinafter, ONO), France Telecom España, S.A. (hereinafter,



Orange), Vodafone España, S.A.U. (hereinafter, Vodafone), Telefónica de España, S.A.U., Verizon Spain S.L. (hereinafter, Verizon), Colt Telecom España, S.A.U. (hereinafter, COLT), BT España Compañía de Servicios Globales de Telecomunicaciones, S.A.U. (hereinafter, BT) and Asociación de Empresas Operadoras y de Servicios de Telecomunicaciones (hereinafter ASTEL).

The Secretariat for Telecommunications and the Information Society of the Catalonian Government (Secretaria de Telecomunicacions i Societat de la Información de la Generalitat de Catalunya) also presented allegations during the public inquiry.

Fourth. Extension of the procedure deadline

Due to the complexity of the current procedure, on 23 February 2009, in accordance with article 42.6 of Spanish Law 30/1992 dated 26 November 2006, of the Legal System for Government Bodies and the Common Administrative Procedure (hereinafter LRJPAC), the Secretary of the CMT agreed in writing the extension of the maximum resolution period and notification of same by a further three months.

This extension was published in the Spanish Official Journal number 53 dated 3 March 2009.

Fifth. Notice of the Draft Measure

By means of a written document dated 4 June 2009, the notification of the Draft Measure relative to the definition and analysis of the market of the minimum set of rented lines and of the market of segments of termination of lines rented wholesale was agreed upon, as well as the appointment of the operator with significant market power and the enforcement of specific obligations to the Spanish Ministry of Industry, Tourism and Commerce, the Spanish Ministry of Economy and the Treasury, and the European Commission and National Regulatory Authorities of the European Union member states in order for them to submit their comments within a maximum period of time of one month.

The European Commission was informed of the Draft Measure on 5 May 2009.

Sixth. Comments of the European Commission and Ministry of Economy

On 6 July 2009, the European Commission written documentation was entered into the CMT's Register which did not contain observations of the notified Draft Measure.

On 8 July 2009, the Spanish Ministry of Economy written documentation was entered into the CMT's Register which did not contain observations of the notified Draft Measure.

LEGAL BASIS

First. Authorisation for Competition

The General Telecommunications Law 32/2003 of November 3 (hereinafter LGTel) in articles 10, 48.2 and 48.3.g) recognises that the Telecommunications Market Commission has the capacity to: (i) define and analyse markets of reference; (ii) determine which operators have a significant impact on the market; and (iii) impose, hold, modify or suppress operators' specific obligations.



According to article 16.1 of EC Directive 2002/21 of 7 March 2002 regarding the common regulatory framework for networks and electronic communications services (hereinafter, Framework Directive), this procedure must be carried out as soon as possible following the Recommendation's adoption or modification, taking into account those Guidelines established by the European Commission. This provision became applicable in Spanish law by means of articles 10.2 and 3.1 of the LGTel and the Market Regulation respectively.

Spanish Royal Decree 2296/2004 of 10 December, which approves the Regulation on electronic communications markets, access to the networks and numbering (hereinafter, Market Regulation) lays down, by means of its articles 2 to 5, the procedure to be followed by the Telecommunications Market Commission for the identification and analysis of the reference markets in the exploitation of networks and in the supply of electronic communication services, and also describes its capacity to impose specific and appropriate obligations upon those operators that hold significant power within each market being examined.

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

Second. Regarding the procedure of defining the markets, analysing competition, identifying operators with significant market power, and imposing obligations on those principal operators within the market

On 17 December 2007, the European Commission adopted the Recommendation relating to the markets for electronic communications products and services that could be subject to *ex ante* regulation under the European Parliament and Council's EC Directive 2002/21 regarding a common regulatory framework for electronic communication services and networks (hereinafter, the Recommendation)

Whilst keeping in mind the declarations presented by operators in the public inquiry, and the Report by the Spanish Competition Commission, the CMT developed a Draft Measure relating to this market.

According to article 7 of the Framework Directive and article 5 of the Market Regulation, the Draft Measure in question was reported to the European Commission, the Spanish Ministry of Industry, Tourism and Commerce, the Spanish Ministry of Economy and the Treasury, and to the National Regulatory Authorities from other European Union member states.

The European Commission did not make any comments on the Draft Measure.

Third. Definition and analysis of the retail market of the minimum set of rented lines and of the wholesale market for terminal segments of rented lines, the appointment of the operator with significant market power and the imposing of specific obligations

I INTRODUCTION

The purpose of the present procedure for market analysis is both at the retail and wholesale levels.



In accordance with considerations (4) from the European Commission Market Recommendations, "the starting point for market definition in the current Recommendation is the wholesale market definition from a future perspective (...). Once the retail markets are defined the appropriate wholesale markets should then be defined".

At a retail level, it should be mentioned that a subgroup of the services of rented lines is directly regulated by the CMT and should be analysed once more on its own: it is the minimum set of rented line market in which Telefónica has SMP and has been imposed the full range of the obligations indicated by the access directive. This market was included in the first Market Recommendation, but has been excluded from the current one. Therefore, it should be checked whether said market meets the three criteria necessary to be liable to be *ex ante* regulated.

Therefore, the present study will analyse the following aspects:

- i) In the first place, all the rented retail line services, including the minimum set, will be described. This will contribute to the identification of the competition problems and determine the most proportionate obligations in the connected wholesale market of the rented terminal lines.
- ii) Then it will be analysed if the minimum set of rented lines meets the three criteria, taking into account that it is a retail market. In the event that these are not met, the cancellation of the existing obligations will be proposed.
- iii) Finally, the wholesale rented terminal line market will be analysed.

II RETAIL SERVICES AND RENTED LINES

II.1 Description of the retail services of rented lines

The classic definition of rented line is as follows: transmission service for the permanent connection between two points by means of a public telecommunications network, with a determined fixed capacity and which does not include switching functions that the user may control. Said service allows connecting two points for the sending and reception of information flow.

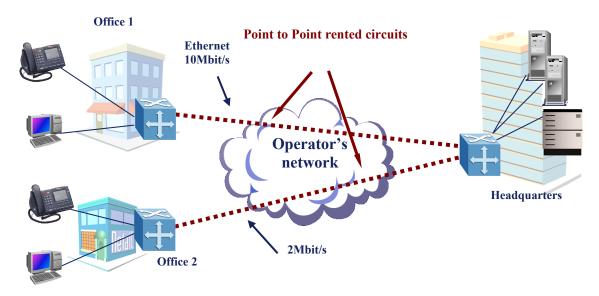
A very relevant characteristic of the supply of rented lines is that it is not a residential use service. Its main application is the connection of different offices of a company or institution.

The rented lines are not usually sold separately. A company contracts its communication with an operator, details its needs and the client engineers design a made-to-measure solution using, amongst others, rented lines.

A bank is the archetype company that requires very complex telecommunication solutions, with very strict quality guarantees: connectivity of offices with the central office and between offices, remote cash points, data backups, etc.

Below a very simple example of the use of rented lines by a company is shown:





In this example a company has Headquarters and two offices. It requires connecting the two offices with the Headquarters. The operator designs a solution using two rented lines, an Ethernet of 10Mbit/s to connect the largest office with the Headquarters and another one of 2Mbit/s to connect the small office. The operator can connect the different client offices by means of own access or contracting the rented lines wholesale to another operator.

As mentioned above, this is a very simple example, but it shows one of the most relevant characteristics of this market: the multi-office nature of the rented line clients. In the previous example, the operator has to provide the service in the three offices of the company, by means of own access or a wholesale service from another operator. The simple fact of not having coverage in one of the offices, even if this is the smallest one, to loose all possibilities of signing a contract with the client.

During the first years of the liberalisation, just one type of line was marketed: those provided with the so-called "traditional" interfaces. These are, amongst others, the analogue rented lines, the n x 64Kbit/s circuits marketed by Telefónica on its Ibermic network and the hierarchies circuits PDH/SDH1: 2, 34, 155 and even 622Mbit/s.

At the same time in 1992 the European Commission defined a subgroup within the previous called the minimum set of rented lines, including lines of up to 2Mbit/s of capacity and has been very closely linked to the obligations related to the provision of universal services. In short, it is a regulatory division of the rented lines provided with traditional interfaces that, as stated, will be analysed in detail in a specific section further on.

Later on the operators started to provide the companies with data accesses not based on the traditional lines, but using the standard of the local computer networks: Ethernet. Annex 2 describes the evolution of this technology from the technical point of view and its impact on the rented line services.

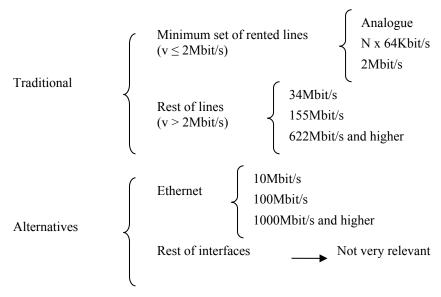
¹ Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH)



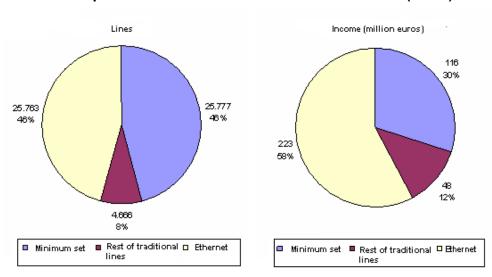
On the other hand, the rented lines can be classified as international or national. The international are those with an end abroad. The national ones have both ends in Spain. The present analysis relates to the national lines.

Finally, the rented lines of all the speeds are analysed, although the usual ranges are from 64Kbit/s to 155Mbit/s in the traditional and of 10Mbit/s to 1Gbit/s in Ethernet.

As a summary, the previous categories are shown schematically:



The volume of these categories both in terms of lines and income are shown graphically below:



Graphic II.1.1 Volume of the rented line services (2008²)

² All the data included in the Resolution (with the exception of those refering to the traditional leased retail lines) have been subject to



Source: CMT based on the annual CMT requirements and specific requirements of the present analysis.

The total size of the market in 2008 was 56,206 lines and 386 million euros in terms of income.

It is outstanding that in terms of income the lines with Ethernet interfaces already exceed 50% of the market. On the other hand, the minimum set subject to retail regulation represents 30% in terms of income. The remaining 12% corresponds to the traditional rented lines of speeds of more than 2Mbit/s.

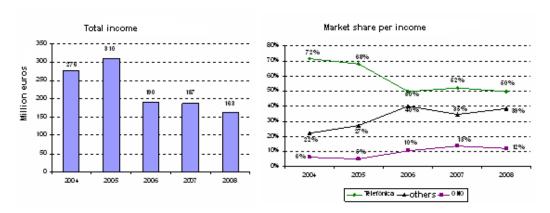
II.2 Competitive situation of the rented line retail services

II.2.1 Analysis at a national level

While the traditional rented lines have a wholesale offer regulated from the Reference Interconnection Offer (hereinafter, RIO), approved in 2001, there has not been any regulated offer for the Ethernet lines until 2008. For this reason, the carrying out of a different analysis is necessary in order to assess the existence of a regulated wholesale offer. Therefore, first the situation of the traditional lines will be analysed, to then analyse the Ethernet lines and finally both of them jointly.

II.2.1.1 Rented lines with traditional interfaces

The total number of traditional lines in 2008 was 30,443, of which 16,364 belonged to Telefónica, which represents a share of 54% in terms of lines. In terms of income, the situation was as follows:



Graphic II.2.1 Income and traditional retail line shares

Source: CMT based on the annual CMT requirements

It should be pointed out that the sharp decrease in the size of the market between 2005 and 2006, due to a double effect:

a) The migration of the n x 64Kbit/s lines to ADSL connections with guarantees.



b) The migration of the traditional lines of 2Mbit/s and more to Ethernet lines.

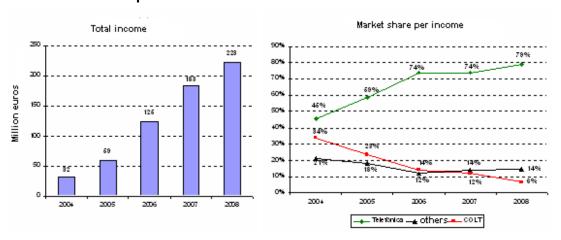
Until 2005, Telefónica's share was about 70%, given its absolute leadership in the circuits of speeds of less than 2Mbit/s.³ In 2006, the number of these circuits decreased considerably, which negatively affected the share of the incumbent. In 2008 said quota had decreased to 50%.

The second competitor in the market is ONO Group, with a share of 12% in 2008. Of the rest of operators, the most relevant are: Vodafone Group, Euskaltel, Orange and Colt.

II.2.1.2 Rented lines with Ethernet interfaces

The total number of Ethernet lines in 2008 was 25,763, of which 18,757 belonged to Telefónica, which represented a share of 73% in terms of lines.

On the other hand, the evolution of the income and the market shares of the most relevant operators are shown in the following graphic:



Graphic II.2.2 Income and shares of Ethernet retail lines

Source: CMT based on the specific requirements of the current analysis.

The growth of the lines provided with Ethernet interfaces is outstanding. In the 2004-2008 period the income was seven times as much and the number of lines increased by more than fifteen times.⁴

The evolution of Telefónica's share can also be highlighted: in 2004, when Ethernet was an incipient technology in the market, its share was only 45%, very closely followed by COLT. In the following years, its share has increased to reach 79% in 2008. Undoubtedly, Telefónica promotion of this technology is one of the main causes for such an outstanding growth of Ethernet. In any event, the speed with which such a high market share has been reached is very significant.

³ For example, in 2005 Telefónica was the supplier of about 90% of the circuits of less than 2Mbit/s (analogical and n x 64Kbit/s).

⁴ The total number of Ethernet lines in 2004 was only 1650.



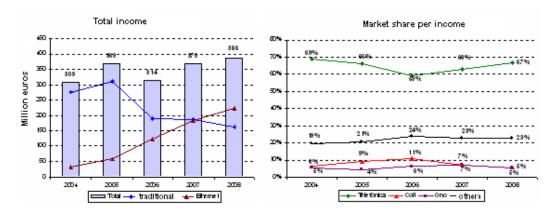
COLT is the second operator in terms of income and has been one of the pioneers in introducing this technology in the data access for companies, which is a factor that should be highlighted. In the 2004-2007 period it doubled its income volume, but its market share went from 34% to 12% due to the growth of Telefónica. In 2008 it continued being the second competitor, but its share has decreased to 6% not only due to the growth of Telefónica but also by the increase in the market share of operators such as BT or Orange.

At the same time it can be highlighted that ONO, the second operator for the traditional interfaces, has a marginal presence in the market segment provided with Ethernet interfaces.

Lastly, we should highlight the different performance with regards to the traditional lines, given the lack of an Ethernet wholesale offer as they were included, for the first time, in the Reference Line Rental Offer (hereinafter, RLO⁵) at the end of 2007. While this market analysis procedure is in process, the first Ethernet lines are being provided, thus the effects of the wholesale regulation will not be noticed until 2009.⁶

II.2.1.3 Total rented lines

Lastly, the total number of rented lines should be analysed, including the traditional and Ethernet lines. The following graphic includes the total evolution of the market income, as well as the shares over the past four years.



Graphic II.2.3 Income and share of all the rented retail lines

Source: CMT based on CMT annual requirements and specific requirements of the present analysis.

The previous graphic shows the mentioned migration process of the traditional lines to the Ethernet accesses: in 2004, the income of the traditional lines was nine times higher than that from Ethernet. Four years later, in 2007, the income from both types of lines was very similar. In 2008 the incomes of the Ethernet lines were higher than those corresponding to the traditional lines for the first time.

⁵ Resolution of 20 December 2007 on the approval of the Reference Line rental Offer of Telefónica de España S.A.U. (MTZ 2007/219).

⁶ The first link services were provided in November 2008. In March 2009 the total number of link services reached 262.



Telefónica's share is between 60% and 70%, a great difference with the second operator. Despite its loss of share in the traditional, the historical operator compensates this thanks to its growing leadership in Ethernet lines.

Likewise, the second competitor, in terms of total income, is COLT, above ONO. In any case, Telefónica income is almost the same as those of ONO or COLT put together.

II.2.1.4 Prospective Analysis

The CMT considers that the competitive evolution described in the previous points will continue in the period subject to the analysis, given the expected effects of the implementation of the wholesale measures and the evolution of the technology.

On the one hand, the increase in the needs for bandwidth of the final users makes the competitive advantage of Telefónica in the circuits of a lower capacity a lot less important in the set of rented lines services. In fact, it is not expected that the market share of the historical operator will increase in the retail level during the period subject to analysis.

Likewise, in the following years the replacement process of the low-speed traditional lines for bandwidth connections with guarantee and the traditional high-speed with Ethernet lines will continue. Therefore, it is expected that the decrease in traditional lines will continue, as well as that the number of Ethernet lines will increase. In any event, we can rule out the possibility that the traditional lines will disappear during the period included by the present market review.

On the other hand, this Commission expects that the wholesale offer of the circuits rented will become consolidated in this period, making competition easier for the alternative operators in the lines with Ethernet interface.

In other words, with an appropriate wholesale regulation, including Ethernet technology, a decrease in Telefónica's share is expected. Especially for the lines provided with this technology it seems logical to expect a decrease in the shares from the current levels (at about 75%) to levels very similar to the existing ones in the traditional ones (near 50%).

In short, during the following years an increase in the Ethernet lines is expected, as well as a decrease in the traditional lines and a decrease in Telefónica's share.

The CNC considers it appropriate to state that the tendency of the rented lines retail market is a future decrease in Telefónica's share and that the degree of the retail services will be higher given the existence of a regulated Ethernet wholesale supply. On the other hand, Telefónica and BT agree with the analysis made by the CMT.

We should indicate that the conclusions reached by this Commission are based on the prospective analysis that –in accordance with the regulating framework- should include the market definition and the enforcement of obligations. Given the current situation and this analysis, we can conclude that the position of Telefónica does not justify retail intervention. The existence of an Ethernet wholesale supply is increasing the number of lines provided with the alternative operators, thus considering that all this will have influence on the increase in competition in the retail market.



II.2.1.5 Conclusions of the analysis of the retail services of rented lines

The most relevant data of the previous sections is the following:

- Telefónica's share in the traditional lines, where there is a regulated offer, is about 50%.
- On the other hand, Telefónica's share in the Ethernet lines, where there was no regulated offer until the present year, is higher than 75% with a growing tendency.
- A migration process of the traditional lines to the Ethernet lines can be seen.

The previous data shows that the level of competition in the retail services of rented lines is higher if there is a regulated wholesale offer.

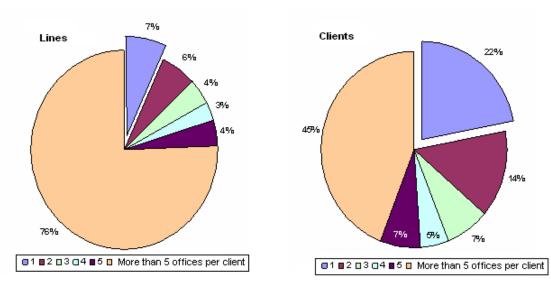
II.2.2 Geographical analysis

The analysis carried out in the previous sections is framed in a national scope. We should consider if a geographical analysis in a more reduced scope is necessary.

The rented lines demand is concentrated on the large urban nuclei. For example, COLT, an operator centred on companies, has only deployed its own network in Madrid, Barcelona and Valencia. The demand is where the companies with sophisticated communication needs are located. In view of the above, we could consider the convenience of carrying out a geographical analysis at a scope lower than the national one. Nevertheless, there is a very relevant aspect that should be considered: the multi office nature of the retail clients of rented lines.

In fact, one of the main uses of the rented lines is the setting up of private networks or virtual private networks (VPN) that, by definition, involves companies with more than one office. The following graphic presents the proportion of lines and clients depending on the total number of offices of the final client.

Graphic II.2.4 Multi-office nature of the retail services of rented lines



Source: CMT based on the specific requirements of the current analysis.



The results are conclusive: only 7% of the rented lines are provided to companies with one office. In terms of clients, 22% of the companies that contract rented lines have one office, although these are, by definition, the least relevant in terms of lines and associated income.

We should highlight that the companies require only one operator to design and build an integral telecommunications solution. Therefore, not being able to provide the service to one office, no matter how small it may be, can involve the loss of a key account. For this reason, for the operators centred in a business segment it is very important to be able to provide retail services with national coverage.

In this sense, the CMT, in line with that laid down with the ERG, estimates that the multi-office nature recommends a wide definition of the geographical framework of reference.⁷ In accordance with Guidelines (section 56), "the relevant geographical market includes an area in which the companies affected participate in the offer and demand of the corresponding products or services, the competition conditions are similar or sufficiently homogeneous and can be distinguished from neighbouring areas as the prevailing competition conditions are clearly different".

In fact, given the clients needs, the specific deployments in a specific area do not have an effect on the competition conditions as the companies are provided with a complete solution, and the operators compete in the designing of the best global offer, not just based on a difference in price in a specific area. Therefore, we can conclude that the competition conditions are homogeneous in all the geographical areas regardless of the development of the networks in a specific area.

II.3 The minimum set of rented retail lines

After having analysed the retail services of the rented lines as a set, we should remember that currently Telefónica is the operator with SMP for the minimum set, as was seen in 2008 it represented about 30% in terms of income of all the retail services of rented lines.

Therefore, although many of the characteristics of the market have already been mentioned in previous sections, a specific analysis should be made of the minimum established in order to assess the need to maintain, extend or cancel the obligations currently in force for Telefónica.

II.3.1 Definition of the relevant market

II.3.1.1 Product relevant market

Before defining the minimum set of rented lines, it is necessary to consider the current legal framework, as it is a market closely related to the Universal Service Directive and to the evolution of the European legislation in this respect.

⁷ See ERG Common Position on Geographic Aspects of Market Analysis (definition and remedies), ERG (08) 20: "If a separate market for business or high quality services is defined, it may be the case that because of differences in demand patterns it be appropriate for the NRA to define the geographic scope of the business orientated market as geographically broader than the geographic scope of the residential orientated market".



In fact, the minimum set of rented lines was included in the initial Recommendation of relevant markets of the European Commission in accordance with Annex 1 of the Framework Directive.

Likewise, in article 18.3 the Universal Service Directive established that the minimum set of rented lines would be published in the Official Journal of the European Union.

Lastly, the minimum set of rented lines was defined in Decision 2003/548/CE of 24 July. The lines included were the following:

- Analogue
- 64Kbit/s
- 2Mbit/s structured and non-structured

We should indicate that this minimum set coincides with that laid down in Directive 92/44/CEE, dated 5 June, relative to the application of an offer of open network to the rented lines. In other words, the minimum set of rented lines was defined more than 16 years ago.

With this scenario in the first Recommendation of markets the European Commission included the following indications (emphasis added):

"At a retail level, the Universal Service Directive includes a specific reference to the supply of the minimum set of rented lines. Said denomination is given to the specific rented circuits with harmonised characteristics that should be available under certain conditions throughout the country. Thus, this minimum set of rented lines is included in the Recommendation as a specific set of retail markets. It is not considered necessary to identify specific markets for each category of rented line of the minimum set, as it is probable that the market structure is similar in each subgroup. It is not necessary to extend the categories of rented retail lines to capacities that exceed the minimum set, as it is expected that any wholesale intervention would be enough to solve any problem that may arise. There is no a priori reason to believe that in the context of rented lines this would not be the case."

With this in mind, as the Commission included the minimum set of rented lines in the first Recommendation of markets as liable to be *ex ante* regulated, The CMT carried out the analysis of the same. With regards to the market definition, following the indications of the European Commission, the CMT limited to the minimum set. The only difference worth indicating was the inclusion in the market of the circuits of speeds between 64Kbit/s and 2Mbit/s, the so-called "n x 64Kbit/s". They were included given the existence of the chain substitution between them. It is reasonable that if the circuits of 64Kbits/s and 2Mbit/s are included in the market, the circuits at intermediate speeds are also included.

However, in the opinion of BT, Orange, Verizon and the CNC, a wider definition of the reference market should be considered, valuing the inclusion of segments (Ethernet lines, services provided on ADSL connections and lines of more than 2Mbit/s) that are the substitutes of the minimum set of rented lines. The CNC adds that the minimum set of rented lines is a minority proportion of the retail market analysed.



As stated previously, this market is not included in the new Market Recommendation. In the explanatory memorandum of the same it indicates that the appropriate wholesale regulation should be enough to promote competition in the retail market, as the access barriers are largely reduced. Therefore, the Commission removed the minimum set of the Recommendation and also given notice that it would propose to remove the same from the European legislation in general.⁸

Thus, it is not relevant to extend the market classification further than that carried out in the first analysis. In any event, we should highlight that the situation of all the rented retail line services (not only of the minimum set) has been previously analysed and it has been very much taken into account in the analysis of the connected wholesale markets. Therefore, the CMT considers it appropriate to maintain the definition of the product relevant market made in the first round.

II.3.1.2 Geographic relevant market

In the previous analysis it was concluded that the scope of the markets defined was nationwide, as the competition conditions were sufficiently homogeneous both from the substitution of the demand point of view as well as that of the demand.

Paragraph 59 of the Guidelines indicates that to define a geographical market the following criteria can be followed:

- a) the area covered by a network;
- b) the existence of legal instruments and other regulatory instruments.

In accordance with the previous criteria, the operators that desire to provide the services included in the reference markets can carry this out by means of the deployment of their own infrastructure or from the wholesale services regulated in the RLO.

For this reason, it is of special importance to determine the geographical coverage of the wholesale services, in order to determine possible geographical areas where the competition conditions are different.

In this sense, the obligations enforced in market 13 of the Recommendation of 2003 are applied throughout the country. Therefore, the operators that decide to provide the retail services of rented lines from the wholesale offers of Telefónica can provide their services without any geographical limitations.⁹

Additionally, the considerations about the multi-office nature of the rented lines are valid for the minimum set, thus from this point of view the geographical scope of the market is also nationwide.

^{8 &}quot;With SMP regulation applied where it is warranted at the wholesale level, there is not likely to be consumer harm on the leased retail lines market. Wholesale regulation, where appropriate, should be sufficient to ensure that there is competitive supply at the retail level. The minimum set of leased lines was included in the initial Recommendation in line with Annex 1 of the Framework Directive. However, it is not clear that there is any significant residual market failure that would be required in order for this market to warrant ex ante regulation. Putting consideration of its inclusion in the text of the Directives to one side we can examine whether this market satisfies the three criteria.

With wholesale regulation in place there should be few barriers to market entry into the retail market. Firms can make tenders to provide a widely based leased line offer to the customer's premises. Having overcome the problem of making a ubiquitous offer, then entry barriers into this market are no longer high. Thus, the retail market for the minimum set of leased lines will not be identified in this draft revised Recommendation. Consequently the Commission will propose to reduce the Minimum Set of Leased Lines to zero."

⁹ In RLO, the wholesale services connected to the minimum set have a maximum distance of 70km from the client's home to the Connection Point between the operator and Telefónica. In any event, this does not affect the definition of the geographical market as there is no limitation with regards to the establishment of Connection Points with Telefónica, without prejudice that this aspect may be revised in the wholesale market.



In summary, we can consider that as in the first round, the geographical dimension of the market is nationwide.

II.3.1.3 Conclusion with regards to market definition

Given the previous considerations, the CMT considers it necessary to maintain the definition of minimum set of rented lines made in the first round.

In other words, the following types of lines are considered included in the market:

- Analogue lines of ordinary and special quality (2 and 4 wires)
- Digital lines:
 - $n \times 64$ Kbit/s $(n \ge 1)$
 - 2Mbit/s structured and non-structured

The geographical dimension of the market defined is the Spanish territory.

II.3.2 Analysis of the criteria established by the European Commission to identify markets susceptible to *ex ante* regulation

In accordance with article 10.1 of the LGTel, "The Telecommunications Market Commission, taking into account the European Commission Guidelines for the analysis of the markets and determination of operators with significant weight in the market, as well as the Recommendation of Relevant Markets, will, by means of a resolution published in the "Spanish Official Journal", define the reference markets relative to networks and electronic communications services, amongst which the corresponding wholesale and retail reference markets will be included, as well as the geographical scope of the same, whose characteristics can justify the enforcement of specific obligations". In this respect, the Recommendation of the Commission of 17 December 2007 establishes that, upon identifying markets different from those included in the Annex, the NRAs have to ensure if the three criteria set to determine if a market is liable to be ex ante regulated 10 are accumulatively met.

In accordance with the European Commission, "The application of the three criteria should limit the number of markets in the electronic telecommunications sector where the ex ante regulating obligations are enforced, thus contributing to the objective of the regulating framework of progressively reducing the ex ante sector regulation as market competition develops. These criteria shall be accumulatively applied, that is to say, that the fact of not meeting any of them would imply that said market should not be included amongst those that can be subject to ex ante regulation" (section 14).

Therefore, a market identified by a NRA at a national level may not be susceptible to *ex* ante regulation in the case of it not complying with one of the three criteria as established by the European Commission in their Recommendation.

¹⁰ Section 5 of the Recommendation: "In order to identify the markets that can be subject to *ex ante* regulation, it is convenient to apply the following cummulative criteria. The first criterion is the presence of strong and non-transitory obstacles to access the market, whether these are structural, legal or regulatory. Nevertheless, given the dynamic nature and the operation of the electronic communication markets, in order to carry out a prospective analysis it is necessary to identify the relevant markets in view of a possible *ex ante* regulation, also take into account the possibilities of overcoming these obstacles that make the access difficult in the relevant timescale. Therefore, the second criterion only chooses those markets whose structure does not tend towards effective competition within the relevant time horizon. The application of this criterion implies the examination of the competitive situation behind these access obstacles. The third criterion is the one in which the mere application of legislation on the competition situation does not allow suitable attention to be paid to the failures of the market in question.



In accordance with section 17 of the same, the "markets listed in the annex have been identified on the basis of these three cumulative criteria". Therefore, the NRAs can expect compliance. ¹¹ On the other hand, "In the case of the markets that are not included in the present Recommendation, the national regulatory authorities should apply the test of the three criteria to the corresponding market".

In this sense, the market of the minimum set of rented lines is not included in the Annex of the Recommendation, thus, prior to the analysis of the same, it is necessary to determine whether it is a market liable to *ex ante* regulation in accordance with the previous criteria. For this purpose, the indications of the ERG document "Guidance on the application of the three criteria test" will be followed.

II.3.2.1 Presence of non-transitory entry barriers to market access

The aim of this first criterion is to analyse the structural elements and legal obstacles that in the previously defined market can affect the entry of other operators or the expansion of currently existing ones. As established by the Recommendation, "the structural obstacles are derived from an original situation of demand or costs that create asymmetrical conditions between historical operators and the new operators which make market entry difficult or prohibitive, for the latter set".

Likewise, upon carrying out the analysis of the market entry barriers we should take into account if these are liable to be non-transitory following the "modified Greenfield approach", namely, taking into account the current regulation of the wholesale markets related but not the asymmetric regulation enforced on the services subject of the analysis.

II.3.2.1.1 Legal or regulatory obstacles

With regards to the existence of this type of obstacle, the Recommendation indicates that these "are not based on the economic situation, but are derived from legislative, administrative or public measures in general that directly influence the entry conditions and/or the positioning of the operators in the relevant market".

The main legal obstacles that can arise in the electronic communications market are as follows:

- Need to obtain administrative authorisation or a license for operating in the market
- Having user concessions in the radio-electric spectrum.

With regards to the reference market, there are no obstacles for this type in order to access the same, as the system of licenses has been derogated and a more flexible authorisation system is applicable, which involves a lesser load for the operator. Furthermore, there is no need for electromagnetic spectrum in order to provide the services included in the reference market.

¹¹ See Explanatory Note, point 2.2: "For those markets listed, the Recommendation creates a presumption for the NRA that the three criteria are met and therefore NRAs do not need to reconsider the three criteria. However, it is open to NRA to assess the three criteria in terms of whether they are satisfied for their specific market if the NRA believes that this would be appropriate. The results of any such analysis should follow the normal market notification procedure".

¹² ERG (08) 21 ERG Report on 3 criteria test final 080604.



II.3.2.1.2 Structural obstacles

With regards to the existence of obstacles to the structural entry, the electronic communication markets are characterised by important scale, scope and density economies and by high sunk costs.

In order to assess the magnitude of the structural obstacles, a series of variables are analysed below, which will allow assessing if there are important and non-transitory barriers to the entry in the reference market.

- Level of the sunk costs

This type of cost is defined as those being necessary for the entry of the operator in the market and that cannot be recovered when the company leaves the same.

The wholesale services regulated in the RLO greatly facilitate the entry of new operators to the reference market. In this respect, it should be highlighted that the establishment of a Point of Connection¹³ with Telefónica allows an operator to provide the reference services in an area of 70km of radius.

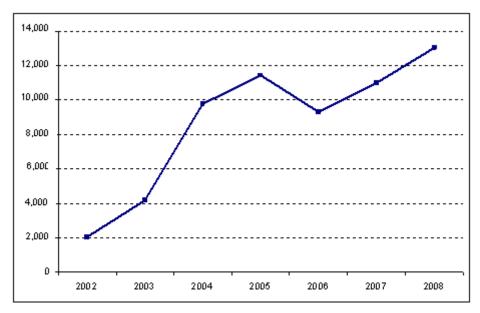
In this case, although the variable costs will be significant, the sunk costs for the establishment of Points of Connection are reduced when compared with the deployment of the access network necessary to reach the same coverage, and it is not considered to be an obstacle. Additionally, for the setting up of Points of Connection, the RLO provides all the facilities with regards to the re-use of existing infrastructures, both of interconnection and of RUO. Sharing the Points of Connection with various operators is also allowed. All these regulated offer facilities decrease the obstacles to the entry even more.

We should remember that the wholesale circuits that allow the provision of the minimum set of rented lines were regulated for the first time in the RIO 2001. The following graphic shows the number of lines contracted in the period 2002-2008.

¹³ Both the terms Point of Connection (PoC) or Circuit Point of Interconnection (CPoI) will be used without distinction in the document.



Graphic II.3.1 Evolution of the number of wholesale lines provided by Telefónica



Source: CMT based on the specific requirements of the current analysis.

In 2008, Telefónica had multiplied the lines provided wholesale with regards to 2002 by 6.5. The growing tendency of these services shows that the supply is in operation and that it is more frequently used by the operators.¹⁴

In short, the CMT considers that the existence of a regulated wholesale supply available since 2002 and the facilities provided by the RLO with regards to setting up Points of Connection with Telefónica allow concluding that the sunk costs to provide the retail services of reference are reduced.

- Scale and scope economies

A second type of entry barriers is the existence of substantial scale and/or scope economies. The scale economies are defined as the costs advantage that a company obtains as its production increases, while scope economies refer to the efficiency achieved by a company when it supplies a range of services using a same infrastructure.

For the speeds included in the reference market, it is considered that the regulated wholesale services included in the RLO allow the operators to enjoy the economies of the incumbent operator. Thus, and in a "modified Greenfield approach" context, the costs orientation obligation of the wholesale services included in the RLO allows enjoying the entries of the same scale and scope economies as Telefónica.

Control of an infrastructure that it is not easily reproducible

¹⁴ The small change in the tendency of the series in 2006 was due to the integration of Telefónica Data in Telefónica, which caused an adjustment in the total number of circuits supplied by the operator. Furthermore this also happened at a retail level where the number of n x 64Kbit/s lines was also reduced due to the migration of bitstream connections.



In the first review of the markets it was concluded that "TESAU, as the traditional operator, controls the access network with the highest capillarity in Spain, whose deployment implies an important investment in economic and time terms".

The analysis of this criterion is similar to that of the sunk costs and again it is greatly conditioned by the existence of wholesale services. By means of the regulated access, the alternative operators can enjoy the advantages of the ubiquity of Telefónica infrastructure.

In short, given the regulated wholesale services in the ascending markets, this Commission does not consider that there is an infrastructure that is not easily reproducible to access the market.

- Change costs

Another of the entry obstacles that may exist in the reference market is the existence of change costs for the consumer. In the case of the rented lines the consumer is a company, very sensitive to the service prices as well as to its quality. Additionally, the operators centred in this business usually have commercial and technical staff (client engineers) dedicated to meet the client needs in a personalised way. All these factors allow concluding that the change costs are not an entry obstacle either to this market.

II.3.2.1.3 Conclusion

From the previous analysis we can conclude that there are no important and non-transitory obstacles. The regulated wholesale offers largely mitigate the obstacles that there may be given the level of sunk costs or the scale and scope economies enjoyed by Telefónica. Therefore, the CMT considers that the first criterion is not met in order to consider that a market is liable for *ex ante* regulation.

In accordance with the Recommendation, the compliance of the three criteria should be cumulative, namely, if one of them is not met, the market will not be liable to be *ex ante* regulated. Nevertheless, and in order to carry out the analysis as exhaustively as possible, below we will analyse if the market defined meets the two additional criteria indicated by the European Commission in its Recommendation.

II.3.2.2 Tendency towards effective competition

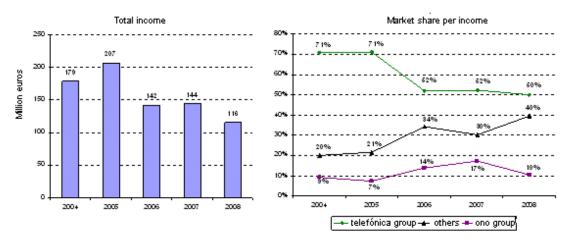
In order to assess the possibility of a market to tend towards effective competition within the period considered, indicators should be valued, such as the market shares, the existing competition, the evolution of the prices or the potential competition.

II.3.2.2.1 Market share and evolution of competition

The following graphic shows the evolution of the shares by income in the market of the minimum set of rented lines.



Graphic II.3.2 Income and share of the minimum set



Source: CMT based on the annual CMT requirements

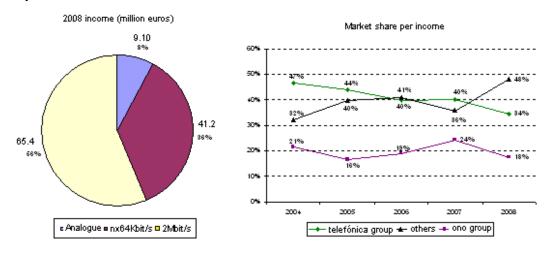
The market share by income of Telefónica has decreased very significantly between 2005 and 2006. This is due to a sharp decrease in the availability of n x 64Kbit/s circuits, where the Telefónica share has been historically high, as the alternative operators focussed on circuits of speeds of 2Mbit/s and more from the very beginning. Of the remaining operators we should highlight ONO group, with a share of 10% in 2008. The remaining 40% of the market is widespread, the most important operators being COLT, Vodafone group and Euskaltel.

In a prospective way, it can be estimated that the availability of analogue circuits and of n x 64Kbit/s circuits will continue decreasing. Many of these circuits will migrate to DSL connections with guarantees or at higher speeds. Therefore, the share of the 2Mbit/s circuits is a good indicator of the market situation once the availability of n x 64Kbit/s and analogue circuits decreases.

Therefore, the shares by income of the 2Mbit/s circuits are shown below, as well as the relative importance in income of this speed in the minimum set in 2008.



Graphic II.3.3 Relevance and market shares of 2Mbit/s circuits



Source: CMT based on the annual CMT requirements

It can be highlighted that Telefónica's share for the 2Mbit/s circuits in 2004 was already lower than 50% in terms of income, continuing with a decreasing tendency to reach 34% in 2008. ONO's share is 18%, whilst the remaining 48% as happened with the global of the minimum set, is widely distributed among various operators.

Such a reduced share of Telefónica for the 2Mbit/s circuits is very significant, as in a prospective way, it is expected that the share of the global level of the minimum set will become more and more similar to the share of the 2Mbit/s circuits (as the analogue and digital circuits and the n x 64Kbit/s circuits disappear).

However, the CNC considers that the fall in the share seems to be more related to the migration of the lines to Ethernet technology and with the replacement of the low speed rented lines by VPN over ADSL solutions than to the existence of a regulated offer.

With respect to this CNC comment, it is necessary to indicate that, according to the Guidelines, the technology change imposes competitive pressure on the operator with SMP that should be considered within the framework of the analysis of the reference market. Therefore, the fact that is indicated is not enough to distort the conclusions reached with regards to the market shares of Telefónica.

Likewise, we should remember that data has been included (graphic II.3.1) on the evolution of the number of lines wholesale provided by Telefónica. In the 2002-2008 period, the number of these lines has gone from 2,000 to more than 13,000, which represents an increase of about 650%. It is clear that such an outstanding growth on a wholesale level – given the existence of a regulated offer - has negatively influenced the retail share of Telefónica.

On the other hand, as indicated by the CNC, numerous low speed lines have migrated to ADSL connections. Precisely for this reason the specific analysis of the 2Mbit/s lines has been carried out, as this speed is the least affected by the migrations to ADSL connections (too high) or to Ethernet (too low). Therefore, it has already been indicated



that the share of Telefónica for this type of line shows a clearly decreasing tendency, at only 34% in 2008.

In summary, the previous data indicate that the market of the minimum set of rented lines tends towards effective competition thanks to the existence of a regulated wholesale offer, and of course, to the competitive pressure of the operators that have deployed their own network.

II.3.2.2.2 Price evolution

The Telefónica prices for the minimum set of rented lines are regulated by the CMT – previously by the CDGAE.¹⁵ In any event, these circuits are sold included in other services in the shape of a global telecommunications solution, which implies the application of discounts on the regulated price. In this respect, the monthly average income of the market for a line of 2Mbit/s is about €700, whilst the equivalent regulated price is about €1,500 (using an average distance of between 20 and 30Km). In short, although the regulated prices are maximum, they are not, given the existing level of competition in the market, a limitation for the performance of the operator with SMP, given that the real ones are substantially lower.

II.3.2.2.3 Conclusion

From the analysis of the second criteria we can conclude that the reference market has the appropriate conditions to consider that this tends to effective competition. In fact, Telefónica's market share is being reduced to levels close to 50%. Likewise, the n x 64 and analogue circuits are gradually disappearing and currently the 2Mbit/s circuits represent 56% of the market in terms of income. In a prospective way, it is expected that the share of the minimum set will become more and more similar to the share of the 2Mbit/s circuits. Thus Telefónica's share for this speed is 34%, with a tendency to decrease.

Given all this, the second criterion to consider that a market is liable to be ex ante regulated is not met.

II.3.2.3 Sufficiency of Competition Law

According to the Market Recommendations, the third criterion to be met by a market in order to be liable to be ex ante regulated consists in determining "if the legislation on competition is enough to solve the market failures resulting from the compliance of the first two criteria".

The European Commission considers that, "probably, the legislation on competition will not be enough if its intervention in order to solve a market failure has to meet multiple requirements or when a frequent intervention and/or at a specific moment is essential".

According to article 24 of Law 15/2007, of 3 July, from the Competition Defence (herein LDC), "the Spanish Competition Commission is the competent body for instructing and resolving issues revolving around this Law and in particular: (a) applying the points laid out the current Law regarding competition-restricting behaviour [...]; (c) applying articles 81 and 82 of the EU Treaty and its resulting laws in Spain [...]".

¹⁵ Spanish Government Commission for Economic Affairs.



Therefore, according to article 48.2 from the LGTel, "the Telecommunications Market Commission (CMT) must establish and supervise the specific obligations that market operators have to comply with, boost competition in the audiovisual services market in accordance with its regulatory rules, resolve conflicts between operators and where necessary, act as arbitration body for any disputes between them". Likewise, according to article 48.3 of the LGTel, the CMT exercises the following functions: e) Adopts necessary measures for safeguarding the plurality of the service offer, access to the electronic communication networks by operators, network interconnection and operation of network in open network conditions, price policies and marketing by the service suppliers [...]".16

In compliance with the previous indications, below we will analyse if an *ex post* intervention by the authorities competent in the matter can prevent certain anti-competitive actions in the reference market.¹⁷

The minimum set is a market with a decreasing weight at a global level of the rented lines services. In fact, the use of new technology –such as Ethernet– as well as the use of higher capacities makes the regulation of the wholesale market of rented lines sufficient to achieve a suitable level of competition in the retail market.

In this respect, from the last market revision this Commission has not carried out any intervention, nor has it has resolved any conflicts in this market, indicating the little margin of conflicts in the same.

Therefore, even though there is a vertically integrated company (Telefónica), the characteristics of this market (increasingly less relevant when compared to other types of lines), as well as the dynamics of the same (scarce regulatory conflicts between the operators) has shown that an *ex ante* intervention is not essential, the ex post intervention being sufficient.

The competent authorities avail of the necessary resources and skills for testing the existence of competition-restricting practices in an *ex post* context in the case that a formal complaint were to be submitted by an alternative operator.

On the other hand, taking into account the characteristics and the structure of this market, it does not seem that there is going to be actions that may cause an irreparable prejudice, above all if we take into account the existence of a regulated wholesale offer. In any event, the restoration of the previous competitive conditions would be viable from actions in the connected wholesale market.

To summarise, it is considered that *ex post* intervention is sufficient for solving market failures that could have been produced in the reference market, taking into account, in any case, and in accordance with the *"Explanatory Note"*, that article 5 of the Framework Directive (article 9 of the LGTel) provides the NRAs the competence to

¹⁶ As indicated by the Spanish High Court (*Audiencia Nacional*), "[...] it is true that the Law expressly enables the CMT to enforce obligations on certain operators in order to prevent anti-competitive practices, although the general direct application of the rules for the defense of competition are not included in the competence of the CMT. Therefore, in the event of noticing a practice that may be contrary to the 'plurality of offers', the regulating organisms may enforce obligations of a different nature, to do or not to do, on the operators, and in the case of non-compliance with the same, the CMT may exercise its sanctioning powers. [...] The drafting of the current section e) of paragraph 3 of article 48 of Act 32/2003 [...] authorises the CMT to impose 'specific' and 'individual' measures, which should be complied with by the operators in the Telecommunications Market, this being its purpose [...]", sentence of the Spanish High Court of 1 March 2006 (rec. n. 1219/2003); in the same respect, please refer to the sentence of the Spanish High Court dated 22 July 2007 (rec. n. 83/2005); sentence of the National High Court dated 17 July 2007 (rec. n. 529/2004).

¹⁷ To these effects, it is interesting to refer to the General Action Protocol between the Spanish Competition Commission and the Telecommunications Market Commission, signed on 18 June 2008.



obtain relevant information not only on costs, but also with regards to the retail prices in order to enforce and supervise the appropriate obligations in the access wholesale markets.

The competent authorities avail of the necessary resources and skills for testing the existence of competition-restricting practices in an *ex post* context in the case that a formal complaint were to be submitted by an alternative operator.

In view of the foregoing, the third criterion to consider that a market is subject to ex ante regulation is not met.

II.3.3 Conclusions regarding meeting the three criteria fixed in the European Commission Market Recommendation

Exhaustive analysis has been carried out in this document into the criteria that a market should meet with to be susceptible to *ex ante* regulation in accordance with the European Commission market Recommendation.

The following conclusions have been drawn:

- There are no significant entry obstacles in the reference market as the regulated wholesale offers (RLO) soften the obstacles there may exist with regards to the sunk costs or the scale and scope economies.
- Telefónica market share has progressively reduced and it is at a level near 50%. Likewise, Telefónica share for the 2Mbit/s circuits, the most relevant speed in the minimum set, is of 34%.
- Anticompetitive practice can be solved via *ex post* intervention (sufficiency of competition legislation).

According to the CNC, there are no significant variations with regards to that indicated in the analysis of the former market 7, approved in March 2006, where the conclusions were different.

This Commission does not agree with the statement of the CNC, as it considers that there are outstanding differences with regards to the first analysis. For example, the decrease of Telefónica's share with that in the first market analysis is very significant, going from 71% to 50% in the 2004-2008 period. Furthermore, it should also be taken into account that between the two market analysis the CMT decreased the wholesale prices of the RLO in a very significantly way.

Given the above reasons, the CMT concludes that the three criteria to identify a market as liable to be *ex ante* regulated are not met.

II.3.3.1 Cancellation of the existing obligations in the retail market of the minimum set of rented lines

In accordance with article 10.1 of the LGTel, "the Telecommunications Market Commission, taking into account the Guidelines of the European Commission for the analysis of the markets and determination of operators with significant weight in the market, as well as the Recommendation of Relevant Markets, shall define, by means of a resolution published in the 'Spanish Official Journal', the reference markets relative to the networks and electronic communication services amongst which the corresponding



wholesale and retail reference markets will be included, and the geographical scope of the same, whose characteristics can justify the enforcement of specific obligations". ¹⁸

In the present document this Commission has defined the market of the minimum set of rented lines and has analysed if it can be subject to *ex ante* regulation, in compliance with that laid down in the Framework Directive and in article 10 of the LGTel. In line with the conclusions reached by the European Commission in its 2007 market Recommendation, the CMT considers that the reference market is not liable to be *ex ante* regulated, as the three cumulative criteria required by the European regulations in order to proceed with the market regulation are not met.

Therefore, in compliance with that laid down in LGTel and in the Market Regulation, this Commission considers it recommendable to proceed with the cancellation of the obligations previously imposed on Telefónica. To these effects, it is necessary to take into account that there are users that are currently using a minimum set of rented lines. Therefore, it is considered that a period of time of 6 months, as from the publication of the definite resolution in the Spanish Official Journal, for the cancellation of the current obligations is reasonable, as it ensures the existence of a prudential period of time for the adaptation, if applicable, to the new situation.

The CNC indicates that the disappearance of the regulated conditions for the retail services of the operator with SMP could give rise to multiple potentially abusive situations that leads it to reconsider the suitability of the right of the competition to face them. Nevertheless, this circumstance could be solved by means of the design and application of appropriate *ex ante* obligations in the wholesale market of the rented terminal lines, such as the prohibition of abusive practices in the descending retail market and the *a priori* control of the prices and offers of Telefónica. In particular, said obligations should be useful to guarantee the replicability and objective justification of the promotions and offers of Telefónica, including the packages. This opinion is shared by ASTEL, BT, COLT and Orange.

The market of the rented terminal lines will be analysed below. It is in this section where the appropriate wholesale obligations should be imposed, for this purpose taking into account the decision of cancelling the obligations in the descending levels of the chain of value.

III WHOLESALE MARKET OF RENTED TERMINAL LINES

Once the analysis of the retail services of the rented lines has been concluded, the connected wholesale market should be analysed. We will start with a brief study of the different existing wholesale options to provide rented retail lines to then analyse the most relevant wholesale service in detail: the rented terminal lines.

III.1 Technical options on which rented lines can be provided

In order to provide users with the retail service defined above, an operator has several options:

¹⁸ Also see article 2.1 of the Market Regulation.

¹⁹ Included in Annex 2 of the Resolution of the CMT of 20 April 2006 by which the definition and analysis of the market of the minimum set of rented lines, the appointment of operators with SMP and the enforcement of specific obligations is approved.



- a) Deploying its own access network (including the outside plant). This is the option with the best possibilities for differentiation in the supply and it is the lowest level of competition in infrastructures, allowing the operators to develop their network and thus their offer of services in an independent way. Examples of operators with their own access network in Spain are Telefónica, the cable operators and COLT.
- b) Contract wholesale rented terminal lines to Telefónica or other operators. In the case of Telefónica, the provision conditions, including the prices, are regulated in the RLO for both the traditional interfaces (up to 155Mbit/s) and Ethernet (up to 100Mbit/s).
- c) Use the services related with the unbundling of the bit-streams regulated in the RUO. In fact, an operator, by means of the setting up of two or more fully unbundled pairs (a technique known as "bonding") can obtain SHDSL of up to 2Mbit/s.
- d) Use of the external plant (passive infrastructure) of another operator. In this case, an operator would use the civil works elements that make up the external plant of another operator associated with the conductor lines from the exchanges to the offices of the companies in order to proceed with the installation of the signal conducting elements themselves.

Of the previous four options, the first two are the most interesting for the present analysis, as:

- Option c) is an alternative that the operators re using, but its weight is relatively low, and the unbundling of a series of loops at a same address is not specifically included in the RUO, so this alternative presents uncertainties with regards to its practical implementation. In any event, the wholesale rented lines that the alternative operators have provided in this way have been included in the calculation of the market shares.
- With regards to the use of channelling (option d), as a consequence of the obligations imposed by this Commission in the Resolution dated 22 January 2009,²⁰ Telefónica should provide these wholesale services. Therefore, although it is expected that the operators will very soon start to use this access modality, until now this has not been relevant.

An operator can also contract bit-stream access to the subscriber loop included in the RUO in order to provide services to certain locations of its client, depending on quality requirements of the final service to be provided. Although it is true that some low capacity rented lines have been replaced by broadband connections with guarantees, by means of the bit-stream a service of rented lines is not provided. It is more a supplementary tool in the design of integral communication solutions to business clients. In other words, certain locations of a client should be provided with a rented line and in others a bit-stream connection with the appropriate quality guarantees is enough.

²⁰ Resolution by which the definition and analysis of the wholesale access (physical) market to network infrastructure (including the shared access or fully unbundled) at a fixed location, and the wholesale access market to broadband, the appointment of an operator with significant market power and the imposition of specific obligations (MTZ 2008/626).



The following graphic includes an example of how an alternative operator can cover, with different ways of access, the requirements of a multi-office company (specifically a bank):

Head Provincial Local Remote Address office office office cash point used Own fibr Rented line Rented Bit-stream Bit-stream (Ethernet) line (2Mbit/s) with without guarantees

Operator

Graphic III.1.1 Different access requirements for a multi-office company

Source: CMT based on the annual CMT requirements

It should be highlighted that in the design of a telecommunications solution for a company an alternative operator uses services that belong to different wholesale markets. In the previous example, the alternative operator could use the wholesale access to Telefónica channelling in order to access the head office with its own optic fibre (market 4), use the rented lines (traditional and Ethernet) of the RLO for the offices (market 6) and bit-stream connections regulated in the RUO for remote cash points and domestic access to the Intranet by the employees (market 5).

As in the retail market, according to the CNC the effects of the dominant condition of Telefónica in the connected market of broadband access services and in the virtual private network retail services on ADSL and other access technologies, highly substitutive of the rented terminal lines on the wholesale market structure should be considered.

This Commission is perfectly aware of the situation of the markets mentioned by the CNC, as in January the second round analysis of the markets 4 and 5 was completed and in both Telefónica was appointed as the operator with SMP. In this respect, the appropriate obligations to cover the needs of the operators with regards to the unbundled access to the bit-stream and to Telefónica conduits and channelling have been analysed in market 4 and the bit-stream access to the loop in market 5.²¹

III.2 Definition of the relevant market

In order to define the access market of rented terminal lines we will start, for its review, from the definition made in the first round of the market analysis.

III.2.1 Definition for the relevant product market

III.2.1.1 Definition made in the first round

In general terms, we believe that a rented line wholesale service is the transmission service provided to other operators for the permanent connection between two points by means of a public telecommunications network, with a determined fixed capacity,

²¹ File MTZ 2008/626.



and without including switching functions that the demanding operator may control. Said service allows connecting two points for the sending and reception of information flows.

These services are requested in order to be used as carriers of another type of electronic communications services, namely, a rented line is requested in order to have connectivity between two points and on the link set up to provide other types of services.

In the first review there was a joint analysis of the rented terminal line markets and those of trunk rented lines. In fact, the trunk rented lines were defined as those provided to third operators by means which a section of the circuit between two nodes of the operator demanding the service is supplied. Likewise, it was specified that an operator contracts this types of lines in order to build certain routes of its trunk network. On the contrary, the terminal circuits are more related to the geographical area where the fixed location to be connected is located and in which the fixed operator does not have coverage with its own means.

On the other hand, a trunk network is understood as being that established to connect certain nodes as switching exchanges, presence points and Points of Interconnection forming the main connection axis of the operator's network to which smaller subsidiary networks will be connected. It is also known as the transport network or the backbone.

Therefore, the rented terminal lines are in general more lined with the rented retail line services, while the trunk rented lines are part of the trunk network of the operator and, therefore, they are indirectly related with any type of service, both wholesale and retail: broadband, rented lines telephone traffic, etc. The following schematic and very simplified graphic shows the existing relationship between the various different services:



Rented trunk lines + Own network + Rental of Dark Fibre

Rented terminal lines Own access network and other wholesale access services

Rented retail lines Remaining final services: broadband, telephone access and traffic, etc.

Graphic III.2.1 Rented lines and network structure

Source: CMT

In the first analysis it was concluded that the trunk and rented terminal lines were not substitutive and belonged to different markets.

Additionally, it was concluded that it was not appropriate to segment the rented terminal lines markets depending on the capacity of the lines.

In any event, the most outstanding fact of the definition made in the first round was the inclusion of lines provided with Ethernet interfaces. It was concluded that this type of line were replaceable with the traditional ones, although some slight technical differences between both types of lines were acknowledged. The conclusion reached has been confirmed in practice, as seen in the analysis of the rented retail services lines.

The CMT considered that the previous points remained valid. However, Telefónica considers that the following segmentation by speeds should be carried out:

- Circuits of up to 2Mbit/s.
- Circuits of more than 2Mbit/s and up to 155Mbit/s.
- Ethernet and Fast Ethernet circuits.

Telefónica states that the existence of the bit-stream which allows providing circuits of up to 2Mbit/s is that which justifies this differentiation.



It should be reminded that in the analysis of the retail line markets information has been presented separated by speeds. From the study of this data it can be proven that the replaceability in chain of the speeds mentioned by Telefónica, thus it has not been considered necessary to segment the market depending on the speed in the wholesale market.

Therefore, the conclusions reached by the CMT Services in the public consultation in that regarding the technologies –both the traditional and the Ethernet lines are included– and speeds -all the circuits of any capacity are included- are maintained.

III.2.1.2 Replaceability of the rented terminal lines as a complement to the access network

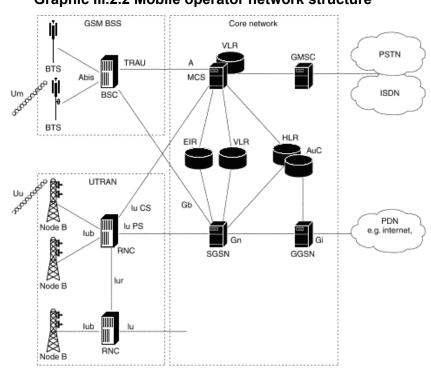
In the first market analysis, the rented wholesale terminal lines were defined as those provided to other operators along which a section of circuit between a node and the address of the client of the operator demanding the service is provided. In other words, an operator contracts this type of lines wholesale for the provision of services to final users at locations where it does not have its own network.

Therefore, the definition made in the first round was exclusively centred on the use of wholesale rented lines by the operators for the provision of the retail services of rented lines. Nevertheless technical lines analogous to the latter are used by the operators to complete the access networks in areas where they do not have coverage. This type of circuit, given the local characteristics, do not fit in the trunk lines market, so it should be analysed whether the possibly belongs to the terminal lines market.

In fact, specifically, the mobile operators contract wholesale rented lines at certain geographical locations to connect different elements of their network. Therefore, we should briefly describe the components of a mobile network and the separation between trunk and access network in order to determine the possible replaceability with the terminal circuits connected to final clients.

The following graphic shows the usual scheme of a mobile network (regardless of being a GSM or UMTS network).





Graphic III.2.2 Mobile operator network structure

Source: Cisco Systems public documentation (www.cisco.com)

Within the architecture of a mobile network, we can consider that the mobile access network is made up by the series of elements that in the GSM network make the Base Station Subsystem (BSS)²² in the UMTS network that make up the Terrestrial Radio Access Network (UTRAN, UMTS).²³ These elements are responsible for managing the traffic and signalling between the mobile terminal and the switching elements (MSC, Mobile Switching Centre).

The trunk network of the mobile network is made up by both the switching elements of circuits associated to the voice services (MSC) and those in charge of the package traffic (GSN, GPRS²⁴ Support Nodes), all of them usually located at the same exchanges, such as the communication networks of circuits and data for the interconnection of the exchanges.

Given the widespread geographical dispersion of the sites of the emission/reception stations of the radio signal for the connection with the user mobile terminal, it is usual that for the connection of said sites with the operator's network, rented lines are contracted from another operator with presence at the locations of the radio stations. This is also met; although its dispersion is lower, to connect the BSCs or RNCs with the exchanges and buildings of the mobile operator.

²² The BSS is made up by the base stations called BTS, Base Transceiver Station, and the control and management centres that set various base stations known as BSC, Base Station Controller.

²³ The UTRAN network is made up by the base stations known as Nodes B and the control and management centres grouping together various B nodes and called RNC, Radio Network Controller.

²⁴ General Package Radio Services.



On the other hand, as any other operator, the mobiles can use the rented lines services to support part of their trunk network and connect their switching exchanges.

Therefore, the mobile operators' contract rented lines in order to:

- a) Make up certain routes of their trunk network and;
- b) To connect trunk network elements with the radio access network, namely, for the connection between MSC and BSC/BTS.²⁵

With the first type of lines there is no doubt whatsoever: they are rented trunk lines from all the aspects and meet the definition of the trunks made in the first round. In short, they are rented lines, in general high capacity, that connect elements of the trunk network of the operator demanding the service.

On the other hand, with the second type of line there are doubts on the relevant market to which they belong. Strictly applying the literal definition made in the first analysis, they would belong to the trunk market, as they connect two elements of the network of the operator demanding the service (the MSC and the BTS). Nevertheless, this type of line is more limited in their theoretical and practical nature, to the rented terminal lines, namely, lines of a lower capacity that allow the demanding operator to provide the service at a location where it does not have its own access network.

From the demand point of view, although the final use of the rented line is different (in a case to directly connect a business client and in another to connect a BSC/BTS), both the fixed and mobile operators use this type of line to complete their access network. In fact, the mobile operators may use the RLO services to cover these needs without having to carry out any modification in the supply. Therefore, from the demand point of view it could be considered that both types of lines are replaceable.

From the supply point of view, replaceability is total, since if the terminal lines operator has sufficient capillarity in a certain geographical area to connect to a final client, it can also, without any relevant costs, reach a BSC/BTS. In fact, from the installation point of view, the supplying operator does not mind if the end of the terminal line is the head office of a business client or a BSC/BTS.

In conclusion, taking into account the replaceability from the demand point of view, which is reinforced by the absolute replaceability from the supply point of view, it is considered that the lines rented by the mobile operators for the connection of elements of its fixed access network belong to the relevant market.

ASTEL, Orange, ONO, Verizon, Vodafone and the CNC consider appropriate the analysis and definition of the relevant market proposed by the CMT.

They only indicate that it should be considered if the terminal lines used to complement the access network of the operators have to necessarily be limited to the lines contracted by the mobile operators or if they could be extended to any electronic communications network.

We should clarify that the market definition includes all the lines used to make up the operator's access network. It was specified in the lines used by the mobiles for the

²⁵ Likewise, the BTS of a smaller size used to improve the coverage of interiores known as picocells would also be included in this category.



BTS/BSC connection because they are very numerous and their treatment was the most evident problem with regards to the definition made in the first round.

III.2.1.3 Conclusion

According to the conclusions reached in the previous sections, the following market definition is proposed:

- Rented terminal lines wholesale market: that in which the capacity of fixed transmission is supplied, symmetrical, without any switching functions that the user may control and that will be part of the access network of the operator demanding the service, regardless of the technology used to supply the capacity.

III.2.2 Definition of the relevant geographic market

According to section 56 of the Guidelines, "the relevant geographic market covers an area in which the companies affected participate in supply and demand of the relevant products and services, the competition conditions are similar or sufficiently homogenous and can be differentiated from the neighbouring areas as having considerably different conditions than the prevalent competition." In section 59, the European Commission also specifies that "in the electronic communications sector, the geographical scope of the relevant market has traditionally been determined by reference to two main criteria: a) the area covered by a network, and b) the existence of legal instruments and other regulations".

According to these criteria, Market 13 Resolution concluded that the scope of that market was "national, since sub-national areas in which the competition conditions for the service described are not detected as being sufficiently different with respect to the rest of the country".

Addressing both criteria, in the case of the present revision these conclusions are maintained, in such a way that the rented terminal lines are the first regulated service in the chain of value of the rented line services.

Additionally, the considerations on the multi-office nature of the rented retail lines are also applicable to the rented terminal lines, so from this point of view the market is also nationwide.

In summary, for the previous reasons we can conclude that the geographical dimension of the reference market is nationwide.

III.2.3 Market liable to ex ante regulation

The product market so defined coincides with the list with number 6 in the Recommendation Annex. This is a market that has been previously identified by the European Commission as one of those meeting the three accumulative criteria that should meet the relevant markets where the specific *ex ante* obligations are to be enforced.

Therefore, we must conclude that the market defined in the above section is a market that may be subject to ex ante regulation according to that stated in the Framework Directive.



III.3 Analysis of the market structure, assessment of the existence of effective competition in the same and determination of SMP operators

III.3.1 Description of the structure of the reference market

After defining the relevant market we analyse its structure as a prior step to the valuation of the existence or not of effective competition in the same.

III.3.1.1 Evolution of the offer. Market shares

In 2008 the rented terminal lines wholesale market had a size of 35,385 lines that generated an income of 199 million euros. Telefónica rented 26,069 lines, a share of 73%.

Within the market the lines of all speeds and interfaces are included, although the most usual are 64Kbit/s to 155Mbit/s in the traditional and 10Mbit/s to 1000Mbit/s in Ethernet.

Likewise, the data includes both the terminal lines for fixed operators (access to their business clients) as well as for mobile operators (access to BTS/BSC).

The evolution of the total income as well as the market share is included in the following graphic:

Graphic III.3.1 Total income and shares of rented terminal lines²⁶

Source: CMT based on the annual CMT requirements

Telefónica's market share was 70% in terms of income in 2008. From 2005 to 2006 we can see a considerable decrease of more than 10 percent. Said decrease is due, as happened with the retail lines, to two reasons:

²⁶ In accordance with the conclusions reached in the market definition, both the terminal lines leased to fixed operators and those leased to mobile operators are included. Nevertheless, the terminal lines that Telefónica leased to its mobile branch are not included as they are captive sales.



- a) The migration of n x 64Kbit/s lines to ADSL connections with guarantees. As Telefónica was practically the only wholesale provider of this type of lines, its income and therefore its market share are the most affected.
- b) The migration of retail lines to the Ethernet technology. As Telefónica did not offer this type of line as a wholesale, its share in the total market is reduced.

The second competitor in the market, far behind Telefónica, is ONO group, with a share of 11% in 2008. The remaining operators had a joint share of 19% in 2008.

III.3.1.1.1 Prospective Analysis

In the period subject to the present analysis, we can expect the following:

- a) On the one hand, that the evolution of the traditional lines will be similar to that described at a retail level, that is, the number of rented n x 64Kbit/s lines will continue decreasing, which will have a double effect: decrease in the size of the market and of Telefónica's share.
- b) On the other, as described in the retail level, the rented lines with Ethernet interface will continue with the growth seen up to the present time. Without wholesale regulation, the economic force of Telefónica would be increased given that it is the operator with greater capacities for the provision of this type of services to the final client. This being the case, in a "Greenfield Approach" context, Telefónica would not have incentives to provide wholesale services with this modality. However, at a wholesale level, the start up of the RLO for Ethernet interfaces will cause the increase in the size of the market (until now, the importance of this technology in the wholesale market was very low) and the increase of Telefónica's share.
- c) We should highlight that until now only the alternative operators provided wholesale Ethernet lines. Therefore, the main growth factor of the wholesale market for this technology will be given by the circuits provided by Telefónica under the conditions laid down in the RLO, which also implies that the market share will increase.

Of the two previous effects, expectedly the most relevant, especially in terms of income, is the growth of the Ethernet availability due to the start up of the RLO. With this in mind, in global terms a growth of the total size of the rented terminal lines market and of the relative importance of the Ethernet technology can be expected.

III.3.2 Obstacles to entry

The presence of obstacles to entry is a transcendental factor when determining the impact that a dominant operator's presence will have on effective competition in the market of reference. Its existence or not determines that a significant business position becomes long-lasting or structural, or, on the contrary, it is easily contestable and therefore, circumstantial.

In the case of the market of reference, the only way of providing the services included entails extending one's own access network to an end user. However, according to the Explanatory Note to the Market Recommendation, the local access to the final user is the least replicable part of an electronic communications network given the costs and legal barriers to its deployment. On the topic of costs, we repeat what this Commission



as well as the European Commission and the ERG have already indicated: the cost of civil works infrastructures make up between 50 and 80% of the total cost of launching an electronic communications network.

In this sense, and in accordance with a "Modified Greenfield Approach", in spite of the fact that since the Resolution of past 22 January²⁷ Telefónica should provide wholesale access to its channelling, the effects if this measure cannot be considered sufficiently in the market analysed and in the time scale of the present review.

Regarding legal barriers, as first market analysis of market 13 already indicated in the establishment of networks, in specific those of the access, necessary to provide the services included in the reference market, face legal and regulatory obstacles when obtaining the necessary authorisations to carry out deployment. In particular, "the legal procedures so that operators can exercise their right to occupation are unclear as to the length of time and the conditions in which that occupation may take place. This situation therefore affects operators' ability to extend their networks according to their planning and time schedules. Therefore, in essence, they are a legal entry obstacle to these markets, whose importance will depend on numerous factors, but principally upon the geographic area in which the operator wants to provide the service".

Therefore, we can conclude that the obstacles to the entry to the reference market are very high.

III.3.3 Potential competition in the reference market

Given the obstacles to the entry described in this market, the entry of potential competitors is not expected.

The operators that have larger access infrastructures (the cable operators and COLT and ALPI in the business segment) have been present in the market for years.

Additionally, the business movements taken place in the last few years (integration of Auna in ONO, purchase of Tele2 by Comunitel and then of Vodafone to the new group, purchase of Ya.com by Orange) indicate the concentration of the existing operators instead of the appearance of new competitors.

Therefore, we can conclude that the potential competition in the market of rented terminal lines is practically non-existent.

III.3.4Analysis of the effective competition in the market

The Framework Directive establishes that there is no effective competition in a relevant market if it is seen that there are one or more operators with SMP in said market. This concept is, in accordance with that laid down in the same European regulation, equivalent to the concept of position of dominance well known in the doctrine and jurisprudence of the Competition Law.

Therefore, the analysis of effective competition in a relevant market is equivalent to a prospective analysis of dominance in said market.

²⁷ See note 21.



Telefónica's position in the reference market that is being analysed, the presence of considerable structural obstacles to entry and the lack of potential competition indicate that said operator enjoys SMP.

A series of criteria included in the Guidelines will be below analysed, in order to confirm the supposition of the individual market power of Telefónica.

III.3.4.1 Analysis of the market shares

As previously described, Telefónica is the operator that has the highest share in the rented terminal lines market (70% in terms of income and 73% in terms of lines).

From the rest of operators supplying the reference service we can highlight ONO group with a share of 11% in 2008. A numerous group of operators has the remaining 19%.

In short, Telefónica maintains a very high share, and considerably higher than that of the remaining operators. In a prospective way, given the start up of the RLO Ethernet, it is expected that said share will increase.

III.3.4.2 Control of an infrastructure not easily reproducible

Telefónica has the access network with the highest capillarity in Spain. Although during these years there have been considerable investment efforts by both the cable operators and of the remaining alternative operators to develop their own access infrastructure, it is not expected that said operators are in a position to replicate Telefónica's network in the timescale of the present review.

Likewise, the multi-office nature of the retail clients in the market derived from the same has been previously commented on, thus it is essential to give coverage throughout the territory.

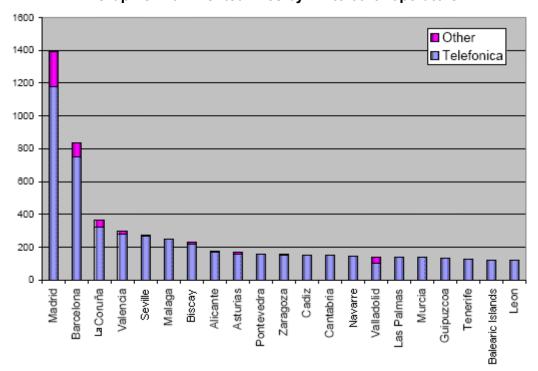
III.3.4.3 Compensatory power and change costs

In the market of rented terminal lines, the compensatory power of the alternative operators (they make up the demand in this market) will depend on the fact whether these can change suppliers, if they can significantly reduce their service purchase to Telefónica or if they can just stop using the same in the event of a price increase of the service by Telefónica.

This Commission considers that the negotiating capacity of the operators that use the reference service is greatly reduced, as the supply alternatives are very limited. The operators present in the market cannot do without the wholesale services of Telefónica, as it would imply losing an important part of their income in the services addressed to the business segment.

As an example of the above, the following graphic shows the number of lines rented by BT to Telefónica and to the rest of operators. It can be seen that even in Madrid, the dependence on Telefónica as supplier is very relevant.





Graphic III.3.2 Rented lines by BT to other operators

Source: The economic benefits from providing businesses with competitive electronic communications services.

In conclusion, and in a scenario of lack of regulation ("Greenfield approach"), the threat by part of the alternative operators to do without the services of Telefónica rented terminal lines is not believable and in no way it could be believed that it could impose discipline on their behaviour. In this sense, it can be highlighted that even the operators with own infrastructure, such as ONO, COLT and Euskaltel, are at the same time relevant clients of Telefónica on a wholesale level.

III.3.4.4 Vertical integration

Telefónica is a vertically integrated company and has a relevant position both in the reference market and in most of the descending markets. In a lack of regulation scenario in this market, Telefónica would have incentives to stop providing the rented terminal line service or supply the same under less favourable conditions to its competitors, which would have a negative impact on those operators that depend upon the wholesale service in order to compete in the retail markets.

The previous point is not only theoretical, as it is precisely what has occurred to the Ethernet lines. Telefónica only provided said technology as a wholesaler since it was regulatory obliged to do so, while in the retail segment its market share went from 45% to 74% in only two years.

III.3.5 Conclusions on the determination of operators with SMP

The objective of the present revision has been to analyse whether there has been any advance in the market structure as well as of those factors that can discipline Telefónica's performance (entry threats or compensatory power of the demand) since its first analysis in November 2006.



The conclusions obtained in the present review are very similar to those of the first analysis:

- Telefónica is the operator having the highest market share in terms of income (70%) and lines (73%).
- There are significant structural market entry barriers, above all with regards to the costs necessary to deploy one's own network and that are considered as being sunk costs if the operator decides to abandon the market. Additionally, Telefónica is the operator that most enjoys the different scale and scope economies.
- Lack of threats to the entry during the timescale covered by the present review.
- The factors that increase the capacity of Telefónica to act independently from its clients and competitors are the following:
 - The capillarity of its network;
 - Its presence in the connected markets as vertically integrated operator;
 - The lack of supply alternatives (even direct access operators such as ONO and COLT contract wholesale services from Telefónica).

Given the above, this Commission concludes that there is no effective competition in the reference market, with regards to that laid down in the Framework Directive, namely, because the presence of an operator with SMP is envisaged.

III.4 Identification of the operator with SMP

In accordance with the previous conclusions, Telefónica is identified as the operator with significant power in the market of wholesale rented line termination segments, regardless of the technology used to provide the rented or dedicated capacity, for the purposes of article 10.3 of the LGTel and 3.2 of the Market Regulations. It is understood that this identification of Telefónica's market position extends to the companies of the group to which it belongs and that supply the services included in the reference market.²⁸

On the other hand, identifying the SMP responds to the objective of *ex ante* regulation, stated in section 16 of the Guidelines, which is to ensure that the company may not use its market power to restrict or distort competition on the relevant market, nor may leverage market power onto adjacent markets.

²⁸ This commission has already pronounced with regard to the concept of economic unit by interpreting reiterated community jurisprudence (see Resolutions of 20 May 1999 and 8 November 2000, in which it is indicated that "when a group of companies constitutes an economic unit, insofar as they lack the necessary autonomy of conduct in the market with regard to the parent company, for the purposes of applying the provisions for the right to competition, a single company exists").



III.5 Analysis of the obligations which may be imposed on operators with significant market power

III.5.1Principles for the regulator to apply when choosing the most fitting obligations

When it comes to decided which obligations are to be imposed on operators with SMP in a particular market, the regulations establish a number of principles which should guide the National Regulation Authorities (hereinafter, NRAs) in the selection of the same. In this respect, the NRAs must take reasoned, transparent decisions that respect the principles of proportionality and which are in line with the objectives set out in the Framework Directive.

In fact, Article 10.4 of the LGTel (including Article 8 of the Framework Directive) establishes that the obligations must be based on the type of problem detected, be in proportion to the same and by justified in the light of the objectives listed in Article 3 of the LGTel. These objectives are, among others:

- To promote competition in the supply of electronic communications networks, electronic communications services and associated resources and services, among other things, by:
 - a) Ensuring that there is no distortion or restriction of competition in the electronic communications sector;
 - b) Promoting efficient investment in infrastructure and fostering innovation;
 - c) Promoting efficient use and monitoring for effective management of radio frequencies and numbering resources.
- To contribute to the development of the internal market, among other things, by:
 - a) Cooperating with each other and with the Commission, in a transparent way, to guarantee the exercise of practices consistent with regulations and a consistent application of the Framework Directive and of the specific directives.

Likewise, the NRAs should preferably impose obligations that would affect the wholesale markets, and only when these measures fail to guarantee effective competition in the reference market, would they have to be imposed on the retail markets, as established in the Explanatory Note to the Market Recommendation.²⁹

Along with these principles, explained in the current regulations, there are others which arise from the same without being expressly stated, as shown in the document, *ERG* Common position on the approach to appropriate remedies in the new regulatory framework³⁰ (hereinafter, the Common Position on obligations). In fact, the NRAs must

²⁹ On page 13 it is established that "A downstream market should only be subject to direct regulation if competition on that market still exhibits SMP in the presence of wholesale regulation on the related upstream market(s)".
http://ec.europa.eu/information_society/policy/ecomm/doc/library/proposals/sec2007_1483_final.pdf

³⁰ ERG Common Position on the Approach to Appropriate Remedies in the New Regulatory Framework, approved in the ERG 8 Plenary Session, of 1 April 2003 and revised in May 2006 (ERG [06] 33 Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework).
http://www.erg.eu.int/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf



take the following ideas into account when choosing the obligations to impose on SMP operators:

- For those cases in which competition based on infrastructures is unlikely due to the persistent presence of significant economies of scale or scope and other restrictions to entry, the NRAs must ensure sufficient access to wholesale inputs.
- For those cases in which duplicating the incumbent operator's infrastructure seems viable, the obligations should generate incentives that are present during the transition process to a market with sustainable competition.
- Obligations must be chosen in such a way that, for the regulated party, the benefits of compliance outweigh the benefits of non-compliance.

Finally, it is also necessary to bear in mind the recommendations appearing in the "ERG Common Position on best practices in remedies imposed as a consequence of a position of significant market power in the relevant markets for wholesale rented lines³¹" (hereinafter, the Common Position on rented lines). In this document the ERG provides additional guidance to the NRAs on the imposition of obligations on operators designated as having significant market power in the wholesale rented line markets.

III.5.2Identification of competition problems in the reference and related markets

Conditions on the rented terminal line market have not undergone any significant changes since the first revision, such that the competition problems which may potentially arise are the same as those identified at that time, namely,

1. Vertical extension of the dominant position: this group of problems appears when a company controls an input that they consider essential for providing a retail service in a competitive market. The vertical extension of the dominant position gives rise to restriction competition in the downstream retail markets where the operator with significant market power also supplies services.

The types of problems that tend to arise in the reference market are as follows:

- Refusing service or access;
- Excessive requirements;
- Dilatory tactics
- Price discrimination

It should be pointed out that access refusal has been a real competition problem for rented terminal lines with Ethernet interfaces.

On the other hand, another type of anti-competitive conduct involving the imposition by the SMP operator of unfair prices could also be implemented, being put across as a "constructive" supply/access refusal.

³¹ ERG 07 (54), available at http://www.erg.eu.int/doc/publications/erg 07 54 wll cp final 080331.pdf



2. Horizontal extension of the dominant position: these competition problems arise when a company that is considered dominant in a market uses its financial strength to extend its power into markets that are closely related within the same level of the production or distribution chain.

With regard to the reference market, the main competition problem which may arise is that of abusive packaging; in particular, as pointed out by the CNC, the packaging of retail rented line services with other services such as broadband access, fixed telephones, mobile telephones, etc., which could lead to the narrowing of margins. Also worth noting are Telefónica's incentives to package commercial wholesale services with regulated services, in such a way that, if an operator wishes to avail itself of a commercial offer for a particular type of service, it has to contract all its services under the same commercial conditions, even when part of them could be contracted under regulated conditions.

III.5.3 Obligations to impose

In the reference market, potential competition problems have been detected which involve both vertical and horizontal extension of the dominant position.

The competition problems described in the previous section are considered potential problems for rented terminal lines with traditional interfaces, due to existing regulations, but in absence of the latter, and as has been empirically proven with Ethernet lines, said problems become real problems.

The first of the problems identified, and the one with greatest impact on the competition situation, is that of refusal to supply. In accordance with the Common Position of the ERG, in order to resolve this problem it is necessary:

- (i) To ensure access to the associated resources;
- (ii) To fix a suitable price for the resource used.

III.5.3.1 Obligation of access

Point (i) would be solved by directly applying article 10 of the Market Regulation (article 12 of the Access Directive) which establishes that the Member States shall ensure that SMPs grant all reasonable applications for wholesale access to and use of specific elements in those networks and associated resources belonging to operators with SMP on a wholesale market. It must be remembered that this Commission already imposed on Telefónica the obligation of access regarding rented terminal line services in the first revision, for lines with both traditional interfaces and Ethernet.

On the terminal wholesale line market, there are zones in which there are no alternatives of supply to the Telefónica network, given the capillarity required to provide said services. On the other hand, it must be remembered that the European Commission has considered that "rented lines are essential components of the communications market which network operators and service providers use as basic transport infrastructures for their services and which large company users use for internal voice transport and data communications traffic to communicate their headquarters throughout the world. (...) the new operators (or 'authorized operators') often have to depend on the historical operators to provide them with short distance rented circuits (also called 'partial rented line circuits') which enable them to connect their clients' premises with their own networks. The availability at a wholesale level of



partial rented line circuits at competitive prices is a necessary condition for the development of a world category communications infrastructure in Europe".³²

Bearing in mind the above, this Commission considers that it is necessary to maintain the obligation of access on the network infrastructure of the dominant operator with regard to terminal wholesale lines with both traditional interfaces and Ethernet.

The obligation of access must be completed from the viewpoint of reasonableness. In the first round, said reasonableness was established from two dimensions: the maximum distance of circuits and the speeds to be offered. Additionally, according to the Common Position of rented lines, the operator with SMP must not only offer access, but must also facilitate as far as possible the migration of existing lines to the wholesale regulated lines. These three aspects are analysed below:

III.5.3.1.1 Maximum distance (lines with traditional interfaces)

For traditional lines, access to all those circuits whose distance, calculated according to RLO specifications, does not exceed 70km was defined as reasonable. Said limit was established bearing in mind the following two factors:

- a) The flexibility existing at the time of establishing Circuit Points of Interconnection from existing voice Points of Interconnection, as well as the sharing of Pols. Likewise, it should be remembered that, in accordance with the previous legislation, operators were obliged to have at least one Pol per province. All this makes it plausible to consider it reasonable for an operator to have a CPol for each provincial capital and, by establishing a CPol in each province, practically the whole of the national territory is covered.
- b) The existence of a regulated retail offer of up to 2Mbit/s. This meant that, in the event of the distance being greater than 70km for a specific request, the operator always had the possibility of contracting a line under regulated (though retail) conditions from Telefónica.

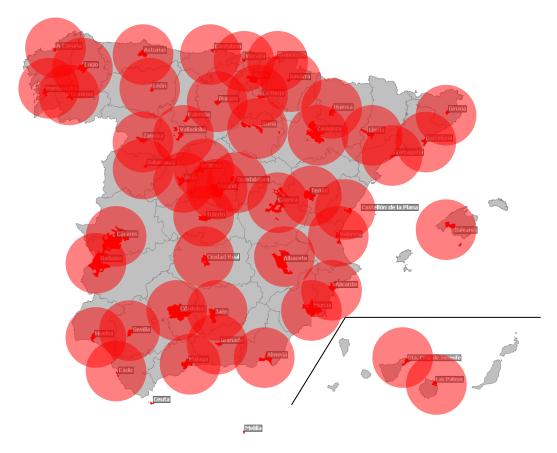
Nevertheless, factor b) is modified by this Resolution, since the decision has been taken to do away with the obligations existing in the minimum number of lines rented from Telefónica. Therefore, the regulated retail offer will disappear. Additionally, on numerous occasions, the relevance of being able to offer lines throughout the national territory has been stressed. Therefore, it is worth reconsidering the reasonableness of the maximum distance with the new contour conditions.

For this purpose, it is necessary to analyse what coverage an operator would achieve with a Circuit Point of Interconnection in each provincial capital. This can be observed graphically on the following map, on which a circle with a 70km radius has been drawn round each provincial capital.

Graph III.5.1 Area of coverage with one CPol per province

³² Recommendation of the Commission of 29 March 2005 on the supply of leased lines in the European Union (Part 2- Aspects related to the fixing of prices of wholesale partial rented line circuits).





Source: CMT

As can be observed, a CPoI in each provincial capital does not guarantee coverage throughout the territory. Although a very substantial part of the territory is covered on the mainland, particularly in terms of population, there are noticeable gaps in most Autonomous communities. All the smaller islands of the Balearic and Canary Islands are also without coverage.

Therefore, bearing in mind the deregulation of the retail offer, the wholesale offer must be designed in such a way as for a reasonable deployment of CPols to enable an alternative operator to have coverage throughout the national territory. Given that it has been considered reasonable to have use of a CPol in each provincial capital, the modification to be made with regard to what is considered a reasonable access is immediate:

With regard to traditional terminal lines, it is considered reasonable to request access to all those circuits whose distance, calculated according to RLO specifications, does not exceed 70km, except for provincial circuits, which will have no limitations with regard to maximum distance.

ASTEL, ONO and the CNC consider the extension of the maximum distance for provincial lines to be a positive step. ONO that this proposal by the CMT is of particular importance for terminal circuits between islands. Therefore, ASTEL, the CNC and ONO request that it be clarified that, at all events, interprovincial lines of up to 70km are still permitted.



In response to ASTEL, the CNC and ONO, it is clarified that interprovincial lines respecting the maximum distance of 70km are still permitted.

III.5.3.1.2 Maximum distance (lines with Ethernet interfaces)

On the other hand, the maximum distance for Ethernet circuits was established in the RLO approval proceedings³³ bearing in mind technical limitations, such that it is now not appropriate to modify said limit. Therefore, the maximum distance for Ethernet lines remains at 35km, without detriment to the fact that this distance may be revised in future RLO modifications due to the aforementioned limits having been exceeded.

ASTEL, COLT, Orange and the CNC point out that it is necessary to assess whether current technological solutions (for example, Ethernet over SDH or equipment which exceeds 35km) permit the extension of the present 35km limit for this type of circuits.

ASTEL adds that several of the limitations of the current Ethernet offer are due to the fact that Telefónica has to provide the service through and end-to-end fibre. For this reason, ASTEL considers it expedient for the link between technical service mode and limitations to be included in the market, in such a way that a change of mode (for example Ethernet over SDH) would automatically cause the disappearance of the limitations without the need to carry out a new market analysis.

In fact, as ASTEL points out, the limitations of the current wholesale Ethernet offer are caused by the configuration of the service which Telefónica has to provide, namely, a transparent and consistent level 1 carrier service in a fibre optic connection with media converters at either end. In the RLO modification proceedings, said distance was established after having analysed the technical specifications of Telefónica's media converter units. And the appropriate procedure for revising said distance, in the case of objective technical arguments existing, will be the next RLO modification.

III.5.3.1.3 Speeds to be offered (lines with traditional interfaces)

In the first round, it was established that Telefónica had to offer circuits with speeds ranging from 64Kbit/s to 155Mbit/s for traditional terminals.

In 2007, for traditional terminals on the retail market, 1,345 155Mbit/s lines were provided and Telefónica's share was 67% in terms of income. Therefore, given that the demand for this type of lines on the retail market is significant and Telefónica's share is high, it is considered absolutely reasonable to maintain the obligation of access for this speed.

On the other hand, 622Mbit/s lines are very uncommon on the retail market and their total number has remained unchanged at around 50 for the last three years. Therefore, it is not considered proportionate to impose the obligation of access on Telefónica for terminal wholesale lines of this speed.

III.5.3.1.4 Speeds to be offered (lines with Ethernet interfaces)

With regard to Ethernet interfaces, in the first round, the obligation of access for Ethernet and Fast Ethernet was imposed, but not for Gigabit Ethernet.

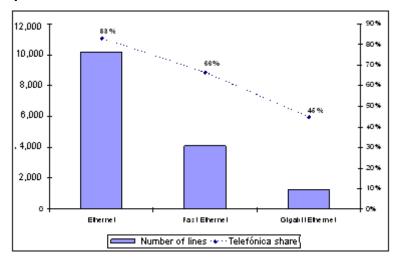
In the first analysis, it was found that Gigabit Ethernet accesses are required by large companies which produce a considerable turnover that justifies the investment in the

³³ Resolution of 20 December 2007 on the approval of the Reference Line Rental Offer of Telefónica de España, S.A.U. (MTZ 2007/219).



infrastructure necessary to provide the service. In this respect, la CMT considered that imposing the obligation of access for Gigabit Ethernet interfaces would imply a clear disincentive to investment. In this respect, Common Position, in section 5, establishes that "NRAs must encourage the investment of both the incumbent operator with SMP and the entrant operator". Additionally, the access Directive establishes that "(...) the obligations imposed on operators with SMP must be based on the type of problem detected, be in proportion to the same and be justifiable in the light of the objectives listed in article 8 of the Framework Directive".

In relation to the above statements, the following graph shows current data regarding the total number of retail lines per interface in 2007 and Telefónica's share for each different speed:



Graph III.5.2 Number of lines and share for Ethernet interface

Source: CMT based on the specific requirements of the current analysis.

It can be seen that Telefónica's share decreases as the speed of the line increases. In fact, it is worthy of mention that Telefónica's share for Gigabit Ethernet lines is less than 50% in access terms. On the other hand, Telefónica's share for Ethernet and Fast Ethernet lines is well over 50%. With this argument, the CMT Services considered, on a preliminary basis, in the Public Inquiry that is was expedient to maintain the conclusions reached in the first round, namely, the imposition of the obligation of access for Ethernet and Fast Ethernet speeds, higher speeds not being subject to said obligation.

This proposal by the Services has been subject to numerous allegations by the CNC and the operators. The CNC suggests that the changes in the number of accesses and in Telefónica's share should be analysed and a prospective analysis be carried out before making a permanent decision about the exclusion of these lines from the set of obligations.

Therefore, ASTEL, BT, COLT and Verizon consider that Telefónica should offer Gigabit Ethernet lines, since it is not enough to allege that Telefónica's share is 45% to justify their exclusion. ASTEL and BT consider that a more thorough analysis which includes



the market shares of the rest of the operators and the market share trend should be carried out, and an analysis of the market prices and conditions, in order to see whether or not there is any real competition. BT puts forward the following reasons in favour of the imposition of the obligation of access for Gigabit Ethernet:

- The experience of BT is that a certain level of competition may exist in Madrid and Barcelona for this type of lines, but that there is a market share of nearly 100% in any other part of Spain.
- Companies demand more and more transmission capacity, such that a prospective analysis calls for the imposition of the obligation of access for Ethernet lines.
- Other regulators (BT mentions United Kingdom, Sweden and France) have included this type of lines in the regulated offer of the operator with SMP.

On the other hand, Euskaltel considers that the obligation of access for Gigabit Ethernet lines would not be justified because:

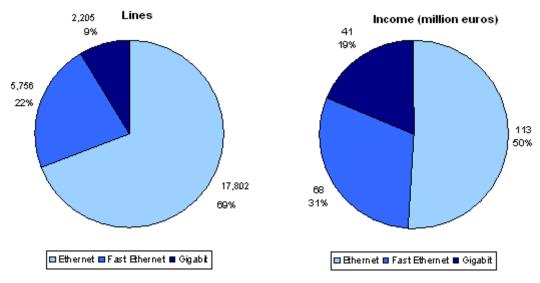
- Being a higher priced product, there is a greater incentive to provide this service though other deployment options.
- Telefónica's market share is much lower.
- The imposition of the obligation of access would discourage investment in alternative access infrastructures.

Given these allegations, firstly, it is important to point out that the situation of rented lines with Ethernet interfaces has changed substantially since the first market analysis. At that time (2005) they had a growing but small importance in absolute terms in relation to traditional lines. However, since 2008 Ethernet lines have been more important than traditional lines in terms of income. Furthermore, the growth of Telefónica's share for retail Ethernet accesses (including all speeds) has been very high, as affirmed previously in the analysis of retail markets.

With regard to Gigabit Ethernet lines, in 2005 there were only 396 retail accesses in the whole Spanish market. Said lines produced an income of 9 million euros. In 2008, the situation was the following:



Graph III.5.3 Distribution of lines and income by type of Ethernet interface (2008)

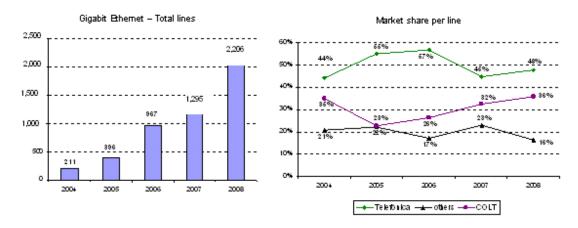


Source: CMT based on the specific requirements of the current analysis.

In just three years, the number of Gigabit Ethernet lines has multiplied by 5.5 and the associated income by 4.5. Total income from rented retail lines (including traditional ones) in 2008 amounted to €386M. Therefore, Gigabit Ethernet accesses represent 11% of the retail market total in terms of income. In other words, unlike the situation in 2005, in 2008 Gigabit lines now have a very significant market presence and with a markedly growing trend.

Secondly, with a view to analysing the obligations to be imposed on this type of terminal lines, it is considered necessary to study the changes in retail shares rather than just using the 2007 data. Therefore, the changes in Gigabit Ethernet retail accesses from 2004 to 2008 are shown below:

Graph III.5.4 Changes in Gigabit Ethernet retail market shares (lines)



Source: CMT based on the specific requirements of the current analysis.



From 2007 to 2008, the total number of Gigabit lines has almost doubled, and Telefónica's share over the last year has increased by three percentage points, reaching 48%. The second competitor is COLT, with a share of 36% in 2008.

Given that the market shares according to number of accesses do not offer a conclusive result, it is expedient to analyse the shares according to income as well.

Graph III.5.5 Changes in Gigabit Ethernet retail market shares (income)

Source: CMT based on the specific requirements of the current analysis.

In this case, Telefónica's share is 64% and COLT's share is only 20%. A share by income of this magnitude is an argument in favour of the imposition of obligations over Gigabit Ethernet lines.

On the other hand, prospectively, Gigabit Ethernet lines are going to be more and more relevant in the retail rented line market. In this field, the ubiquity of the operator network becomes a relevant variable which may affect the competitive situation of the market.

The experience with the lower speeds (Ethernet and Fast), in which Telefónica has increased its market share in a very notable way over a very short period of time, also points towards the imposition of obligations over Gigabit interfaces. Additionally, the lack of appropriate regulation in this type of lines could lead Telefónica to act strategically, making use of the non-replicable nature of the same to gain clients at a retail level. The next two years may be of key importance for the consolidation of this speed in the market, and the lack of a wholesale offer may negatively influence the degree of competition in the retail market. If obligations are not imposed on this speed, there is a risk that the alternative operators might lose contracts with important companies on being unable to offer Gigabit circuits.

Finally, with regard to the situation in other countries, it is difficult to make a suitable comparison due to the fact that many countries have not yet regulated Ethernet technology (as already mentioned, Spain is one of the first countries to have regulated the lines rented with this type of interface). In any case, it is worth mentioning the example of the United Kingdom, where OFCOM has regulated the three cost-orientated speeds (Ethernet, Fast and Gigabit).

To recapitulate, the most significant aspects of the analysis carried out are:



- The market share of Telefónica by accesses has increased over the last year and the share by income is high (64%).
- The next two years may be of key importance for the consolidation of this capacity in the retail market, such that, prospectively, the ubiquity of the offer of the alternative operators in this type of line becomes more relevant.
- The operators' opinion is divided: the alternative operators more dependent on Telefónica's wholesale services (BT, Verizon, Orange) request the imposition of obligations. However, other alternative operators with their own considerable access network (ONO and Euskaltel) are opposed to the idea, with the notable exception of COLT. This operator is Telefónica's strongest competitor in this segment, is characterized by a clear investment interest in access network and is in favour of the regulation of this type of lines.

Therefore, the above arguments and evidence advise the reconsideration of the original position and the imposition on Gigabit Ethernet lines of the same obligations the remaining Ethernet accesses.

III.5.3.1.5 Migrations between different types of lines

In accordance with the Common Position on rented lines, the operator declared to have SMP must migrate, without unjustified delays or service cuts, the rented retail lines it loses to an alternative operator which makes use of the wholesale offer.

Similarly, the Common Position indicates that it should be possible to migrate the existing clients of an operator between different wholesale products of the operator with SMP without unjustified delays or service cuts. Additionally, the prices for carrying out the migration must be reasonable and not be an obstacle to the uptake of the new client.

Therefore, Telefónica must always provide the process of migration both from its own retail circuits and from other wholesale products to the services regulated in the RLO.

In the event of physical modifications being necessary for reasons sufficiently justified by Telefónica, the latter may only pass the costs arising from said modifications to the operator requesting migration.

For example, any provincial lines of over 70km that the operators have under contract from Telefónica under any type of conditions, including retail, may be migrated to the regulated conditions of the RLO at no cost, unless physical modifications to the circuit are absolutely necessary.

ASTEL, BT, Orange, ONO and Vodafone consider it necessary to clarify that the progress of migration to RLO services shall be without cost, except for any physical modifications sufficiently justified by Telefónica.

We reiterate that Telefónica must only invoice for the migration of rented lines to the regulated offer in the event of it being essential to carry out actions which have a cost.

III.5.3.2 Price obligations and associated obligations

Once the reasonableness of access conditions has been defined, in accordance with point (ii) above, a suitable price must be set for the same, since Telefónica may have



incentives to establish excessive or discriminatory prices for its competitors in order to close the connected retail markets.

III.5.3.2.1 Traditional interfaces

In the first round, it was decided that the prices of rented terminal lines with traditional interfaces must be set according to costs, given that:

- On the one hand, the entrant operators depend on the infrastructures of Telefónica to provide their retail services. Therefore, they require access to the same at a competitive price;
- On the other hand, in order to compensate the greater scale economies and scope of Telefónica and ensure that these do not become barriers to entering the related retail markets, it is expedient for part of these efficiencies to by transferred to the competitors through wholesale prices.

The earlier motivations are still valid in this new analysis, such that the CMT resolves to maintain the obligation of price control and cost accounting contained in article 11 of the Market Regulation (article 13 of the Access Directive), as well as the supplementary obligation of separation of accounts contained in article 9 of the Market Regulation (article 11 of the Access Directive).

Prices of provincial lines of over 70km shall be calculated using the same prices per kilometre as those already established in the RLO.

Telefónica indicates that the price for terminal circuits with an undersea stretch (for example, the circuit of a final client in Menorca to a CPol in Majorca) must be calculated one case at a time and never linked to a general offer. In this respect, it also affirms that prices for these circuits must be set with 15% *retail minus* over the retail prices, given the complexity of their treatment.

This Commission agrees partially with Telefónica, in that terminal lines with an undersea stretch have a special caseload and that the prices per kilometre established in the RLO in a general way may not be applicable for this type of lines. On the other hand, they do not agree on the need to set the prices one case at a time. For this reason, prices for this type of lines shall be established in the next revision of the RLO.

III.5.3.2.2 Ethernet Interfaces

On the other hand, in the first round, the application of the same methodology for the calculation of the wholesale price level (cost orientation) for Ethernet interfaces was considered disproportionate, insofar that the CMT considered it necessary for said price level to be a balance, as established in the aforementioned Access Directive (recital 19), between the short term increase of competition and the maintenance of the "incentives of the competitors to invest in alternative installations which guarantee greater competition in the long term". In this way, the impact of an access obligation which implies a drastic reduction in the prices of this type of circuit could reduce the value of certain investments, which would reduce the incentives to the competition in infrastructures and be in detriment of competition in the long term, an essential element of the objectives set by the regulatory framework in force in article 8 of the Framework Directive.



For this reason, it was considered that a *retail minus* methodology, by which wholesale prices are calculated according to the retail prices of Telefónica, could be the most effective in combining the two aforementioned objectives.

On the other hand, it should be remembered that, while this action is being processed, Telefónica is delivering the first linkage services to Ethernet clients. The next market analysis, after the effects of Ethernet price regulation using the *retail minus* methodology have been observed, will be the suitable time to reconsider the price setting method for Ethernet lines. Therefore, the CMT considers that the most reasonable decision is to maintain the price setting scheme for Ethernet lines using the *retail minus* methodology.

The CNC considers that the advantages of establishing a common methodology for the different technologies should be assessed, in order to avoid situations which may affect the principle of technological neutrality.

Apart from the reasons set out in the Public Inquiry, it must be added that the prices set in Spain fro wholesale Ethernet lines are among the lowest in Europe. It is worthwhile mentioning here the comparative study carried out by the consultancy Indepen for BT Plc. The following graph shows the wholesale prices in eight relevant European countries (according to the report itself, only one of them is a new member, the remaining seven belonging to the EU-15).

Figure B3.7 Pricing for Business Ethemet (1 Year contract)

45,000

30,000

25,000

15,000

A B C D E F G H

Country

Ethemet 100km, 5km Ethemet 100M, 20km

Graph III.5.6 European comparative study of Fast Ethernet wholesale prices

Source: The economic benefits from providing businesses with competitive electronic communications services.

It is worth mentioning that there are three countries which do not even have a wholesale Ethernet offer (B, C and F). Of the countries with an offer, G has the lowest prices. Comparing the prices of the comparative study with current RLO prices, it can be deduced that Spain is country G.

Another advantage of the *retail minus* system established by the CMT is that it makes it possible to know the retail prices of Telefónica, something which has been requested by a number of operators. Therefore, the proposal of the Services is maintained and it is established that Ethernet line prices shall be set using a *retail minus* system.



With regard to Gigabit Ethernet lines, it is worth remembering that in the RUO some prices were already set using the same *retail minus* methodology as that used in the RLO for Ethernet and Fast Ethernet interfaces.³⁴ For this reason, and in order to maintain the necessary consistence between the different regulated offers, it is made clear that said prices shall also be applicable for the Gigabit Ethernet lines of the RLO.

Finally, in the first round, the obligation of accountancy separation for Ethernet lines was imposed, in order to have control over the correct application of other obligations such as non-discrimination and the prohibition of setting abusive prices. The aforementioned reasons are still valid. In fact, in the RLO approval proceedings it was declared that accounting information is of paramount importance as an additional reference in the setting of prices using a *retail minus* methodology. Therefore, the obligation of separation of accounts is maintained for Ethernet lines as well (article 9 of the Market regulations; article 11 of the Access Directive).

III.5.3.3 Obligation of non-discrimination

Additionally, a description has been made of the problems which the use of different abusive practices (dilatory tactics, unjustified requirements, discrimination and packaging) by Telefónica might imply for the remaining operators on the rented line retail market. Therefore, the effectiveness of the obligation of access must be assured, as occurred in the first round, by the additional imposition of the obligation of non-discrimination for all rented terminal lines, regardless of the interface (Art. 8 of the Regulation; article 10 of the Access Directive).

This obligation involves applying the same conditions in similar circumstances to the operators that provide equivalent services, and providing services and information to third parties which is of the same quality as that which they supply in their own services or to their affiliates. In particular, non-discrimination must refer both to the quality of the service and to the delivery times and other supply conditions.

III.5.3.4 Obligation of transparency

In a supplementary way, the obligation of transparency is the simplest tool for controlling the fulfilment of the obligation of non-discrimination, in that all the operators are aware of the wholesale offers of Telefónica.

On the other hand, it is necessary for the CMT to know about the wholesale offers of Telefónica in order to monitor the effective application of the measures taken in this market analysis. For this reason, and in order to make it possible for negotiations between alternative operators and Telefónica to take place as fast as possible while, at the same time, considerably reducing possible disputes due to the imposition of abusive clauses, it is necessary to maintain the obligation of transparency (article 7 of the Market Regulation; article 9 of the Access Directive).

The obligation of transparency is specified in the publication, and effective application, by Telefónica of a reference offer sufficiently broken down to guarantee that other operators are not forced to pay for resources which are not necessary for the required service. For the purposes of this obligation, the current rented terminal line wholesale

³⁴ Section five, epigraph four, of the Resolution of 27 March 2008 on the revision of the Bit-stream Access Broadband Offer of Telefónica (MTZ 2006/1019).



services offer contained in the RLO and approved by the CMT Resolution of 20 December 2007 is considered to remain valid.

Likewise, and in accordance with the provisions of article 7.3 and of article 9.2 of the Access Directive of the Market regulations, the CMT may dictate a motivated resolution pressing for the modification of reference offers and establish the date from which the latter shall take effect.

The possibility of pressing for the modification of the reference offer is of great relevance in most regulated markets. The CMT must ensure that said offer will enable the alternative operators to compete efficiently in the retail market. In this respect, it is a well known fact that the reference offers (RUO, RIO and now RLO) have been tuned and perfected in successive revisions resulting form the real experience gained in the use of regulated services.

ASTEL, the CNC, ONO, Verizon and Vodafone consider that the obligations of transparency which the CMT has imposed on the wholesale broadband market (file MTZ 2008/626) should be transferred to this market, that is to say, communication to the CMT of the applicable prices and conditions of retail services, the breakdown of prices in the case of packages and the introduction of new services or modification of existing ones. ONO alleges that there is a high risk of anti-competitive practices in the business market (particularly the narrowing of margins). Furthermore, ASTEL considers that obligations similar to those existing in other markets should also be imposed, such as the keeping of a register of clients and contracts.

This Commission considers, as it did in the framework of market 1, that personalized offers had certain conditions which meant that their competitive situation differed from the situation existing in the residential market. For this reason, in said market, Telefónica was given the obligation of keeping a register, at the disposal of the CMT, of all personalized offers, the latter being considered as all those whose sales per client exceeded 12,000 euros per year. Therefore, in accordance with the obligations of said retail market, Telefónica is now obliged to keep a register of personalized offers just as the aforementioned operators propose.

BT adds that, given that Ethernet line prices are calculated using a *retail minus* methodology, the provisions contained in the RLO regarding Telefónica's obligation to communicate the prices of its retail Ethernet offer to both the CMT and the operators should also be included in the market.

The CMT is in accordance with BT, for which reason a reference to the provisions contained in the RLO regarding Telefónica's obligation to communicate the prices of its retail Ethernet offer to the CMT and the operators has been included in the obligations Annex.

Likewise, if it is demonstrated that the offer communicated differs significantly from the actual conditions applied by Telefónica to its final clients —for example, by offering personalized discounts on a mass basis—, the CMT may set wholesale prices by using data obtained from the effective mean income or cost information of the services affected. The use of this type of information would also be necessary in the extreme situation of Telefónica deciding to do away with the standard retail offer.



III.5.3.4.1 Communication of quality parameters by Telefónica

It is necessary for Telefónica to inform the CMT periodically of the quality parameters of wholesale rented terminal line services and of its own retail services. It is very difficult to verify the obligation of non-discrimination if only the agreements which have been signed by Telefónica are available.

In the opinion of ASTEL and BT, the CMT should publicize the quality parameters of retail and wholesale services (in bundled form) so that the operators can verify the obligation of non-discrimination. BT argues that there is no justification for said information to be considered confidential and that it is common practice among other regulators.

In accordance with the allegations of ASTEL and BT, the CMT considers that for the correct functioning of wholesale services, it is necessary to publicize in bundled form — for operators using the RLO— the quality parameters of rented line wholesale and retail services. At all events, the correct procedure for defining the parameters and frequency of the data to be published is the revision of the RLO, as established in the obligations annex. Therefore, this obligation shall take effect when said procedure terminates.

III.5.3.4.2 Technological progression of the Telefónica network

In this second round of market analyses, one of the most relevant aspects is the impact of the progression of the Telefónica network towards NGNs in the different regulated services. In the fixed interconnection markets, for example, obligations are being proposed in relation to IP interconnection, considering this to be the natural progression of switched traffic interconnection.

With regard to rented lines, the natural technological progression of traditional lines are rented lines with Ethernet interfaces, which have been regulated since the first round and which already have a wholesale offer in the market. Therefore, from this viewpoint, the technological progression of rented lines has been covered since the analysis carried out in the first round.

Nevertheless, there are other aspects of the progression of the Telefónica network which may have an impact on the wholesale rented line market and which should be taken into consideration. In particular, the closure of switching centres could affect operators with Points of Connection or rented terminal lines depending on them.

Therefore, the same as in other markets, it is necessary to impose on Telefónica the obligation of informing twelve months in advance of any modification to its network which has an impact on the provision of rented line services. Additionally, these modifications shall be subject to prior authorization by the CMT.

Fourth. Notification and publication of the Measure

In accordance with the provisions of article 7.5 of the Framework Directive and article 5.4 of the Market regulations, the Telecommunications Market Commission shall take into account, as far as possible, the observations made by the European Commission and the National Regulatory Authorities, and may adopt the resulting Draft Measure; in which case, it shall communicate the fact to the European Commission.



Therefore, article 10.1 of the LGTel establishes that the Telecommunications Market Commission shall define "by means of a resolution published in the 'Spanish Official Journal', the reference markets related to electronic communications networks and services (...) and the geographical area of the same, whose characteristics may justify the imposition of specific obligations".

By virtue of the findings of fact and law set forth, this Telecommunications Market Commission

HAS DECIDED

First. To approve the definition and analysis of the minimum set of rented lines market and of the wholesale rented line termination segments market, the designation of the operator with significant market power and the imposition of specific obligations, as shown in the Third section of Legal Basis of this Resolution.

Second. To consider that the retail market of the minimum set of rented lines does not constitute a market whose characteristics justify the imposition of specific obligations and is therefore not liable to *ex ante* regulation, in accordance with the provisions of the Framework Directive and of article 10 of the General Telecommunications Law.

Third. To do away with the obligations currently applicable to Telefónica de España, S.A.U. by virtue of the Resolution of this Commission of 20 April 2006, which approves the definition and analysis of the minimum set of rented lines market, the designation of operators with SMP and the imposition of specific obligations, after a period of 6 months has elapsed following the publication of the Resolution in the Spanish Official Journal.

Fourth. To consider the wholesale rented line termination segments as a reference market which may be subject to *ex ante* regulation, in accordance with the provisions of the Framework Directive and of article 10 of the General Telecommunications Law.

Fifth. To consider that said reference market is not really competitive, with reference to the provisions of section 4, article 16 of the aforementioned Framework Directive and section 3 of article 10 of the General Telecommunications Law.

Sixth. To consider that Telefónica de España, S.A.U., in the terms of III.4 of the Third section of Legal Basis, has significant market power in the aforementioned reference markets, with reference to the provisions of section 2, article 14 of the Framework Directive, and Annex II, section 8 of the General Telecommunications Law.

Seventh. To impose on Telefónica de España, S.A.U. the obligations contained in Annex 1 of this Resolution.

Eighth. To communicate to the European Commission the definition and analysis of the minimum set of rented lines market and of the wholesale rented line termination segments market, the designation of the operator with significant market power and the imposition of specific obligations.



Ninth. To agree on the publication of this proceeding in the Spanish Official Journal, in accordance with the provisions of article 10.1 of the General Telecommunications Law 32/2003, of 3 November.

Tenth. The present Resolution will be effective on the day after 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: MEASURES TO BE IMPOSED ON THE WHOLESALE RENTED TERMINAL LINE MARKET

1.- Obligation of providing wholesale rented terminal line services to all the operators at regulated prices

The effectiveness of this obligation requires the generic imposition of the following obligations on Telefónica:

a) To provide reasonable applications for access to specific resources in their networks and usage (articles 13.1 d) of LGTel and 10 of Market Regulations; article 12 of the Access Directive)

This obligation implies, among other aspects, that Telefónica is obliged to:

- Provide third party access to specific components and resources from their network which is necessary for the supply of wholesale trunk line services. In particular, Telefónica must supply the following services to third parties:
 - 1. Link Service (to final Client or network access element of a mobile operator): Service by which Telefónica shall provide the stretch of circuit between the circuit interconnection border exchange of Telefónica and the home of a client of the operator or an element of the access network of the operator requesting the service;
 - 2. Connection service: Service by which Telefónica offers connection to its network by providing carrier capacity between the circuit interconnection exchange of Telefónica and the circuit Point of Interconnection located in the operator's border exchange, providing the distance between the two points is less than 30km;
 - 3. Any other facility associated with the aforementioned points necessary for the supply of wholesale reference services.
- Negotiate in good faith with the authorized access applicants
- Provide the services necessary to guarantee the inter-operability of the end-to-end services offered to users.
- Grant free access to technical interfaces or other technologies that are indispensable for the inter-operability of the services
- Maintain access to facilities that are currently being supplied without the prior approval of the CMT
- Provide third party access to operative support systems or information technology systems with similar functions.

Telefónica must attend to all reasonable requests for access to rented terminal lines.

ii)In the case of rented terminal lines with traditional interfaces, a reasonable request shall be considered as one applying to those circuits whose distance,



calculated according to the specifications of the current RLO,³⁵ does not exceed 70km if the circuit is inter-provincial. For circuits rented within the same province, there shall be no limit to distance.

iii)The reasonableness of rented terminal lines with Ethernet interfaces is specified in the current RLO. With regard to distance, a reasonable request shall be considered as one whose distance does not exceed 35km.

Telefónica must offer rented terminal lines with traditional interfaces with the following capacities: 64Kbit/s, n x 64Kbit/s (n = 2, 3, 4, 6, 8, 12, 16, 24 and 30), 2Mbit/s structured and non-structured, 34Mbit/s and 155Mbit/s.

Telefónica must offer rented terminal lines with Ethernet interfaces (10Mbit/s), Fast Ethernet interfaces (100Mbit/s) and Gigabit Ethernet interfaces (1000Mbit/s).

Telefónica shall maintain the configurations of the Circuit Points of Interconnection (CPols) and Ethernet Points of Connection (EPoCs) included in the current RLO, along with all the possibilities established with regard to the reuse of infrastructures.

In summary, all the provisions contained in the current RLO, approved by CMT Resolution of 20 December 2007, remain valid, bearing in mind the following changes:

- Rented terminal lines with traditional interfaces of over 70km are permitted if they are provincial
- Operators may have recourse to the RLO for the connection of any element of their access network. In particular, mobile operators may have recourse to the RLO for the connection of their access network elements (BTS/BSC).
- Gigabit Ethernet lines are included.

Within a period of one month following the adoption of this measure, Telefónica shall present the RLO to the CMT, including in the text all the products contained in this measure. At all events, it is made clear that said products must be available for the operators following the entry into force of this Resolution.

The above, without detriment of the power of the CMT to introduce changes to the reference offer, in accordance with the provisions of article 9.2 of the Access Directive and article 7.3 of the Market regulations.

Telefónica must facilitate the process of migration both of its own retail circuits and of other wholesale products to services regulated in the RLO. In the event of physical modifications being necessary for reasons sufficiently justified by Telefónica, the latter may pass only the costs arising from said modifications to the operator requesting migration.

b) To offer wholesale rented terminal line serves at regulated prices (articles 13.1 e) of the LGTel and 11 of the Market Regulations; article 13 of the Access Directive).

³⁵ That is, calculated in a straight line between the terminal exchanges of Telefónica which connect end A (the operator's address) and B (the client's address), expressed in kilometres.



b1) Prices of wholesale rented terminal lines with traditional interfaces (including provincial lines of over 70km and lines contracted by mobile operators) shall be <u>orientated in accordance with production costs</u>. The CMT shall decide on the cost accounting system to be applied, specifying the accounting format and method to be used. Moreover, it shall guarantee that Telefónica publicizes the description of the cost accounting system used, determining for this purpose the form, sources and media, in accordance with article 11 of the Market Regulations.

With regard to the cost model, and in relation to past and present cost standards, Telefónica shall be obliged by the provisions of the Resolution of 15 July 1999 regarding the principles, standards and conditions of the cost accounting system to be used by Telefónica, and of the Resolution of 13 December 2007 regarding the adaptation of the cost accounting system of Telefónica to the new regulatory framework, and of any other which supplements them.

With regard to the incremental cost standard, Telefónica must comply with the provisions of the Resolution of 25 May 2006 regarding the Principles, Standards and Conditions for the execution of the incremental cost standard.

b2) Reference wholesale prices for wholesale rented terminal lines with Ethernet interfaces shall be subject to the obligation of price control by means of the *retail minus* mechanism, such that in no case may the prices offered to third parties by Telefónica be excessive or involve the compression of the applicant operator's operative margins which would prevent the entry of an efficient operator either in the connected retail markets or in the wholesale markets proceeding from the reference market.

The prices set for regulated wholesale services by virtue of the previous point must:

- Permit alternative operators that decide to use wholesale rented line services with Ethernet interfaces to replicate the retail offers of Telefónica or of any company of its group;
- Guarantee sufficient economic incentives to ensure the development of alternative networks, efficient investment and sustainable competition in accordance with article 8.2 of the Framework Directive and article 13.2 of the Access Directive:
- b3) Likewise, when Telefónica considers unreasonable the supply of a rented terminal line with traditional interfaces in accordance with the prices and conditions established by virtue of this measure, it must request the authorization of the CMT to change the general supply conditions.



For lines with Ethernet interfaces, the reasonableness of requests shall be established according to the type of coverage of the line, following the guidelines contained in the current RLO.

- b4) Finally, and given the position of Telefónica and its business group in the reference market, this CMT shall ensure that, as a whole, the wholesale conditions, both technical and economic, are sufficient to prevent the commercialization of retail offers which would lead to an extension of its position and, therefore, risks to free competition in the retail market. In particular, Telefónica may not execute the following practices:
 - Reductions of anti-competitive prices (narrowing of margins or predatory prices);
 - Abusive or unjustified packaging (imposition of non-required services, abusive package prices, non-replicability from wholesale elements...);
 - Abusive discrimination in price terms;
 - Abusive contractual clauses (caption, exclusivity, right of first refusal...).
- c) To separate its accounts in relation to wholesale terminal line services (arts. 13.1 c) of the LGTel and 9 of the Market Regulations; art. 11 of the Access Directive)

Telefónica must separate its accounts in relation to the activities of access and interconnection. Fulfilment of this obligation will permit the CMT to control the fulfilment of obligation 1. b) of this Annex.

This obligation is applicable to rented terminal lines with both traditional and Ethernet interfaces.

The CMT shall establish the format and methodology with which Telefónica must fulfil these obligations. When the CMT fails to establish said aspects, Telefónica must use those established in the Resolutions mentioned in the previous section.

2.- Non-discriminatory obligation in the conditions of the wholesale rented terminal line services (articles 13.1 b) of the LGTel and 8 of the Market Regulations; article 10 of the Access Directive)

Article 10 of the Access Directive details the scope of the application of this principle in the following terms: "the operator applies equivalent conditions under similar conditions to other companies that supply similar services and supply services and information to third parties of the same quality as that which they supply for their own services or those of their subsidiaries under the same conditions".

Therefore, Telefónica shall introduce the resources necessary for the provision of rented terminal lines, supplying resources to third parties equivalent to those it provides itself or its subsidiaries or joint ventures under the same conditions and deadlines.



This obligation is applicable to rented terminal lines with both traditional and Ethernet interfaces.

For the purpose of controlling the fulfilment of this obligation:

- -The agreements signed by Telefónica with other operators, its subsidiaries and other companies from the Telefónica Group, must be formalized in writing and communicated by Telefónica to the CMT within a maximum period of 10 days following their formalization.
- -Telefónica shall be obliged to inform the CMT of certain quality parameters regarding the supply of wholesale rented terminal line services, with the aim of supervising the correct fulfilment of non-discriminatory obligations.

For example, obligations of communication of quality parameters regarding the circuit interconnection service which are presently imposed on Telefónica by virtue of the current RLO, approved by CMT Resolution of 20 December 2007, shall remain in force.

The above, without detriment to the power of the CMT to introduce changes to the reference offer, in accordance with the provisions of article 9.2 of the Access Directive and article 7.3 of the Market Regulation.

Additionally, Telefónica must send the equivalent information, with the same frequency and in the same format, regarding lines rented on a retail basis.

Likewise, Telefónica must inform the RLO using operators of the quality parameters of both wholesale and retail services in aggregate form. The CMT shall provide the parameters to be published and their frequency in the next revision of the Reference Line rental Offer.

3.- Obligation of Transparency in the supply of wholesale rented terminal line services

a) Telefónica is obliged to publish a sufficiently broken down Reference Offer for the supply of wholesale rented terminal line services in order to guarantee that unnecessary resources for the required service do not have to be paid (articles 13.1 a) of the LGTel and 7 of the Market Regulations; article 9 of the Access Directive).

This reference offer should include, at least, the following components as they are currently defined:

- Location and description of the exchanges where the access is offered.
- The access service mode services that are on offer. Where necessary, the applicable technical or financial details that are applicable to each of the services/modes shall be noted and an exhaustive description of the functional capacities included in each service or access service mode shall be given.



- The required technical characteristics for the networks or specific components that are used for the connection to the points in which access is offered, shall, where necessary, include information relating to the supply conditions of these specific networks or components.
- The technical specifications of the interfaces offered in the network termination points shall, where necessary, include the physical and electrical characteristics and the functional capacities offered via the interface.
- The processes and conditions for access to information for supply of services and the relevant operation systems.
- The general conditions for carrying out and maintaining access, in particular, those relating to the methods and phases of the verification tests and processes for proceeding to updates or modifications in the access points where there is no modification in the offer.
- The service level agreements.
- The financial conditions, including the prices applicable to each of the components of the offer.

For the purposes of this obligation, the current wholesale rented terminal line services offer included in the RLO approved by CMT Resolution of 20 December 2007 is considered to remain in force.

With regard to Gigabit Ethernet line prices, those in force in the RUO for circuits of the same capacity used for the Signal Delivery service shall be applicable.

The above, without detriment to the power of the CMT to introduce changes to the reference offer, in accordance with the provisions of article 9.2 of the Access Directive and article 7.3 of the Market Regulation.

At all events, Telefónica must update the reference offer at least once a year and, in the event of any modification being applied, the period after which said modification shall be considered effective will be of two months following its publication, unless a different period should be indicated by this Commission.

- b) <u>Obligations of transparency with regard to the progression of the</u> Telefónica network:
 - Prior authorization and inclusion in the RLO

When there are modifications to the Telefónica network (particularly due to progression to NGN) which may affect the supply of rented terminal line services by Telefónica, the conditions applicable to the same (including technical aspects and economic conditions) must be subject to prior authorization by the CMT and be included, when necessary, in the RLO. Telefónica must inform the operators and the CMT of said modifications with at least 12 months' notice.

Closure of exchanges

Exchanges open to RLO services may be closed when all the rented lines dependent on the exchange are directly accessible in an alternative way and in the applicable conditions authorized by the CMT, in accordance with the previous point.



c) <u>Obligations of transparency with regard to the provision of retail rented</u> line services:

In order to control the correct setting of the wholesale prices of Ethernet lines using the *retail minus* methodology, Telefónica must communicate its retail Ethernet offer (MetroLAN) prices one month in advance. For example, the price communication procedure established in the CMT Resolution of 20 December 2007, by which the RLO is modified, remains in force.

Likewise, if it is demonstrated that the offer communicated differs significantly from the actual conditions applied by Telefónica to its final clients —for example by offering personalized discounts on a mass basis—, the CMT may set the wholesale prices using the data obtained from the effective mean income or cost information of the services affected. The use of this type of information will also be necessary in the extreme situation of Telefónica deciding to do away with the standard retail offer.

4.- Determination of the specific conditions for access to wholesale rented terminal line services (with both traditional and Ethernet interfaces)

Telefónica and the operator shall set the general conditions under which Telefónica shall supply the services detailed in section 1. a).

By virtue of the provisions of article 7.3 of the Market Regulation, the CMT shall be informed of any access related disputes arising between operators, during both the negotiation and execution phases. The CMT shall decide on the suitability of the access application and, where necessary, dictate the agreement conditions for guaranteeing the suitability of access, interconnection and inter-operability of the services, as well as achieving the objectives established in article 3 of the LGTel. In accordance with article 14 of the LGTel, the maximum period for solving said disputes shall be four months.



ANNEX 2: rented LINES AND ETHERNET TECHNOLOGY

A2.1 Introduction

The classic definition of rented lines is: "transmission service for the permanent connection between two points through a public telecommunications network, with a specific fixed capacity, not including switching functions which the user can control, and rented to final users if the line is supplied in the retail market. Said service permits the connection of two points for the sending and receiving of information flows."

Another name commonly used to refer to these services is that of *rented circuits*, a term which emphasises the type of technology commonly used to implement the networks which have supported these services and through which these services have been provided. And rented line services have effectively been associated with circuit networks, a technological term used to refer to those networks in which the communication between two points takes place thanks to the existence of a permanent connection between them, continuously reserving and dedicating certain network resources and offering a fixed capacity for said communication.

In fact, the definition of the rented line service is a result of the technologies used in the past to provide a permanent dedicated connection between two points. Moreover, even the different types of rented line service available in the past and distinguished by their band breadth (n x 64Kbit/s, 2Mbit/s, 34Mbit/s, 155Mbit/s, etc.) are a direct translation of the speeds offered by the PDH and SDH based circuit networks.³⁶

A2.2 Ethernet technology

Ethernet³⁷ was a technology designed for communication between computers via a coaxial cable connected to the same. Said technology defined the characteristics of the physical medium used, the connection interfaces, the method used by the computers to arbitrate access to the medium and be able to send the information, and the format of the data frames or packages.

Ethernet was adopted as standard, IEEE Std. 802.3, and has become the leading technology in local area networks (LAN) for the connection of computers, both in residential and business fields.

Although Ethernet networks originally consisted of a simple coaxial cable, used as a shared medium for the connection of computers, Ethernet switches later appeared,³⁸ units with several interfaces or ports to which users or other switches are connected and whose purpose is to direct and retransmit the Ethernet frames received at one of its interfaces towards another suitable port so that they can be received by the receiver terminal.³⁹

³⁶ Plesiochronous Digital Hierarchy (PDH); Synchronous Digital Hierarchy (SDH).

³⁷ Technology originally designed by the company Xerox PARC between 1973 and 1975. In 1976 an article was published in Communications ACM.

³⁸ Also called Bridges in the IEEE 802.1 standards.

³⁹ The basic function of Ethernet switches is to process the sender and receiver Ethernet addresses of the frames received at their interfaces. By means of the processing of the sender addresses of the frames received at each interface, the switches carry out a learning process with regard to the location of the addresses, thereby constructing the tables which associate the Ethernet addresses with each of the existing interfaces. At the same time, the retransmission process consists of carrying out a search for the Ethernet address which identifies the destination of the frame received in the tables of addresses associated with each port, and retransmitting the frame only through the port whose table contains said Ethernet address. In the event of said address not appearing in any table, the switch will resend the frame through all the interfaces (a technique known as *flooding*), thereby assuring that the frame will reach its destination.



In the successive versions of the IEEE 802.3 standard the Ethernet interface speeds have gradually increased, rising from 100Mbit/s to 1Gbit/s and up to the 10Gbit/s currently defined. Furthermore, the physical media defined in the standard range from the coaxial cable to different types of UTP/STP twisted pair cable and different types of multimode and monomode fibres.

Regardless of the medium and speed, in all types of Ethernet interface the format of the data frame or package transmitted is the same. Although there are two types of Ethernet frame, the original frame, called Ethernet II or DIX, and the trama defined in IEEE Std. 802.3 or 802.2, both types may coexist even in the same network, although the Ethernet II format is currently the most frequently and extensively used, being commonly used for IP. The frames transport the Ethernet addresses which identify the sender and receiver interfaces connected to the network. Each Ethernet address is made up of 48bits and is unique, identifying univocally all existing Ethernet interfaces.

With the later definition of switches permitting the support of virtual LANs or VLANs,⁴⁰ and the corresponding VLAN labels (VID) transported in the Ethernet frames, the intention was to partition the traffic present in an Ethernet network in such a way that the frames should only be received by the terminals belonging to the same VLAN. The switches which support virtual LANs, besides processing sender and receiver Ethernet addressed, also process the value of the VLAN label of the frames, taking it into account in both the learning and retransmission processes. The switches will only retransmit a package to a port if said port is associated with the VLAN to which said package belongs.

A2.3 Ethernet in operator networks

The implementation of multi-service networks by operators has been associated with the adoption of the package switching techniques necessary to construct their networks. At the present time, telecommunications network operators have implemented networks supported by equipment with Ethernet interfaces, normally with speeds of 100Mbit/s, 1Gbit/s or 10Gbit/s.

However, under the name of Ethernet based metropolitan or aggregation networks,⁴¹ there are usually numerous alternatives regarding the possible architectures used. Although the terminal interconnection interfaces used in all of them are of the Ethernet type, depending on the architecture, the terminals have a specific conduct, processing different fields and information included in the packages exchanged. The units used can act either in their own right as Ethernet switches or as routers⁴² with MPLS⁴³ functions.

Certainly, regardless of the type of architecture implemented, they all allow operators to continue offering rented line services, taken to mean the connection of two points with certain band breadth capacities between them, while having a certain quantity guaranteed. Some of these architectures even make it possible, in a package switching network, to define services which can emulate a TDM circuit (multiplexing in the time

⁴⁰ Standardized in IEEE Std 802.1Q

⁴¹ The term aggregation network is used to refer to those networks which concentrate the traffic form several networks towards the trunk network access (backbone)

⁴² Routers, term usually used to designate the network units whose job is to route and retransmit IP packages to their destination.

⁴³ MPLS, Multiprotocol Label Switching



domain) at 2Mbit/s, 34Mbit/s or any other speed, services usually referred to as Circuit Emulation Services.⁴⁴

The widespread use of Ethernet technology in local networks and its subsequent introduction into operator telecommunications networks, gave rise to the demand for services of connectivity between two points, by the use of Ethernet interfaces and with speeds of 10Mbit/s, 100Mbit/s or even 1Gbit/s, typical of local Ethernet networks. Services of this type are commonly referred to as Rented Ethernet Lines.⁴⁵ Nevertheless, services of this type do not always have the same characteristics, being able to offer guaranteed minimum capacities as well as maximum peak speeds, maximum values of QoS parameters such as retardation and retardation variation, or the use of VLANs by the client, etc.

Regardless of the differences, this type of service always involves the transparent transport of the Ethernet frames generated by the client and their subsequent delivery at the other end of the connection without modifications.

As already mentioned, the implementation of the service and the way in which the Ethernet frames delivered by the client will be processed within the operator network, will depend on the architecture of the network implemented by the operator. By way of example, the following would be possible operator network architectures:

- Network made up of Ethernet switches with the use of a *Q-in-Q* architecture, also known as Provider Bridging or VLAN stacking,⁴⁶ which consists of using two VLAN labels. By using a second VLAN label, a second virtual LAN space or domain is created, which will be processed only by the operator network units, thereby making it independent of the first VLAN domain, which can be used by the user. The operator units will carry out their learning and retransmission functions according to the value or presence of the second VLAN label. Even in the event of both VLAN spaces being used by the operator, this permits the creation of a network with two hierarchical levels, or bundling network, increasing the possible number of different services or users identified.
- Network made up of Ethernet switches with the use of a MAC-in-MAC architecture, also known as Provider Backbone Bridges,⁴⁷ in which the Ethernet frame of the user is encapsulated within another Ethernet frame, thereby creating two separate and independent Ethernet addressing spaces, one belonging to the operator network and the other belonging to the client network. This same architecture can be supplemented by other techniques, known as PBB-TE, whose purpose is precisely to provide Ethernet networks based on non-connection orientated package switching, with connection orientated transmission methods. For these, the use and processing which the switches make of the VLAN labels is modified.

⁴⁴ MEF 3 Circuit Emulation Service Definitions, Framework and Requirements in Metro Ethernet Networks MEF 8 Implementation Agreement for the Emulation of PDH Circuits over Metro Ethernet Networks

⁴⁵ The Metropolitan Ethernet Forum (MEF) defines three types of Ethernet service, including the Ethernet - Line (E-Line), defined as a point-to-point Ethernet Virtual Connection (point-to-point EVC) MEF 6.1Ethernet Services Definitions. The ITU-T G.8011.1 and G.8011.2 recommendations refer to the same service as Ethernet Private Line (EPL).

Specified in the IEEE, Std 802.1ad standard
 Specified in the IEEE Std 802.1ah Standard (draft)



Network based on hybrid switch-router units, with the use of MPLS. MPLS makes it possible to introduce a connection orientated package transmission method into IP networks by the use of tunnels. This makes it easier to define and implement point-to-point connectivity services, such as that used in rented lines. In MPLS networks, services of this type are known as Pseudo-wires.⁴⁸ In schematic form,⁴⁹ MPLS headers are added to the client Ethernet frames which are then encapsulated in other Ethernet frames. The network units process the MPLS headers in order to direct the traffic towards the other end of the network.

⁴⁸ The following IETF standards define the Pseudo-wire service and its architecture respectively: RFC 3916 (www.ietf.org/rfc/rfc3916.txt) and RFC 3985 (www.ietf.org/rfc/rfc3985.txt)

⁴⁹ Currently, the encapsulation of Ethernet frames for point-to-point services via MPLS has been defined in the IETF RFC 4448 standard (www.ietf.org/rfc/4448.txt). In the past, the most common encapsulations were carried out in accordance with an IETF draft known as the Martini draft.



ANNEX 3: SUMMARY OF ALLEGATIONS

This annex contains the allegations presented by the operators and the CMT's replies to the same. The main considerations made by the CNC and the operators, and the response to the same, have been included in the main body of the Resolution.

III.1 The minimum set of rented lines

III.1.1 Definition of the relevant market

III.1.1.1 Summary of allegations

BT adds that it would make sense to analyse the competition situation in the corporate communications solutions offered to multi-site clients.

III.1.1.2 Response to the Public Inquiry allegations

The multi-site nature of corporate communications solutions has been taken into account when it comes to defining the geographical area of the market as the whole of the Spanish territory.

On the other hand, the CMT has borne in mind the needs of operators focused on multi-site clients in different markets, not only in rented line markets. Specifically:

- In fixed origin and termination markets, the alternative operators are able to make use of interconnection by capacity, which gives the operators great flexibility when it comes to preparing their retail offer and signifies very substantial reductions in mean interconnection costs. Furthermore, Spain is the most important example in Europe of the use of said mode of interconnection.
- The market 4 analysis includes not only local loop access, but also access to the Telefónica ducts, which facilitates the laying of fibre to the site of the final client.
- The market 5 analysis establishes the need to define an indirect broadband access service which will enable company operators to offer the quality guarantees necessary for these connections.
- Spain has been one of the first countries to introduce a wholesale rented line Ethernet offer.
- Thanks to the analysis of the former market 15, mobile operators are obliged to offer reasonable access, such that operators centred on the business sector can establish themselves as VMOs and directly meet the growing mobility needs of business clients.

In summary, the measures adopted in different markets are considered to enable operators centred on multi-site corporate solutions to compete efficiently with Telefónica.

III.1.2 First Criterion

III.1.2.1 Summary of allegations

BT considers it to be untrue that the switching costs in this market are lower than those existing in residential markets. BT points out that the introduction of an electronic communications solution in a company is a long, complex process which usually



involves a migration period with incidences in the service. For this reason, companies are reluctant to change service provider.

Telefónica is in agreement with the analysis of the CMT.

III.1.2.2 Response to the Public Inquiry allegations

The CMT considers that BT is partly right when they point out that the possible incidences arising from a change of operator may cause a certain degree of reluctance in companies. Nevertheless, said reluctance can be overcome by making a considerable improvement in the technical or economic conditions of the service, such that it is not considered necessary to modify the conclusions on the matter. Additionally, business clients are able to afford greater search costs than residential users.

III.1.3 Second Criterion

III.1.3.1 Summary of allegations

Orange and Verizon allege that the CMT has excluded the Ethernet service from this important market in order to be able to identify a trend towards effective competition in the same. Verizon points out that Telefónica holds the greatest share in Ethernet services, which, moreover, are those which show the highest growth in sales.

ASTEL, BT and Verizon consider that if the CMT has identified discounts of over 50% on regulated retail prices, the possibility of the existence of the narrowing of margins should be considered. Verizon adds that this situation is aggravated by the existence of wholesale prices which are traditionally higher than the average of the other countries in the region.

Telefónica is in agreement with the analysis of the CMT.

III.1.3.2 Response to the allegations

The allegations of Orange and Verizon regarding the delimitation of the relevant market have been answered in the body of the document.

On the other hand, with regard to the supposed narrowing of margins, it should be pointed out that the wholesale prices of traditional lines are cost orientated. It should also be added that, after the substantial reduction of wholesale prices established in the latest revision of the RLO, it is not true, as Verizon affirms, that wholesale prices in Spain are higher than those of the other countries in the region.

III.1.4 Third Criterion

III.1.4.1 Summary of allegations

ASTEL, BT and Verizon do not agree with the statement of the CMT regarding the low level of disputes in the rented line retail market. On the other hand, Telefónica is in agreement with the analysis of the CMT.

III.1.5 Response to the Public Inquiry allegations

With the expression "low level of disputes", the CMT is referring to the low number of disputes brought before the regulator in relation to the minimum set, this number constituting objective evidence for the measurement of disputes in the market —at least from a regulatory point of view.



III.1.6 Removal of obligations

III.1.6.1 Summary of allegations

Orange considers it insufficient to maintain the RLO with a slight extension of the scope of application of the same for its use in mobile access and the elimination of the distance restriction at a provincial level in order to proceed to eliminate *ex ante* regulation in the retail market, since there are a number of routes, such as Tenerife-Gran Canaria, which would fall outside wholesale or retail regulation.

Telefónica considers that the period for the removal of obligations should be at most three months, arguing that a longer period might prove a liability to its commercial capacity and its power to compete with the rest of the agents.

Verizon considers that, despite the fact that the European Commission has excluded this market from its Recommendation, the CMT should compare the situation of the Spanish market with that of the other countries in the region in which the former monopolies are weaker than that of Telefónica in Spain. The elimination of regulation in Spain is not justified.

III.1.6.2 Response to the Public Inquiry allegations

The allegations of Orange regarding the Tenerife – Gran Canaria route are dealt with in the proceedings related to the definition and analysis of wholesale rented line trunk segment markets (MTZ 2008/1945).

The period of 6 months for the removal of obligations is considered necessary in order for the users of lines belonging to the minimum set to be able, if they consider it necessary, to negotiate alternatives with Telefónica and carry out the migration to the new supplier.

Finally, in reply to Verizon, it should be said that the removal of obligations from the minimum set is justified from the moment at which it has been demonstrated that said market fails to fulfil the three criteria which justify *ex ante* regulation.

Therefore, all allegations on this point are rejected.

III.1.7 Wholesale terminal rented line market

III.1.7.1 Definition of the terminal rented line market

III.1.7.2 Summary of allegations

Inclusion of Ethernet lines

Telefónica considers that Ethernet lines should not form part of the reference market, since they constitute a network based service, with different scalability and flexibility capacities and characteristics from the rented point-to-point services which use traditional interfaces.

Inclusion of lines for BTS/BSC connection

Telefónica and Euskaltel do not agree with the inclusion of lines used by mobile operators to connect their BTSs. These operators consider that this type of line belongs to the rented trunk line market. Telefónica adds that BTS access is already dealt with in the wholesale infrastructure access market and it is not admissible for it to be dealt with also in the terminal rented line market. Finally, Telefónica considers that lines



contracted by mobile operators are not replaceable from the point of view of the demand for rented lines contracted for connection to a final client.

Technical definition of the wholesale service

ASTEL, BT, COLT and Orange point out that the market definition does not include the characteristics of "permanent connection" and "fixed capacity", which could lead to Telefónica deciding to offer a non-dedicated switched service without sufficient quality guarantees. To clear up any doubts on the matter, they request the inclusion of said characteristics in the market definition.

BT considers that it should be clearly established that the wholesale Ethernet service to be provided by Telefónica is a transparent level 1 optical fibre carrier service. The reasons on which this request is based are that:

- Possible problems which might arise in the introduction of the Ethernet service would be solved.
- The current regulatory limitations of the Ethernet service are based on the fact that the service delivered by Telefónica is a transparent level 1 dedicated optical fibre carrier service. BT considers that its delivery in any other form (for example, Ethernet using SDH) should mean the automatic disappearance of these limitations.

Definition of geographical markets

Telefónica considers that lines between islands should not form part of the terminal line market, given that 80% of the population is concentrated on the larger islands.

Telefónica adds that the scope of the market could be geographically differentiated according to the presence of an alternative offer, either wholesale or self-provided, as already occurred in the first CMT report on infrastructure access and wholesale broadband markets.

Grupalia considers it necessary to carry out a territorial analysis at an Autonomous Community level, bearing in mind the characteristics of certain territories in which an operator other than Telefónica might hold an SMP position and, therefore, be liable to have the same measures imposed upon it as Telefónica.

III.1.7.3 Response to the allegations

Inclusion of Ethernet lines

In reply to Telefónica, it should be mentioned that a detailed analysis of substitutability between Ethernet and traditional lines had already been carried out in the first market analysis, the conclusion being that they belonged to the same market. Furthermore, the data compiled in this analysis have fully confirmed the process of migration of traditional interfaces towards Ethernet lines and, therefore, it is not considered necessary to modify the previous conclusions.

Inclusion of lines for BTS/BSC connection

With regard to the inclusion of lines used for BTS or BSC connection, the substitutability analysis justifying their inclusion in the market has been carried out in the body of this Resolution. On the other hand, it should be pointed out that in most



countries of the European Commission, the lines rented for BTS connection belong (either fully or in the final stretch) to the terminal market.

Telefónica's affirmation regarding the supposed incompatibility existing for dealing with mobile BTS connectivity in the infrastructure access market is also inadmissible. By this reasoning, the market would not include any type of line, not even the lines used to connect with business clients, since the passive infrastructures of Telefónica can also be used for the same purpose.

Technical definition of the wholesale service

In response to ASTEL and other operators, it should be pointed out that the wholesale services currently regulated to Telefónica are "permanent connection" and "dedicated capacity" services, without detriment to the fact that, in the future, it may be considered expedient to introduce a wholesale offer for a switched, non-dedicated service.

Along the same lines and in response to BT's request, it is clarified that the wholesale Ethernet service is a transparent level 1 optical fibre carrier service, as has already been pointed out in the body of the document (section III.5.3.1.2). In this respect, it should once again be mentioned that certain limitations of the wholesale Ethernet service (particularly the maximum distance and the speeds to be offered) are closely linked to the aforementioned technical features of the wholesale service.

Definition of geographical markets

The fact that only 20% of the population of the archipelagos live on the smaller islands in no way justifies the fact that the CMT should obviate them and exclude them from the regulation.

With regard to the allegations of Telefónica and Grupalia regarding the definition of markets at a lower than national level, the multi-site nature of rented lines ensures that competition conditions are homogeneous throughout the national territory.

III.1.8 Analysis of the terminal market structure

III.1.8.1 Summary of allegations

Telefónica considers that, if all types of access to all base stations and B nodes in this market were included (not only through rented lines), the market would be three times the size, in which case Telefónica's dominant position would be questionable.

Telefónica considers that the segment of terminal lines with speeds of 2Mbit/s or less should be liberalized. Telefónica points out that the operators, rather than contracting n x 64Kbit/s lines, use the unbundled loop and technologies such as SDSL. Telefónica affirms that in January 2009 it rented fewer than 6,000 n x 64 circuits per almost 28,000 unbundled loops with SHDSL technology. Telefónica argues that the ULL offer regulates circuits of less than 2Mbit/s, making the imposition of further remedies for this segment of the market unnecessary. Finally, Telefónica points out that the international comparative study shows that in several countries the market has been segmented according to speeds, with 2Mbit/s as a threshold (mentioning Denmark, Greece, The Netherlands, Ireland, Lithuania and Hungary. Telefónica also points out that the international comparative study recommends the liberalization of the market of up to 2Mbit/s.



Telefónica points out that there are numerous operators offering circuits on a wholesale basis, which is indicative of the fact that the market is competitive.

Telefónica criticises the fact that the three criteria test has not been analysed in this market, just for the mere fact that it appears in the European Commission's market Recommendation. In Telefónica's opinion, the three criteria test should be analysed in all markets, regardless of whether or not they are included in the Recommendation. Telefónica adduces that, although the first and second criteria are analysed superficially, nothing is said about the third and, in their opinion, the right of competition is sufficient to solve any possible problems which may arise in the terminal market.

III.1.8.2 Response to the Public Inquiry allegations

In response to Telefónica, it should be pointed out that the rented lines which the alternative operators have provided through the unbundling of several loops and through technologies such as SHDSL have been included in the terminal market and, despite this fact, the available data demonstrate the SMP of Telefónica in this market.

It is true, as Telefónica affirms, that several regulators have segmented the market according to speed, particularly among circuits with speeds of up to 2Mbit/s and over. In some countries, the absence of SMP has been declared in the sub-market of circuits with speeds of over 2Mbit/s. Certainly, all countries have declared the existence of SMP in circuits of up to 2Mbit/s. In other words, the international comparative study reaches conclusions which are diametrically opposed to Telefónica's proposal.

On the other hand, with regard to the allegations of Telefónica regarding the supposed non-fulfilment of the third criterion, evidence shows that the right to competition is not sufficient to solve the competition problems which may arise in the wholesale terminal line market. The most recent example is provided by Ethernet lines; Telefónica did not start to provide wholesale services of this type until wholesale obligations were imposed by the CMT.

Finally, and as an additional factor, it should be pointed out that this market has been regulated in all the member states of the European Commission.

III.1.9 Measures to be imposed in the terminal market

III.1.9.1 Maximum distance of traditional rented lines

III.1.9.1.1 Summary of allegations

Therefore, Verizon and COLT allege that the CMT should extend the maximum distance of the terminal circuits included in the regulated offer. Verizon proposes a limit of 250km. According to Verizon, the market analysis confirms that the demand is concentrated in a limited number of provinces. For example, users of circuit leasing services are concentrated around 7 industrial centres (as shown by the graph included on page 41 of the inquiry). It considers that a deployment of 50 points generates costs for the operators which can only be met in the event of profits being gained from scope economies or from substantial scale economies.

Verizon and COLT point out that the alternative operators find themselves forced to contract non-regulated offers from Telefónica under conditions which do not meet the quality levels demanded by users.



Verizon considers that the CMT should think over the results of demanding excessive deployments of points of access to the Telefónica network, because it is not the same to demand the deployment of the operator's own network as to demand the deployment of network towards the points of access to the Telefónica network.

On the other hand, COLT and Verizon consider that the limitation of the distances of regulated circuits ultimately works in detriment of the final users, since the offers of the alternative operators will be of lower quality and less economically developed zones will fail to be covered due to the impossibility of guaranteeing the quality levels of the service.

On the other hand, Telefónica affirms that the maximum distance of circuits should not be more than 50km, which, in their opinion, is the limit set by the European Recommendation on rented lines. Telefónica points out that it currently supplies very few circuits of over 70km on a wholesale basis.

III.1.9.1.2 Response to the allegations

Contrary to the affirmations of COLT and Verizon, the available data shown that the deployment of one CPol per province is normal. The CMT possesses information about co-located exchanges, switched traffic Points of Interconnection, and CPols in the different Spanish provinces and the fact is that, with the exception of Ceuta and Melilla,⁵⁰ in all the provinces, the alternative operators have one or other type of the aforementioned connections to the Telefónica network. In other words, the real situation demonstrates that it is in no way disproportionate to consider a deployment of one CPol per province as reasonable.

Additionally, for those operators that do not have one CPoI per province, there are alternatives to leasing circuits from Telefónica in commercial conditions. Nonetheless, these options involve negotiating with other alternative operators. Once again, it should be remembered that there are infrastructure reuse and CPoI sharing facilities and that resale to third parties of circuits rented from Telefónica is permitted.

Finally, with regard to Telefónica's allegation regarding the limit established by the rented line Recommendation of the European Commission, although this allegation has already been answered in previous procedures, it must be clarified that the Recommendation establishes no limit for terminal rented lines. Furthermore, in the first round, the European Commission was already notified of the maximum distance of 70km and no objection was raised on the matter.

III.1.9.2 Maximum distance of Ethernet rented lines

III.1.9.2.1 Summary of allegations

Orange adds that Pols are normally in provincial capitals and that most of the important towns in a province are further than 35km from the capital.

According to Orange, the lack of regulation in this respect leaves only one solution: the commercial offer. But this option involves numerous disadvantages which discourage investment: contracts with long time commitments, high penalties, demanding invoicing commitments, etc.

⁵⁰The specific situation of Ceuta and Melilla is already dealt with in the market analysis of leased trunk lines (MTZ 2008/1945).



III.1.9.2.2 Response to the allegations

The maximum distance of Ethernet lines has been dealt with in the body of the document. In any case, it should be pointed out that the Ethernet connection service permits a maximum distance of 30km, which added to the 35km of the link service, amount to a total of 65km Therefore, all allegations are rejected and the maximum distance for the Ethernet line link service is maintained at 35km, without detriment to the fact that, as already stated in the body of the document, this limit may be revised in the next modification of the RLO.

III.1.9.3 Setting of traditional line prices

III.1.9.3.1 Summary of allegations

ONO alleges that, despite the similarity existing between the price regulation models applied to trunk lines and to terminal lines, in the second case a cost price regulation or *retail minus* mechanism has been chosen, whereas in the first case, the imposition of a reasonable price obligation has been opted for. ONO considers that the methodology used by the CMT in the RLO modification proceedings with regard to the Mainland-Canaries route should also be applied for terminal rented lines.

Therefore, in order to achieve greater consistence between the measures adopted in the different markets, ONO suggests that in the terminal line market, reference be made to "reasonable" rather than "regulated" prices and that, as in the trunk line market, the principles which the Commission will apply to assess whether the prices are reasonable be established.

According to ONO, the application of reasonableness criteria to Telefónica's wholesale prices in the case of trunk lines implies, in practice, a clamping analysis which, in the same way as a *retail minus*, assures replicability to operators without their own network, as was made clear in the RLO modification regarding the Canaries route.

Telefónica affirms that was not sufficient justification in the RLO approval proceedings of the reasons for rejecting their request to do away with discounts for volume and once again proposes the elimination of said discounts.

III.1.9.3.2 Response to the allegations

The decision the regulator must take for choosing among the different price setting methods available depends on many different factors. In fact, in the case of the Mainland-Canaries route, very serious consideration was given to the possibility of a competitor entering and laying an alternative undersea cable, a situation favoured by the diverse new cable projects between Europe and West Africa currently underway.

With regard to terminal lines with traditional interfaces, the situation is different, since they constitute an access service to the network left by Telefónica. Ethernet lines are also and access service, but because they are a relatively new technology using fibre optics, it has been considered more proportionate, in order not to discourage efficient investment in infrastructures, to apply a *retail minus* methodology. In other words, the situation of each regulated service is different and it would not be efficient for the CMT to adopt a single standard for the setting of prices in all of them.

Finally, the CMT considers that, both in the RLO Resolution and in the Request for Review,⁵¹ Telefónica's allegations regarding discounts for volume were more than



adequately answered. There are two main reasons for their existence: they make sense from the point of view of the costs of the service and they are what enable wholesale circuit prices in Spain to be in the region of those recommended by the European Commission.⁵²

III.1.9.3.3 Ethernet line price setting

III.1.9.3.4 Summary of allegations

According to COLT, Orange and Verizon, the market has reached a certain level of maturity and the growing importance of Ethernet services has been observed, making it necessary to impose the obligation of cost orientation. According to Verizon, this obligation is to prevent the narrowing of margins, since the current *retail minus* regulation is only desirable when the retail prices are transparent, which is not the case in this market. Orange adds that the *retail minus* methodology results in the setting of an excessive wholesale price.

On the other hand, Telefónica considers that Ethernet line prices should be put up. At all events, the prices of Ethernet lines contracted by mobile operators should be higher than those contracted by fixed operators, since the Ethernet offer price was set using a *retail minus* of a line contracted by a fixed operator and the consumption of a mobile operator is very different.

III.1.9.3.5 Response to the allegations

The allegations regarding the setting of Ethernet line prices using a *retail minus* methodology have been answered in the body of the document.

With regard to Telefónica's allegations regarding the setting of mobile line prices, it must be pointed out that the market ruling is the same for lines contracted by both fixed and mobile operators. Therefore, there is no justification for differentiating the obligations and applying a different wholesale price for the same service depending on whether the operator requesting it is fixed or mobile.

III.1.9.4 Reuse of infrastructures

III.1.9.4.1 Summary of allegations

According to Vodafone, in practice, there are various services of connection of the Telefónica network to the operator network (rented line service in the RLO, interconnection service in the RIO, carrier capacity service in the RUO, etc.). Therefore, it considers that the Commission should guarantee that the most efficient use be made of the infrastructure deployed, in such a way that it is always possible for all services to use the Telefónica network Points of Connection whenever it is technically viable.

Vodafone alleges that, once a particular infrastructure is deployed, it should be possible for this to be used by any of the services mentioned with no added cost

⁵¹ Resolution of 26 June 2008 (AJ 2008/103).

⁵² European Commission Recommendation of 29 March 2005 regarding leased line supply in the European Union. Part 2: aspects regarding the setting of prices of wholesale rented line partial circuits.



(except for objective causes) and without any of the services provided being conditioned by the continuity of others.

Orange considers that the RLO establishes no express relationship between the reuse of infrastructures and the processes of migration of commercial offers to regulated offers, and that this also creates insecurity in the operators.

III.1.9.4.2 Response to the allegations

In response to Vodafone, it should be pointed out that the CMT has facilitated the reuse of infrastructures whenever possible and that this possibility is included in the various reference offers (RIO, RUO, RLO). Therefore, Vodafone's request is already considered in the regulation.

On the other hand, with regard to Orange's allegations, it must be pointed out that Telefónica's obligation to facilitate migration to the regulated offer is generic and that there is no obstacle to the reuse of infrastructures under this situation, without detriment to the fact that Telefónica may invoice for any work which is indispensable for carrying out the migration.

III.1.9.5 Prohibition of anti-competitive practices

III.1.9.5.1 Summary of allegations

ASTEL and Orange request the express prohibition of practices such as anticompetitive price reduction, abusive packaging, etc. ASTEL adds that it should be expressly established in section b4) of the proposed measures that any wholesale service must make it possible to compete, in equality of technical and economic conditions, with the corresponding retail services commercialized by Telefónica. Along the same lines, BT directly proposes the inclusion of the following text in section b4):

For example, and without it implying a limitation, Telefónica shall be obliged to:

- Refrain from commercializing retail services which involve anticompetitive conducts, the latter including:
 - Anti-competitive price reductions (narrowing of margins or predatory prices).
 - Abusive or unjustified packaging (imposition of non-required services, abusive package prices, non-replicability from wholesale elements...)
 - Abusive discrimination in price terms.
 - Abusive contractual clauses (caption, exclusivity, right of first refusal...)
- Guarantee at all times that its wholesale terminal rented line services offer permits the alternative operators to replicate all its retail offers.

III.1.9.5.2 Response to the allegations

The requests of ASTEL, BT and Orange are already considered in section b4) of the obligations Annex. Nevertheless, it is considered that extending said section might help to prevent misunderstandings. At all events, instead of the text proposed by BT, it would appear reasonable, for the sake of consistence, to include the same text as has



been used in the wholesale broadband market, for example (number 5 of the Recommendation).

III.1.9.6 Obligations of transparency to prevent narrowing of margins

III.1.9.6.1 Summary of allegations

Orange considers that Telefónica should be obliged to inform this Commission (at least fifteen days in advance of its effective commercialization) of the prices and conditions applicable to retail services and their modifications, including to final clients of the Telefónica Group, as well as the breakdown of prices in the case of packages. Finally, Orange requests that Telefónica be obliged to inform this Commission of new services and of the modification of the provision conditions applicable to retail services with sufficient notice.

III.1.9.6.2 Response to the allegations

The business segment is characterized by the existence of personalized offers which, by definition, are numerous and highly complex. Therefore, the imposition of the obligation of communication to the CMT of all the retail offers of Telefónica would not be of great use, since it would cause an inundation of communications and it would be unviable to analyse them all. Furthermore, it should be remembered that an obligation regarding transparency has already been imposed in market 1: the keeping by Telefónica of a register for retail offers of over 12,000 Euro a year, which must be available for consultation by the CMT.

III.1.9.7 Other allegations regarding the obligation of transparency

III.1.9.7.1 Summary of allegations

ASTEL and BT point out that, for the sake of consistency with the other regulated offers, an annual frequency should be established for the revision of the reference offer.

III.1.9.7.2 Response to the allegations

The request of ASTEL and BT to establish an annual frequency for the revision of the reference offer is accepted, in line with the provisions of other markets.

III.1.9.8 Other allegations

III.1.9.8.1 Summary of allegations

BT believes it is necessary (though always maintaining the current Ethernet offer) to impose an SDH Ethernet service which can be provided in all towns, without any limit to distance (provided it is provincial) and with a greater range of speeds, including current common speeds such as 2Mbit/s.

The Generalitat points out that, despite it being acknowledged that it is a market with considerable entrance barriers (between 50% and 80% of costs are from civil works apart from the legal barriers) and that the possible competitors (cable and Colt and Alpi for the business client segment) have been present in the market for years, there is no progression towards effective competition and, nevertheless, the regulator's solutions start out from the basis that the competitors use the infrastructures of the dominant operator without any measure to encourage the deployment of new networks and facilitate the existence of alternative networks.



III.1.9.8.2 Response to the Public Inquiry allegations

In response to BT, it must be pointed out that this Commission does not consider it necessary to regulate a wholesale SDH Ethernet service, since the operators can already provide said services by leasing traditional lines from Telefónica and incorporating Ethernet/SDH converter units at the each end.

Finally, in response to the Generalitat, promoting investment in alternative infrastructures has been one of the basic principles behind the decisions of the CMT. A recent and relevant example is the imposition of Telefónica of the obligation of providing access to its ducts in the market 4 Resolution.



IN	DEX	
	CTUAL BACKGROUND	
	GAL BASIS	
LE		
I	INTRODUCTION	3
Ш	RETAIL SERVICES AND RENTED LINES	4
	II.1 DESCRIPTION OF THE RETAIL SERVICES OF RENTED LINES	4
	II.2 COMPETITIVE SITUATION OF THE RENTED LINE RETAIL SERVICES	7
	II.2.1 Analysis at a national level	
	II.2.1.1 Rented lines with traditional interfaces	
	II.2.1.2 Rented lines with Ethernet interfaces	
	II.2.1.3 Total rented lines	
	II.2.1.4 Prospective Analysis II.2.1.5 Conclusions of the analysis of the retail services of rented lines	۱۰. ۱۱ 1 <i>۰</i>
	II.2.2 Geographical analysis	
	II.3 THE MINIMUM SET OF RENTED RETAIL LINES	13
	II.3.1 Definition of the relevant market	
	II.3.1.1 Product relevant market	
	II.3.1.2 Geographic relevant market	
	II.3.1.3 Conclusion with regards to market definition	1
	II.3.2 Analysis of the criteria established by the European Commission to identify	
	markets susceptible to ex ante regulation	
	II.3.2.2 Tendency towards effective competition	
	II.3.2.3 Sufficiency of Competition Law	
	II.3.3 Conclusions regarding meeting the three criteria fixed in the European	
	Commission Market Recommendation	
	II.3.3.1 Cancellation of the existing obligations in the retail market of the minimum set of rent	
	lines	24
Ш	WHOLESALE MARKET OF RENTED TERMINAL LINES	2
	III.1 TECHNICAL OPTIONS ON WHICH RENTED LINES CAN BE PROVIDED	25
	III.2 DEFINITION OF THE RELEVANT MARKET	
	III.2.1 Definition for the relevant product market	27
	III.2.1.1 Definition made in the first round	2
	III.2.1.2 Replaceability of the rented terminal lines as a complement to the access network	
	III.2.1.3 Conclusion	
	III.2.3 Market liable to ex ante regulation	
	III.3 ANALYSIS OF THE MARKET STRUCTURE, ASSESSMENT OF THE EXISTENCE OF EFFECTIVE	
	COMPETITION IN THE SAME AND DETERMINATION OF SMP OPERATORS	34
	III.3.1 Description of the structure of the reference market	
	III.3.1.1 Evolution of the offer. Market shares	
	III.3.2 Obstacles to entry	38
	III.3.3 Potential competition in the reference market	
	III.3.4 Analysis of the effective competition in the market	36
	III.3.4.1 Analysis of the market shares	37
	III.3.4.2 Control of an infrastructure not easily reproducible	3
	III.3.4.3 Compensatory power and change costs	う
	III.3.5 Conclusions on the determination of operators with SMP	
	III.4 IDENTIFICATION OF THE OPERATOR WITH SMP	
	III 5 ANALYSIS OF THE ORLIGATIONS WHICH MAY BE IMPOSED ON OPERATORS WITH SIGNIFICAN	

MARKET POWER40



III.5.1 Principles for the regulator to apply when choosing the most fitting o	bligations40
III.5.2 Identification of competition problems in the reference and related m	
III.5.3 Obligations to impose	
III.5.3.1 Obligation of access	
III.5.3.2 Price obligations and associated obligations	50
III.5.3.3 Obligation of non-discrimination	53
III.5.3.4 Obligation of transparency	
HAS DECIDED	56
ANNEX 1: MEASURES TO BE IMPOSED ON THE WHOLESALE RENTED TER	MINAL LINE
MARKET	58
ANNEX 2: RENTED LINES AND ETHERNET TECHNOLOGY	65
ANNEX 3: SUMMARY OF ALLEGATIONS	69
III.1 THE MINIMUM SET OF RENTED LINES	69
III.1.1 Definition of the relevant market	
III.1.1.1 Summary of allegations	
III.1.1.2 Response to the Public Inquiry allegations	69
III.1.2 First Criterion	
III.1.2.1 Summary of allegations	
III.1.2.2 Response to the Public Inquiry allegations	70
III.1.3 Second Criterion	
III.1.3.1 Summary of allegations	
III.1.3.2 Response to the allegations	70
III.1.4 Third Criterion	
III.1.4.1 Summary of allegations	
III.1.5 Response to the Public Inquiry allegations	
III.1.6 Removal of obligations	
III.1.6.1 Summary of allegations	71
III.1.6.2 Response to the Public Inquiry allegations	71
III.1.7 WHOLESALE TERMINAL RENTED LINE MARKET	71
III.1.7.1 Definition of the terminal rented line market	71
III.1.7.2 Summary of allegations	
III.1.7.3 Response to the allegations	
III.1.8 Analysis of the terminal market structure	
III.1.8.1 Summary of allegations	
III.1.8.2 Response to the Public Inquiry allegations	74
III.1.9 Measures to be imposed in the terminal market	
III.1.9.1 Maximum distance of traditional rented lines	
III.1.9.2 Maximum distance of Ethernet rented lines	75
III.1.9.3 Setting of traditional line prices	
III.1.9.3.3Ethernet line price setting	77
III.1.9.4 Reuse of infrastructures	
III.1.9.5 Prohibition of anti-competitive practices	78
III.1.9.6 Obligations of transparency to prevent narrowing of margins	79
III.1.9.7 Other allegations regarding the obligation of transparency	
III.1.9.8 Other allegations	