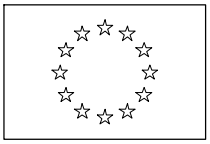

COMMISSION OF THE EUROPEAN COMMUNITIES

COMMISSION DECISION

of 04.07.2007

relating to a proceedings under Article 82 of the EC Treaty

(Case COMP/38.784 – Wanadoo España vs. Telefónica)

(ONLY THE SPANISH TEXT IS AUTHENTIC)

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THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty[1], and in particular Article 23(2) thereof,

Having regard to the complaint lodged by Wanadoo Spain S.L. (now France Telecom España S.A.) on 11 July 2003, alleging infringement of Article 82 of the Treaty by Telefónica S.A. and requesting the Commission to put an end to those infringements,

Having regard to the Commission decision of 20 February 2006 to initiate proceedings in Case COMP/38.784,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission pursuant to Article 19(1) of Regulation No 17[2] and Commission Regulation (EC) No 2842/98 of 22 December 1998 on the hearing of parties in certain proceedings under Articles 85 and 86 of the EC Treaty[3],

Having regard to the final report of the hearing officer in this case,

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

Whereas

[1] OJ L 1, 4.1.2003, p. 1.

[2] OJ 13, 21.2.1962, p. 204/62. Regulation as last amended by Regulation (EC) No 1216/1999 (OJ L148, 15.6.1999, p.5).

[3] OJ L 354, 30.12.1998, p. 18.

I. INTRODUCTION

(1) Broadband internet access is a key element of the information society. The main technology used in Spain to provide broadband internet access services is ADSL (asymmetric digital subscriber line), which provides high-speed internet access using a telephone line. The incumbent Telefónica is the only Spanish telecommunications operator that has a nation-wide fixed telephone network. It rolled out this local access network over significant periods of time protected by exclusive rights and was able to fund investment costs through monopoly rents from the provision of voice telephony infrastructure and services.

(2) In order to provide broadband internet access to end-users, Telefónica's competitors basically have two possibilities:

(3) First, they can build an alternative local access network: this option which requires significant time and huge investments is not economically viable. Second, they can contract wholesale broadband access. Three main types of wholesale broadband access services are available to them, two of which are exclusively provided by Telefónica and one which is provided by both Telefónica and competing operators. The latter are nonetheless dependent upon Telefónica for the inputs required to supply this third type of wholesale product.

(4) Telefónica's central role in the provision of all the wholesale broadband access services available in Spain and its presence in the retail broadband access market means that it has been in a position to control and influence market prices, output, innovation, variety and the quality of services on the market for a significant period of time.

(5) On 11 July 2003, Wanadoo España S.L. (now France Telecom España S.A.) submitted to the European Commission ("the Commission") a complaint against Telefónica, alleging that the margin between the wholesale prices Telefónica's subsidiaries charge their competitors for wholesale broadband access in Spain and the retail prices they charge end-users is not sufficient to enable Telefónica's competitors to compete in the broadband retail market.

(6) Hereinafter, after having identified the type, the development over time and the regulation applicable to the services covered by the Decision (see Section IV), the Commission has identified two relevant wholesale markets: the market for wholesale broadband access at regional level and the market for wholesale broadband access at national level. Telefónica is dominant on both markets. The Commission also identified one relevant retail market, which comprises all the standard broadband products, whether provided through ADSL or any other technology, marketed in the "mass market" for both residential and non-residential users. Although case law does not require to establish that Telefónica is dominant on the retail market, the Commission has completed its analysis by also establishing such dominance (See Section V).

(7) The Commission has then found that from September 2001 to December 2006 the margin between Telefónica's retail prices and the price for wholesale access at regional level, on the one hand, and the margin between the retail prices and the price for wholesale access at national level, on the other hand, was insufficient to cover the costs that an operator as efficient as Telefónica would have to incur (see Section VI.D below). This finding does not depend on the profitability method chosen: both the so-called period-by-period and discounted cash flow methods lead to the same conclusion, namely that Telefónica has imposed a margin squeeze on its competitors.

(8) The margin squeeze was capable of foreclosing competition in the retail market, and has harmed consumers (see Section VI.E). There is no objective justification or efficiency defences to Telefónica's behaviour (See Section VI.F) . Also, existing regulation has not prevented Telefónica from restructuring its prices so as to put an end to the margin squeeze (See Section VI.F.6).

(9) Telefónica's behaviour amounts to an abuse of dominant position by unfair pricing in the form of a margin squeeze contrary to Article 82 of the EC Treaty. It lasted five years and four months, namely from September 2001 to December 2006.

(10) The subject-matter of these proceedings is Telefónica's behaviour in the form of a margin squeeze, but it is not excluded that Telefónica may also have engaged in other abusive behaviour in the Spanish broadband markets.

II. THE PARTIES TO THE PROCEEDINGS

A. The addressees of the decision

(11) The present Decision is addressed to Telefónica S.A. ("Telefónica") and its 100% owned subsidiary Telefónica de España, S.A.U ("TESAU"). It also concerns the behaviour of Telefonica's subsidiaries Telefónica Data de España, S.A.U ("TDATA") and Terra Networks España S.A. ("TERRA") which merged with TESAU on 30 June 2006 and 7 July 2006 respectively (see below).

(12) Telefónica S.A., TESAU, TERRA and TDATA have formed a single economic entity during the entire period under investigation (see Section VIII below).

(13) Telefónica S.A. is the parent company of the Telefónica group, Spain's former state telecommunications monopoly. Before the full liberalisation of telecommunications markets in 1998, Telefónica was owned by the Spanish State and enjoyed a legal monopoly in the retail provision of fixed-line telecommunications services. At present, it operates the only nation-wide fixed telephone network in Spain.

(14) In addition to Spain, the Telefónica group has a strong presence in Latin America where it operates in thirteen countries. It is also present in other EU Member States, in particular in Germany, UK, Ireland, Slovakia and in the Czech Republic.

(15) The worldwide revenues of the Telefónica group were € 52.9 billion in 2006[4].

(16) Telefónica is the largest telecommunications company in Spain, commanding leadership positions in almost all the telecommunications markets. The importance of Telefónica as a group is reflected by the fact that in 2005, it accounted for 52% of all revenue generated by the Spanish telecommunications sector[5].

(17) In 2005, Telefónica had a market share (in terms of revenue) of 78.6% for fixed telephony[6] and 52% for mobile telephony[7]. Due to its extensive network and its advantageous market position as incumbent, Telefónica has very large shares of the markets for leased lines, wholesale broadband access[8] and other sales of network capacity.

(18) Telefónica is currently present in the Spanish broadband markets through TESAU, a 100% owned subsidiary of Telefónica whose primary activity is the operation of fixed telephony and broadband services in Spain. TESAU is a vertically integrated operator providing wholesale broadband services since 1999 and retail broadband services since 2001.

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4 Telefónica Trimestral Report December 2006, p. 7.

5 Annual Report 2005 of the Comisión del Mercado de las Telecomunicaciones (the "CMT"), the Spanish national regulatory authority for telecommunications.

6 CMT 2005 Report, p. 304

7 CMT 2005 Report, p. 74

8 See section V.C below.

(19) During the period investigated in the present decision, Telefónica has provided broadband services through two other subsidiaries:

(20) Until 30 June 2006, TDATA was a 100% owned subsidiary of Telefónica responsible for data communication and internet support services for multinational companies. TDATA provides wholesale broadband access services to alternative Internet Service Providers ("ISP") and retail broadband access services to companies. On 30 June 2006, TESAU and TDATA merged and constitute one legal entity (TESAU) since that date.

(21) TERRA was a 100% subsidiary of Terra Networks S.A. which is an ISP and portal company present in 43 countries, 100% owned by Telefónica, following the takeover by the incumbent in July 2005[9]. TERRA provides retail broadband access services to end-users in Spain since 1999. On 7 July 2006, TESAU and TERRA merged and constitute one legal entity (TESAU) since that date. As a result, all of Telefónica's broadband activities are now bundled within TESAU.

(22) TESAU's broadband internet business in Spain generated revenues of € 2.3 billion in 2006.[10]

(23) Hereinafter, "Telefónica" will not only refer to the mother company of the Telefónica Group but also to the economic entity formed by the latter, TESAU, TERRA and TDATA

B. The complainant

(24) The complainant is France Telecom España S.A., a fixed and mobile telecommunications operator in Spain. France Telecom España S.A. is 100% owned by the French incumbent for telecommunications services France Telecom.

(25) In 2002, the France Telecom group acquired Eresmas Interactiva S.A. ("eresMas") which was an ISP and portal provider in Spain. EresMas and Wanadoo España S.L. were merged in the last quarter of 2002.

[9] TERRA was 76% owned Telefónica S.A. until July 2005 and 38% until July 2003 (see section VIII.B below).

[10] Telefónica Trimestral Report December 2006, p. 20.

III. THE PROCEDURE

(26) On 11 July 2003, France Telecom España S.A. ("France Telecom") submitted to the Commission a complaint against Telefónica. The main objection of the complaint was that the margin between the wholesale prices Telefónica's subsidiaries charge its competitors for wholesale broadband access in Spain and the retail prices they charge end-users is not sufficient to enable Telefónica's competitors to compete with it to provide end-user broadband internet access.

(27) The investigation that led to this Decision was opened pursuant to France Telecom's complaint (case COMP/C -1/38.784). The Commission then sent various requests for information in order to complete the information provided for by the complainant. After a thorough investigation of the complaint and the additional information obtained, the Commission, on 20 February 2006, sent a Statement of Objections ("SO") to Telefónica and gave it the opportunity to comment on the preliminary findings of facts and law. The SO focussed on unfair pricing contrary to Article 82 of the EC Treaty and, in particular, on margin squeeze practices. Telefónica responded to the SO on 19 May 2006 ("the *Reply"*).

(28) Throughout the procedure, various companies and associations of companies, comprising Telefonica's main competitors, have been admitted as interested third parties. These are *inter alia* Tele2, ONO, Jazztel and Astel.

(29) Access to the file was granted to Telefónica on two occasions (21 February 2006, following the notification of the SO to the company, and 7 April 2006)

(30) An Oral Hearing took place on 12 and 13 June 2006 at Telefónica's request. Telefónica, the complainant and interested third parties were given the opportunity to be heard and comment on the issues raised by the Commission in its SO. After the Oral Hearing, the Commission services sent further requests for further information to Telefónica in order to seek more clarity.

(31) On 11 January 2007, the Commission sent to Telefónica a letter ("letter of facts") inviting it to provide comments on the conclusions the Commission intended to draw on the basis of new facts not mentioned in the SO. Telefónica replied to this letter on 12 February 2007.

IV. THE SERVICES CONCERNED BY THE DECISION

A. Broadband internet access

1 Introduction

(32) The internet is a series of interconnected computer networks. By connecting to the internet, users can take advantage of services such as email, web-surfing, web-page hosting and instant messaging. Internet Service Providers ("ISPs") enable their users to connect to the internet by providing them a connection to their platform, which is in turn connected to the internet ("internet connectivity"). Internet ac cess can be provided over various technological platforms. In the majority of cases, internet subscribers are connected to their ISP either via a fixed telephone line, by cable (in areas served by cable networks) or via a dedicated link.

(33) There are currently three main forms of internet access (i) dial-up service, (ii) high bandwidth services using digital subscriber line (DSL) technologies or cable modem (or equivalents) and (iii) dedicated access.

(34) Dial-up access via analogue telephone lines (PSTN[11]) or via Integrated Systems Digital Networks (ISDN) implies that users seeking access to the internet must contract for the telephone separately and connect their terminal to the telephone line using a modem. Their connection software then instructs the modem to dial a number at which it can connect them to the ISP's terminal.

(35) In addition to dial-up access, users can also purchase a higher speed, "broadband" access. In this context, "bandwidth" is used to describe the capacity of a communications connection. The greater the capacity of the connection (i.e. the "broader" the band), the greater the amount of information that can be passed over it, meaning that more data can be delivered in a given period of time (thus a higher "speed" connection). This enables the user to access larger files such as those for digital video and music, and participate in video games over the internet or even receive TV channels.

2 Broadband internet access in Spain

(36) The present Decision concerns the provision of broadband internet access in the Spanish mass market. The question what constitutes a broadband internet service must therefore be addressed.

(37) Broadband access has distinctive features: (i) upload and download speeds which are significantly higher than those offered by dial-up internet access; (ii) the possibility of an always-on connection and (iii) the ability to use the same access line for telephone calls or other communications while still linked up to the internet.

[11] Public Switched Telephone Network.

(38) All of these characteristics have to be present simultaneously for an internet access service to be defined as broadband. They are not available in practice using dial-up internet access services and distinguish broadband access as a higher quality service than dial-up access. It has therefore been the consistent practice of Community competition authorities and regulators of electronic communications networks and services to consider dial-up internet access and broadband access as non-equivalent services pertaining to different relevant service markets[12].

(39) Broadband internet access can be provided over various technological platforms: DSL (Digital Subscriber Line), cable and WLL (Wireless Local Loop), including LMDS[13] and MMDS[14] technologies. DSL is the predominant platform for broadband access in Spain (79% of broadband connections at the end of 2006), followed by cable-modem (21% of broadband connections). WLL has generally only been available for business customers.

Table 1 - Distribution of broadband lines in Spain by technology (Source: CMT Annual and Monthly Reports) from 2002 to 2006

	2002	2003	2004	2005	2006
ADSL	72.0%	73.8%	75.3%	76.3%	78.7%
CABLE	27.7%	26.0%	24.1%	23.4%	21.3%
Others	0.3%	0.2%	0.6%	0.3%	<0.1%

3 Digital Subscriber Line (DSL)

(40) DSL (Digital Subscriber Line) is a technology which makes it possible to use the local loop of the existing network for fixed telephony (PSTN) for high-capacity transmission of digital data. This technology requires that local telephone exchanges are upgraded and that they are connected to high-capacity networks. DSL technologies make use of existing telephone lines to deliver voice, data and video traffic simultaneously at high speed.

[12] See the Judgment of the Court of First Instance of 30.01.07 in Case T-340/03, France Télécom SA vs. Commission ("*France Telecom*"), paragraph 91. See also the Commission's decision of 16.07.03 in case COMP/38.233 • Wanadoo Interactive ("*Wanadoo*"), paragraphs 169 to 204.

[13] Local Multipoint Distribution System.

[14] Multichannel Multipoint Distribution System.

(41) There are a number of DSL-based technologies – e.g. ADSL (Asymmetric Digital Subscriber Line), HDSL (High bit rate DSL), SDSL (Symmetric DSL) and VDSL (Very high bit rate DSL) – often collectively referred to as xDSL[15]. ADSL is currently the predominant technology for the provision of broadband internet for residential customers in Spain as well as in other Member States. Asymmetric indicates that the transmission capacity is different to and from the user, i.e. the capacity to the user is higher than from the user. Because most households consume more data than they generate, the network is converted so that the in-coming and out-going capacities of the copper wire are "asymmetric", allowing greater capacity for incoming data.

4 Cable modem

(42) Users can also contract broadband internet access from their cable television operators. As is the case with the local loop for fixed telephony, conventional coaxial cable networks used for the transmission of TV signals may be upgraded in order to allow the provision of high speed internet access.[16] This type of broadband access will hereafter be referred to as cable modem.

(43) While ADSL technology covers most of the population in Spain and is homogeneously available in all Spanish regions (i.e. Comunidades Autonomas) thanks to the ubiquitous network it inherited from the former monopoly, only 40% of the population can get broadband access using cable-modem, which is heterogeneously available in the Spanish territory[17]. In fact, cable modem's coverage is low in some of the Spanish regions where the most populated cities (Madrid and Barcelona) are located, Comunidad Autonoma de Madrid (i.e. 62% households having access to cable) and Comunidad Autonoma de Cataluña (42% households with access to cable.[18] The main reason for this difference in coverage is the fact that Telefónica already had a ubiquitous network rolled out when the sector was liberalized in 1998 while the cable operators have had to overcome various obstacles to build their networks (i.e. sunk costs for the building of infrastructure and administrative difficulties due to licensing).

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15 More information about xDSL technology can be found on the web-site of the DSL Forum at www.dslforum.org.

16 Coaxial cable is a high-capacity cable used by cable-TV providers for the transmission of analogue and/or digital audio and video signals between the local loop and end users.

17 CMT 2005 Annual Report, p. 285.

18 CMT 2005 Annual Report, p. 101.

5 Other technologies

(44) Alongside ADSL and cable, there are some other technologies currently being used in Spain to market retail broadband offers. Some of these technologies are based on a fixed network, such as fibre to the home (FTTH), power line communications (PLC), wireless local loop (WLL) and satellite, for example, while others are based on mobile networks[19] (e.g. GPRS[20] or UMTS[21]). However, many of these technologies (satellite, WLL) are characterised by very high costs of provision which make them suitable for the provision of tailor-made products only. Others (PLC, GPRS and UMTS) are still in an early phase of development. As can be seen from Table 1 above these technologies still represent less than 0.1% of all broadband lines in Spain.

B. The mass market for retail broadband internet access

1 The main internet service providers ("ISPs")

1.1 Telefónica

(45) The Telefónica Group has been providing retail ADSL services through its subsidiaries TESAU, TERRA and TDATA. TERRA has been offering retail ADSL services to residential and SoHo (Small Office Home Office)[22] under the brand Telefónica since October 1999. TESAU was granted government approval to market retail ADSL services on 31 July 2001[23] and introduced ADSL internet access services on 7 September 2001[24]. TDATA started offering ADSL access services in 1999[25]. On 1 December 2001, it transferred its broadband subscribers to TESAU but still offered retail broadband access to big corporate customers[26].

(46) At the end of December 2006, TESAU had 3.742.652 retail broadband subscribers.[27]

1.2 The alternative ISPs providing ADSL services

(47) France Telecom started offering retail ADSL services in May 2001. As a result of the merger with Eresmas, its customer base almost doubled at the end of 2002. At the end of 2006, France Telecom had 640 000 broadband subscribers in Spain[28] and now represents Telefónica's biggest competitor in terms of number of ADSL subscribers.

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19 The difference between a fixed and a mobile network depends on the ubiquity of the Network Termination Point (NTP). Some technologies such as WLL are in fact fixed since the NTP is fixed.

20 General Packed Radio Service.

21 Universal Mobile Telecommunications System.

22 Letter of Telefónica of 22.09.03 (see page TFCA-19 of the file)

23 See Resolución de 31 de julio de 2001, del Secretario de Estado de Telecomunicaciones y para la Sociedad de la Información, relativa a la prestación del servicio "ADSL minorista" por parte de Telefónica de España, S.A.U.(see page CMT-4578 of the file).

24 See Telefónica's press release: 'Telefónica de España lanza sus servicios de banda ancha Línea ADSL dirigidos a usuarios finales', 07.09.01, available on http://www.telefonica.es/saladeprensa/

25 Letter of Telefónica of 22.09.03 (see page TFCA-18 of the file)

26 See letter of Telefónica of 21.07.05 at page TFCA-8926 of the file.

27 Telefónica Trimestral Report December 2006, p. 20. This number includes TERRA's and TDATA's retail broadband subscribers.

28 France Telecom 2006 annual report.

(48) Ya.com is a subsidiary of T-Online (Deutsche Telekom's ISP). On 31 December 2005, it had 275 008 ADSL subscribers[29].

(49) Like France Telecom and Ya.com, Jazztel is an alternative telecommunications and data transmission carrier in Spain. At the end of 2006, Jazztel had 247 451 subscribers connected through their own network[30]

(50) There are other small ISPs offering broadband internet services via ADSL, none of which achieved a market share above 1% at the end of 2005.

1.3 The cable operators

(51) Ono and Auna are the two largest cable operators. Their coverage is limited to a number of regions[31]. In November 2005, Ono overtook Auna. The merged entity Ono had 1 014 502 broadband clients at the end of 2005[29].

(52) The other cable operators are Euskaltel[32] (107 556 broadband clients at the end of 2005[29]), R Cable[33] (69 085 broadband clients at the end of 2005) and Telecable de Asturias[34] (61 720 broadband clients at the end of 2005[29]).

2 The retail broadband offerings in Spain

(53) Two different types of retail broadband access products can be distinguished on the basis of marketing and technical characteristics: (i) standard broadband services targeted at the mass market and (ii) tailor-made broadband services.

(54) The first type of products, which are covered by this Decision, caters customers with common and non-specific needs that are satisfied with standard products designed by telecommunications operators for the mass-market.

(55) The second type of products is destined to meet the special and specific needs of certain customers in terms of electronic communications services in general and of data transmission services in particular.

(56) Tailor made services are not covered by the decision and will be briefly addressed in the market definition section below (see section V.A.2). The remainder of the present section on retail broadband offerings in Spain only concerns standard broadband access products (section 2.1 below) and the emergence of bundled offers (section 2.2 below).

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29 CMT 2005 Report p 367.

30 Jazztel 2006 annual report, page 6.

31 Ono operates in Comunidad Valenciana, Cantabria, Mallorca, Albacete, Murcia, Huelva, Castilla-Léon and Cádiz. Auna operates in Madrid, Cataluña, Andalucia (except Huelva and Cádiz), Canarias, Alicante, Aragón, Navarra and La Rioja.

32 Euskaltel operates in País Vasco.

33 R Cable operates in Galicia.

34 Telecable Asturias operates in Asturias.

2.1 The standard broadband access products marketed in the mass market in Spain

(57) The standard retail broadband access offers available in the mass market in Spain vary as a function of two main criteria: the speed rate and the allowance of connection (metered / unmetered offer):

(58) Retail offers are first differentiated according to the download speed (the speed at which data can travel from the internet to the end-user). Until 2004, there were four different download speeds available in the market. Those speeds were doubled on two occasions (in September 2004 and July 2005) by Telefónica without any modification of the price to the end-user (see Table 2). The majority of ADSL customers in Spain ([…][35] and […]) purchase the retail offer under the basic ("básica") modality (the lowest speed available of Telefónica). The other categories are higher-priced products allowing higher download speeds.

Table 2 Evolution of the download speed of Telefónica's main retail offers[36]

Modality	Before Sept 04	Sept 04 – July 05	Since July 05
Básica	256 Kbps/128 Kbps	512 Kbps/128 Kbps	1 Mbps/300 Kbps
Class	512 Kbps/128 Kbps	1 Mbps/300 Kbps	2 Mbps/300 Kbps
Avanzada	1 Mbps/300 Kbps	2 Mbps/300 Kbps	4 Mbps/512 Kbps
Premium	2 Mbps/300 Kbps	4 Mbps/512 Kbps	8 Mbps/640 Kbps

(59) Retail offers are also differentiated according to the allowance of connection: Users either pay each month (i) a flat (or unmetered) rate independent of how much time they spend on the internet or the amount of data downloaded or (ii) pay a semi-flat rate which allows them to spend time or download data as much as they want in specific periods (typically during leisure time, e.g. week-end and/or nights) and pay a variable fee (charged per minute of connection or per amount of volume of data downloaded) for usage outside time allowance.

2.1.1 TESAU's catalogue of retail ADSL products

(60) TESAU's catalogue of retail broadband internet access offers provides a good overview of the standard retail ADSL products which are available in Spain […].

(61) As of December 2006, TESAU's catalogue was composed of the following offers:

35 See Annex A.

36 See CMT Decision DT 2004/1008 of 22.07.04 (see footnote 103 below) and CMT Decision DT 2005/418 of 19.05.05 (see footnote 104 below).

Table 3 - TESAU's retail offers as of December 2006 (VAT excluded)[37]

Product	Monthly allowance	Fixed monthly fee	variable monthly fee	Maximal monthly fee
FLAT OFFERS				
Kit/Línea ADSL 1 Mbps	Unmetered	€ 39.07	-	€ 39.07
Línea ADSL 2 Mbps	Unmetered	€ 75.00	-	€ 75.00
Línea ADSL 4 Mb	Unmetered	€ 120.00	-	€ 120.00
Línea ADSL 8 Mbps	Unmetered	€ 150.00	-	€ 150.00
Línea ADSL 2 Mbps Business	Unmetered	€ 208.33	-	€ 208.33
Línea ADSL 4 Mbps Business	Unmetered	€ 333.33	-	€ 333.33
Línea ADSL 8 Mbps Business	Unmetered	€ 466.67	-	€ 466.67
SEMI FLAT OFFERS				
Tiempo Libre 1 Mbps	Nights+we	€ 29.90	0.060 € / min	€ 42.00
A tu Medida weekend 1 Mbps	11h/month+we	€ 21.90	0.024 € / min	€ 42.00
A tu Medida night 1 Mbps	11h/month +nights	€ 21.90	0.024 € / min	€ 42.00
A tu Medida combined 1 Mbps	11h/month +nights+we	€ 29.70	0.024 € / min	€ 42.00
ADSL Mini 1 Mbps	1 Gb / month	€ 29.90	5 € / Gb	€ 42.00

(62) With the exception of the above-mentioned upgrade of speeds, TESAU's nominal prices have not varied since TESAU started to offer retail ADSL services in September 2001.

2.1.2 Comparison of TESAU's and its main competitors' retail broadband access prices

(63) As of September 2002, there was still no differentiation in the products offered by the main alternative ISPs, which all were offering the same flat product at a speed of 256 Kbps. The table below shows that the monthly fees of each of the main ISPs were still closely aligned with TESAU's at that date.

[37] See Telefónica's website (www.telefonica.es).

Table 4 - Main retail broadband offerings (speed 256 Kbps) as of September 2002 (VAT excluded)[38]

ISP	Product	Monthly allowance	Fixed monthly fee
AUNA[39]	ADSL Auna 256 Kbps	unmetered	€ 39.00
TESAU	Kit/Línea ADSL 256 Kbps	unmetered	€ 39.07
TERRA	Terra ADSL plus 256 Kbps	unmetered	€ 42.04
Tiscali[40]	ADSL Top 256 Kbps con equipo	unmetered	€ 39.95
Ya.com[41]	ADSL 256 Kbps	unmetered	€ 39.07
Wanadoo[42]	ADSL Speed 256 Kbps	unmetered	€ 39.00

(64) As of September 2003, new semi flat products allowing unmetered access during leisure time (week-ends and nights) at a reduced price (€ 29.9 plus a variable fee for out of allowance usage) were launched. As shown in the table below, the monthly fees of alternative ISPs were still closely aligned with those of TESAU.

Table 5 - Main retail broadband offerings (speed 256 Kbps) as of September 2003 (VAT excluded)[38]

ISP	Product	monthly allowance	Fixed monthly fee	Variable monthly fee	Maximal monthly fee
AUNA[39]	ADSL Auna 256 Kbps	unmetered	€ 39.00	-	€ 39.00
TESAU	Kit/Línea ADSL 256 Kbps	unmetered	€ 39.07	-	€ 39.07
TERRA	Terra ADSL plus 256 Kbps	unmetered	€ 42.04	-	€ 42.04
	ADSL Home 256 Kbps[43]	we + nights	€ 29.90	0.06 € / min	€ 42.00
Tiscali[40]	ADSL Top 256 Kbps + equipo	unmetered	€ 38.95	-	€ 38.95
	ADSL Libre 256 Kbps + equipo[44]	-	€ 19.95	0.024 €/min	€ 39.95
Ya.com[41]	ADSL 256 Kbps	unmetered	€ 39.07	-	€ 39.07
Wanadoo[42]	ADSL Speed 256 Kbps	unmetered	€ 39.00	-	€ 39.00
	ADSL Go 256 Kbps[45]	we + nights	€ 29.90	0.06 €/min	€ 42.00

(65) As of March 2004, the situation was virtually the same (in term of price and quality differentiation)[46].

38 Information provided by the main ISPs in response to questionnaires sent by the Commission.
39 See the letter of Auna of 08.04.05 (page ISP-335 of the file).
40 See the letter of Tiscali of 24.09.03 (page ISP-138 of the file). See also footnote 44 below.
41 See the letter of Ya.com of 06.04.05 (page ISP-311 of the file).
42 See the letter of Wanadoo of 07.04.05 (page ISP-397 of the file). See also footnote 45 below.
43 Product launched on 06.03.03 (letter of Telefónica of 22.09.03 – see page TFCA-54 of the file).
44 Product launched on 20.01.03 (letter of Telefónica of 22.09.03 – see page TFCA-54 of the file).
45 Product launched on 28.10.02 (letter of Telefónica of 22.09.03 – see page TFCA-54 of the file).

(66) From the second half of 2004, alternative ISPs started to differentiate from TESAU's retail offers, by offering higher speeds, new semi-flat products at lower prices and products bundling voice telephony calls. These new offers are only available in limited geographic areas, basically where the main alternative network operators have rolled-out networks to Telefónica's unbundled local loops[47] (mainly in Spain's main cities) and at the same time local loop unbundling (and the associated services) was effectively available[48], while still being aligned or more expensive than Telefónica in the rest of the territory. The retail offers available on the market as of July 2005 were:

[46] CMT, Public consultation on the definition and analysis of the market for access and traffic to (on) data networks through a permanent connection from a fixed location. See table I.1.8 (pages CMT-3966 and CMT-3967 of the file).

[47] As will be explained in section IV.C.2 below, local loop unbundling is the only wholesale offer that enables decisive differentiation (both in terms of quality and prices) from Telefónica's retail offers. It is also the most investment intensive one on the part of the alternative operator.

[48] See section IV.F below.

Table 6 - Main retail ADSL offerings as of 11 July 2005 (VAT excluded)[49]

ISP	Product	Monthly allowance	Geographic Restriction[50]	Fixed monthly fee
TESAU	Kit/Línea ADSL 1 Mbps	Unmetered	-	€ 39.07
	Tiempo Libre 1 Mbps	we+nights	-	€ 29.90
	ADSL A tu Medida weekend 1 Mbps	We[51]	-	€ 21.90
	ADSL A tu Medida night 1 Mbps	Nights	-	€ 21.90
	ADSL A tu Medida combined 1 Mbps	we+nights	-	€ 29.70
	ADSL Mini 1 Mbps	Unmetered	-	€ 29.90
France Telecom	ADSL 1 Mbps directo	Unmetered	Restriction	€ 29.90
	ADSL 2 Mbps directo	Unmetered	Restriction	€ 39.00
	ADSL Nav. 2 Mbps + voz nacional	Unmetered	Restriction	€ 36.00
	ADSL Nav. 2 Mbps + voz ciudad	Unmetered	Restriction	€ 29.90
Ya.com	ADSL 256 Kbps	Unmetered	Restriction	€ 19.95
	ADSL 1 Mbps	Unmetered	Restriction	€ 29.95
	ADSL 1 Mbps	Unmetered	-	€ 54.95
	ADSL 2 Mbps Voz	Unmetered	Restriction	€ 32.95
Jazztel	ADSL 4 Mbps 24h	Unmetered	Restriction	€ 32.95
	ADSL 4 Mbps Bono 17 h	17h/month	Restriction	€ 15.95
	ADSL 4 Mbps Bono 22h	22h/month	Restriction	€ 20.95
	ADSL 4 Mbps noches	Nights	Restriction	€ 26.95
	ADSL 4 Mbps fin de semana	We	Restriction	€ 26.95

(67) As of December 2006, the retail offers available on the market were:

[49] Information collected from the web sites of the main alternative ISPs on 11 July 2005 (see pages ISP-522 to ISP-530 of the file).

[50] Geographic restriction means that the service either is only available in some geographical areas only or is available in the whole territory but with different prices according to the geographical area (differentiation between cities and rural areas).

[51] Week-end.

Table 7 - Main retail ADSL offerings as of December 2006 (VAT excluded)[52]

ISP	Product	Monthly allowance	Fixed monthly fee LLU/rest territory
TESAU	Kit/Línea ADSL 1 Mbps	Unmetered	€ 39.07
	Tiempo Libre 1 Mbps	we+nights	€ 29.90
	ADSL A tu Medida weekend 1 Mbps	We	€ 21.90
	ADSL A tu Medida night 1 Mbps	Nights	€ 21.90
	ADSL A tu Medida combined 1 Mbps	we+nights	€ 29.70
	ADSL Mini 1 Mbps	Unmetered	€ 29.90
France Telecom	ADSL 1 Mbps	Unmetered	€ 39.00
	ADSL 1 Mbps + voz nacional	Unmetered	€ 20.00 / € 36.00
	ADSL 1 Mbps + voz local	Unmetered	€ 29.90
	ADSL 4 Mbps + voz local	Unmetered	€ 29.90 / n.a.
	ADSL 20 Mbps + voz local	Unmetered	€ 36.00 / n.a.
Ya.com	ADSL 1 Mbps + voz nacional	Unmetered	€ 19.95 / n.a.
	ADSL 4 Mbps + voz nacional	Unmetered	€ 25.95 / n.a.
	ADSL 20 Mbps + voz nacional	Unmetered	€ 29.95 / n.a.
Jazztel	ADSL 1 Mbps 24h	Unmetered	€ 35.95
	ADSL 6 Mbps 24h	Unmetered	€ 32.95 / n.a.
	ADSL 20 Mbps 24h	Unmetered	€ 29.95 / n.a.

2.1.3 The multiplication of promotions in the retail broadband market

(68) The Spanish retail broadband internet access market is characterised by the large number of promotions (mainly regarding the connection fee, the equipment, free or reduced-monthly subscriptions, and sometimes promotional gifts that apparently bear no direct relationship with the contracted broadband product) proposed by Telefónica and its competitors to attract new subscribers[53]. According to the Spanish regulatory authority for telecommunications (*Comisión del Mercado de las Comunicaciones* ("CMT")), these promotions have in fact been a key competition tool between operators in the retail market[54].

52 Information collected from the web sites of the main alternative ISPs on December 2006.

53 The impact of Telefónica's promotions in the margin squeeze is measured in section VI.F.3 below.

54 CMT Annual Report 2004, page 107 (see page CMT-3585 of the file).

2.2 Emergence of bundled offers

(69) In the last three years, one of the most striking developments in the broadband retail products of Telefónica and its competitors has been the emergence and increased provision of the so-called “double play" offers which bundle voice and Internet and the so-called “triple play” offers, which also include television over broadband. Such offers have from the beginning been at the core of the cable operators' attempts to enter and expand in the broadband internet access market. However, as will be established below; these attempts have not prevented the cable operators from losing market share during the period under investigation. At the end of 2004, Telefónica launched its service of television over broadband (Imagenio) which is bundled with broadband internet access and voice telephony.

(70) While Telefónica may offer triple play products nation-wide thanks to its ubiquitous infrastructure inherited from the former legal monopoly, in the short/medium term alternative operators are only able to offer triple play in limited parts of the Spanish territory, i.e. that covered by each cable operator's footprint; or where alternative ADSL operators have rolled out infrastructure to Telefónica's local exchanges (see Section C.2.1 below). Indeed, contrary to other Member States (e.g. in France) and as recognised by Telefónica itself[55], Telefónica's national and regional wholesale products do not permit technically alternative operators to offer television over broadband. As a result, local loop unbundling is the only means for alternative (non cable) operators to provide television over broadband, and there have been serious obstacles in Spain in obtaining this form of access (see Section F below). In fact, only Jazztel and France Telecom are just starting to offer these services, with very limited geographic coverage.

(71) Telefónica set itself the ambitious target of acquiring 200 000 clients connected to Imagenio by the end of 2005, which it met[56]. At the end of 2006, there were already 383 000 Imagenio clients[57].

C. Wholesale broadband access

1 Introduction

(72) As mentioned above, the internet is a series of interconnected computer networks. In order to provide retail broadband internet services to its customers, an ISP must be able to (i) connect the end-users’ premises to its platform (“network access to the end-users”) and (ii) connect its platform to the internet (“internet connectivity”).

(73) TESAU is the only operator having a local access network (i.e. access to most Spanish households and businesses) in the entire Spanish territory.

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55 See the letter of TESAU of 18.07.05 (page TFCA-3242 of the file).

56 Telefónica 2005 Annual Report, page 27.

57 Telefónica, Quaterly results 2006, January to December , page 21.

(74) An undertaking wishing to provide broadband access to the end-users throughout the Spanish territory has no other option, save the economically not viable roll-out of an alternative nation-wide access network, but to contract one of the wholesale ADSL services available on the market, which are all built on TESAU's access network consisting of ADSL enabled local loops.

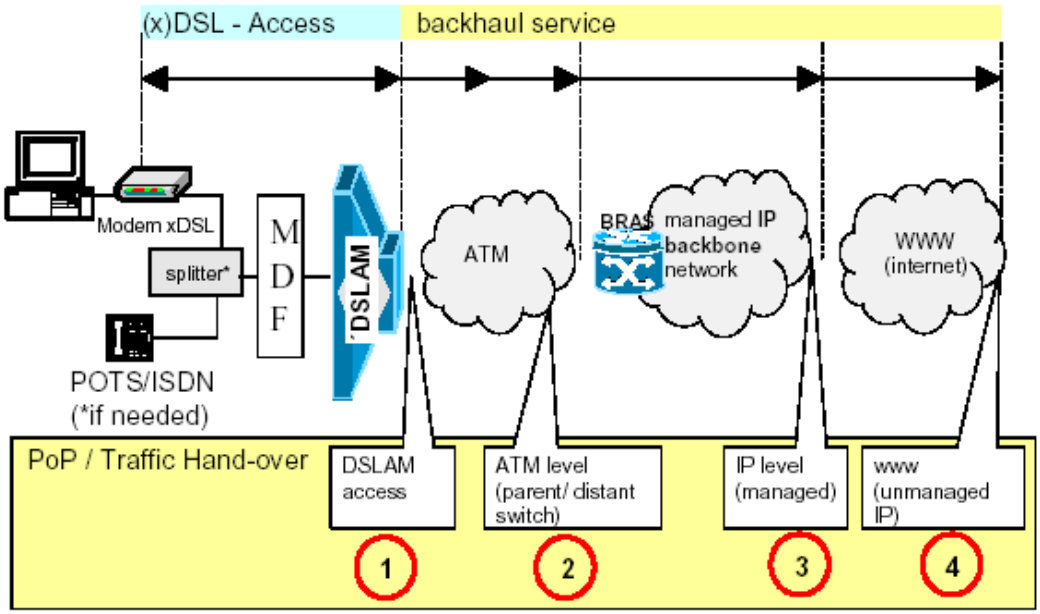
(75) There are three main types of such wholesale ADSL offers (i) a reference offer for local loop unbundling ("LLU") only commercialised by TESAU; (ii) a regional wholesale offer only commercialised by TESAU and (iii) several national wholesale offers, commercialised by both Telefónica and other operators on the basis of local loop unbundling and/or TESAU's regional wholesale offer.

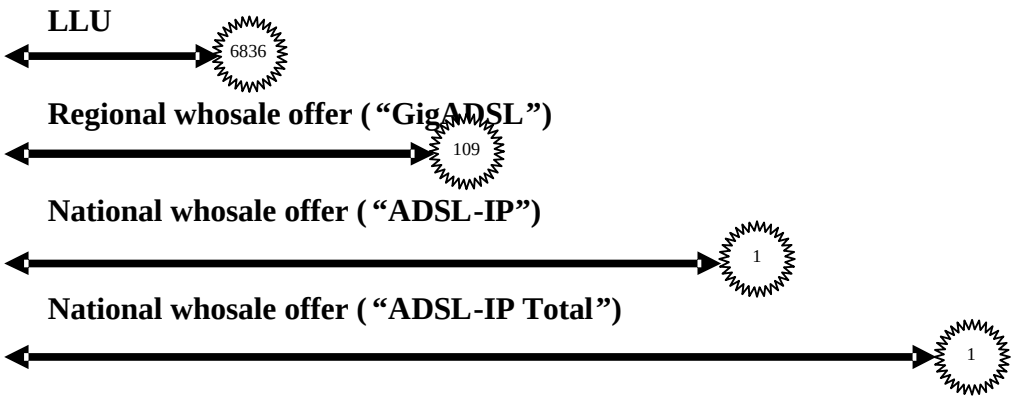
(76) Internet connectivity (i.e. connectivity with all other internet users so that data packets sent by end-users reach the intended destinations and that incoming data traffic is received by the end-users) can be arranged for in three different ways: (i) it can be purchased from a network operator (e.g. in the case of an ISP that has no network of its own); (ii) it can be obtained by interconnecting and exchanging traffic with a sufficiently large number of networks so that all destinations are covered; or (iii) through a combination of the above.

2 Description of the main wholesale broadband products in Spain

(77) The following gives a more detailed overview of the characteristics and developments of these wholesale access products since their introduction on the market:

Figure 1 - Telefónica's wholesale products





109 = number of points of interconnection

2.1 Fully unbundled and shared access to the local loop

(78) The local loop is the physical twisted metallic pair circuit connecting the network termination point at the subscriber's premises to the main distribution frame (MDF)[58] or equivalent facility in the fixed public telephone network. Fully unbundled access to the local loop means the provision to a beneficiary of access such that the latter can use the full frequency spectrum of the twisted metallic pair (and offer both voice and data services such as internet access). Shared access to the local loop means the provision to a beneficiary of the use of the non-voice band frequency spectrum of the twisted metallic pair.

(79) An operator contracting shared access is able to provide the end user with broadband services, while the incumbent continues to provide the end user with voice telephony services. With fully unbundled access the end user no longer receives any service from the incumbent: the alternative operator can provide the end user with both voice and data services.

(80) As mentioned above, as the only undertaking having a local access network in the entire Spanish territory, TESAU is the only provider of fully unbundled and shared access to the local loop in Spain.

(81) Since December 2000 TESAU is under the regulatory obligation to allow alternative operators to rent the copper pair from the end user's premises to the local exchange (or MDF)[59]. Alternative network operators must be physically present and collocate with TESAU in the local exchange where they must connect the copper pair to their DSLAM[60] and their own network. This option requires new entrants to install their equipment in TESAU's 6836 main distribution frames and therefore entails very large up-front investments[61].

(82) Thanks to its control over the DSLAM and its own network, an undertaking contracting an unbundled local loop from TESAU can decide on the split of capacity between upstream and downstream links, use different equipment and standards to allow longer line lengths and employ appropriate equipment allowing for additional services such as video over DSL and voice over internet (VoIP). In other words, it can control a substantial part of the overall value chain and many aspects of its retail service and thereby can differentiate its retail products from Telefónica's.

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58 Main distribution frame. In telephony, a distribution frame is a closet or area which contains equipment which multiplexes users' transmission mediums over a high-capacity medium. A main distribution frame multiplexes many DSL lines over a larger cable.

59 See section IV.D.2.3 below.

60 DSL access multiplexer.

61 See Table 8 below.

(83) The number of unbundled loops increased significantly in 2005 and 2006 as compared with 2004. As of 30 September 2004, some 42 000 lines had been unbundled in Spain, representing some 1% of broadband connections provided to end users[62]. As of 31 December 2005, some 370 000 lines had been unbundled in Spain, representing some 8% of broadband connections provided to end users[62]. As of 31 December 2006, 939 000 lines were unbundled, representing some 14% of the broadband connections provided to end users[63].

2.2 Wholesale broadband access with regional traffic hand-over points ("regional wholesale offer") - "GigADSL"

(84) Telefónica is the only provider of regional wholesale broadband access in Spain.

(85) Since 1999, TESAU is under a regulatory obligation[64] to provide a wholesale broadband access service which is based on the ATM (Asynchronous Transfer Mode) protocol. It is called "GigADSL" and presents the characteristics of the main elements comprising bitstream access as defined by the European Regulators Group[65], namely: (i) high speed access link to the customer premises (end user part) provided by the incumbent (TESAU); (ii) transmission capacity for broadband data in both directions enabling new entrants to offer their own, value-added services to end-users; (iii) new entrants have the possibility to differentiate their services by altering (directly or indirectly) technical characteristics and/or the use of their own network.

(86) TESAU hands-over the traffic to the new entrant at regional indirect access points (PAI). In order to have national coverage, an undertaking needs to be connected at indirect access points in 109 demarcations. This involves substantial up-front investments[66]. The client must therefore have or build up an extensive network.

(87) Contrary to the situation with fully unbundled and shared access to the local loop, an undertaking contracting TESAU's regional wholesale offer is unable to adjust any characteristics of its service that are related to the choice of standards or equipment used to provide connectivity over the local loop. Some functionalities, like the maximal upload and download speeds are already pre-established. However, thanks to its control over the broadband remote access server[67] and elements of its own network, the undertaking can make certain choices about the bandwidth and the reliability of its backhaul service[68] and offer end-user products with different technical characteristics by altering quality of service parameters. Nonetheless, contrary to the case of local loop unbundling, there are limits to the extent that a purchaser of the regional wholesale offer can produce innovative services for its own retail supply and depart significantly from the retail services provided by Telefónica.

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62 See Table 60 in Annex A. Full unbundled lines that are not marketed in the retail ADSL market are excluded.

63 CMT monthly Report for December 2006, page 9.

64 See section IV.D.2.2 below.

65 Bitstream Access – Common Position of the European Regulators' Group, 2.4.2004.

66 See Table 8 below.

67 By running the broadband remore access server (BRAS) the undertaking can subdivide the virtual path into further virtual paths and thereby define the minimum throughput in hours of high traffic demand.

68 Backhaul services allow network operators to aggregate data (such as Internet traffic) to a centralised location in a town or region, then connect that location to even bigger sites.

2.3 Wholesale broadband access with a single national traffic hand-over point ("national wholesale offer") - "ADSL-IP" and "ADSL-IP Total"

(88) Until June 2006, Telefónica provided three wholesale access products where traffic is handed to alternative operators at a single point from which the latter may reach a national coverage of end-users. From June 2006, when TDATA and TERRA were incorporated in TESAU, Telefónica reduced the number of wholesale access products to two: ADSL-IP and ADSL-IP Total[69]. Since April 2002, Telefónica is under a regulatory obligation to provide ADSL-IP to alternative operators on transparent and non-discriminatory terms[70].

(89) ADSL IP is built on GigADSL (DSL link and backhaul) to which TESAU adds traffic through it s IP network, which is delivered to the new entrant at one national IP - indirect access point. Internet connectivity is not included in this product. Since it is enough for a client to connect to a single traffic hand-over point to provide services on a national basis, ADSL-IP allows the client to forego significant network deployment costs. However, due to more limited control over the quality of service parameters, this product does not allow for as differentiated end-user products as in the case of local loop unbundling or the regional wholesale offer

(90) The main difference between ADSL-IP and ADSL-IP Total is that in the case of the former, TESAU tunnels[71] the traffic in its network and the client must complete the tunnel between the end-user's telephone line and the indirect access point of the client using his own equipment. It is the client that provides for internet connectivity (and the end-user's internet address). These features allow the client to benefit from some autonomy for dimensioning the interconnection capacity vis à vis the providers of national and international bandwidth in such a way as to avoid a bottleneck that would restrict the bandwidth enjoyed by the end-users. On the contrary, ADSL-IP Total comprises internet connectivity, which allows the client to forego the investments related to the completion of the tunnel, the downside being that he has no possibilities to control or to differentiate the retail product that he offers to his end-users. This is because the product sold by the client to end -users is from an engineering point of view the same as the retail product of the wholesale provider, and the client merely markets, distributes and bills the product.

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69 See letter from TESAU of 21.08.2006. ADSL-IP Total has replaced the following two products which were functionally similar in that the client acquired a service "ready for resale" as it included internet connectivity:
- TESAU's "non tunnelled ADSL-IP" which was built on GigADSL (DSL access link and a backhaul) to which TESAU added traffic through its IP network. The traffic was delivered at an interconnection point with TDATA's network, with TDATA providing the internet connectivity..
- TDATA's "Megavía", which was also built on GigADSL and ADSL-IP, to which TDATA added internet connectivity. Until the last quarter of 2002 Megavía was the most contracted of Telefónica's wholesale products.

70 CMT, Decision MTZ - 2001/4038 of 29.04.02 ("*OBA 2002*") - Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001 (see page CMT-618 of the file).

71 This is why this product is also called "tunnelled ADSL-IP" in contrast with the "non tunnelled ADSL-IP referred to in the above footnote.

(91) The table below summarises the main features of the wholesale products offered by Telefónica and the regulatory obligations applicable to them, which will be described in more detail in Section D below:

Table 8 - The ADSL Value Chain in Spain (June 2006)[72]

Wholesale ADSL access product	*Characteristics*	*Regulation and price*	*Necessary network investments*
Local loop unbundling	"Naked" twisted cooper pair Presence required in the MDF, operation of the DSLAM High degree of control over the retail product	Cost orientation. Monthly charge: – full unbundling: €11.35; – shared loop: €3.	Very investment heavy option: […][73]
Regional wholesale access **GigADSL**	DSL access and backhaul National coverage entails presence at 109 points of presence Limited control over the retail product	Retail minus . Monthly charge depends on bandwidth chosen (standard offer: €21.09).	Investment heavy option: […][74]
National wholesale access **ADSL-IP** **ADSL–IP Total**	DSL access and backhaul + traffic though Telefónica's IP network One national traffic hand-over point Limited control over the retail product	No price regulation Monthly charges: – ADSL-IP: €27.80 – ADSL-IP Total: €36.06 minus volume discount	ADSL-IP: very limited investment ADSL-IP Total: hardly any investment

(92) Until October 2002, Telefónica was the only provider of national wholesale access.

72 For reasons of completeness, it should be noted that in 2005, Telefónica also launched, at its own initiative, a new wholesale access product that is available in two modalities, 'ADSL Avanza IP' and 'ADSL Avanza IP Total' and that basically provides for a DSL access and backhaul, traffic collection through Telefónica's IP network and delivery of the traffic to the new entrant at one IP-indirect access point. This new wholesale product has a limited geographical coverage and is only available in dense areas (basically where the main alternative network operators already offer competing national wholesale offers). […], these products need not be considered further, or separately from the other national wholesale products in this decision.

73 Investments made by Telefónica between 2001 and 2006 to bridge de gap between the wholesale product of undbundling of the local loop and the retail product. See annex 2 of the letter of Telefonica of 17.10.06 (page TFCA-13126 of the file).

74 Investments made by Telefónica between 2001 and 2006 to bridge de gap between the regional wholesale product and the retail product. See annex 2 of the letter of Telefonica of 17.10.06 (page TFCA-13126 of the file).

(93) The placing on the market of a competing national wholesale offer at that date was the result of France Telecom buying *eresmas*, the retail ADSL arm of network operator Auna. Sales of wholesale products that until that date had been effected within the Auna group were passed on to the merchant market (as Auna continued provisioning at wholesale level the *eresmas* customers acquired by France Telecom).

(94) As indicated in the table below, apart from Telefónica's wholesale products and […]'s wholesale product that was only provided to […], the alternative national wholesale offers represented less than […] lines at the end of 2002 (0.2% of the retail broadband lines), less than […] lines at the end of 2003 (1.4% of the retail broadband lines) and less than […] lines at the end of 2004 (1.7% of the retail broadband lines).

Table 9 – Number of wholesale lines sold by alternative network operators

	until Oct 02	Dec 02	Dec 03	Dec 04
Telefónica[75]	[…]	[…]	[…]	[…]
Auna (to […] only)[76]	[…]	[…]	[…]	[…]
France Telecom[77]	[…]	[…]	[…]	[…]
Albura[78]	[…]	[…]	[…]	[…]
British Telekom[79]	[…]	[…]	[…]	[…]
Jazztel[80]	[…]	[…]	[…]	[…]

(95) In any event, all competing national wholesale offers that have appeared as from October 2002 have relied on one of Telefónica's wholesale products, namely regional wholesale access exclusively until September 2004 and a combination of local loop unbundling and regional wholesale access from that date.

75 ADSL lines using the IP network of Telefónica (TESAU or TDATA), excluding the lines sold by TESAU and TERRA in the relevant retail market. See letter of TESAU of 18.07.05 (page TFCA-3262 of the file).

76 Letter of Auna of 08.04.05 (see page ISP-339 of the file). […].

77 […] (letter of Wanadoo of 07.04.05 – see page ISP-405 of the file).

78 Letter of Albura of 13.04.05 (see page ISP-323 of the file).

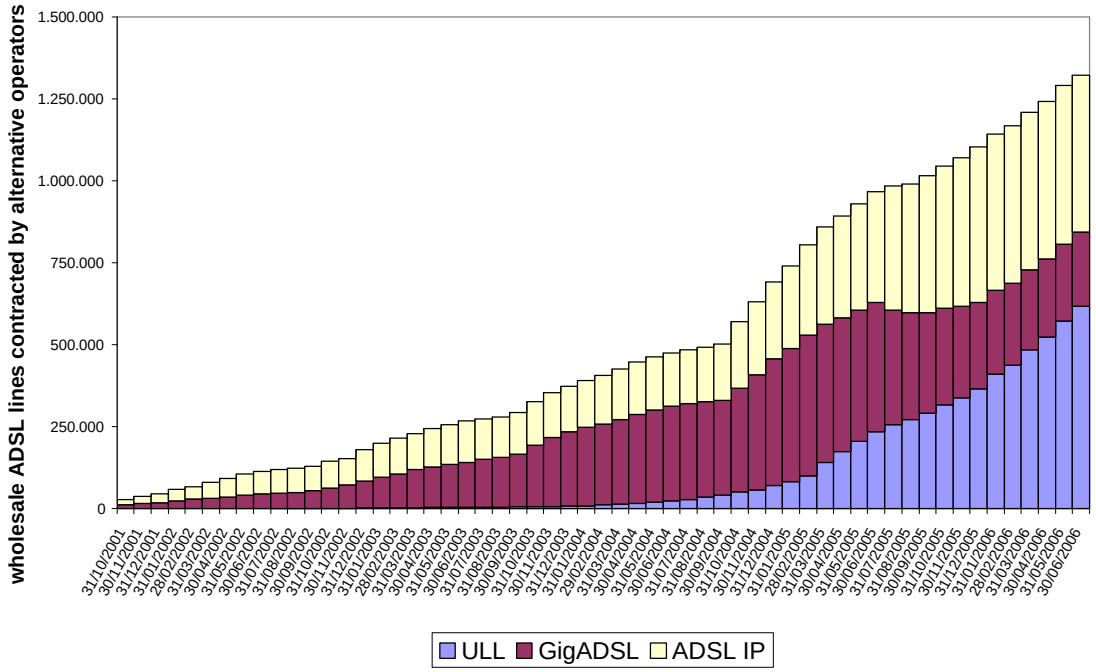
79 […] (letter of BT of 04.04.05 – see page ISP-352 of the file).

80 Letters of Jazztel of 17.09.03 (see page ISP-90 of the file) and of 08.04.05 (see page ISP-374 of the file).

3 Evolution of the use of the above described wholesale products

(96) Because of the investments in network roll-out associated with each of these products[81], alternative operators have started by entering the retail market on the basis of wholesale offers requiring connecting to a single point of traffic hand-over. As their customer base has increased, some of them have gradually climbed up the "investment ladder"[82] by rolling out networks and equipment allowing contracting the regional wholesale offer of Telefónica ("GigADSL") and, subsequently, shared or fully unbundled local loops.

Figure 2 Wholesale lines marketed by Telefónica from September 2001 to June 2006[83]



(97) The graph above shows the evolution of the number of lines contracted for the three types of wholesale offers. Three periods can be distinguished:

(98) Until the last quarter of 2002, ADSL-IP Total, which does not entail any network investments, was the most contracted wholesale product.

81 See Table 8 above.

82 "The investment ladder" is a concept used by the European Commission, national regulators, economists and operators themselves that refers to the gradual nature of investments by alternative operators in telecommunications. The concept encapsulates the key characteristic of the sector, namely the high degree of fixed and sunk costs involved in network industries, and the need to amortise those investments in a situation of competition with an incumbent operator that rolled-out its own networks under a previous regime of special or exclusive rights. See section V.A.3.1 below which describes more in detail the "investment ladder" concept.

83 See annexes 1 and 2 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4661 of the file).

(99) From the last quarter of 2002, GigADSL has been the most contracted wholesale product in Spain. From that date, some alternative network operators have rolled networks and started to provide national wholesale products which compete with those of Telefónica.

(100) In 2005 and 2006, the number of unbundled loops has increased significantly. Some alternative network operators (mainly France Telecom, Ya.com and Jazztel) have rolled out networks to TESAU's local exchanges in Spain's main cities.

(101) The figures below show the proportion of wholesale products contracted by France Telecom and Ya.com[84]:

(102) Figure 3 shows that […].

Figure 3 – Wholesale ADSL products contracted by France Telecom[85]
[…]

(103) Figure 4 shows that […].

Figure 4 – Wholesale ADSL products contracted by Ya.com[86]
[…]

D. Regulation of the services concerned by the decision

1 Regulation of the prices of retail broadband access services

(104) Whereas TESAU's retail prices were regulated from 3 August 2001 to 1 November 2003, the retail prices of the other subsidiaries of Telefónica S.A. have not been subject to any retail price regulation[87].

[84] Putting aside France Telecom and Ya.com, none of the ADSL operators (Tiscali, Jazztel, Tele 2, BT, etc) achieved a market share of 1% until 2005.

[85] See annexes 1 and 2 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4661 of the file). […].

[86] See annexes 1 and 2 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4661 of the file). […].

[87] As stated in the Decision of 31 July 2001 of the Spanish State Secretary for the Telecommunications (see footnote 23 above).

1.1 Regulation of TESAU's retail prices until 1 November 2003

(105) On 3 August 2001, the retail prices proposed by TESAU were approved by the Comisión Delegada del Gobierno para Asuntos Económicos ("CDGAE")[88] as fixed prices. This was in accordance with the Spanish General Telecommunications Law 11/1998[89] which provided that Telefónica's ADSL retail and wholesale services prices may be subject to regulation. Under the terms of this law, the CDGAE had the power to set, on a provisional basis, fixed, minimum and maximum prices, the criteria for their establishment and the mechanisms for their control, taking into account the actual costs of service provision and the level of competition between operators in the market.

(106) Until 1 November 2003, TESAU was obliged to present to the Ministry of Economy and to the Ministry of Science and Technology its proposals for new prices for approval by the CDGAE[88]. TESAU's proposals were deemed to be approved if there was no formal decision rejecting them within two months of the registration of the proposal at the relevant State Secretariat.[90]

1.2 Regulation of TESAU's retail prices from 1 November 2003

(107) The prices of TESAU's retail ADSL services were liberalized by a decision of the CDGAE of 25 September 2003[91]. This measure put an end to the regime of administrative authorization for TESAU's retail ADSL prices. However, it maintained an obligation on TESAU to communicate any modifications to the prices of its retail ADSL services 10 days before their introduction in the market[92].

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88 ORDEN de 3 de agosto de 2001 por la que se dispone la publicación de los acuerdos de la Comisión Delegada del Gobierno para Asuntos Económicos, de 2 de agosto de 2001, sobre tarifas y servicios prestados por Telefónica de España, Sociedad Anónima Unipersonalª, Spanish Official Journal 189/15551 (see page CMT-4579 of the file).

89 4th Transitory Provision of Spanish General Telecommunications Law 11/1998.

90 See the Orders of 3 August 2001 (see page CMT-4581 of the file) and 10 May 2001(see page CMT-4584 of the file).

91 ORDEN PRE/3028/2003, de 30 de octubre, por la que se dispone la publicación del Acuerdo, de 25 de septiembre de 2003, de la Comisión Delegada del Gobierno para Asuntos Económicos, por el que se aprueba la liberalización de los precios minoristas de los servicios ADSL prestados por Telefónica de España, Sociedad Anónima Unipersonal., Spanish Official Journal 262/20153 (see pages CMT-4595 and CMT-4596 of the file).

92 See Article 1 and 2 of ORDEN PRE/3028/2003, de 30 de octubre.

(108) Under the relevant wholesale regulation (see below) TESAU is also obliged to communicate[93] in advance any retail price modification and/or any changes to the structure of its retail prices, and to propose new corresponding wholesale tariffs. The purpose of the communication requirement is to allow the CMT to block the launching of the retail product if it is not technically replicable by competing operators, or to modify the proposed wholesale tariffs so as to allow alternative operators to compete with TESAU (see paragraph (115) below) .[94] The CMT has no powers to change TESAU's retail prices, which were liberalised on 1 November 2003.

2 Regulation of the prices of wholesale broadband access services

2.1 National wholesale offers (ADSL-IP Total and ADSL-IP)

(109) The prices of ADSL-IP Total (former Megavia) have never been subject to any price regulation. Telefónica therefore enjoys full commercial discretion as to the setting of the prices of this product.

(110) Until 21 December 2006[95], the prices of ADSL-IP[96] have never been subject to any price regulation. ADSL-IP was introduced internally within the Telefónica Group since September 2001[97]. Immediately after Telefonica introduced this product internally the CMT sent two requests for information[98] to TESAU regarding this wholesale product and subsequently ordered TESAU on 29 April 2002 to make it available for access by alternative operators on transparent and non-discriminatory terms[99].

2.2 Regional wholesale offer (GigADSL)

(111) The first legal provisions governing the provision of this service was a Decision[100] of the CDGAE of 25 March 1999, which mandated access to this product and established the prices that alternative operators had to pay to Telefónica S.A. for it. The decision was valid until 31 December 2000.

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93 TESAU has to communicate changes in the structure of the ADSL retail prices 1 month before their commercialization on the market and the changes in relation with the launching or withdrawal from the market of a new technical modality of ADSL retail services 3 months before their commercialization on the market.

94 CMT Decision MTZ 2003/1000 of 31 March 2004 regarding the modification of the reference (local loop) unbundling offer ("*OBA 2004*").

95 See section 2.4 below.

96 Whether its existing "tunnelled" modality or its "non tunnelled" modality which was replaced by ADSL-IP Total in June 2006.

97 Letter of Telefónica dated 22.09.03 (see page TFCA-49 of the file).

98 On 12 November 2001 and 4 March 2002. See CMT, Decisión MTZ - 2001/4038 of 29.04.02 ("*OBA 2002*") - Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001 (see page CMT-618 of the file).

99 CMT, Decisión MTZ - 2001/4038 of 29.04.02 ("*OBA 2002*") - Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001 (see page CMT-618 of the file).

100 Orden de 26 de marzo de 1999 por la que se dispone la publicación del Acuerdo de la Comisión Delegada del Gobierno para Asuntos Económicos, de 25 de marzo de 1999, por el que se determinan los precios que los operadores autorizados deberán abonar a Telefónica, Sociedad Anónima, por la

(112) In December 2000, the Spanish regulator mandated fully unbundled and shared access to the local loop, and the regional wholesale broadband access offer was included in Telefónica's first local loop unbundling reference offer as an indirect modality for accessing the local loop.

(113) The Order[101] of 29 December 2000 of the Ministry of Presidency introduced a regime of maximum nominal prices for GigADSL as of 1 January 2001. Nothing precluded TESAU from lowering them. From that date, the CMT has been the only authority vested with the power to regulate the prices of this service.

(114) In its decision of 26 July 2001[102], the CMT reduced the prices of GigADSL and established that henceforward, the prices of GigADSL would be fixed on the basis of a retail-minus system which determines that the price of each modality of GigADSL should not be higher than a given percentage of TESAU's corresponding retail monthly fee.

(115) As indicated in paragraph (108) above, as from 31 March 2004, whenever TESAU changes the structure of the prices of its ADSL retail services and/or launches or withdraws from the market a new technical modality of ADSL services (e.g.duplication of the speeds), TESAU has the regulatory obligation to propose in advance new corresponding wholesale tariffs. The CMT may, if necessary, modify the proposed wholesale tariffs so as to allow alternative operators to compete with TESAU's ADSL retail offer.

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provisión del acceso indirecto al bucle de abonado de la red pública telefónica fija, hasta el 31 de diciembre del año 2000 – BOE 86 pages 13513 to 13515 (see page CMT-573 of the file).

101 ORDEN de 29 de diciembre de 2000 por la que se dispone la publicación del Acuerdo de la Comisión Delegada del Gobierno para Asuntos Económicos, por el que se establecen los precios de la primera oferta de acceso al bucle de abonado en las modalidades de acceso completamente desagregado, de acceso compartido y de acceso indirecto, a la red pública telefónica fija de Telefónica de España, Sociedad Anónima Unipersonal. BOE number 313, pages 46758 to 46764 (see pages CMT-4597 to CMT-4603 of the file): *"**9. Carácter máximo de los precios**. Los precios de los servicios a los que se refiere este Acuerdo tendrán carácter de máximos. Telefónica de España, Sociedad Anónima Unipersonal, podrá aplicar precios por debajo de los límites indicados, informando a la Comisión del Mercado de las Telecomunicaciones de dichos precios con quince días de antelación a su aplicación efectiva."*

102 Resolución de la CMT de 26 de julio de 2001, por la que se resuelve el recurso potestativo de reposición interpuesto por TESAU contra la Resolución de medidas cautelares dictadas dentro del expediente MTZ 2001/4935 sobre el establecimiento de condiciones para el acceso indirecto al bucle de abonado de la red telefónica pública fija de Telefónica de España con el objeto de articular los mecanismos que posibiliten la prestación de servicios ADSL en competencia (see page CMT-593 of the file).

(116) The prices of GigADSL were slightly reduced by the CMT following the proposal by TESAU to duplicate the speed of its retail products in 2004[103] and 2005[104]. It is worthwhile to point out that on both occasions Telefónica itself had proposed to keep the GigADSL prices unchanged.[105]

(117) Telefónica also proposed explicitly to keep the GigADSL prices unchanged when it launched its new retail products 'ADSL Tiempo Libre', 'ADSL a tu medida'[106] and 'ADSL mini'[107]. The prices of these semi-flat offers were cheaper than the retail prices applicable hitherto. Ultimately, the GigADSL prices remained unchanged on those three occasions.

(118) In any event, the nature of the GigADSL prices as maximum prices has remained unaltered over the period covered by the investigation, as confirmed by the CMT itself in its letter of 7 January 2005 to the European Commission:

> *"Asimismo, conviene no olvidar que la OBA es una oferta de mínimos que TESAU está obligada a publicar, pero que en ningún modo excluye la negociación entre las partes. En este sentido, y respondiendo a las cuestiones de la Comisión Europea, nada impediría a TESAU ofrecer el servicio GigADSL a precios inferiores, respetando, eso sí, la normativa vigente en relación, entre otros, con el principio de no discriminación. Por supuesto, TESAU también podría en cualquier momento solicitar a esta Comisión una reducción de los precios."*[108]
>
> *[Translation into English: "Also, it should not be forgotten that the reference offer is the minimum offer that TESAU is obliged to publish and that it does not exclude negotiation between the parties in any way. In this sense, and in reply to the questions of the European Commission, there is nothing that would preclude TESAU from offering the GigADSL service at lower prices as long as it abides with the applicable rules regarding, inter alia, the non-discrimination principle. TESAU could obviously also solicit at any moment a reduction of the prices from this Commission."]*

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103 Resolución de la CMT de 22 de julio de 2004, sobre solicitud de modificación de la oferta de acceso al bucle de abonado (OBA) de Telefónica de España, S.A.U. para adecuarla a la modificación de las velocidades ADSL en el nivel minorista. ("*OBA 2004 (2)*") (see page CMT-1605 of the file).

104 Resolución de la CMT de 19 de mayo de 2005, sobre solicitud de modificación de la oferta de acceso al bucle de abonado (OBA) de Telefónica de España, S.A.U. para adecuarla a la modificación de las velocidades ADSL en el nivel minorista. ("*OBA 2005*") (see page TFCA-3028 of the file)

105 CMT decision *OBA 2004 (2)* (see footnote 103 above) : "*Con la propuesta que realiza TESAU de modificar los parámetros técnicos de las modalidades ADSL, este operador estima que no es necesario llevar a cabo ninguna otra modificación de la OBA. En particular, considera que no habría que revisar ni el Plan de Gestión del Par, ni el capítulo de precios, ni los servicios de información*." (see page CMT-1606 of the file).
OBA 2005 (see footnote 104 above) : "*TESAU no propone ninguna modificación en los precios actuales, ni minoristas ni mayoristas.*" (see page TFCA-3029 of the file).

106 Resolución DT2004/1447 de la CMT de 7 de octubre de 2004 por la que se pone fin a l periodo de información previa a la apertura de un procedimiento de modificación de la oferta de acceso al bucle de abonado como consecuencia del lanzamiento por TESAU del servicio 'ADSL a tu medida' (see page CMT-4640 of the file).

107 Resolución MTZ 2005/101 de la CMT de 14 de marzo de 2004 sobre el lanzamiento por TESAU del servicio minorista 'ADSL 12/04' de facturación por volumen (see page W-741 of the file)).

108 See page 7 of the letter of CMT of 02.02.05 (see page CMT-568 of the file).

2.3 Unbundled access to the local loop

(119) As mentioned above, the obligation on TESAU to provide access to its local loops and to publish a reference unbundling offer was mandated in December 2000 by means of Decree 3456/2000, of 22 December 2000. Since 31 December 2000, TESAU has the obligation to provide unbundled access to its local loops and the related facilities[109] on a cost oriented basis.

2.4 The CMT Decision of 21 December 2006

(120) On 5 November 2003, the above-mentioned Spanish General Telecommunications Law 11/1998 was replaced by the Spanish General Telecommunications Law 32/2003 which transposes into Spanish law the new EC regulatory framework for electronic communications[110] and empowers the CMT to impose appropriate regulatory obligations on undertakings designated as having significant market power following a market analysis (see below).

(121) The above-described regulation of Telefónica's wholesale prices for regional and national access underwent some important changes at the end of 2006 after the CMT decision of 1 June 2006[111] which maintained Telefónica's obligation to provide wholesale access both at regional and at national level and established Telefónica's obligations under the new regulatory framework. [112]

(122) The CMT decision of 1 June 2006 includes the following provision:

> ***"1.-Obligación de proporcionar los servicios mayoristas de acceso de banda ancha a todos los operadores.***

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109 The facilities associated with the provision of unbundled access to the local loop are notably collocation, cable connections and relevant information systems, access to which is necessary to provide downstream services. See section F below.

110 The new regulatory framework for electronic communications networks and services consists of of a series of Directives adopted in 2002, which require national regulatory authorities (NRAs) to carry out periodic reviews of certain markets listed in Commission Recommendation 2003/311/EC on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services ("the Framework Directive"). These market analyses have to be carried out on a prospective basis applying EC competition law principles, and based on them, NRAs are to designate undertakings with significant market power (SMP), if any, and establish the ex ante regulatory obligations to be placed on such undertakings. The NRA's draft measures have to be notified to the European Commission under Article 7 of the Framework Directive. The Commission can, under ceratin circumstances, exercise veto powers with regard to the market definitions and SMP designations of the NRAs.

111 CMT, Decisión AEM 2005/1454 of 01.06.06 – Resolución por la que se aprueba la definición del mercado de acceso mayorista de banda ancha, el análisis del mismo, la designación de operadores con poder significativo de mercado y la imposición de obligaciones específicas, y se acuerda su notificación a la Comisión Europea. In this decision, the CMT analysed the wholesale broadband market, found that Telefónica had significant market power in it, detected competition problems in the wholesale and retail broadband markets (in particular refusal to supply, delaying tactics, undue use of privileged information, unfair requirements, price and quality discrimination, margin squeeze) and imposed regulatory obligations based on the nature of the problems identified.

112 See footnote 110

La efectividad de esta obligación requiere la imposición genérica de las siguientes obligaciones a TESAU:

a) Atender a las solicitudes razonables de acceso a recursos específicos de sus redes y a su utilización (art. 13.1 d) de la LGTel y 10 del Reglamento de Mercados; art 12 de la Directiva de Acceso)

Esta obligación implica, entre otros aspectos, que TESAU está obligado a:

- *Dar acceso a terceros a elementos y recursos específicos de su red necesarios para la provisión del acceso mayorista de banda ancha*
- *[…]*
- *No retirar el acceso a facilidades que actualmente se están prestando sin aprobación previa d la CMT*

La obligación anterior implica que TESAU estará obligada a facilitar un acceso mayorista de banda ancha (acceso indirecto al bucle) suficiente para garantizar la replicabilidad técnica de todas las ofertas minoristas de banda ancha que comercialice, bien directamente o a través de otras empresas de su mismo grupo. Este servicio mayorista deberá estar disponible a terceros tanto en las demarcaciones definidas para el servicio GigADSL como en el nivel nacional [ADSL-IP].

b) Ofrecer los servicios de acceso mayorista de banda ancha a precios orientados en función de los costes de producción (arts. 13.1 e) de la LGTel y 11 del Reglamento de Mercados; art. 13 de la Directiva de Acceso).
[…]
Los precios fijados para los servicios mayoristas regulados en virtud del punto anterior deberán:

- *Permitir a los operadores alternativos que decidan utilizar los servicios mayoristas de banda ancha replicar las ofertas minoristas de banda ancha de TESAU o cualquier empresa de su grupo;*
- *Asegurar los incentivos económicos suficientes para asegurar el desarrollo de redes alternativas, la inversión eficiente y la competencia sostenible de acuerdo con el Artículo 13.2 de la Directiva de Acceso;*
- *Asegurar la coherencia de las tarifas de los servicios mayoristas asegurando un margen suficiente tanto entre los servicios prestados en las diferentes demarcaciones (servicio regional) y el nacional como con respecto a otros servicios mayoristas conexos (servicio desagregado al bucle).”*

[Translation into English: "1. Obligation to provide the wholesale broadband access services to all operators

The effectiveness of this obligation requires that the following obligations be imposed on TESAU:

a) To meet all reasonable requests for access to, and use of, specific network facilities (Article 13 of the General telecommunications Law ["GTL"] and Article 10 of the Regulation on relevant markets; Article 12 of the Access Directive)
This obligation entails, inter alia, that TESAU is obliged to:

-Provide access to third parties to the specific network facilities and elements that are necessary for the provision of wholesale broadband access
- […]
- Not to withdraw access to facilities currently being provided without the prior agreement of the CMT
The above obligation implies that TESAU is obliged to provide sufficient wholesale broadband access (indirect access to the local loop) to guarantee the total replicability of all the broadband retail offer that it commercialises either directly or through other companies of the [Telefónica] group. Thus wholesale services must be available to third parties in the demarcations defined for the GigADSL service and at national level (ADSL-IP).

b) To offer the broadband wholesale access products at prices oriented at their cost of production (Article 13.1 e) of the GTL and Article 11 of the regulation on relevant markets; Article 13 if the Access Directive)
[…]
The prices set for the wholesale services that are regulated in accordance with the preceding point must:
- Allow alternative operators that decide to use the broadband wholesale access services to replicate the retail broadband offers of TESAU or any other company of the [Telefónica] group;
- Ensure sufficient economic incentives to ensure the development of alternative networks, efficient investment and sustainable competition in accordance with Article 13.2 of the Access Directive
- Secure the coherence of the tariffs for the wholesale services ensuring a sufficient margin both between the services provided in the different demarcations (regional service) and the national service and in relation to other related wholesale services (service of unbundled access to the local loop)]

(123) In particular, that CMT Decision modified the price regulation applicable to the regional and national wholesale offers: it established that the prices of GigADSL, which had been regulated via a retail minus mechanism until then, should be based on cost orientation and that the prices of ADSL-IP, which had been unregulated until then, should also be cost oriented. To this effect, the CMT announced that it would conduct a study in order to determine the costs of these services (the results of this study should be delivered in the first semester of 2007).

(124) The level of the prices of either GigADSL or ADSLP-IP were not affected by the CMT Decision of 1 June 2006 until 21 December 2006 when the CMT adopted provisional measures providing for substantial decreases of the prices of both GigADSL and ADSL-IP[113]: The measures were provisional because they were adopted prior to the completion of the above-mentioned study on cost orientation. The prices of GigADSL were reduced between a range of 22% (for the lowest speed offer) to 54% (for the highest speed offer). As to the price imposed for ADSL -IP, the reductions ranged from 24% (for the lowest speed offer) to 61% (for the highest speed offer).

2.5 Conclusion on the regulation applicable to Telefónica's wholesale and retail broadband products

(125) At the retail level, whilst TDATA's and Terra's broadband products have never been price regulated, the retail price regulation applicable to TESAU between 1 August 2001 and 1 November 2003 was such that TESAU was free at any time to propose to raise its retail charges for broadband access by proposing new prices for approval by the CDGAE. However, it did not do so. On 1 November 2003 its retail prices were liberalized.

(126) As to the national wholesale services, Telefónica has been free at any time since September 2001 to reduce the charges of national wholesale services, which have never been subject to any price regulation until December 2006.

(127) The regulation applicable to TESAU's regional wholesale service has only imposed a maximum price level and has been such that TESAU could have decreased at any time the charges for this service on its own initiative.

E. Evolution of Telefonica's wholesale charges since September 2001

1.1 GigADSL

(128) The wholesale prices that Telefónica charges to alternative operators are composed of:

- A wholesale access charge per end user: this charge is composed of a one-off connection fee for the activation of each new ADSL line and a monthly rental fee that varies with the modality (or bandwidth) of the final ADSL connection.

- A wholesale access charge per port occupied at the PAI ("pPAI"): this charge is composed of a one-off fee for the installation of each pPAI and a monthly fee for each pPAI. Both charges vary with the capacity of the pPAI (2, 34 or 155 Mbit/s).

[113] Resolución sobre la conveniencia de adoptar medidas cautelares con respecto a la determinación transitoria de las condiciones de la oferta de referencia de servicios mayoristas de banda ancha de Telefónica de España S.A.U.

Table 10 - Access prices for GigADSL since September 2001

Monthly rental charge[114] (€/month/line)	Until 29.09.04	Until 26.07.06	Until 22.12.06	Since 22.12.06
Modalidad Básica	22..66	22.32	21.09	16.48
Modalidad Class	44.99	44.18	38.58	22.04
Modalidad Avanzada	72.00	74.85	64.42	29.39
Modalidad Premium	90.34	84.88	74.16	40.30

Connection fee[115] (€/new line)	Until 03.05.02	Until 03.05.04	Since 03.05.04
Kit ADSL	30.05	38.10	41.83
Linea ADSL		38.10	41.83
Modalidad Básica	90.15		
Modalidad Class	153.26		
Modalidad Premium	306.52		
RDSI		77.17	82.21
Modalidad Básica	90.15		
Modalidad Class	153.26		
Modalidad Premium	306.52		

pPAI[116]	Until 03.05.02	Until 03.05.04	Since 03.05.04
One-off fee (€/new port)			
pPAI of 2Mbps	1803.04	471.87	529.81
pPAI of 34Mbps	3005.06	821.25	930.04
pPAI of 155 Mbps	4507.59	1403.54	1570.40
Monthly fee (€/port/month)			
pPAI of 2Mbps	180.30	70.97	78.32
pPAI of 34Mbps	300.51	124.19	138.57
pPAI of 155 Mbps	450.76	212.90	234.97

1.2 ADSL-IP

(129) The wholesale prices for ADSL-IP are composed of:

114 See the letter of TESAU of 17.03.05 (pages TFCA-1055 and TFCA-1056 of the file), Telefónica's *Reply* (pages 267 and 276) and CMT decision MTZ 2006/1019 of 21.12.06.

115 See the letter of TESAU of 17.03.05 (pages TFCA-1055 and TFCA-1056 of the file).

116 See the letter of TESAU of 01.04.05 (pages TFCA-1675, TFCA-1676, TFCA-1683 and TFCA-1690 of the file).

– A wholesale access charge per end user: this charge is composed of the same one-off connection fee as for GigADSL and a monthly fee that varies with the modality of the final ADSL connection.

– A wholesale access charge per port occupied at the port of interconnection ("pPAI-IP"): this charge is composed of a one-off fee for the installation of each pPAI-IP and a monthly fee for each pPAI-IP.

Table 11 - Access prices for ADSL-IP since September 2001[117]

Rental charge (€/month/line)	Until 22.12.06	Since 22.12.06
Modalidad Básica	27.8	22.42
Modalidad Class	57.7	24.99
Modalidad Avanzada	94.54	40.26
Modalidad Premium	119	57.85

pPAI-IP	Since Sept 01
One-off fee (€/new port)	4598.91
Monthly fee (€/port/month)	459.89

1.3 ADSL-IP Total

(130) The wholesale prices for ADSL-IP Total are only composed of a wholesale access charge per end user composed of the same one-off connection fee as for GigADSL and a monthly fee that varies with the modality of the final ADSL connection.

Table 12 - Access prices for ADSL-IP Total since September 2001[118]

Rental charge (€/month/line)	Until 22.12.06
Modalidad Básica	36.06
Modalidad Class	71.98
Modalidad Avanzada	117.00
Modalidad Premium	147.57

(131) A discount of 10% is granted to the alternative operators contracting more than 5000 lines.[118]

[117] See the letter of TESAU of 17.03.05 (page TFCA-1057 of the file), the letter of TESAU of 01.04.05 (page TFCA-1657 of the file) and CMT decision MTZ 2006/1019 of 21.12.06.

[118] See Annex B of the contract between TDATA and Wanadoo for the provision of the service Megavia (Annex 1 of the letter of TDATA of 09.12.03 – see page TFCA-644 of the file).

F. The availability of local loop unbundling since 2001

(132) In order to use Telefónica's unbundled local loops, alternative network operators need to (i) roll-out their own network reaching Telefónica's local exchanges; (ii) install their access equipment, such as DSLAMs in each Telefónica's MDF to which access is requested ("collocation"); (iii) connect their access equipment back to their network, which involves contracting Telefónica's wholesale service "signal transfer"[119]; (iv) connect their access equipment to Telefónica's Handover Distribution Frame (HDF) in the MDF, which involves contracting Telefónica's wholesale service "internal tie"[120] and (v) contract the unbundled local loop itself ("prolongation of the pair"[121]).

(133) The collocation, the signal transfer and the internal tie are wholesale services that are associated to the service of the unbundling of the local loop. They are indispensable for the use of Telefónica's unbundled local loops and are included in Telefonica's reference unbundling offer OBA. The unavailability of any of those services affects the overall availability of the process of unbundling of the local loop – independently of whether the alternative operator has already rolled-out its own network – since the alternative network operator is not able to offer downstream services in the area covered by the MDF until the effective provision of all the services that are associated to local loop unbundling. Generalised delays in the provision of local loop unbundling and its associated services directly affect the end users since the latter cannot subscribe to a competing retail offer, which harms the reputation of the alternative operator.

(134) As illustrated by the figures below, there has always been a significant gap between (i) the local exchanges in which collocation was requested to Telefónica[122] (dotted pink curve) and (ii) the local exchanges where collocation was effectively granted by Telefónica[122] (pink curve). There also has been a significant gap between (i) the local exchanges where the rental of a local loop was effectively requested[122] (dotted blue curve) and (ii) the local exchanges where the alternative operators effectively offer downstream (retail and/or national wholesale) services based on local loop unbundling[123] (blue curve).

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119 The signal transfer ("entrega de señal) service allows the connection between collocated equipments in TESAU's local exchanges with the LLU operator equipments which are located in its point of presence (outside of TESAU's premises). The signal transfer service is indispensable for the provision of broadband services on the basis of LLU by an alternative operator which collocates some of its equipment in TESAU's local exchanges.

120 When the LLU operator co-locates its broadband equipment in a separate collocation room in Telefónica's local exchange building, the access pair to be unbundled has to be diverted from Telefónica's MDF at the local exchange to the ULL operator's broadband equipment, which is connected to the Handover Distribution Frame (HDF). This is carried out by connecting the pair terminated on MDF side to an internal tie cable to the HDF. The provision of the internal tie is included in the LLU service. In case the LLU operator locates its broadband equipment outside Telefónica's local exchange, an "external tie" is needed. The provision of the external tie is also included in the LLU service.

121 The prolongation of the pair ("prolongación de par") consists in connecting the loop corresponding to one subscriber to the alternative operator's network.

122 The numbers are those provided by Telefónica itself in its letter of 03.10.06 (see pages TFCA-13172 to TFCA-13254 of the file).

123 The coverage of the MDF in which each network operator offers downstream services based on local loop unbundling is calculated on the basis of (i) the monthly evolution of the wholesale lines contracted in each MDF (see the annex 4 of the letter of Telefónica of 28.07.06 at pages TFCA-5661 to TFCA-

Figure 5 – The evolution of Ya.com's use of local loop unbundling[124]

[…]

Figure 6 – The evolution of France Telecom's use of local loop unbundling[124]

[…]

Figure 7 - The evolution of Jazztel's use of local loop unbundling[124]

[…]

(135) As of September 2004: France Telecom had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory. Ya.com was not granted collocation at that time. Jazztel had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory.

(136) As of June 2005: France Telecom had been granted collocation in […]% of the territory, and effectively marketed retail offers based on local loop unbundling in […]% of the territory. Ya.com had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory. Jazztel had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory.

(137) As of March 2006: France Telecom had been granted collocation in […]% of the territory, and effectively marketed retail offers based on local loop unbundling in […]% of the territory. Ya.com had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory. Jazztel had been granted collocation in […]% of the territory and effectively marketed retail offers based on local loop unbundling in […]% of the territory.

(138) In its reply to the letter of Facts[125], Telefónica claimed that Figure 5, Figure 6 and Figure 7 do not constitute evidence of an unavailability of local loop unbundling and do not provide a real image of the delays that are imputable to Telefónica. According to Telefónica, a significant proportion of the delays indicated in those figures should in fact be imputable to Telefónica's competitors (e.g. unexpected exponential wholesale demand). However, Telefónica has not contested the significant gaps identified by the Commission between the moment Telefónica's competitors requested access to the incumbents' unbundled local loops and the moment they effectively offered downstream services on the basis of the latter.

5826) and (ii) the coverage of each MDF (see the annex 5 of the letter of Telefónica of 28.07.06 at pages TFCA-5827 to TFCA-5955 of the file).

124 See footnotes 122 and 123 above.

125 See pages 11-12 of the Reply to the Letter of Facts.

(139) In any event, the Commission finding of the above mentioned delays in the provision of local loop unbundling is further supported by the fact that since 2002, 55 conflicts in relation to access to the local network have been brought before the CMT, most of which resulted in a decision against Telefónica.

(140) In particular, on 16 November 2006, the CMT fined Telefónica €20 million on the grounds that at least between January 2004[126] and April 2005 it infringed the procedures and conditions under which it has to provide the services included in its reference unbundling offer ("RUO")[127] .

(141) The CMT decision is based on the established fact ("hechos probados")[128] that these infringements had been committed in a continuous and generalised manner, that they had related to nearly all of the services included in the RUO and had affected numerous alternative operators and local exchanges:

> *"**Telefónica de España, S.A.U. ha incumplido de manera continuada y generalizada los procedimientos y condiciones de provisión de los servicios incluidos en su Oferta de Acceso al Bucle de Abonado durante el periodo de tiempo comprendido entre al menos los meses de enero de 2004 y abril de 2005.** […] Está claro que en los años 2004 y 2005 ha habido incumplimientos que han afectado a una pluralidad de operadores y centrales en relación con la práctica totalidad de los servicios OBA. […] **Esta actuación de TESAU no sólo se ha referido a JAZZTEL sino que ha afectado a una pluralidad de operadores, tal y como queda reflejado en los expedientes que se han acumulado al presente procedimiento sancionador, especialmente el expediente relativo a la solicitud de TELEFÓNICA para la no aplicación de las penalizaciones por retrasos en la provisión de los servicios de la OBA (DT 2005/511), en el que constan acreditados (reconocidos por la propia TESAU) retrasos generalizados relativos a los diversos servicios OBA, y todos ellos referidos a la totalidad de los operadores del mercado."*[129]

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126 As illustrated by Figure 5, Figure 6 and Figure 7, new entrant's requests for local loop unbundling and the associated services (collocation in particular) only took up in 2004.

127 Resolución del expediente sancionador RO 2004/1811, incoado a la entidad "Telefónica de España, S.A.U." por acuerdo del Consejo de la Comisión del Mercado de las Telecomunicaciones de 9 de junio de 2005", 16.11.2006 ("*CMT decision RO 2004/1811 of 16.11.2006").* Telefónica has appealed this Decision.

128 The reference in the present decision to the CMT decision RO 2004/1811 of 16.11.2006 is not the conclusion in law made by the CMT but a reference to a factual situation as described by the CMT decision in its factual assessment.

129 *CMT decision RO 2004/1811 of 16.11.2006,* p. 22-23.

*Translation into English: "**Telefonica de Espana S.A.U. has infringed in a continuous and generalised way the procedures and conditions for providing the services included in the local loop unbundling offer during the perod from January 2004 to April 2005.** […] It is clear that in the years 2004 and 2005 there have been infringements that have affected numerous operators and exchanges as concerns nearly all of the services of the RUO. […] **Telefonica's conduct has not only affected Jazztel, but it has affected a number of operators, as reflected in the proceedings that have been joined with these sanctioning proceedings, in particular the proceedings relating to the request of Telefonoca for the non-application of the penalties for delays in the provision of the services of the RUO (DT 2005/511), in which generalised delays relating to the different services of the RUO affecting all operators on the market were evidenced (and recognised by Telefonica itself)."***

(142) In its reply to the letter of facts[130], Telefónica argued that the CMT decision does not establish that such delays were not justified.

(143) In any event, there is concurring evidence, as established by both the CMT and the Commission (see Figures 4, 5 and 6 above), that there have been significant gaps between the moment alternative operators requested access to Telefónica's unbundled local loops and the moment they were effectively granted such access. This fact – which was explicitly acknowledged by Telefónica in the CMT decision[131] – is independent of whether such delays are objectively justified or not.

(144) As a conclusion, there have been significant problems with the effective availability of local loop unbundling and associated services.

130 See pages 10-11 of the Reply to the Letter of Facts.

131 *CMT decision RO 2004/1811 of 16.11.2006*, p. 112: "TESAU a reconocido expresamente los incumplimientos en que ha incurrido." Translation into English: ""TESAU has recognised explicitly the infringements that it has committed".

V. ESTABLISHING THE DOMINANT POSITION

A. The relevant product or service markets

1 Introduction

(145) The extent to which the supply of a product or the provision of a service in a given geographical area constitutes the relevant market depends on the existence of competitive constraints on the price-setting behaviour of the producer(s) or service provider(s) concerned.

(146) Firms are subject to three main sources of competitive constraints: demand substitutability, supply substitutability and potential competition. From an economic point of view, for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product[132].

(147) However, supply-side substitutability may also be taken into account when defining markets in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy. Supply-side substitution is particularly relevant for network industries, such as electronic communications where the same network may be used to provide different types of services. There is supply-side substitution when suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs or risks in response to small and permanent changes in relative prices. When these conditions are met, the additional production that is put on the market will have a disciplinary effect on the competitive behaviour of the companies involved.[133]

(148) On the other hand, supply-side substitutability would not be taken into account for the definition of a relevant market each time it would entail the need to adjust significantly existing tangible and intangible assets, additional investments, strategic decisions or time delays[134].

(149) In the SO, the Commission defined four relevant product markets in broadband internet access which are closely linked to each other: (i) the market for unbundled and shared access to the local loop ("the wholesale market for local access"), (ii) the market for wholesale broadband access for which traffic is delivered at the regional level ("the regional wholesale market"), (iii) the market for wholesale broadband access for which traffic is delivered at one national hand-over point ("the national wholesale market") – which are the upstream markets in broadband access offered by infrastructure owners to service providers active in the retail mass market – and (iv) the retail mass market, which is the downstream market of broadband internet access services offered by telecommunications operators to their own end-users.

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132 Commission Notice on the definition of relevant market for the purposes of Community competition law 97/C 372/03 ("*Notice on relevant markets*"), paragraph 13.

133 *Notice on relevant markers*, paragraph 20.

134 *Notice on relevant markets*, paragraph 23.

(150) In its *Reply*[135], Telefónica contested the Commission's definition of the three different wholesale broadband markets. According to Telefónica, all the three wholesale broadband products are interchangeable and, therefore, belong to the same market. Telefónica did not contest the definition of the relevant retail market.

(151) The Commission maintains in the current decision the definition of the wholesale and retail broadband markets provided for in the SO, and which is as follows.

2 The relevant retail market

(152) Broadband access products vary as a function of different criteria: (i) their usage characteristics (flat vs. semi-flat offers), (ii) their speed rate (with nominal speeds ranging from 0.25 to 20 Mbps), (iii) their technology (ADSL, cable-modem, others), (iv) the presence of individual specificities (standard broadband products vs. tailor made broadband products) and (v) the price.

(153) As will be established below, the relevant retail market comprises all the non-differentiated broadband products, whether provided through ADSL or any other technology, marketed in the "mass market" for both residential and non-residential users. The relevant market excludes tailor-made broadband solutions which are mainly targeted at large corporations.

(154) Firstly, all standard ADSL products that are listed in Section IV.B.2 above belong to the same product market. Indeed, there is supply-side substitution between all of them of them, the effect of which is equivalent to that of demand substitution in terms of effectiveness and immediacy. Supply-side substitution is evident since once an operator is able to provide ADSL services to a particular customer, whether using its own infrastructure or through a wholesale offer of another operator[136], it is immediately capable of changing the characteristics of that product (usage characteristic, speed) without any important further investment..

135 See Telefónica's Response, pages 38-48.

136 ISPs are able to offer retail products of different speeds thanks to regulatory obligations whereby TESAU must provide wholesale products to alternative ISPs enabling the latter to provide the same retail products that it markets (in particular at the same speed rates).

(155) This immediate supply-side substitutability is illustrated by the current "race for speed" in Spain. TESAU has already doubled the speeds of all its retail ADSL products on two occasions, while maintaining the same price. New entrants have also been able to do the same in a very short period of time (2 months at most), notably thanks to TESAU's regulatory obligations and the absence of technical impediments or costs at the level of the entrants' networks, equipment or retail services that would have prevented them from following TESAU's move. W hen TESAU effected the second duplication of the speed of its entire customer base in July 2005, some of its competitors had already increased even more the speed of their retail products. As of today, Telefónica's standard offer of 1 Mbps (€ 39.07) competes with (i) Jazztel's offers of 20 Mbps (€ 29.95 – full local loop unbundling only) of 6Mbps (€ 32.95 – full local loop unbundling only) and of 1 Mbps (€35.95), (ii) France Telecom's offers of 20 Mbps (€ 36 – local loop unbundling only), 4 Mbps (€ 29.90– local loop unbundling only) and of 1 Mbps (€ 39.0) and Ya.com's offers of 20 Mbps (€ 29.95 – local loop unbundling only), 4 Mbps (€ 25.95 – local loop unbundling only) and 1 Mbps (€ 19.95 – local loop unbundling only).

(156) However standard ADSL products and tailor-made ADSL products are not substitutable. The first type of products caters for customers with common and non-specific needs that are satisfied with standard products designed by telecommunications operators for the mass-market. The second type of products is destined to meet the special and specific needs of certain customers in terms of electronic communications services in general and of data transmission services in particular. Tailor-made access services incorporate more advanced functionalities (much higher download speeds, greater web-page hosting capacities, the possibility of multi-terminal use and networking operation) and their prices are higher than the standard access services marketed in the mass market.

(157) From a demand-side perspective, it is clear that tailor-made and standard products are in different retail markets. Customers with complex and specific needs will not be satisfied with the standard characteristics of the broadband services available in the mass-market and even in case of a small, but lasting increase in price of around a 5-10% in the price of the tailor-made product they would not switch to a standard product because products in the mass market do not satisfy their requirements.

(158) From a supply-side point of view there is no substitutability either. The inputs used to provide tailor-made services on one hand, and standard ones on the other, are different in terms of the technologies used, the distribution networks and the marketing tools. Standard products are marketed through mass-media publicity, reach the consumers through non-specialized distribution networks and are built on the technologies that better fit the needs of mass-market end-users that will be looking at ease of usage and low price. Conversely, tailor-made services are usually marketed by specific offers to companies, often presented in bidding processes, designed and implemented by sectoral experts and built on sophisticated technological solutions aimed to meet particular needs. Broadband internet access for business customers can also be achieved through other options such as fibre-optic networks, leased lines, wireless local loops and satellite connections suitable to meet their particular requirements. These options are costly but are viable in the case of business customers.

(159) In the case of Spain, there is a clear link between tailor-made products and companies with intensive and complex requirements of data transmission services (large business), on one hand, and between standard products and residential and SMEs customers, on the other hand. The latter's use of electronic communication services is not large enough to justify more costly and higher priced tailor-made products. In general terms these customers, in particular very small business units (which account for 94% of business units in Spain)[137] are satisfied with the same standard products as those used for the residential market. Small and medium sized enterprises represent the larger part (99%) of business customers in Spain. Up to 86% of non-residential customers contracting ADSL retail products are very small or small to medium-sized business units[138] who have probably entered the market on the basis of lower speed offers and gradually evolved from there to higher speed products as they have integrated this new tool in their business operations. These SME customers form a different group from large companies, for which there are other options available (e.g. leased lines) and tailor-made services and fees. Due to the specificity of these large companies, the ADSL solutions contracted by them are not included in the relevant retail product market.

(160) With regard to the substitutability of the various means of broadband access (via upgraded cable TV networks, ADSL and others), these different access platforms are generally substitutable from the end users' perspective. On the demand side, ADSL-based and cable-based retail products can be considered as substitutes since both technologies are able to provide standard broadband transmission services for the mass market and their prices and functionalities are similar. Although, supply-side switching between ADSL and cable-modem technologies is not possible (see section 3.3 below), demand-side substitutability is sufficient to justify the inclusion of cable-modem in the relevant retail market. Alongside ADSL and cable, there are some other technologies currently being used in Spain to market retail broadband offers. They are presented in more detail in Section IV.A.5, and collectively account for less than 0.1% of all retail broadband accesses in Spain. Retail products based on these technologies are therefore included in the relevant market only to the extent that they are used to provide retail broadband services in the mass market..

(161) As a conclusion, the relevant retail market comprises all the standard broadband products, whether provided through ADSL or any other technology, marketed in the "mass market" for both residential and non-residential users. This definition has not been contested by Telefónica.

3 The relevant wholesale markets

(162) For defining the relevant wholesale market(s) in this case, it must be analysed whether the wholesale access products described in Section IV.C belong to the same relevant market, or whether they constitute separate markets.

137 IDATE, Development of broadband access in Europe, December 2004 (see page Div-622 of the file)

138 IDATE, Development of broadband access in Europe, December 2004 (see page Div-625 of the file).

3.1 Substitutability between local loop unbundling and the regional wholesale offer

(163) As mentioned above, an alternative operator contracting local loop unbundling on a national basis must locate itself and install its equipment (DSLAMs) in the 6836 main distribution frames that Telefónica has throughout Spain. This requires significant network roll-out investments. It is therefore unlikely that even an operator that would have deployed a network that is sufficiently capillary to interconnect with Telefónica's network at all the indirect access points in the 109 demarcations of the regional wholesale offer would switch to local loop unbundling in the case of a small, but significant non-transitory increase in the price of the former.

(164) In Spain, according to estimates presented by alternative operators, the rolling out of a network up to 550-575 exchanges for an operator seeking a market share of 13% of the ADSL segment by 2009 would cost around € 580-670 million.[139] The investment necessary to roll-out a network to all of Telefónica's exchanges would obviously be still much higher. As a comparison, Telefónica's investments in its regional access network (i.e. excluding the network investments that are necessary to bridge the gap between the regional wholesale product and the retail product) from 1999 to 2006 accounted for more than € 1500 million[140]. This represents a substantial amount of money, specially, if we take into account that Telefónica's main ADSL competitor's (France Telecom España) revenue was around €21 million in 2002[141] and €170 million in 2005[142].

(165) In addition to the heavy investments required when switching from the regional wholesale offer to local loop unbundling, there are clear functional differences between the two wholesale access services. As explained in Section IV.C.2.1 above, an operator contracting a Telefónica's unbundled local loop can control a substantial part of the overall value chain and many aspects of its retail service. On the contrary, there are limits to the extent that a purchaser of Telefónica's regional wholesale offer can produce innovative services for its own retail supply and depart significantly from the retail services provided by Telefónica[143].

(166) The Commission therefore concludes that there is no sufficient demand-side substitutability between these two access products to warrant including them in the same relevant market.

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139 Jazztel, updated business plan 2006-2009, presentation of 27.02.06 (page 29), available at: http://www.jazztel.com/archivos/documentos/ficheros/28022006165558Plan_Negocio_0609.pdf

140 Annex 2 of the letter of Telefónica of 17.10.06 (page TFCA-13126 of the file).

141 CMT 2002 Annual Report.

142 CMT 2005 Annual Report.

143 In its Communication on unbundled access to the local loop (COM(2000)237) of 26 April 2000 (page 18), the Commission noted in this regard that "*A service of this type allows the incumbent to retain control of the rate of deployment of high speed access services, and the geographical regions in which these services are rolled out. The incumbent's priorities may not match those of the new entrants. Such services should therefore be seen as complementing the other forms of unbundled access described above (i.e. full unbundling of the local loop and shared access to the local loop), but not substituting them*".

(167) There is no supply-side substitution between the products either, since it would entail an alternative operator duplicating Telefónica's network of local loops over the Spanish territory. It is a commonly accepted view in the industry and among regulators[144] that , with the present technologies, this is economically unfeasible or unreasonably difficult in a reasonable time period. The establishment of a new local access network would entail very significant capital investment[145]. In particular, it would require major investment, largely at sunk costs, in the provision of suitable ducting to house cables or wires, as well as providing the cable or wire itself. Moreover, TESAU's local access network was rolled out during decades protected by special rights and was funded by monopoly rents from the provision of telecommunication services. Telefónica has had to incur investments in order to enable its existing infrastructure to support broadband traffic. In comparison, operators considering building completely new local infrastructure characterised by very significant economies of scale would face much greater investments than the broadband enabling costs, rending the duplication of Telefónica's local access network uneconomical.

(168) In its *Reply*[146], Telefónica argued that local loop unbundling and the regional wholesale access belong to the same relevant market. Telefónica claims that all of these wholesale products identified in Section IV.C above, (i.e. also national wholesale access) are substitutable because they allow alternative operators to provide the same retail services, and alternative operators effectively make use of this choice of wholesale inputs for this purpose[147]. Telefónica also argued[148] that the analysis of substitutability should not only take into account the investments necessary to switch from regional wholesale access to local loop unbundling but also the advantages gained from switching from the former to the latter. According to Telefónica, switching to local loop unbundling enables (i) offering additional downstream services (thus obtaining higher revenues) and (ii) decreasing network costs (thus benefiting from higher margins).

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144 See Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop, OJ L336/4: *"It would not be economically viable for new entrants to duplicate the incumbent's metallic local access infrastructure in its entirety within a reasonable time. Alternative infrastructures such as cable television, satellite, wireless local loops do not generally offer the same functionality or ubiquity for the time being, though situations in Member States may differ.*" (see paragraph 6)

145 Estimates of the cost to replicate local access infrastructure are at 1000 euros per line on average. For example, the duplication of the local access network of the incumbent in France would require an investment of €30 billion (€900 per line) plus the recurrent operating cost of €3 billion (€7.6 per line per month). See: ARCEP, Consultation sur les méthodes de valorisation de la boucle locale cuivre, April 2005.

146 See Telefónica's Reply, pages 38-45.

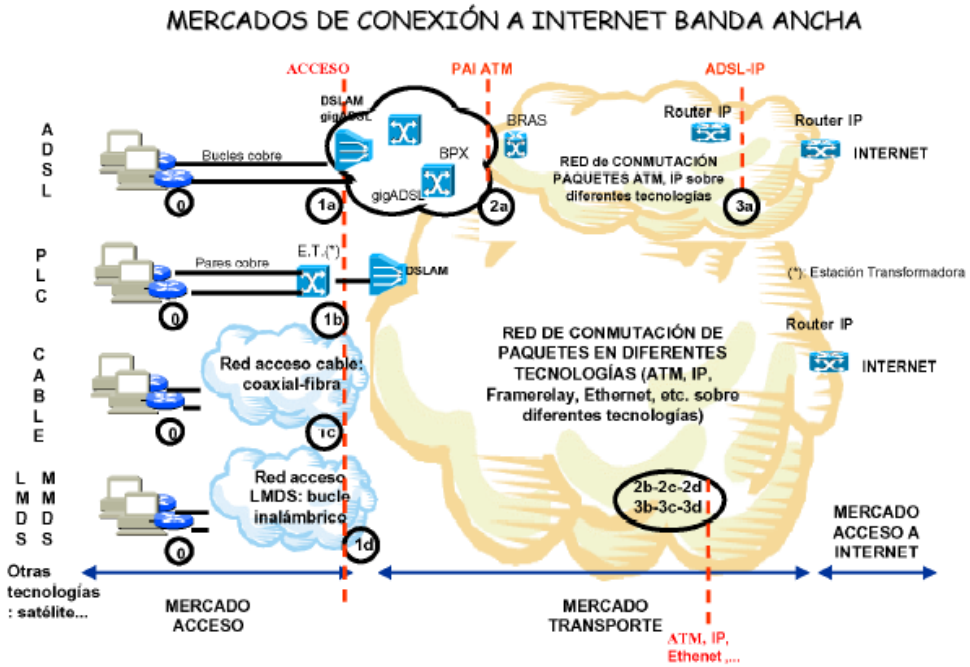
147 Telefónica mentions, in support of its argument, that all the three wholesale markets belong to the same relevant market, a recent merger decision of the Spanish "Tribunal de defensa de la competencia" – Informe del Tribunal de defensa de la competencia C 93/05 Telefónica / Iberbanda, which concluded that there was only one wholesale broadband market in Spain. However, this decision did not look into the details of the definition of the wholesale market, and in particular into the appropriateness of further fragmentation, because that would not have changed the conclusion reached by the Tribunal, namely that Telefónica is dominant in both the wholesale and retail markets for broadband access in Spain and that the merger should be prohibited.

148 See page 8 of the reply to the letter of facts.

(169) However, Telefónica's arguments are insufficient, incomplete and misleading:

(170) Firstly, Telefónica's allegations in reply to the SO are in contradictions with those that it presented to the Commission when commenting on France Telecom's initial complaint (at the origin of this decision)[149]: Telefónica itself considered that wholesale access at local level (local loop unbundling) and indirect wholesale access (at regional and national level) belong to separate product markets. Indeed, the company defined two different wholesale broadband markets: (i) the market for wholesale access (which corresponds to local loop unbundling in the present case); and (ii) the market for wholesale broadband conveyance (which corresponds to the regional wholesale market and the national wholesale market in the present case). Telefónica's proposed market definition was illustrated as follows:

Figure 8 – The relevant markets defined by Telefónica in its comments to France Telecom 's initial complaint[150]



(171) It is incorrect that local loop unbundling on the one hand and regional and national wholesale access on the other hand allow alternative operators to offer similar retail products. Contrary to local loop unbundling (see paragraph (165) above), national and regional wholesale access only allow alternative operators to offer the same retail product as Telefónica (in terms of speed)[151] and do not allow alternative operators to offer products like TV over broadband or Voice over IP services.

149 See the letter of Telefónica of 22.09.03 (pages TFCA-22 to TFCA-26 of the file).

150 See the letter of Telefónica of 22.09.03 (page TFCA-24 of the file).

151 This is illustrated by Table 6 and Table 7 which show that alternative operators differentiate in terms of quality (speed of the connection) and price depending on the wholesale product contracted (local loop unbundling on the one hand or regional and/or national wholesale on the other hand).

(172) Local loop unbundling and regional wholesale access are not substitutable. Substitutability needs to be immediate (or materialise in the short term), since the objective is to identify the actual competitive constraints faced by the undertaking. This is not the case here, because switching is extremely costly, time consuming and even over time, local loop unbundling will never be an economically viable option for alternative operators in the whole of the Spanish territory.

(173) Switching from the regional wholesale product to local loop unbundling is extremely costly. It requires: (i) rolling out a network from the regional POI to the local exchanges of Telefónica (see paragraph (164) above), (ii) specific wholesale charges for switching imposed by Telefónica[152]; and (iii) getting collocation and other related services (see section IV.F above) in order to be able to provide retail broadband services.

(174) Switching from a regional wholesale product to local loop unbundling is also time consuming: it requires a lot of time to roll out a fixed telecommunications network reaching Telefónica's local exchanges and to collocate broadband equipments in Telefónica's local exchanges[153].

(175) Even over time, local loop unbundling will never be a viable option in the whole Spanish territory: alternative operators which use local loop unbundling in some areas of Spain today have not forsaken the regional wholesale product and the national wholesale product, they use them as complements[154].

(176) In any event, contrary to Telefónica's allegations, an alternative operator wishing to switch from regional wholesale access to local loop unbundling will have to incur the above mentioned network roll-out investments but will only reap the benefits of that switching after having achieved a sufficient customer base, which is neither certain nor immediate.

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152 €25 from indirect access (regional or national level) to fully unbundled access to the local loop and €32.75 from indirect access to shared access to the local loop. There is also the possibility to do a massive migration which costs a fixed charge of €85.25 plus €7.42 per switch to fully unbundled access to the local loop and €13.09 per switch to shared access to the local loop. See the letter of Telefonica of 21.07.07, pages TFCA-4224 and TFCA-4225 of the file.

153 Section IV.F above. This is independent of whether Telefónica delays in the provision of the services associated to local loop unbundling are objectively justified or not.

154 This is evidenced by the fact that in 2005, despite the take-up of local loop unbundling, TESAU's revenue for these other wholesale products was €537 million, i.e. far more than in 2004 (€391 million). See CMT 2005 Report, p. 113.

(177) Due to the risks involved in investments that entail high sunk costs (see paragraph (164) above), alternative operators are likely to follow a step-by-step approach to continuously expanding their customer base and infrastructure investments. When constructing a new alternative telecommunications infrastructure, it is of crucial importance to obtain a minimum "critical network size" in order to fully benefit from network effects and economies of scale and be able to make further investments. This phenomenon is commonly referred to as the 'investment ladder' by economists, regulators and Telefónica itself. This concept is not prescriptive: it does not entail that alternative operators *must* follow a step-by-step approach to investing in (broadband) infrastructure. Rather, it encapsulates the *observed* pattern of market entry and expansion by new entrants. This pattern has prompted regulators in Europe to tackle established barriers to entry and expansion by mandating access at various levels of the incumbent operators' infrastructure.

(178) The first step of the 'investment ladder' is occupied by an operator whose strategy consists in targeting a mass market (thus involving considerable marketing and advertising expenditure), but who is merely acting as a reseller of the ADSL access product of the vertically-integrated provider (the incumbent). As its customer base increases, it makes further investments in traffic conveyance at national level. In a further step, it may even seek to connect its customers directly (local loop unbundling). Thus the progressive investments take the alternative operator progressively closer to the customer, reduce the reliance on the wholesale product of the incumbent, and increasingly enable it to add more value to the product offered to the end-user and to differentiate its service from that of the incumbent[155].

(179) This pattern is confirmed in the Broadband market competition report of the European Regulators' Group (ERG) of May 2005[156]: "While at the beginning most new entrants relied on resale, bitstream access has taken over resale as the preferred form of access and is now the wholesale access mostly used (with a share of more than 1/3 compared to resale share of below 30%). This suggests that migration from resale to bitstream is taking place. The number of shared access lines has also increased (highest increase of all access forms) as has full unbundling. This suggests that the ladder of investment exists, new entrants are starting to climb up the ladder."

(180) In its letter to the Commission dated 2 March 2005, Telefónica itself referred to the concept of the ladder of investment when describing the evolution of the Spanish broadband market since 2001. In particular, it referred to the importance for alternative operators of achieving a critical mass before starting investing in their own infrastructure enabling to use local loop unbundling:

155 Martin Cave, *Remedies for broadband services* (see page Div-378 of the file*).*

156 ERG, *Broadband market competition report*, Executive summary, 14 May 2005 (see page Div-190 of the file).

"El año 2004 también ha sido el punto de inflexión en el que aquellos ISPs que habían basado sus ofertas minoristas sobre el acceso indirecto de TESAU han alcanzado una masa crítica de conexiones y una experiencia en el mercado que les ha permitido comenzar a invertir en infraestructura de red, empezando así a migrar sus conexiones desde los accesos mayoristas de tipo indirecto (el comercialmente llamado GigADSL de TESAU) hacia accesos desagregados al bucle (total o parcialmente). La consecuencia directa es un mayor grado de control por parte de los ISPs de fases de producción anteriores, lo cual les permite diferenciar sus productos, competir en diferentes fases de la cadena de producción y, en última instancia, controlar todos los elementos que tienen incidencia en su margen comercial. En consecuencia, les permite diferenciar sus productos en términos de capacidad, calidad o coste, ampliándose de esta manera su margen de maniobra para competir en el mercado minorista. El mercado español de la banda ancha continúa, por tanto, el ritmo esperado en la 'escalera de la inversión'."[157]

Translation into English: "The year 2004 has also been the turning point at which those ISPs that had based their retail offers on TESAU's indirect access have reached a critical mass of connections and experience with the market allowing them to start investing in network infrastructure and thereby to start migrating their connections from the indirect types of wholesale access (the commercially named GigADSL of TESAU) to (fully or partially) unbundled access to the local loop. The direct consequence of this is a greater degree of control of the ISPs over preceding production phases, which allows them to differentiate their products, compete in different phases of the value chain and, ultimately, to control all of the elements that have an impact on their commercial margin. As a consequence, it allows them to differentiate their products in terms of capacity, quality and costs and thereby widens their room of manoeuvre for competing in the retail market. The Spanish broadband market therefore continues climbing the "ladder of investment "at the expected pace."]

(181) Furthermore, the fact that today Telefónica's competitors use a mix of different products does not invalidate the above conclusion that these products are not substitutable due to costly, time consuming and incomplete switching. The Commission does not dispute that some alternative operators have been progressively duplicating Telefónica's regional wholesale offer[158] in some specific parts of Spain as from September 2004. However, contrary to Telefónica's claims, this is not a substitution and is not an immediate process but rather a gradual one (as illustrated by the history of the Spanish broadband market in section IV.C.3 above). As explained above, it will not concern all the ADSL lines of Telefónica's competitors even in the long term, and will only be sustainable – even in the densest areas of Spain – if the competitor has achieved a critical mass of customers to justify the required heavy, risky investments (which is made more difficult if the competitor's margins are squeezed).

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157 See the letter of Telefónica of 02.03.05 (page TFCA-986 of the file).

158 This is for self-supply purposes. As mentioned above, Telefónica is the only provider of a regional wholesale product.

(182) Finally – as already indicated in the SO[159] – all the national regulators for electronic communications that have analysed the wholesale broadband markets in their respective countries on the basis of a competition law-based assessment, including those where local loop unbundling is far more advanced than in Spain, have also considered that access to the local loop and wholesale broadband access constitute distinct relevant markets even on a prospective basis[160]. Their conclusion has been based on similar reasons as those outlined above. There are no specificities in Spain that would warrant a different conclusion, in particular in the ex post context at hand, as illustrated by the fact that the Spanish regulator CMT[161] has considered that, even on a forward looking basis, local loop unbundling and indirect wholesale access (at regional and national level) are not substitutable.

3.2 Substitutability between the regional wholesale offer and the national wholesale offers

(183) Alternative operator wishing to provide retail ADSL services on a national basis using the regional wholesale product must sustain the one-off and the recurrent costs relating to the deployment and maintenance of a network allowing interconnecting with TESAU's indirect access points in 109 demarcations.

(184) In its *Reply*[162], Telefónica claimed that national wholesale and regional wholesale offers are substitutable. Telefónica holds that a small but significant increase in one of the wholesale products' price would result in an increase of the demand of the other wholesale product. In addition, Telefónica claims that alternative operators have been migrating from GigADSL to ADSL-IP in 2005. According to Telefónica, this is evidenced by the fact that, during 2005, the number of regional wholesale lines sold by Telefónica to alternative operators decreased while the number of national wholesale lines sold by Telefónica to alternative operators increased.[163] In particular, according to Telefónica in February 2006 […]% of the […] ADSL-IP lines were lines that had been migrated from GigADSL[162].

159 See paragraph 207 of theSO.

160 Commission Recommendation 2003/311/EC on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation (in accordance with Directive 2002/21/EC of the European parliament and of the Council on a common regulatory framework for electronic communications networks and services) identifies two separate markets for unbundled access to the local loop ("market 11") and for wholesale broadband access ("market 12") respectively. All regulators having analysed these markets have confirmed the Commission's view that in the ex ante context, these markets are separate from another.

161 CMT, decision of 1 July 2006 in case AEM2005/1454, Resolución por la que se aprueba la definición del mercado de acesso mayorista de banda ancha, el análisis del mismo, la designación de operadores con poder significativo de mercado y la imposición de obligaciones específicas, y se acuerda su notificación a la Comisión Europea.

162 See Telefónica's Reply, pages 45-48.

163 See Telefónica's reply to the letter of facts, pages 16-17.

(185) However, switching from national to regional wholesale products is not as immediate as Telefónica claims. Alternative operators that rely on national wholesale offers (and consequently do not have their own network) to penetrate the broadband retail market would not decide to make considerable investments in rolling out a network to the 109 PAI just because there is a small but significant non-transitory increase of the price of the national wholesale offer. The French regulator[164] has estimated that the costs for operators to switch from a national wholesale offer to a regional wholesale offer, i.e. to build the corresponding networks, would be between €150 and €300 million in France. Telefónica has invested more than […] from 2001 to 2006 in rolling out its network[165]. This is a considerable amount of money.

(186) In that respect it must be noted that the number of indirect access points for Telefónica's regional wholesale access offer is among, if not, the highest in the EU[166]. The higher the number of indirect access points necessary is to reach, the higher is the barrier to switching for alternative network operators.

(187) As to the reverse, i.e. switching from a regional to a national wholesale offer, this makes little sense from an economic point of view as confirmed by France Telecom España in its letter of 03.11.2006[167]. In view of the sunk costs, alternative operators that have already made the necessary investments to connect with the 109 indirect access points would capitalize on their investment and contract the regional wholesale offer and avoid concentrating traffic at a unique national access point. An alternative operator that has already made the necessary investments to use Telefónica's regional wholesale offer would only incur (apart from the network roll-out investments that are sunk) the operating costs composed of (i) wholesale charges ([…][168]) and (ii) incremental operating costs ([…][169]) whereas the charges for wholesale access at national level would be […][170]. Therefore, even in the case of a small, but significant non-transitory increase in the price of the regional wholesale access product, it is unlikely and indeed irrational from an economic point of view that operators that have already invested in the roll-out of a network would bear the opportunity cost of not using their network and use a national wholesale offer which does not allow them the same possibilities in terms of control over the quality of service of the retail product as the regional wholesale offer

164 Notification by the ART of the market for wholesale broadband access in the context of Article 7 of Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (FR/2005/0175).

165 Annex 2 of the letter of Telefónica of 17.10.06 (page TFCA-13126 of the file).

166 For example, in France it is considered that national coverage can be reached by interconnecting at 20 indirect access points.

167 In its letter, France Telecom España states that: " *una vez que un operador ha realizado las sustanciales inversions necesarias para abrir una demarcación GigADSL no tiene sentido económico alguno migrar los clientes de esa demarcación hacía el servicio ADSL-IP*". See page ISP-578 of the file.

168 See Table 18 below.

169 See Table 21 below.

170 See Table 24 below.

(188) Indeed, as explained by the CMT[171], the closer the alternative operators get to the final client the more control and independence from Telefónica they have. Since the regional wholesale offer requires that alternative operators build a network to interconnect with the 109 PAI from which access to the end-user is obtained, by their use of their own network these operators can exert a higher degree of control, and thus of differentiation, of their retail product than in the case of a national wholesale product. Conversely, since in the national wholesale product the traffic is tunnelled in Telefónica's IP network, the level of control that the alternative operator has over the entire access service is more limited.

(189) As to Telefónica's allegation that operators have switched a significant number of wholesale lines from GigADSL to ADSL-IP, it is also incorrect. Indeed, the fact that the number of regional wholesale lines sold by Telefónica decreased while the number of national wholesale lines increased does not necessarily imply that alternative operators migrated from GigADSL to ADSL-IP. It is true that the total number of regional wholesale lines sold by Telefónica decreased by […] lines[172] in 2005. Yet, this decrease is mainly explained by the decrease during the same period of the number of regional wholesale lines sold by Telefónica to […] ([…][173]). The regional wholesale lines contracted by […] were transformed by the latter into national wholesale lines sold to […]. Indeed, […] confirmed[174] that the only migration from GigADSL to ADSL-IP that it carried out took place in 2005 and was a migration of national wholesale lines provided by […] to […] on the basis of GigADSL to national wholesale lines provided by Telefónica (ADSL-IP). Therefore, the migration referred to by Telefónica is a migration between two different national wholesale products which are considered substitutable in the present decision. It is also incorrect that Ya.com-Albura migrated some […] (including […] in Barcelona and […] in Madrid) lines from GigADSL to ADSL-IP until February 2006[175]: the number of GigADSL lines contracted by Albura-Ya.com never exceeded […] until February 2006[176]. It is therefore impossible that Ya.com migrated […] lines from GigADSL to ADSL-IP.

(190) As explained above, alternative operators that have rolled out their networks to all, or a significant number of PAI of the regional wholesale offer will not consider the national wholesale product to be a substitute to the regional one. However, to the extent that operators have deployed networks stretching to some, but not to all of the 109 indirect points of presence of the regional wholesale offer, it will be rational for them to contract the regional wholesale offer where they have deployed their own networks, but to contract the national wholesale offer elsewhere. But even operators in possession of a network that extends to only some of the 109 indirect points of presence of the regional wholesale offer will not consider the national and regional wholesale products as substitutes, but as complements to one another.

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171 CMT Annual report 2005, page 114.

172 See annex 1 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4657 of the file). Internal provision (to TDATA or TERRA) is excluded.

173 See annex 1 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4657 of the file).

174 […].

175 As indicated by Telefónica in annex 7 of its letter of 21.07.07 (page TFCA-4384 of the file).

176 See annex 1 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4657 of the file).

(191) The regional and national wholesale access products cannot be considered as substitutes from the supply-side perspective either: an operator wishing to provide a national wholesale offer can do it on the basis of the regional wholesale offer, which entails considerable investments, but these investments bear no comparison with the investment in network and equipment associated with local loop unbundling which is the prerequisite up-stream input for an operator to be able to offer a competing regional wholesale access product to TESAU's GigADSL. This is evidenced by the fact that there are no competing regional wholesale products to Telefónica's GigADSL, whereas there are several providers of national wholesale broadband access offers.

(192) As to the argument raised by Telefónica in its reply to the letter of fact that in its Decision of 1 June 2006 (see (120) above), the CMT considered that its regional and national wholesale products belong to the same product market, it should be noted that the CMT in fact concluded that the two could become substitutable on a prospective basis[177]. In its prospective analysis, the CMT noted inter alia that "*dadas las mayores eficiencias en el transporte que es posible conseguir a través del protocolo IP, es possible, e incluso previsible, que el número de demarcaciones del servicio mayorista de concentración regional se reduzcan, disminuyendo por tanto, y siempre de forma prospectiva, las citadas inversiones necesarias para acceder a dicho servicio regional*"[178]. [*Translation into English*: " *Given the greater transport efficiencies that can be achieved via the IP Protocol, it is possible, and even foreseeable, that the number of demarcations of the regional wholesale service will be reduced and thereby, from a strictly prospective perspective, the mentioned investments that are needed to accede to that regional service will decrease."]*

(193) All of this suggests that in the CMT's view, from an ex post perspective (as is the case in the Decision at hand) these markets have not belonged to the same relevant market so far. Indeed, in its decision OM 2002/7330 of 10 July 2003 the CMT considered that wholesale access at ATM level (regional level) and wholesale access at IP level (national level) were not substitutable[179].

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177 When consulted on the measure that was notified to it under Article 7 of the Framework Directive (case ES/2006/0370), the Commission questioned the CMT's prospective market analysis, but did not open the Article 7(4) procedure on the grounds that even if two separate markets had been defined "no hubiese conducido a un resultado diferente en el análisis de PSM (poder significativo de mercado) (Letter of the Commission to the CMT dated 5 June 2006, SG-Greffe (2006)D/202422. Indeed, the CMT found Telefónica to have significant market power in the broader market defined.

178 Proyecto de medida relativa a la definición del mercado mayorista de acceso a banda ancha, el análisis del mismo, la designación de operadores con poder significativo de mercado y la propuesta de obligaciones específicas.

179 CMT, decisión of 10 July 2003 in case OM 2002/7330, Resolución sobre la comisión de practicas contrarias a la libre competencia por parte del Grupo Telefónica en la comercialización de servicios ADSL mayoristas.

(194) Regulators in countries where the broadband market has a similar structure (existence of ATM/IP wholesale access at local, regional and national level), in particular ARCEP in France[180] and OFTEL (now OFCOM) in the UK[181]) have also concluded to the lack of substitutability between wholesale access at regional level and wholesale access at national level.

(195) In view of the above, the regional and national wholesale access products do not belong to the same market. In any event, in the case at hand, the precise boundaries between the regional and national wholesale markets are also not determinative because Telefónica is dominant in both of them and a margin squeeze has been identified in relation to both the regional and the national wholesale access products.

3.3 Exclusion of cable technology from the relevant wholesale markets

(196) Apart from ADSL, there are several other networks providing retail broadband access technologies on the Spanish market: cable, satellite, fixed wireless access, fibre and power line communications. Even though the relevant retail market comprises all the standard broadband products, whether provided through ADSL or cable (or any other technology marketed on the "mass market"), access to these other networks cannot be considered as substitutable at the wholesale level.

(197) The providers of these access networks (i.e. other than ADSL) are not at present required by regulation to offer any wholesale broadband access product, nor do they provide such product on their own initiative.

(198) Even if cable (as well as other technologies distinct from ADSL) capacity is all self-supplied, the question arises as to whether the competitive constraint imposed through self-supply on cable platforms is significant enough to justify their inclusion in the wholesale markets.

(199) Demand-side substitution is constrained by the considerable costs that would need to be borne in case of switching from an ADSL wholesale product (mainly access at regional level and local level) to a cable-modem based wholesale product (and vice versa), and by the low coverage and the fragmentation of cable networks in Spain

[180] In July 2005, the Commission cleared a notification by the French regulator, ARCEP (previously ART) in which the latter defined a national wholesale market distinct from the regional wholesale market (FR/2005/0206).

[181] In December 2003, the British regulator defined a wholesale market for broadband origination (which corresponds to regional wholesale access in the present case) and a wholesale market for broadband conveyance (which corresponds to national wholesale access in the present case). See OTFEL, Wholesale Broadband Access Market, Identification and analysis of markets, Determination of market power and Setting of SMP conditions, Explanatory Statement and Notification; 16 December 2003.

(200) Firstly, it is important to note that contrary to retail customers, the potential clients of these cable operators' wholesale access products would hardly consider them as a substitute to the ADSL wholesale products. This is because the majority of those potential clients have already made the irreversible network roll out investments in order to interconnect to Telefónica's local exchanges (local loop unbundling) or PAI (regional wholesale access). The costs associated with switching from one technological platform to another are very significant, because they entail rolling out another network reaching the nodes of the alternative network (Telefónica's network and the cable networks do not have the same topology). These costs by far outweigh any incentive for switching in the case of a small but significant lasting increase in the price of the ADSL wholesale access products, and therefore the clients would be unwilling to switch to a cable modem based wholesale broadband access product even if such product was made available on the market in the future.

(201) Secondly, demand-side substitution is constrained by the difference of geographical coverage of the available cable and ADSL networks in Spain. Whereas nearly all of the Spanish population can get broadband access based on Telefónica's ubiquitous ADSL up-graded network based on conventional copper pairs, only about 40% of the population can get broadband access based on cable-modem[182]. This would not allow a purchaser of wholesale cable-modem access to offer broadband access services throughout the Spanish territory. Even locally, cable networks would not constitute an alternative since their coverage is lower than Telefónica's even in regions like Madrid or Cataluña[183].

(202) Not only is cable coverage much lower than ADSL coverage, but the cable networks are also fragmented and non-overlapping[184] which means that alternative operators would need to contract with several cable operators to serve about 40% of the population.

(203) The geographic coverage of the Spanish cable operators thus acts as a significant constraint on demand-side substitution between cable modem and ADSL wholesale access. This is particularly relevant for alternative operators that rely on a national ADSL wholesale product in non dense areas, because these are precisely the areas where cable operators have not deployed any network.

182 CMT 2005 Annual Report, p. 285.

183 See CMT 2005 Annual Report, page 101.

184 Ono operates in Comunidad Valenciana, Cantabria, Mallorca, Albacete, Murcia, Huelva, Castilla-Léon and Cádiz. Auna operates in Madrid, Cataluña, Andalucia (except Huelva and Cádiz), Canarias, Alicante, Aragón, Navarra and La Rioja. R Cable operates in Galicia. Euskaltel operates in País Vasco. Telecable Asturias operates in Asturias.

(204) While it is technically possible for cable operators to provide a wholesale broadband service to third parties equivalent to Telefónica's wholesale services (though with a limited coverage), there are a number of practical and economic difficulties preventing them from doing so. Investment at the head-end is necessitated to enable the provision of services to third parties such as additional equipment (routing and switching kit), the provision of collocation space with a robust power supply and adequate air conditioning. Other practical considerations include compatibility signals for additional traffic, standardisation of the set-top box modulation technique and billing integration. Each of these issues in itself can be addressed; however in combination they would require significant time and investment (in terms of sunk costs). Therefore, it is questionable whether devising such wholesale offer would be economically viable, as argued by the main Spanish cable operator itself (ONO)[185].In this respect, the Spanish regulator CMT considers that, even on a prospective basis, cable operators do not have the economic incentives to provide wholesale access to third parties:

> *"[N]o se considera que los operadores de cable tengan los suficientes incentivos económicos para ofrecer los recursos a terceros operadores que supondrán una competencia con sus propios servicios en el mercado minorista. En este sentido, cabe resaltar que estos operadores no han ofrecido, ni lo están haciendo ahora, ningún servicio mayorista de acceso de banda ancha a terceros operadores. […] Por otra parte, los movimientos en los precios mayoristas que se han sucedido en España tampoco han provocado la entrada de estos operadores, con lo que no puede esperarse su entrada hasta el próximo proceso de revisión."*[186]
>
> *[Translation into English: " It is not considered that the cable operators have sufficient economic incentives to offer resources to other operators that would be competing with their own services in the retail market. In this regard, it should be stressed that these operators have neither offered or currently offer, any broadband wholesale access service to other operators […] On the other hand, the movements in the wholesale prices that have taken place in Spain have not prompted market entry by these operators either, and it is therefore not expected that they will enter the market up to the next market review process."]*

(205) The Commission therefore considers that ADSL and cable modem wholesale offers are not substitutable. Cable modem is therefore excluded from the relevant wholesale markets.

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185 CMT decision AEM2005/1454 of 01.06.06: *"ONO desea destacar que en la actualidad la prestación de un servicio mayorista de acceso de banda ancha por parte de los operadores de cable es inviable desde el punto de vista técnico-económico tal como se expone en los documentos 1 y 2 que aporta en su contestación. […]ONO adjunta a sus alegaciones la siguiente documentación:Documento 1: Respuesta del Grupo Auna a "ERG's public consultation on wholesale broadband acces via cable";Documento 2: "Report on the Technical Validity of Bit-stream Access to Cable Networks for Applying ex-ante Regulation." Febrero 2005. Elaborado por la "European Cable Communications Association" de la cual ONO es miembro."*

186 CMT decision AEM2005/1454 of 01.06.06.

(206) The above considerations concerning the lack of substitutability between ADSL wholesale access offers and cable modem based broadband access are applicable to the other broadband access technologies mentioned above, whose penetration rate is even lower than that of cable. These are costly networks to build, and their size is as yet reduced, as witnessed by the fact that the number of end-users that they served represented less than 0.1% of the broadband lines in Spain in 2006[187].

(207) In any case, as will be established below, independently of the inclusion of alternative technologies (including cable) in the wholesale markets, these technologies have not exercised a constraint on Telefónica's ability to leverage its market power in the wholesale markets into the retail market.

3.4 Conclusion

(208) Two relevant wholesale markets have been identified for the purposes of this decision: the market for wholesale broadband access for which traffic is delivered at the regional level and the market for wholesale broadband access for which traffic is delivered at one national hand-over point. Both markets exclude cable modem (as well as other technologies distinct from ADSL) wholesale access services.

B. The relevant geographic market

(209) The relevant geographic market at both retail and wholesale level is the Spanish market[188], as also stated by the CMT on various occasions.[189] Telefónica did not contest this geographic market definition in its *Reply*.

(210) According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different[190]. The definition of the geographic market does not require the conditions of competition between traders or providers of services to be perfectly homogeneous. It is sufficient that they are similar or sufficiently homogeneous, and accordingly, only those areas in which the conditions of competition are 'heterogeneous' may not be considered to constitute a uniform market[191].

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187 See Table 1 above.

188 This definition of the geographic market conforms to that used by the CMT in its decisions regarding the Spanish retail and broadband market broadband market.

189 See the CMT decisions OM 2001/5678 on 19.09.02, AEM 2003/1095 on 18.12.03, AEM 2003/1632 on 24.06.04, AEM/2003/314 on 22.07.04, AEM 2004/1264 on 28.07.04.

190 *United Brands vs. Commission*, [1978] ECR 207, paragraph 44 – *Michelin vs. Commission*, [1983] ECR 3461, paragraph 26, *Alsatel v Novasam* [1988] ECR 5987, paragraph 15

191 *Deutsche Bahn v Commission*, [1997] ECR II-1689, paragraph 92. Case T-139/98 *AAMS v Commission*, [2001] ECR0000-II, paragraph 39.

(211) In the electronic communications sector, the geographical scope of the relevant market has traditionally been determined by reference to two main criteria[192], namely the area covered by the network and the existence of legal and other regulatory instruments. In the present case Telefónica's ubiquitous network has a national coverage and the regulatory obligations (wholesale access obligations) imposed on it have national application (i.e. they are homogeneous in all the territory).

(212) The remainder of this section is dedicated to the examination of the competitive conditions at the different levels of the value chain.

(213) At the retail level, Telefónica competes with (i) cable operators whose area of operation is limited to specific regions and (ii) ADSL alternative operators that construct their offers on the basis of wholesale inputs incorporating access to Telefónica's ubiquitous local network infrastructure

(214) Telefónica designs and advertises mass-market national retail broadband access offers and charges uniform prices throughout the territory. Its application of national tariffs has been based on its own commercial decision. Telefónica's uniform pricing means that any response by Telefónica to broadband access competition in a given area in the form of lower prices would apply throughout the whole territory of Spain. As a result, competing ISPs (irrespective of the geographic size and scope of their operations) set their prices in line with Telefónica national prices. Alternative ISPs must therefore position their offerings to match or undercut Telefónica's prices. Consequently, despite the existence of some sub-national "regionalising" factors on the supply-side (the fact that Telefónica –network operator with national coverage – competes with alternative operators whose coverage is more limited), the commercial drivers for the provision of service create an environment in which the competitive conditions are nationally homogeneous. Also, the progressive emergence of regionally differentiated offers from alternative operators from September 2004 onwards (see Table 6 and Table 7 above) have not prompted Telefónica to de-equalize its retail prices across the territory, so that homogeneous conditions have been maintained.

(215) Also, at wholesale level there are no differences in the monthly charges associated with each of the wholesale broadband access products provided by Telefónica. Whether regulated or not, the wholesale offers of the latter are being commercialised under homogeneous conditions throughout the Spanish territory.

(216) Telefónica is the sole provider of regional wholesale offer ("GigADSL") and largely determines the conditions of competition in these markets. This is not undermined by regulation; in fact the regulation applicable thus far has further contributed to making the conditions of competition of these offers homogeneous across the country.

(217) The situation is different for the national wholesale market where there are competing offers to those of Telefónica, especially in some areas. When assessing the geographic scope of this market, two periods can be distinguished. Until the end of 2002, competition in the national wholesale market was nearly inexistent. Telefónica was facing homogeneous conditions of competition throughout Spain.

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192 See for instance, Case IV/M.1025 Mannesmann/Olivetti/Infostrada, paragraph 17 – Case COMP/JV.23 Telefónica Portugal Telecom/Médi Telecom, paragraph 18.

(218) From 2003, some competition emerged in some of the 109 demarcations of the regional wholesale product where alternative operators connected themselves to the indirect access points (namely densely-populated areas). However, these alternative operators competing in the national wholesale market build their offers on Telefónica's regional wholesale and/or local loop unbundling offers which, as mentioned above, have been and still are made available under homogeneous conditions throughout the Spanish territory.

(219) In view of the above, the relevant geographic market at both retail and wholesale level is Spain.

C. The dominant position of Telefónica

(220) The Court of Justice has defined a dominant position as "a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers"[193].

(221) Enjoying a dominant position does not mean that there is no competitive pressure. The dominant position simply enables the relevant undertaking "*if not to determine, at least to have an appreciable influence on the conditions under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment*".[194]

(222) The following analyses the market power held by Telefónica in the relevant markets as defined above.

1 Dominance in the regional wholesale market

(223) Telefónica has been the only operator providing wholesale regional access in Spain since 1999. Its market share is therefore 100%. The purchasers of the regional wholesale offer are therefore unlikely to possess sufficient countervailing buyer power to undermine Telefónica's market power. Telefónica's customers will have countervailing buyer power only if they can exercise a credible threat of purchasing a competing regional wholesale product, but since no such product is available at present, Telefónica in fact enjoys a *de facto* monopoly in the relevant market.

(224) Potential entry into this market is characterised by considerable structural barriers. In order to be able to offer a regional wholesale offer such as Telefónica's, alternative operators must either build a brand new alternative local access infrastructure (which, as noted above, is uneconomical and is very unlikely to materialise over the foreseeable future) or contract Telefónica's unbundled local loops.

193 Case C–27/76 *United Brands and Others* v *Commission* [1978] ECR 207, paragraph 65.

194 Case 85/76 *Hoffmann-La Roche* v *Commission* [1979] ECR 461, paragraph 39.

(225) Indeed, there are significant sunk costs[195] for new operators seeking to offer regional wholesale broadband access services on the basis of Telefónica's unbundled local loops: these relate to investing in enabling network elements and equipment to support broadband traffic (e.g. DSLAMs) and to building a national network such as Telefónica's. The larger the amount of local exchanges to which the operators connect themselves and, thus, the broader the coverage, the more costly it is (see the cost estimates by alternative operators mentioned above in Section V.A.3.1). Also, building network infrastructure is not only very costly, but it is also time consuming.

(226) The above-mentioned costs that must be borne by competitors constitute a considerable market entry barrier. They prevent competitors from competing with Telefónica on an equal footing. Not only has Telefónica successively rolled out, amortised and broadband enabled its local access network, but it is also able to benefit from considerable economies of scale and scope of a magnitude that are not available for alternative operators. In particular, large economies of scale are present in both the DSLAM and ATM network elements of the services consisting in wholesale access at regional level. These economies of scale stem from the nature of DSLAM and ATM network investments: the greater number of end users at the concentrator level the lower the unit cost per line. An alternative operator seeking to enter the relevant market and to compete efficiently with Telefónica needs to secure a significant number of broadband customers in order to benefit from network effects and to achieve as low and efficient unit costs per line as Telefónica.

(227) Moreover, independently of whether the alternative operator has already rolled-out its own network, it will not be able to offer downstream services in the area covered by the MDF until the effective provision of all the services that are associated to local loop unbundling (collocation, internal tie and signal transfer). In that respect, even though Telefónica is required by regulation to grant access to its local network, there have been considerable obstacles and delays in the provision of the relevant services (see Section IV.F), to the effect that local loop unbundling can hardly be considered as a service that has been effectively available during the main part of the period covered by this Decision.

(228) The need to secure a sufficient number of broadband customers creates a further market entry barrier for operators that invest in local loop unbundling and could thereby exert a potential competitive threat to Telefónica in the regional wholesale market: as they are likely to have higher unit costs than Telefónica while they are rolling-out their local networks. The figure below shows that the number of end users connected to the exchanges where alternative operators were present at the end of 2004. This number is limited, which shows that alternative operators are still facing higher unit costs than Telefónica because of the presence of significant fixed costs in the provision of retail or wholesale broadband services on the basis of local loop unbundling.

[195] See section V.A.3.1 above.

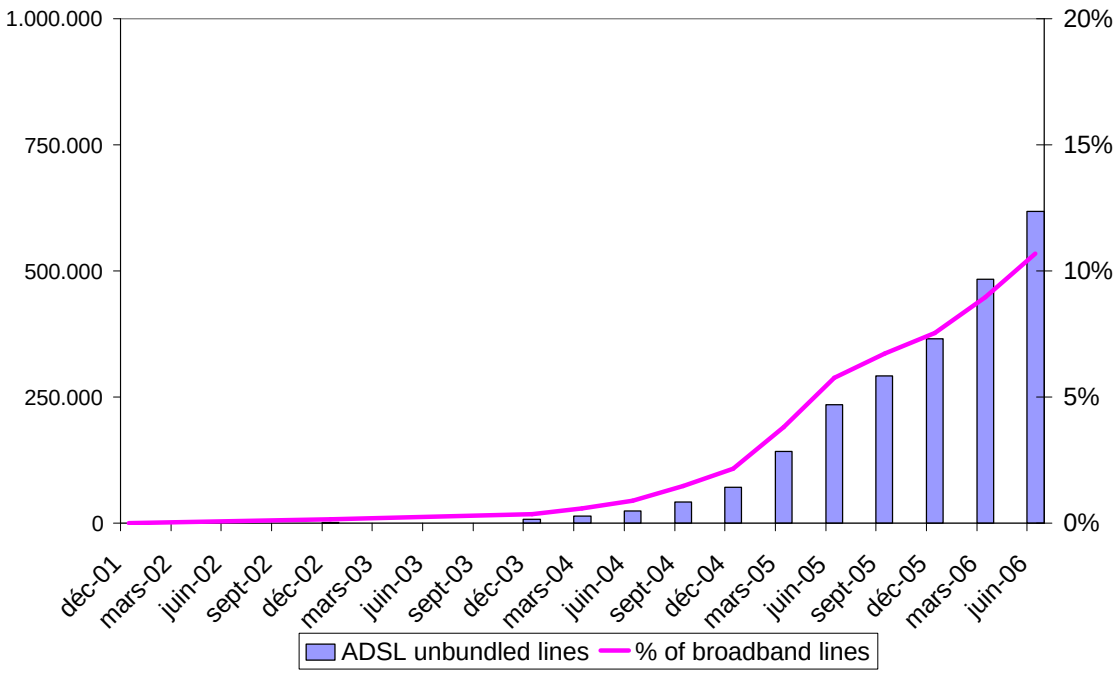
Figure 9 – Number of ADSL end users per exchange per operator since November 2004[196]

[…]

(229) This suggests that alternative operators currently investing in local loop unbundling (and which until now have not put on the market a regional wholesale offer competing with that of Telefónica) will not have a significant impact on competition in the regional wholesale market even in the intermediate term, and such impact will never be national. Telefónica's subsidiary in the UK has come to the same conclusion as to the effects of local loop unbundling in the British broadband market[197]: "*While Ofcom's attempts to encourage deeper facilities-based competition through Local Loop Unbundling (LLU) are welcome, the impact will not be immediate and will never be national. Full national competition in the form of fixed line broadband is only likely to be delivered through DataStream* [British Telecom's equivalent to GigADSL in the UK]."

(230) In the light of these considerations potential competition from operators having invested in local loop unbundling has remained limited during the period under investigation. This is evidenced in the following figure.

Figure 10 - Evolution of the number of unbundled local loops in Spain[198]



196 Number of unbundled lines divided by the number of local exchanges where the alternative operator is physically present. See annex 4 of the letter of Telefónica of 28.07.06 at pages TFCA-5661 to TFCA-5826 of the file.

197 See Telefónica UK Response to the Ofcom Consultation on a Draft Direction Setting the Margin between IPStream and ATM Interconnection Prices – 02.07.04 – page 1 (see page TFCA-3769 of the file).

198 See Table 60 in Annex A.

(231) As can be seen from this figure, local loop unbundling has remained almost inexistent until the end of 2004. Since then, even though there is evidence of alternative operators climbing up the "investment ladder" (moving from contracting the national wholesale offer to contracting the regional wholesale offer in 2003 and investing in local loop unbundling from the second half of 2004), these operators remain dependent on Telefónica's local access network, so that their wholesale supplier is also their main retail competitor.

(232) In view of the above, Telefónica is dominant in the regional wholesale market.

2 Dominance in the national wholesale market

(233) As described above, the national wholesale market consists in products offered by operators purchasing an input in the regional wholesale broadband market (GigADSL) and/or in the wholesale market for local access (local loop unbundling), upgrading it and selling it to ISPs which offer services in the retail broadband market.

(234) Due to the low level of contracting of local loops and of the regional wholesale access offer, there were no effective alternatives to Telefónica's national wholesale products until the last quarter of 2002. (see paragraphs (92) to (95) above) .

(235) However, this entry into the market has not eroded Telefónica's dominant position, as reflected in its market share that has remained constantly above 84% during the period under investigation. According to the Court of Justice, very large market shares, in excess of 50%, can be considered as strong indication of the existence of a dominant position.[199]

(236) Relative market shares and the relationship between the market shares of the undertaking concerned and of its competitors, especially those of the next largest, are held by the Court of Justice to be relevant factors in assessing a dominant position[200]. Since 2001, Telefónica's share has been more than 11 times bigger than that of its largest competitor (Auna until June 2005, France Telecom since June 2005).

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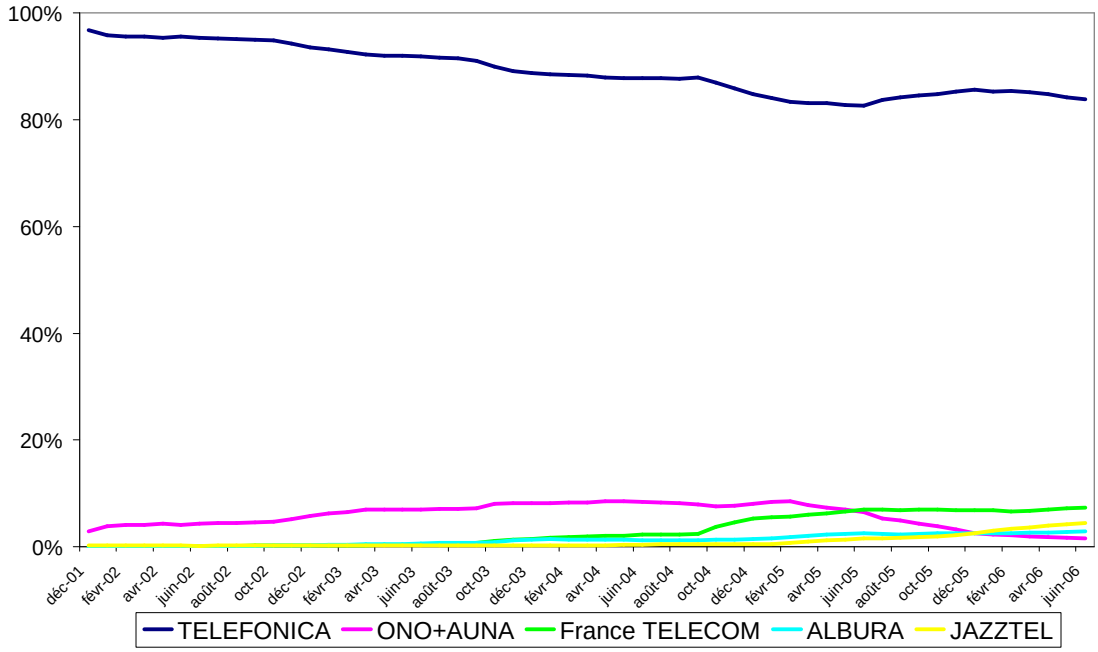
199 See Judgments of the Court of Justice in Case C-62/86 *Akzo vs. Commission* [1991] E.C.R. I-3359, at paragraph 60; Case T-228/97, *Irish Suguar vs. Commission*, [1999] ECR II-2969, paragraph 70, Case 85/76 *Hoffmann-La Roche vs. Commission* [1979] ECR 461, paragraph 41, and Jugements of the Court of First Instance Case T-30/89 *Hilti v Commission* [1991] ECR II-1439, paragraph 91; Case T-83/91 *Tetra Pak v Commission* [1994] ECR II-755, paragraph 109.

200 *Hoffmann-La Roche*, paragraph 48.

Figure 11 – Share in the national wholesale market (in terms of number of broadband connections, including self provision)[201]

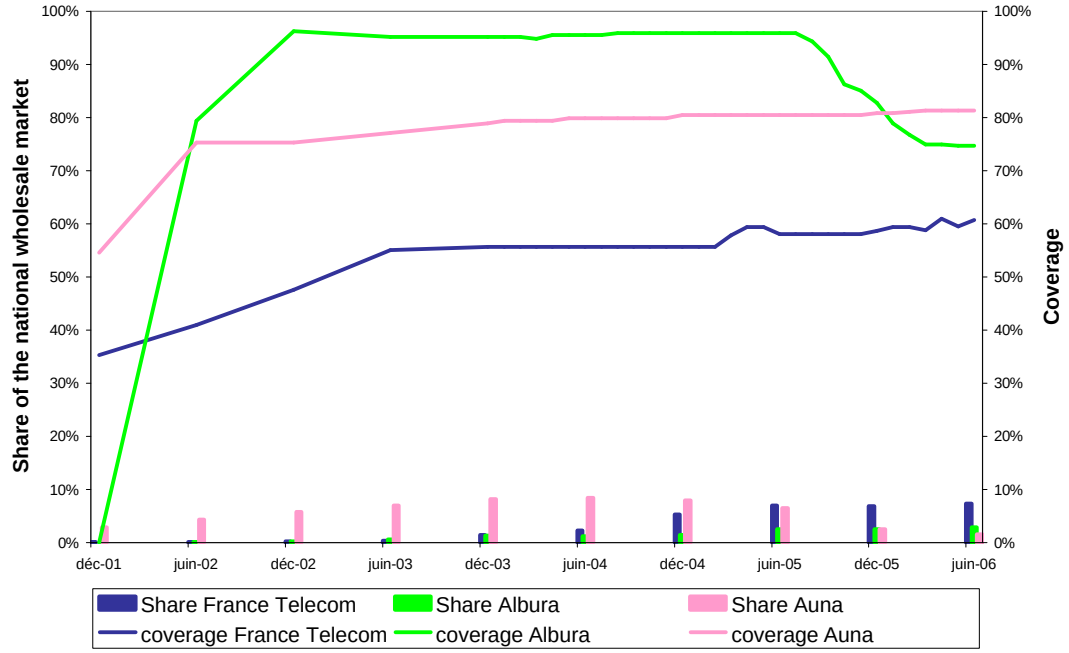


(237) Telefónica's dominance also draws from the distinctive features of the network services: economies of scale and scope and vertical integration. Indeed, as mentioned above, Telefónica benefits from economies of scale and scope of a magnitude that is not available for alternative operators in the regional wholesale market. Similar economies of scale are present in the national wholesale market through the high fixed/sunk costs associated with building and maintaining an IP network. Telefónica is able to recover these costs over the high volumes of traffic that are generated by its large customer base (both in this merchant market and those self-provisioned at the retail level) and which result in lower unit costs for its IP transport compared with a new operator with small traffic volumes.

(238) When deciding to which point of indirect access ("PAI") to connect, each alternative operator has to assess the volume of traffic which it is likely to obtain at a given indirect access point. The figure below presents the percentage over total lines (coverage) served by the indirect access points to which the alternative operators have rolled-out their networks and their corresponding market share in the relevant market (including self provision).

201 Alternative operators: local loop unbundling + regional wholesale lines contracted with Telefónica.
Telefónica: TESAU's retail lines + national wholesale lines (including internal provision to TERRA and TDATA).
Sources: annexes 1 and 2 of the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4661 of the file) for the wholesale volumes and *ADSL scorecard* (see footnote 793 below) for TESAU's retail volumes.

Figure 12 – Coverage and share of the national wholesale market (including self provision) of the main alternative network operators[202]



(239) The mere presence of operators at the different indirect access points and the consequent existence of competing national wholesale access offers do not *per se* undermine Telefónica's dominance in as far as the latter is derived from other factors such as economies of scale. As can be seen, one operator (Albura) has reached a coverage approaching 100% (it has never been operational in 11 out of 109 indirect access points), but its share has never exceeded 3% during the period under investigation. Therefore it cannot cover its network roll-out and maintenance costs over as large a customer base as Telefónica, which is one of the reasons why Albura was obliged to withdraw operations from 55 indirect access points[203]. Another operator (Auna) has been able to propose its wholesale services with acoverage of 80%, but its market share never exceeded 8% and declined to 2% in June 2006.

(240) Telefónica's dominance in the national wholesale market is further corroborated by its ability to influence significantly the overall availability of competing wholesale products. Indeed, since all available wholesale broadband access products are based on Telefónica's local loops, any competing wholesale product is necessarily built on one of Telefónica's wholesale products (LLU or regional wholesale access), they will not only depend on the effective availability of unbundled local loops and/or regional wholesale access but also on the economic conditions (in particular, existence of a margin squeeze in respect to the retail market) under which the latter are provided.

202 Shares: see Figure 11 above.
Coverage: demarcations where each alternative operator contracts at least one GigADSL line with Telefónica. See Annex 3 of the letter of Telefónica of 28.07.06.

203 See the letter of Albura to Uni2 of 03.02.05 (Annex 1 of the letter of Uni2 to the Commission of 07.04.05 (see page ISP-407 of the file).

(241) Indeed, the mere existence of an alternative wholesale product does not necessarily mean that such substitute would allow alternative ISPs to replicate sustainably Telefónica's retail prices in the whole territory. Take the example of one national wholesale product of Telefónica N_1 and a close substitute N_2 offered by an alternative operator on the basis of regional wholesale access. If regional wholesale access is not made available by Telefónica (whether this would be objectively justified or not), N_2 will not be available to the alternative ISP either. This is particularly relevant in the present decision, since as established above, the unavailability of the services associated with local loop unbundling has constrained the ability of alternative operators to compete with Telefónica in the national wholesale market on the basis of local loop unbundling. Moreover, if there is a margin squeeze between the regional wholesale product of Telefónica and the latter's retail offers, no alternative operator as efficient as Telefónica would be able to offer on a profitable basis N_2 at a price that would enable the alternative ISP to replicate profitably Telefónica's retail prices. This is because that operator would have to ensure (i) a margin between the regional wholesale access product it purchases from Telefónica and N_2 (that it sells to the ISP) in order to be profitable and (ii) a margin between N_2 and the retail level so that the purchaser of N_2 would also be profitable. This is particularly relevant in the present case, since as will be established below, there is a margin squeeze between the wholesale regional and the retail products. This allows Telefónica, thanks to its control of an infrastructure inherited from the former legal monopoly and that is not easily replicable, to leverage its dominant position from the lower network levels (local loops and regional wholesale offer) to the national wholesale market.

(242) In view of these considerations, Telefónica is also dominant in the national wholesale market.

3 Dominance in the retail market

(243) As the case law of the Community courts clearly confirms (see section VI.A below), it is not necessary under Article 82 to demonstrate that Telefónica is dominant in the relevant retail market for proving the existence of an abuse of dominant position in the form of a margin squeeze.

(244) However, the Commission has completed its analysis by also establishing that Telefónica is dominant in the retail market in view of the following: (i) Telefónica has continuously been holding a stable leading market position in the retail market that surpassed by far that of its competitors; (ii) as the former incumbent, Telefónica enjoys a strong recognised brand, an already established customer base in other mass markets and an already installed network of sales outlets enabling it to exercise significant pricing power in the retail market; (iii) via its wholesale inputs, Telefónica controls the conditions of entry and expansion of ADSL competitors in the retail ADSL market and (iv) cable operators – which do not rely on Telefónica's wholesale inputs for the provision of retail broadband services – have not exercised a pricing discipline on Telefónica in the retail market.

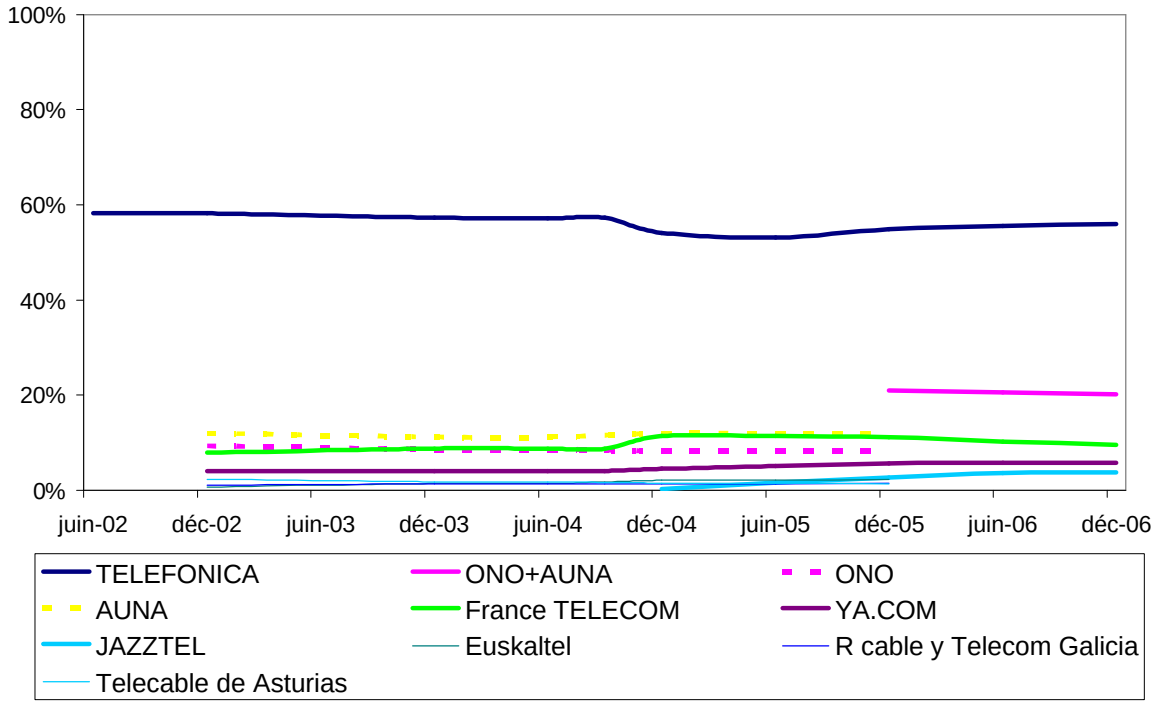
3.1 Telefónica has been holding a stable leading position in the retail market that surpassed by far that of its competitors

(245) During the whole period under investigation, Telefónica remained by far the largest supplier of services in the retail mass market with a market share around 55% in terms of number of end users (maximum: 58% and minimum 52%) and above 60% in terms of revenues. The market share even increased from June 2005 to June 2006.

(246) From 2001 to 2004, Telefónica's revenues have been more than 9 times greater than those of its largest competitor in the ADSL segment (France Telecom) and more than 14 times than those of Ya.com. In 2005, Telefónica's revenues were more than 6 times greater than those of France Telecom and 12 times greater than those of Ya.com.[204] The significant increase of France Telecom's market share in 2003 is in fact explained by its acquisition of Eresmas (i.e. Auna's ISP which enjoyed the same market share as France Telecom) at the end of 2002. The significant increase of Ono's market share in 2005 and 2006 in fact reflects the fact that Auna and Ono merged at the end of 2005.

[204] See CMT decision AEM 2003/1632 of 24.07.04 (page CMT-75 of the file), CMT Annual Reports for 2003 (page 359), 2004 (page 396) and 2005 (page 365).

Figure 13 – Shares in the retail market (in terms of number of customers)[205]



(247) In its *Reply*, Telefónica argued that market shares are not a reliable indicator in the context of a fast growing market.[206] However, the Commission considers that, at the starting date of the infringement, the retail market could not be considered as an emerging one and in any event had certainly gone beyond the launch of experimental phase (see section VI.F.2.1 below). In any event, the retail market did not show signs of marked instability during the period at issue. On the contrary, a rather stable hierarchy was established with Telefónica at its head already in September 2001[207].

205 The size of the relevant retail market and Telefónica's retail volumes are estimated in Table 60 in Annex A. The volumes of alternative ISPs are given by:
- June 2002: CMT decision OM 2001/5678 of 19.09.2006 (see page 36 of the decision)
- December 2002: letter of Wanadoo of 24.09.03 (page ISP-161of the file), letter of Ya.com of 17.09.03 (page ISP-188 of the file), letter of Jazztel of 18.09.03 (page ISP-90 of the file); letter of Auna of 18.09.03 (page ISP-30 of the file), CMT, Consulta pública sobre definición y análisis del Mercado de servicios de acceso y tráfico a redes de datos mediante conexión permanente desde ubicación fija. 11.06.04 (see page CMT-3999 of the file)
- December 2003: CMT Annual Reports for 2003 (page 360).
- December 2004: CMT Annual Reports for 2004 (page 397).
- December 2005: CMT Annual Reports for 2005 (page 367).
- June 2006: See the Annual Reports for 2006 of France Telecom (page 51), Ono (page 55) and Jazztel (page 6).

206 See Telefónica's reply, pages 51-55

207 In *France Telecom*, the Court of First Instance upheld the Commission's finding of Wanadoo's dominance on the basis of, *inter alia*, high and stable market shares. See paragraph 108 of the judgment.

(248) Telefónica also argued that the retail market share should be looked at from a dynamic perspective[208] by assessing not only actual but also potential competition in the future. In that regard, it must be pointed out that Telefónica itself considered that its market share would be increasing by six percentage points (6%) from 2003 to 2006, while the market share of cable operators would remain constant and the market share of ADSL comptetitors would decrease by six percentage points (6%)[209]. Such evidence shows that Telefónica considered potential competition to be limited.

(249) Telefónica also argued that its market has been declining and is below EU average[210]. As held by the Court of First Instance, a decline in market shares which are still very large cannot in itself constitute proof of the absence of a dominant position[211]. Moreover, as established by the Commission in its 11th Implementation Report[212], both the shares of the retail market and the share of the retail ADSL segment that Telefónica held in 2005 were above EU-15 and EU-25 average[213]. Finally, Telefónica has been able to increase those shares in 2005 and 2006.

(250) Telefónica also argued[214] that the following factors discount Telefónica's market position: (i) the fact that the retail market is characterised by aggressive price competition; (ii) the fact that effective competition exists in the market and (iii) the fact that there is potential for competition in the form of expansion or new entries and in the form of alternative technologies. In the remainder of this section, the Commission responds to Telefónica's arguments.

3.2 Telefónica has strong pricing power

(251) As the former monopoly, Telefónica enjoys: (i) a strong and recognised brand in the Spanish telecommunications sector; (ii) an already established strong commercial relationship with the Spanish end users thanks to its continued quasi monopolistic position in the retail market for fixed telephony access (94% in 2001[215], 89% in 2003[216]) and (iii) an already installed network of sales outlets which gives Telefónica a direct access to consumers for the commercialization of its retail broadband products. This "posición como incumbente" has been put forward by TESAU itself as the main strength of the company in the growing retail market for broadband access[217].

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208 See Telefónica's Reply, page 55.

209 See Telefónica's strategic plan for 2005-2008 in the letter of Telefónica of 22.08.06 (slide 14 – page TFCA-9036 of the file).

210 See Telefónica's Reply, pages 58-59 referring to 11th Implementation Report (see footnote 650 below).

211 See, to that effect the judgment of the Court of First Instance in case T-24/93 to T-26/93 and T-28/93 Compagnie maritimime belge transports and Others vs. Commission [1996] ECR II-1201, paragraph 77.

212 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, 11th Report on the Implementation of the Telecommunications Regulatory Package, 20.02.06 ("11th Implementation Report"), available at: http://preprod.europa.infso.cec.eu.int/information_society/policy/ecomm/implementation_enforcement/annualreports/11threport/index_en.htm

213 See Figure 65 of Annex 2 of the 11th Implementation Report.

214 See Telefónica's Reply, pages 52 and 59 to 74.

215 CMT Annual Report for 2001, page 78.

216 CMT Annual Report for 2003, page 320.

217 See annex 11i of the letter of Telefónica of 21.07.06: '*La oportunidad de la banda ancha en la operadoras fijas*', slides 28-29 (pages TFCA-4541 and TFCA-4542 of the file).

(252) Early entry in the telecommunications sector confers a major advantage on a firm where it has been able to establish a significant preference for its brand in the eyes of the consumer, not necessarily by providing an objectively better service than its competitors, but simply because it has enjoyed a monopoly in many mass markets of the telecommunications sector for many years[218]. New entrants must make a much bigger effort to acquire customers if they wish to make up for lost time and bridge the resulting image gap and confer on their broadband service the same brand recognition as that of the dominant undertaking's flagship offering. This has conferred an advantage on the incumbent and created a handicap for new entrants, whose advertising and promotion costs are generally higher and less effective than the incumbent's[219].

(253) Telefónica's pricing power is illustrated by the fact that the incumbent has been able to increase its market share from December 2004 (54%) to September 2006 (55%) despite its levying of retail prices that are between 20 to 25% higher than those of its competitors. According to Telefónica itself[220], this increase of market share is explained by the success of its commercial policy.

3.3 Via the wholesale inputs, Telefónica controls the conditions of entry and expansion in the ADSL segment of the retail market

(254) In its *Reply*, Telefónica argued[221] that the retail market has a high number of ADSL operators belonging to international groups that are able to discipline Telefónica's competitive behaviour. According to Telefònica, ADSL competitors have no limits to expansion and are able to offer retail services on the basis of local loop unbundling.

(255) Yet, via the wholesale inputs, Telefónica has been able to control the conditions of entry and expansion in the ADSL segment of the retail market.

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218 In this regard, it is worthwhile noting that Telefónica indeed benefits from a better perception by consumers that its competitors when it comes to the quality/price ratio of its offering, and this despite levying charges that are 20-25% above that of its competitors (according to a study released in January 2006 by the Unión de Consumidores Españoles, quoted by the CEO of TESAU at the Fifth Investor Conference in November 2006).

219 William S. Comanor and Thomas A. Wilson, 'Advertising Market Structure and Performance', review of Economics and Statistics, volume XLIX, November 1967.

220 See Telefónica's Reply to the LF, page 42.

221 See Telefónica's *Reply*, pages 59-66.

(256) Indeed, it is uneconomical to duplicate Telefónica's local access network, which was rolled out during decades protected by special rights and funded by monopoly rents from the provision of telecommunication services. Therefore, alternative ADSL operators have no choice but to contract one of the available wholesale products. All those wholesale products are built on one of Telefónica's wholesale inputs. As of end of December 2003, the quasi-totality ([…]) of Spain's ADSL end-users purchased a retail product which was built on Telefónica's regional wholesale product and the totality of them purchased a product which was built on Telefónica's local access network[222]. As of December 2004 (resp. June 2005), still […]% (resp. […]%) of Spain's ADSL end-users purchased a retail product which was built on Telefónica's regional wholesale product and the totality of them purchased a product which was built on Telefónica's local access network[222].

(257) The mere existence of wholesale products does not necessarily mean that the barriers to entry and to expansion in the retail market are low. Indeed, Telefónica has always been in the position to influence significantly the availability of wholesale products that its retail ADSL competitors need in order to replicate both technically and economically its retail offers.

(258) Firstly, alternative ISPs were not offered a national wholesale service on the same conditions as Telefónica's downstream activities throughout the initial period of the life of broadband in Spain: throughout 2001 and in the first months of 2002 – a period during which Telefónica enjoyed a monopoly in all the wholesale markets – which gave Telefónica a considerable competitive edge during that crucial period. Telefónica's national wholesale product ADSL-IP that was originally implemented within the Telefónica group was only made available to alternative operators towards May 2002[223], because the CMT ordered TESAU not to discriminate its retail ADSL competitors[224]. Telefónica's other national wholesale product ADSL-IP Total (formerly called Megavia) did not allow alternative ISPs to offer "self install" retail internet access services until January 2002[225], whereas TERRA was able to launch the ADSL 256/128 Kbit/s modality with micro filters already in October 2001. Self-installing offers had a big impact in the development of retail ADSL products in 2001 and 2002 because they allowed the ISPs to decrease very significantly the one-off charge to be paid by the new subscribers.

(259) Moreover, Telefónica constructed its regional and national wholesale products in such a way that differentiation both from a quality and a price point of view was impossible. The more complete the wholesale service provided by Telefónica on which the ADSL retail offer is built, the less room there is for alternative operators to differentiate their offer quality-wise from that of Telefónica. The table below shows that it has been impossible for Telefónica's competitors to compete on quality (i.e. by increasing the speed without increasing the price) on the basis of GigADSL or ADSL-IP.

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222 See Annex A below.

223 Letter of Telefónica's of 22.09.03 (see pages TFCA-49 and TFCA-50 of the file).

224 Decision of the CMT MTZ 2001/4038 of 29.04.02 – Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001 (see page CMT-618 of the file).

225 Letter of Telefónica of 22.09.03 (see pages TFCA-44 and TFCA-45 of the file).

Table 13 Telefónica's retail and wholesale tariffs as of June 2005[226]

	1 Mbps	2 Mbps	4 Mbps	8 Mbps
GigADSL	€ 22.32	€ 44.18	€ 74.85	€ 84.88
ADSL IP	€ 29.99	€ 61.59	€ 101.99	€ 127.97
Retail	€ 39.07	€ 74.98	€ 120.00	€ 150.57

(260) This means that Telefónica has always been the leader in terms of innovation (duplication of the speeds in 2004 and 2005, launch of semi-flat products). Alternative operators were obliged, until the take up of the unbundling of the local loop from the last quarter of 2004 only (in some limited geographical areas of Spain), to offer the same retail ADSL product as Telefónica's to their end users. The only operator which was given the opportunity to differentiate from TESAU's retail offers was Ya.com which enjoyed a preferential treatment in the provision of Megavia[227], by being offered – contrary to Wanadoo – a wholesale product enabling it to market a retail product at the speed of 128 Kbps ('Modalidad Economica')[228].

(261) When Telefónica duplicated the speeds of its retail products in 2004, its strategy was to maintain the level of its nominal prices and increase the quality of its product. It decided not to offer any more the lowest bandwidth 256 Kbps to its wholesale customers (GigADSL, ADSL-IP and Megavia), while the majority of its retail ADSL competitors asked for this modality to be maintained in order to be able to offer a more affordable retail product (though at a lowest speed)[229] to their end-users. Telefónica's competitors were therefore obliged to align their strategy on Telefónica, i.e. duplicate the speeds and not offer the lowest bandwidth anymore.

(262) The main tool used by alternative internet service providers has therefore mainly been the price and price structure of their retail products. However, as with product differentiation, the need to contract Telefónica's wholesale product makes it difficult for most competitors to successfully differentiate in prices: the more complete the wholesale product contracted, the less margin there is for operators to add efficiency and therefore decrease prices to an appreciable extent (see the table below):

226 See the letter of TESAU of 17.03.05 (pages TFCA-1031, TFCA-1056 and TFCA-1057 of the file). The GigADSL prices remained unchanged until the duplication of the speed of TESAU's retail products in July 2005.

227 See contract for the provision of Megavia of 23.12.03 between Ya.com and TDATA. (Letter of Ya.com of 15.06.05 – see page ISP-417 of the file). Such 'modalidad economica' is not offered to Wanadoo – See contract for the provision of Megavia of 21.05.01 between Wanadoo and TDATA Such contract still has not been modified since that data (Annex 2 of the letter of Uni2 of 06.07.05 – see page ISP-479 of the file).

228 As of 31.03.04, this product represented 13% of Ya.com's subscribers (See letter of Ya.com of 06.04.05 – page ISP-313 of the file).

229 Decisión MTZ - 2001/4038 of the CMT on 29.04.02 ("OBA 2002") - Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001. See allegations of Uni2&Wanadoo, Tiscali, BT and Albura (see page CMT-1609 and CMT-1610 of the file).

Table 14 – Proportion of Telefónica's wholesale prices in its retail prices in 2005[230]

	ADSL-IP Total	ADSL-IP	GigADSL
% TESAU's ARPU	[…]	[…]	[…]

(263) In a price driven market where Telefónica holds pricing power, alternative operators need to be able to undercut Telefónica's prices and/or offer higher quality or innovative retail products for expanding their market share. By setting its retail and wholesale prices in a proportion that does not allow as efficient ADSL operators to be profitable (see section VI.D.2 below), while being at the same time profitable on an end-to-end basis, Telefónica has been able to influence significantly the conditions of entry and expansion in the retail ADSL segment.

(264) Telefónica's control of the regional and national wholesale inputs implies that until ADSL competitors were able to offer retail products based on local loop unbundling, Telefónica's competitors were marketing the same ADSL product as Telefónica at a very similar price. Consequently, the constraint on Telefónica's competitive behaviour exerted by alternative ADSL operators was almost inexistent until the take up of local loop unbundling as from September 2004.

(265) However, in addition not to being a substitute to Telefónica's other wholesale inputs and being local loop unbundling an extremely expensive and risky option (see section V.A.3.1 above), this last wholesale product also depends on Telefónica, which only made it available with significant delays (see section IV.F above). This means that Telefónica has also been in a position to constrain the ability of its competitors to base their retail offers on local loop unbundling.

(266) A a matter of fact, local loop unbundling has been limited in time and in geographic scope. As of September 2004, France Telecom offered retail services on the basis of local loop unbundling in […] % of the territory and Ya.com did not offer retail services on the basis of local loop unbundling. As of June 2005, France Telecom offered retail services on the basis of local loop unbundling in […] % of the territory and Ya.com in […] % of the territory. As of June 2006, France Telecom offered retail services on the basis of local loop unbundling in […] % of the territory and Ya.com in […] % of the territory[231]. This means that Telefónica's competitors which seek to operate on a national basis and have been able to self-provide Telefónica's regional wholesale offer in some parts of Spain thanks to local loop unbundling still relied on Telefónica's regional and national wholesale products.

(267) In any event, even the late and progressive development of local loop unbundling did not constrain Telefónica in the retail market, as illustrated by the growth of Telefónica's market share in 2005 and 2006 despite its levying of retail prices that are among the highest (if not the highest) in the EU (see section 2.2 below).

230 See section VI.D.1 below.

231 See Figure 5 and Figure 6 above.

3.4 Cable-modem operators have not exercised a pricing discipline on Telefónica at the retail level

(268) Telefónica also submitted[232] that there are a number of competing alternative technologies which provide a high competitive contraint on Telefónica's competitive behaviour.

(269) Although Telefónica does not control the cable operators' access to wholesale inputs, the latter have not exercised a pricing discipline on Telefónica in the retail market.

(270) Cable operators entered the retail broadband market through their own infrastructure. This infrastructure was built following the award of a licence per region that the Spanish Government tendered in 1995. Cable operators who won the tender could operate on an exclusive basis in the relevant region until 1998, when the market was liberalized. From 1998, cable operators could offer their services in other regions than the one they were originally licensed to operate in. However, in order to do so they had to build their own infrastructure in those other regions because cable is not subject to regulation which would oblige operators to give access to their own infrastructure and currently wholesale access offers to cable infrastructure are inexistent.

(271) To build a cable infrastructure is very expensive and almost none of the cable operators active in the region they were originally licensed to operate in have extended their business to another region (except through merger). The activities of these operators have also been affected by serious obstacles in obtaining rights of way.

(272) The result is that while Telefónica's ADSL infrastructure covers almost all population in the whole national territory, only about 40% of the polulation can get a cable-modem based broadband access. Thus the competitive constraint represented by the cable operators has been constrained by the difference of geographic coverage between the cable operators' and Telefónica's networks and the fact that cable networks do not overlap (see section V.A.3.3 above), which means that Telefónica never competes against more than one cable operator at the same time.

(273) Moreover, the commercial relationship with the Spanish end-users that Telefónica has inherited from its former monopoly position in the Spanish telecommunications is incomparable: as of 2002 (resp. 2005), only 2.06 million (resp. 4.21 million) HFC pairs (cable technology) were in service[233] compared to 16.15 million Telefónica's PSTN pairs. This means that almost all Spanish households subscribe to a service with Telefónica but less than 12% (resp. 27%) of the Spanish households subscribe to a service with a cable operator, which illustrates the reduced constraint that cable operators can exert on Telefónica's ability to leverage its power into the retail broadband market. The barrier to entry in the retail broadband market was much lower for Telefónica that already had a commercial relationship with almost all Spanish end users.

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232 See Telefónica's *Reply*, pages 63-64 and 70-72.

233 See CMT Annual Reports for 2002 (page 322) and 2005 (page 285).

(274) When entering the broadband retail market, cable operators were faced with two choices: (i) undercut significantly Telefónica's retail prices in order to gain market share; or (ii) remain aligned (or slightly lower) on Telefónica's prices. In fact, they have chosen the second option and have not exercised a pricing discipline on Telefónica. This is illustrated by the fact that, even though they were the early movers in the relevant retail market[234], their share has been constantly decreasing since 2002 (27% of the broadband access lines at the end of 2002, 26% at the end of 2003 and 25% at the end of 2004, 23% at the end of 2005, 21% at the end of 2006)[235], and this in spite of the fact that the cable operator's prices have always been either aligned (until late 2004) or lower than those of Telefónica[236].

(275) The cable operators' strategy may be explained by the fact that the price decrease necessary to gain market share would have been too large given Telefónica's pricing power and the limited coverage of the cable networks.

(276) The considerations concerning cable technology are applicable to the other broadband access technologies mentioned by Telefónica in its defence. It is recalled that many of these technologies are characterised by very high costs of provision which make them suitable for the provision of tailor-made products only. In any event the size of those alternative technologies is negligible, as witnessed by the number of end-users that they served at the end of 2005 (below 1% of the total retail broadband lines in Spain). Telefónica's own business plan shows that it does not expect any competitive constraint from any of those alternative technologies[237].

3.5 Conclusion

(277) In view of these considerations, Telefónica is also dominant in the retail market.

234 In 1999, there were 68 000 broadband lines under cable technology compared to 700 under ADSL technology (See Telefónica's *Reply*, at page 203).

235 See Annex A below.

236 See Telefónica's *Reply*, at annex 4.

237 See Telefónica's strategic plan for 2005-2008 in the letter of Telefónica of 22.08.06 (slide 14 – page TFCA-9036 of the file).

VI. THE ABUSE

A. Introduction

(278) The fact that an undertaking holds a dominant position is not in itself contrary to the competition rules. However, an undertaking enjoying a dominant position is under a special responsibility not to engage in conduct that may distort competition.[238]

(279) The European Court of Justice has defined the concept of abuse under Article 82 of the Treaty in the following terms[239]: "The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market where, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition normal competition in products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition."

(280) It follows from the nature of the obligations imposed by Article 82 of the Treaty that, in specific circumstances, undertakings in a dominant position may be deprived of the right to adopt a course of conduct or take measures which are not in themselves abuses and which would even be unobjectionable if adopted or taken by non-dominant undertakings.[240] Similarly, the Court of Justice has held that the strengthening of the position of an undertaking may be an abuse and prohibited under Article 82 of the Treaty, "*regardless of the means and procedure by which it is achieved*", and even *"irrespective of any fault*".[241] Article 82 EC is aimed not only at practices which may cause prejudice to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure, such as is mentioned in Article 3(1)(g) EC.[242] According to consistent case-law, the list of abusive practices contained in Article 82 does not exhaust the methods of abusing a dominant position prohibited by the EC Treaty.[243]

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238 See Judgment of the European Court of Justice of 9 November 1983 in Case 322/81, Michelin v Commision [1983] ECR 3461, at paragraph 57.

239 Judgment of the European Court of Justice of 13 February 1979 in Case 85/76, Hoffmann-La Roche [1979] ECR 461, at paragraph 91.

240 See, to that effect, Case 322/81 Michelin v Commission [1983] ECR 3461, paragraph 57, and Case T-111/96, ITT Promedia v Commission [1998] ECR II-2937, paragraph 139.

241 See Case 6/72 Europemballage and Continental Can v Commission [1973] ECR 215, paragraphs 27 and 29; Case T-128/98 Aéroports de Paris v Commission [2000] ECR II-3929, paragraph 170

242 Judgment of 15 March 2007, Case C-95/04 P, British Airways, paragraphs 106-107; Case 6/72 Europemballage and Continental Can v Commission [1973] ECR 215, paragraph 26.

243 Case C-95/04 P, British Airways, paragraph 57; Case 6/72 Europemballage and Continental Can v Commission [1973] ECR 215, paragraph 26; Joined Cases C-395/96 P and C-396/96 P Compagnie maritime belge transports a.o. v Commission [2000] ECR I-1365, paragraph 112.

(281) In Industrie des Poudres Sphériques, the Court of First Instance defined a margin squeeze as follows: "Price squeezing may be said to take place when an undertaking which is in a dominant position on the market for an unprocessed product and itself uses part of its production for the manufacture of a more processed product, while at the same time selling off surplus unprocessed product on the market, sets the price at which it sells the unprocessed product at such a level that those who purchase it do not have sufficient profit margin on the processing to remain competitive on the market for the processed product"[244].

(282) Similarly, the Commission held in Napier Brown vs. British Sugar[245] that "[t]he maintaining, by a dominant company, which is dominant in the markets for both a raw material and a corresponding derived product, of a margin between the price which it charges for a raw material to the companies which compete with the dominant company in the production of the derived product and the price which it charges for the derived product, which is insufficient to reflect that dominant company's own costs of transformation […] with the result that competition in the derived product is restricted, is an abuse of a dominant position."

(283) It follows from the above that a margin squeeze is a disproportion between an upstream and a downstream price[246]. Contrary to what Telefónica claims[247], there is no need to demonstrate that either the wholesale price is excessive in itself or that the retail price is predatory in itself.

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244 Judgment of the Tribunal of First Instance of 30 November 2000 in Case T-5/97 ("*Industrie des Poudres Sphériques")*, paragraph 178.

245 Decision of the European Commission of 19.10.88 in Case 88/518/EEC Napier Brown-British sugar ("*Napier Brown-British sugar*"), OJ L/284, paragraph 66.

246 In *Industrie des Poudres Sphériques*, the Court of First Instance indeed assessed whether the dominant undertaking allowed a sufficient "profit margin" for competitors to remain competitive in the downstream market. See paragraphs 180-182 of the judgment.

247 See *Reply* at pages 76-81.

(284) It also results from *Industrie des Poudres Sphériques* that it is not necessary[248] to prove that Telefónica is dominant in the downstream market in order to establish that the company has engaged in an abusive margin squeeze. As held by the Court of Justice in *Tetra Pak II*, the fact that a dominant Company's abusive conduct has its adverse effects on a market distinct from the dominated one does not detract from the applicability of Article 82 of the Treaty.[249] Margin squeeze is an example of leveraging of market power from one market (in which there is dominance) into another (in which the abusive undertaking is active – but not necessarily dominant – and in which an extension of market power from the market in which there is dominance is sought). By engaging in margin squeeze, the dominant undertaking raises its downstream rivals' costs and imposes on the latter additional efficiency constraints that it does not have to incur for the provision of its own downstream services: indeed, while margin squeeze needs not involve a loss for the vertically integrated firm on an end-to-end basis, similarly efficient downstream competitors are obliged to incur losses. Such a conduct is likely to hinder the maintenance of the degree of competition still existing on the downstream market or the growth of that competition.

(285) In the following, it will be established that, from September 2001 to December 2006, Telefónica has been abusing its dominant position in the Spanish broadband access markets in the form of a margin squeeze generated by disproportion between its wholesale and retail charges for broadband access with the result that competition in the retail market was likely to be restricted. More precisely, it will be established that during the above-mentioned period Telefónica has abused its dominant position by imposing a margin squeeze between the prices of its regional wholesale offer and its retail prices, on the one hand, and between the latter and the price of its national wholesale offer, on the other hand.

(286) This chapter is structured as follows: Section B describes the regulatory context in which Telefonica has been supplying wholesale access at the regional and at the national level. Section C establishes the methodology of the margin squeeze calculation. In section D, it is established that the spread between Telefónica's retail prices and its regional wholesale prices, on the one hand, and between its retail prices and the national wholesale prices, on the other hand, is insufficient to cover its downstream incremental costs. Section E establishes that Telefónica's conduct was not only capable of restricting, or in other words, likely to restrict competition in the relevant market s but it also had an actual impact on the relevant market s to the detriment of end users. In section F, it will be assessed whether Telefónica's conduct can be objectively justified or whether it has produced efficiencies which could outweigh the negative effect on competition. Lastly, section G assesses Telefónica's autonomy to avoid the margin squeeze.

248 Contrary to Telefónica's allegations, see pages 84-86 of the *Response*.

249 Judgment of the Court of Justice of 14.11.96 in Case C-333/94 P Tetra Pak v Commission ("Tetra Pak II") [1996] E.C.R. I-5951, paragraphs 27 to 31

B. The regulatory context in which Telefonica has been supplying wholesale access at the regional and at the national level

(287) It is established case law that, in determining whether a pricing policy is abusive, it is necessary to consider all the circumstances[250]. In the present case, the regulatory framework for the Spanish broadband market is particularly relevant. Indeed, wholesale access at regional level is mandated since March 1999[251] and wholesale access at national level is mandated since April 2002[252].

(288) National regulation imposes on Telefónica the obligation to supply wholesale access at regional and national level under fair conditions. This is because a denial of access to the upstream product or access on unreasonable terms and conditions having a similar effect would hinder the emergence and/or continuation of sustainable competition at the retail level[253].

(289) As mentioned above, wholesale access at regional level is mandated in Spain since March 1999. As to wholesale access at national level, Telefónica started offereing ADSL-IP Total in September 1999[254] on its own initiative and as soon as it was known that Telefónica had introduced ADSL-IP internally within the company in September 2001, the CMT launched a procedure which resulted in the imposition of access to that product in April 2002[255].

(290) Not only does the national telecommunication regulation oblige Telefónica to supply wholesale access at regional and at national level to its competitors, but it also does not allow the Spanish incumbent to terminate any supply relationship without the prior authorisation of the CMT and obliges Telefónica to ensure that its retail prices are replicable on the basis of its regional wholesale product[256]. In its decision of 1 June 2006[257] which established Telefónica's obligations under the new regulatory framework, the CMT maintained Telefónica's obligation to provide wholesale access both at regional and at national level.

(291) The retail minus price regime[258] implemented by the CMT in relation to the regional wholesale offer before December 2006 was chosen in view of the following advantages[259]: (i) it does not alter the recovery of the costs of wholesale access; (ii) it should avoid a situation of a margin squeeze between the incumbent's wholesale and retail prices; (iii) productive efficiency is ensured i.e. a potential entrant enters only if it is viable, which occurs only if it is more efficient than the incumbent in the downstream activity and (iv) the system preserves the networks operators' incentives (including the incumbent) to invest in their own infrastructure.

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250 Judgment of the Court of First Instance 07.10.99 in case T-228/97, Irish Sugar plc v Commission of the European Communities, paragraph 114.

251 See paragraph (111) above.

252 See paragraph (110) above.

253 As is demonstrated in Section E.

254 See Telefónica's *Response*, page 36.

255 See paragraph (110) above.

256 See paragraph (114) above.

257 See paragraph (120) above.

258 Under the retail-minus system, the wholesale access charge is set at the vertically-integrated operator's retail price minus the incremental cost of providing downstream services and any network elements

(292) This national regulation which imposes on Telefónica the obligation to supply wholesale access at regional and at national level is based on and compatible with Community law.

(293) Firstly, it is compatible with the 1998 regulatory framework which provided for the liberalisation of the telecommunications sector[260]. This is clear from the judgment that the European Court of Justice gave after the Spanish Supreme Court made a reference to it for a preliminary ruling on the issue as to whether Member States could authorise national regulatory authorities to impose on an operator having significant market power on the market an obligation to provide access to the local subscriber loop and to offer interconnection at local and higher-level switching centres under the then applicable Community law. The ECJ held that the Spanish legislation (namely the Royal Decree transposing into Spanish law the *Interconnection/Open Network Provision (ONP)* Directive 97/33/EC[261]) was in conformity with Community law[262].

(294) Secondly, national regulation which imposes on Telefónica the obligation to supply wholesale access at regional and at national level is compatible with the current regulatory framework which was adopted in 2002 and of application from July 2003.

(295) The Framework Directive[263] establishes that "the national regulatory authorities shall promote competition in the provision of electronic communications networks, electronic communications services and associated services by inter alia: (a) ensuring that users […] derive maximum benefits in terms of choice, price and quality; (b) ensuring that there is no distortion or restriction of competition in the electronic communications sector; (c) encouraging efficient investment in infrastructure, and promoting innovation […]."

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supplied by the access seeker. See W.J. Baumol & J.G. Sidak, *The pricing of Inputs Sold to Competitors*, Yale Journal of Regulation, 196 (1994).

259 See CMT decision *OBA 2004* (see footnote 94 above). See also CMT decision *OBA 2004_(2)* (see footnote 103 above).

260 Judgment of the European Court of Justice of 13 December 2001 in Case C-79/00 Telefónica de España vs. Administración General del Estado [2001] ECR I-10057.

261 Directive 97/33/EC of the European Parliament and the Council of 30 June 1997, OJ [1997] L 199/32.

262 See paragraphs 28 to 37 of the judgment.

263 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services ("Framework Directive"). See Article 8.

(296) The Framework Directive further establishes that each NRA "shall carry out an analysis of the relevant markets, taking utmost account of the guidelines […]. Where [it] is required […] to determine whether to impose, maintain, amend or withdraw obligations on undertakings, it shall determine on the basis of its market analysis […] whether a relevant market is effectively competitive.]…] Where it determines that a relevant market is not effectively competitive, it shall identify undertakings with significant market power on that market […] and the national regulatory authority shall impose appropriate specific regulatory obligations"[264]. The Access Directive[265] establishes that such obligations "shall be based on the nature of the problem identified, proportionate and justified". It also provides that "mandating access to network infrastructure can be justified as a means of increasing competition, but national regulatory authorities need to balance the rights of an infrastructure owner to exploit its infrastructure for its own benefit, and the rights of other service providers to access facilities that are essential for the provision of competing services."[266]

(297) The Access Directive establishes that "A national regulatory authority may […] impose obligations on operators to meet reasonable requests for access to, and use of, specific network elements and associated facilities, inter alia in situations where the national regulatory authority considers that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end-user's interest. Operators may be required inter alia: (a) to give third parties access to specified network elements and/or facilities, including unbundled access to the local loop; […] (c) not to withdraw access to facilities already granted; (d) to provide specified services on a wholesale basis for resale by third parties […] When national regulatory authorities are considering whether to impose [those]] obligations referred, and in particular when assessing whether such obligations would be proportionate to the objectives set out in Article 8 of [the Framework Directive], they shall take account in particular of the following factors: (a) the technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved; […] (c) the initial investment by the facility owner, bearing in mind the risks involved in making the investment; (d) the need to safeguard competition in the long term […]."[267]

264 See Article 16 of the Framework Directive.

265 Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of electronic communications networks and associated facilities ("Access Directive"). See Article 8.

266 See Recital 19 of the Access Directive.

267 See Article 12 of the Access Directive.

(298) The Spanish General Telecommunications Law 32/2003 which transposes the new regulatory framework empowers the CMT[268] to conduct the market analysis and, when it concludes that the relevant market is not competitive and designates an operator as having significant market power, to impose appropriate regulatory obligations on that operator in accordance with the objectives laid down in the Access Directive. The objective of Law 32/2003 is, inter alia, to "*fomentar la competencia efectiva en los mercados de telecomunicaciones y, en particular, en la explotación de las redes y en la prestación de los servicios de comunicaciones electrónicas y en el suministro de los recursos asociados a ellos. Todo ello promoviendo una inversión eficiente en materia de infraestructuras y fomentando la innovación*"[269]. [*Translation into English: "to promote effective competition in the telecommunications markets and, in particular, in the use of the networks and the provision of electronic communications services and associated facilities, at the same time promoting efficient investment in infrastructure and innovation"]* The Spanish General Telecommunication Law also provides that the CMT may impose on operators with significant market power "*acceso a recursos específicos de las redes y a su utilización*" and "*control de precios, tales como la orientación de los precios en función de los costes, y contabilidad de costes, para evitar precios excesivos o la compresión de los precios en detrimento de los usuarios finales*"[270] [*Translation into English: "access to, and use of, specific network facilities" and "price control, such as cost orientation and cost accounting, with a view to avoid excessive prices or price squeeze to the detriment of the end-users".]*

(299) In its *Reply*[271], Telefónica submitted that the practices under investigation in these proceedings amount to a refusal to supply and therefore the criteria applied in the *Oscar Bronner* case[272] must be fulfilled.

(300) Telefónica consequently argued that the Commission should prove that the upstream product is "indispensable" for the provision of the downstream service. In that respect, Telefónica interprets *Oscar Bronner* and the post *Oscar Bronner* case law as requiring to show that (a) there is no "*actual or potential substitute*", even if less advantageous, for carrying on business on the downstream market[273], and (b) that there are "*technical, legal or […] economic obstacles capable of making it impossible, or even unreasonably difficult*"[274] for a competitor in the downstream market, "*alone or in cooperation with other [competitors]"*, to replicate the input. Telefónica interprets this test as an assessment of whether an undertaking with an efficiency level comparable[275] to that of the infrastructure owner is able to replicate the input.

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268 See article 10 of the Spanish General Telecommunications Law 32/2003.

269 See article 3.a of the Spanish General Telecommunications Law 32/2003.

270 See article 13 of the Spanish General Telecommunications Law 32/2003.

271 See Telefónica's *Response*, pages 13-37.

272 Case C-7/97 Oscar Bronner [1998] ECR I-7791 ("*Oscar Bronner*"), paragraphs 43-46.

273 In *Oscar Bronner*, the European Court of Justice acknowledged that it was established that there were various substitutes for the distribution of newspapers through Mediaprint's daily distribution network (post, sale in shops and kiosks, etc) which, even if possibly less advantageous, could be used in order to compete on the downstream market (see paragraph 35 of the judgement).

274 *Oscar Bronner*, paragraph 40-46.

275 See Telefónica's *Reply*, pages 16.

(301) Telefónica alleged that the European Court of Justice legal standard in *Oscar Bronner* is not met in the present case because (i) there are real and/or potential alternatives to the regional and national wholesale access services of Telefónica (ULL and wholesale access to cable networks), (ii) the regional and national wholesale access services of Telefónica can be replicated and (iii) the alleged conduct is not likely to eliminate all competition on the downstream market. Telefónica concluded that it is not obliged under Article 82 EC to grant access to its own network through its national and regional wholesale services. Therefore it argued that it is illogical, and legally wrong, to maintain that its pricing policy concerning its national and regional wholesale products is nonetheless subject to Article 82 EC, simply because these wholesale products have been offered to competitors as a result of a regulatory obligation imposed under the Spanish telecommunications law.

(302) However, it should not be disregarded that the particular circumstances of this case fundamentally differ from those in *Oscar Bronner*.

(303) In the present case, Telefónica has a duty to supply the upstream inputs GigADSL (since March 1999) and ADSL-IP (since April 2002). This duty has been established with a view to promoting competition and the consumer interest. It is clear from the considerations underlying both the EC and Spanish law and regulation that Telefónica's duty to supply the relevant upstream products results from a balancing by the public authorities of the incentives of Telefónica and its competitors to invest and innovate. This is because the need to promote downstream competition in the long term by imposing access to Telefónica's upstream inputs exceeds the need to preserve Telefónica's *ex ante* incentives to invest in and exploit the upstream infrastructure in question for its own benefit.

(304) In any event, Telefónica's *ex ante* incentive to invest in its infrastructure are not at stake in the present case. Indeed, it is of significance that Telefónica's infrastructure is to a large extent the fruit of investments that were undertaken well before the advent of broadband in Spain and that thus bore no relation to the provision of broadband services (but for the provision of traditional fixed telephony services). Also, those original investments were undertaken in a context where Telefónica was benefiting from special or exclusive rights that shielded it from competition. The investment criteria used by the former monopoly at that time would have led to the investment being made even if there would have been a duty to supply.

(305) Whilst Telefónica's local access network and regional and national backhaul were funded by monopoly rents, it is true that Telefónica incurred specific investments in order to enter the regional and national broadband wholesale markets[276]. However, these investments have only been related to the costs associated with enabling the existing network elements to support broadband traffic (installation of broadband specific equipment[277], modernisation of the transport network, and increase of capacity of the latter). In comparison, the cost of building a completely new upstream infrastructure would entail investments much greater than the mentioned broadband enabling investments made by Telefónica. As acknowledged by Telefónica[278], the company did not have to roll out a specific transport network for the provision of broadband services. In particular, Telefónica did not have to roll out new canalisations – which represent the most significant cost of a fixed telecommunications network – for the provision of broadband services.

(306) Finally, the obligation to provide regional wholesale access was imposed on Telefónica in March 1999, i.e. before it undertook the investments relating to the up-grade of its infrastructure for the purposes of providing upstream and downstream ADSL services. In other words, prior knowledge of the duty to supply did manifestly not affect Telefónica's decision to upgrade its network.

(307) As to ADSL -IP Total, no mandatory access was imposed by the CMT because TDATA offered it voluntarily in September 1999[279], i.e. before the Telefónica group started offering retail services (October 1999 for TERRA[280] and September 2001 for TESAU[281]). This is a strong indication that Telefónica considered it efficient to offer ADSL-IP Total to third parties at that time.

(308) Therefore, when Telefónica decided to enter the retail broadband market on a mass basis and upgrade its infrastructure, it knew that the obligation to provide regional wholesale access would be maintained[282] and that it would continue supplying ADSL-IP Total to third parties. This is illustrated by both the initial business plan of TESAU's regional infrastructure[283] and the initial business plan[284] of TESAU's broadband business in 2001 which assesses the overall profitability of its broadband business (including the provision of wholesale access at regional and national level to alternative network operators) and also calculates the profitability of the decision[285] of entering the retail mass market while still providing wholesale access at regional and national level versus the decision of non entering the retail market and only providing wholesale services to alternative network operators.

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276 See annex 2 of the letter of Telefónica of 17.10.06 (pages TFCA-13126 and TFCA-13127 of the file).

277 DSLAM, BRAS, commuting equipment, routers, etc.

278 See the letter of Telefónica of 23.06.06 (page TFCA-13271 of the file): "*los costes recogidos en el epígrafe Transporte IP […] no son costes directamente motivados por una nueva inversión en red IP, […] Estos costes son debidos en su gran mayoría a inversiones realizadas hace años, que en modo alguno vinieron motivadas por la red IP. Por ejemplo Telefónica, en general, no ha tenido que hacer nueva obra civil (zanjas, canalizaciones, etc.) como consecuencia de RIMA, ya que normalmente ha podido utilizar para el Transporte IP la ya existente […].*"

279 See Telefónica's *Response*, pages 36.

280 See the letter of Telefónica of 22.09.2003 (page TFCA-19 of the file).

281 See the letter of TESAU of 22.09.03 (page TFCA-331 of the file).

282 As mentioned above, the regulatory obligation to provide access was introduced in 1999. In July 2001, the national regulator confirmed that the obligation to supply wholesale access at regional level would

(309) Therefore, in the light of the specific factual, economic and legal context of the case, in particular the fact that wholesale access at regional level is mandated since March 1999 and wholesale access at national level is mandated since April 2002 and the fact that the former monopoly's *ex ante* incentives to invest in its infrastructure are not stake in the present case, the legal test applied by the European Court of Justice in *Oscar Bronner* is not applicable in the present case.

C. Methodology of the margin squeeze test

(310) This section sets out the methodology used to assess the existence of a margin squeeze. Five main important aspects are considered:

- the level of efficiency of the competitor: profitability should be assessed on the basis of the dominant company's downstream costs (the "equally efficient competitor test) (see section 1 below);

- the appropriate cost standard, which is long run average incremental costs ("LRAIC") (see section 2 below);

- the profitability analysis to be made: the Commission has analysed profitability on the basis of two methods: namely the period-by-period method and the discounted cash flow ("DCF") method (see section 3 below);

- the level of aggregation to be used in the margin squeeze test: the margin squeeze has been conducted on the basis of a mix of the retail services marketed by Telefónica (see section 4 below);

- the upstream input when testing the replicability of the downstream prices: Telefónica's retail prices must be replicable by an equally efficient operator on the basis of at least one Telefónica's product in each relevant wholesale market (see section 5 below).

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be maintained and established a retail-minus regime aiming at controlling the margin to be made available to Telefónica's downstream competitors.

283 See annex 15 of the letter of Telefónica of 27.09.06 (pages TFCA-13094 to TFCA-13117 of the file).

284 See annex 10iii of the letter of Telefónica of 21.07.06: "*Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base*", slide 32 (page TFCA-4477 of the file).

285 See annex 10iii of the letter of Telefónica of 21.07.06: "*Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base*", slide 36 (page TFCA-4481 of the file).

1 Assessing profitability on the basis of the dominant firm's downstream costs – the "equally efficient competitor" test

(311) A margin squeeze can be demonstrated by showing that the dominant company' s own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company ('equally efficient competitor' test). A margin squeeze can also be demonstrated by showing that the margin between the price charged to competitors on the upstream market for access and the price which the downstream arm of the dominant operator charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit ("hypothetical reasonably efficient competitor test").

(312) The Commission considers the applicable margin squeeze test in this case is an 'equally efficient competitor' test. That is, the detrimental effect of a margin squeeze can be described in terms of the foreclosure of competitors which are able to provide downstream services as efficiently as the dominant firm. Thus the relevant test is whether Telefónica would have been able to offer downstream services without incurring a loss if, during the period under investigation, it had had to pay the upstream access price charged to competitors as an internal transfer price for its own retail operations.

(313) This approach is the same as that used by the Commission in *Deutsche Telekom* where the Commission found that Deutsche Telekom abused its dominant position in the form of a margin squeeze because the difference between the retail prices charged by Deutsche Telekom and the wholesale prices it charged its competitors was negative, or insufficient to cover the product-specific costs to the dominant operator of providing its own retail services on the downstream market.[286]. This approach is also consistent with that used in *Napier Brown vs. British Sugar* where the Commission referred to the dominant undertaking's failure to reflect its own costs of transforming the raw material into the derived product in the margin between the upstream and downstream price[287].

[286] *Deutsche Telekom*, paragraph 107.

[287] *Napier Brown- British Sugar,* paragraph 66.

(314) In the case at hand, the "hypothetical equally efficient competitor" test is more favourable to Telefónica than the "hypothetical reasonably efficient competitor" test. Given the economies of scale and scope of Telefónica, its unit costs can be expected to be lower than those of its reasonably efficient competitors. A reasonably efficient competitor which shares the same cost structure as Telefónica's own downstream businesses but which does not enjoy the same economies of scale as those enjoyed by Telefónica during the period under investigation[288] inevitably has higher unit network costs[289]. At the same time, through its presence and leadership position in all the telecommunications markets in Spain (in particular the retail mass markets for fixed telephony, mobile telephony and broadband access), Telefónica has economies of scope enabling it to spread some costs (administration, advertising, commercial network) over a much broader set of operations than a reasonably efficient operator with a narrower range of activities[290]. The importance of economies of scale and scope in this industry entails that Telefónica can price above cost in the downstream market and still foreclose entry and growth in this market.

(315) Contrary to Telefónica's allegations[291], the application of the "equally efficient competitor" test does not imply assuming that the equally efficient competitor would be able to replicate the same upstream assets in place as Telefonica. No such assumption has been made in the relevant case law and decisional practice (*Industrie des Poudres Sphériques*, *Napier Brown* and *Deutsche Telekom*). The test is whether a competitor having the same cost function as the downstream arm of the vertically integrated company is able to be profitable in the downstream market given the wholesale and retail prices levied by the vertically integrated company.

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288 At the end of 2004, 97% of ADSL lines (including Telefonica's lines) in Spain used Telefonica's ATM network (GigADSL) and 81% of ADSL lines (including Telefonica's lines) used its IP network (ADSL-IP or ADSL-IP Total). See Table 60 in Annex A. Moreover, since 2001, Telefónica's share in the national wholesale market has been more than 11 times bigger than that of its largest competitor.

289 In its margin squeeze test between British Telecom's wholesale product *IPStream* (equivalent to Megavia) and ATM interconnection (equivalent to *GigADSL*), the British regulator *"has taken as its benchmark for setting the margin, a new entrant today which has the same underlying cost function to BT (i.e. similarly efficient) but enters later and benefits from fewer economies of scale and scope."* (See OFCOM, Direction Setting the Margin between IPStream and ATM interconnection prices, 26.08.04 at paragraph 2.205). In its response to the consultation on OFCOM's direction, Telefónica not only agreed with OFCOM's approach to take into account scale in the margin squeeze test but considered that the new entrants' market shares used by OFCOM (20%-25%-30%) were unrealistically high. (See Telefónica UK Response to the Ofcom Consultation on a Draft Direction Setting the Margin between IPStream and ATM Interconnection Prices, 2nd July 2004 – page TFCA-3776 of the file).

290 See section 2 below regarding the choice of the cost standard. In this respect, in the above-mentioned margin squeeze test between British Telecom's wholesale products, Ofcom considered "*that entrants are likely to benefit less from economies of scope than BT and considers it reasonable to take this into account when setting the margin, given the objective of promoting competition. Hence Ofcom's benchmark of a similarly efficient entrant involves the same underlying cost function as BT's, but smaller economies of scope. A reasonable method to implement this approach, when using BT's cost information as a data source, is to factor in an allowance for the recovery of common costs in the margin squeeze analysis. On that basis the appropriate cost floor would be one that incorporates an element for the recovery of common costs: e.g. CCA FAC [current cost account fully allocated costs] or LRIC+ [LRIC plus a mark-up for the recovery of common costs]."* (see paragraph 2.32).

291 See*Reply*, page 97.

2 The appropriate cost measure: long run average incremental costs (LRAIC)

(316) A horizontally and vertically integrated company like Telefónica has several kinds of costs. It has incremental costs which arise only because of its operations in the downstream market, and which would not be incurred if Telefónica would only be operating in the upstream market. It also has costs which are common[292] to different operations. Contrary to a downstream competitor as efficient as Telefónica's downstream arm, Telefónica has economies of scale and scope and is able to spread its common costs over a set of operations instead of only one.

(317) Cost structures in network industries tend to be quite different from most other industries because the former have much larger fixed costs. As set out in the *Access Notice*[293], a price which equates to the variable cost of a service may be substantially lower than the price the operator needs in order to cover the cost of providing the service in the long term. In order to assess the profitability of prices which are to be applied over time by an operator, and which will form the basis of that operator's decisions to invest, the costs considered must include the total costs which are incremental to the provision of the service.

(318) Therefore, in accordance with the economic theory[294] and with the practice of the Commission[295] on margin squeeze where the ability of competitors to operate profitably in the long term was assessed, the relevant cost measure for the assessment of a margin squeeze in the telecommunications sector is the long run average incremental costs (LRAIC).

(319) The long run incremental cost of an individual product refers to the product-specific costs associated with the total volume of output of the relevant product. It is the difference between the total costs incurred by the firm when producing all products, including the individual product under analysis, and the total costs of the firm when the output of the individual product is set equal to zero, holding the output of all other products fixed. Such costs include not only all volume sensitive and fixed costs directly attributable to the production of the total volume of output of the product in question but also the increase in the common costs that is attributable to this activity.

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292 Common costs arise when two or more products / services are produced together, even though they could be produced separately. They are also called shared costs if this applies to all of the operations of the operator.

293 Notice on the application of the competition rules to access agreements in the telecommunications sector ("*Access Notice*"), OJ 1998 C 265/2,, paragraphs 113 to 115.

294 See for example G.R. Faulhaber: Cross subsidization in Public enterprises, American Economic Review, Vol. 65/1975, p 970 – Baumol, W & Sidak, JG Towards competition in local telephony, MIT Press, Cambridge, MA, 1994, pp 66, 77-78.

295 See *Deutsche Telekom*, paragraphs 155 to 157 – *Napier Brown–British Sugar*, paragraphs 65 and 66 – Commission Decision 76/185/ECSC of 29 October 1975, National Carbonizing Company ("*National Carbonizing Company")*, paragraph 7.

(320) Since the long run incremental cost of the individual product also includes the increase in the common costs resulting from the provision of the product in question, the mere fact that one cost is common to different operations does not necessarily imply that the long run incremental cost due to the activity in question is zero for any individual product. One must assess whether such common cost would have been incurred, partially or totally, if the company would have decided not to provide the product in question[296].

(321) The idea is that, if the revenues associated with the downstream activity fall below LRAIC, a rational and profit-maximizing firm, at least as efficient as Telefónica – in particular enjoying the same economies of scale and scope – "*has no economic interest in offering downstream services in the medium term. It could increase its overall result by either raising downstream prices to cover the additional costs of providing the service or – where there is no demand for this service at a higher price, to discontinue providing the service*" [297], while holding its output of all other products fixed.

(322) In the present case, LRAIC is an appropriate measure of Telefónica's downstream costs below which the spread between Telefónica's upstream and downstream prices provides evidence of a margin squeeze.

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296 Take the example of a superstore (e.g. fnac) that markets two categories of products (e.g. books and discs). If the store had decided to only market books, some common costs would still be incurred (e.g. the managing director) but other would have been reduced in proportion of the volume of discs (e.g. the surface of the store would have been lower, the number of cash desks would also have been lower, etc.). In other words, if a proportion of the common cost is avoidable, such proportion is incremental

297 Deutsche Post AG ("Deutsche Post"), Commission Decision of 20.03.01 COMP/35.141, OJ L125/27-44. Although *Deutsche Post* concerns predatory prices, it clarifies the Commission's position under Article 82 on the costs to be covered by a multi-product network operator that offers an additional line of products in markets open to competition.

(323) The use of a long-run cost measure implies that any cost that is incremental in the long run due to the activity should be included in the margin squeeze test. Contrary to Telefónica's allegations[298], this does not imply that the unit costs should be calculated on the basis of the volumes in the long term, i.e. this does not imply that the margin squeeze test should consist in comparing Telefónica's today unit revenues with the unit costs calculated on the basis of the volumes in the long term. It is true that, in a growing industry characterised by important fixed costs, unit costs may be high in the beginning of the life of the product just because of a low utilisation of the capacity of the network. However, in this specific case, Telefónica's downstream losses are not justified by the immatureness of the Spanish broadband market. It would be inappropriate to calculate Telefónica's unit costs on the basis of the volumes in the long term because Telefónica itself considered in its initial business plan that the break-even volume for its broadband business[299] was 1 million end users and this volume was achieved in February 2003[300]. This means that Telefónica did not rely on projected growth after 2003 to achieve end-to-end profitability. The mere fact that Telefónica expected rapid achievement of profitability on an end-to-end basis and is indeed profitable on an end-to-end basis but its downstream arm would still make losses in 2006 (i.e. more than five years after the launch of its first retail ADSL product) is a strong indication that Telefónica's downstream losses cannot be explained by a possible accounting distortion due to the calculation of the unit costs on the basis of today's volumes[301].

298 See *Replye*, page 325.

299 That is, aggregating costs and revenues all over the broadband value chain, thereby allowing the subsidisation of downstream losses by upstream profits.

300 See *ADSL scorecard* in the letter of Telefónica of 31.08.06 (page TFCA-9771 of the file).

301 The fact that the break-even volume of Telefónica's broadband business (i.e. aggregating costs and revenues all over the broadband value chain) was achieved in February 2003 does not justify the downstream losses incurred by the company before that date. This is because Telefónica has been profitable on an end-to-end basis but would have made losses until December 2006 if it had had to pay the wholesale charges it has been imposing on its downstream competitors.

(324) The negative result found with the Discounted Cash Flow method – a profitability method[302] that precisely avoids any possible risk of accounting distortion by aggregating all revenues and costs during several years (in the present case more than five years) – is also a strong indication that no accounting distortion in the calculation of the unit costs of the company can explain Telefónica's downstream losses. In any event, it would be incorrect to calculate Telefonica's unit costs on the basis of volumes in the long term because, as explained by Telefónica[303] itself, the capacity of the commuting elements, the IT system and the transmission equipment[304] is adjusted progressively to demand in the medium term (in fact, less than one year – even every trimester as illustrated by the evolution of the capacity of the BRAS and the IT system as provided by the company[305]). When the company duplicated the speed of all its retail products, it also alleged that the capacity adjustments (commuting and transmission equipment) could be implemented in less than 3 months[305]. At the same time, the company always met its volume targets[306], so that it cannot be asserted that the network of the company was oversized, and therefore its unit costs too high, due to overoptimistic volume forecasts.

3 The appropriate test for assessing profitability over time

(325) As mentioned above, a margin squeeze test entails assessing whether the vertically integrated company's own downstream operations could operate profitably on the basis of the upstream price charged to its competitors by its upstream operating arm.

(326) There are two methods by which profitability can be measured: a historical "period by period" approach and a Discounted Cash Flow ("DCF") method.

(327) In the present case, as will be established in section VI.D.1.4 below, both the period-by-period and the DCF methods lead to the finding of a margin squeeze between Telefónica's retail and wholesale prices.

(328) The "period by period" approach consists in comparing every year (or in shorter periods) the observed revenues and costs extracted from the undertaking's accounts in which investment expenditure have been amortised over appropriate periods.

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302 See section VI.C.3 below.

303 See the letter of Telefónica of 25.08.06 (pages TFCA-9039 to TFCA-9041 of the file).

304 As illustrated in Table 20 below, those equipments represent more than 90% of the incremental investments relating to Telefónica's IP backbone.

305 See the CMT of 22.07.04 in case DT 2004/1008: "*TESAU, por su parte, no ve necesidad alguna para establecer un plazo superior a los 3 meses desde la comunicación de la propuesta para implementar el cambio de velocidades en ADSL, tal como se establece en la Resolución de 31 de marzo de 2004, aprobatoria de la OBA. Según este operador, los trabajos a realizar son en su mayoría solicitados a TESAU, y por tanto para el resto sería suficiente con el plazo de dos meses desde la comunicación de migración*" (page 18 of the decision).

306 All volume targets indicated in the initial business plan of the company (see Annex 10iv of the letter of Telefónica of 21.07.06 – page TFCA- 4495 of the file) were reached (see Table 60 in Annex A).

(329) The DCF approach consists in assessing the overall profitability over an adequate period (in general several years). The company's future growth is taken into account in the profitability analysis by aggregating the expected future cash flows over time in order to arrive at a single measure, the net present value (NPV). Since costs are incurred and revenues are generated during a multi-year period, the present discounted value[307] of the stream of costs and revenues is used to compare the total revenues and costs. The NPV is then the sum of the discounted revenues less the sum of the discounted costs (see the formula below). If the NPV is positive, it shows that the activity creates value over the adequate period. If it is negative, it shows that it is value-destroying and the investment constitutes a loss.

$$NPV = \sum_{t=0}^{N} \frac{Revenues_t - Costs_t}{(1+WACC)^t} \sum_{t=0}^{N} \frac{Revenues_t - CAPEX_t - OPEX_t}{(1+WACC)^t}$$

where WACC is the cost of capital of the company

(330) Both the period-by-period method and the DCF method address the same underlying issue of cost recovery over time but in different ways: The DCF approach looks at the profitability of a business over a reasonably long period (several years); it does not specify how costs should be recovered in distinct sub-periods (every year). It considers the evolution of revenues or costs of the company during the period employed for the analysis and calculates the NPV of the business. On the opposite, with the period-by-period method, standard accounting techniques result in some costs being treated as expenses and allocated only to the period in which they were incurred and other costs being capitalised and allocated to more than one time period, typically through the use of straight-line depreciation.

(331) The practice of the European Court of Justice[308] and of the European Commission[309] in cases involving price abuses (in particular predatory pricing, margin squeeze) has always been to assess the profitability of the dominant undertaking using the "period by period" approach. In *Wanadoo*, the Commission considered that the DCF method was inappropriate for the assessment of the existence of predatory prices despite the the fact that the French residential retail broadband market was still growing. That market shows strong similarities with the Spanish broadband market. In the *Wanadoo* judgment, the Court of First Instance held that (i) the Commission is afforded a broad discretion[310] in the choice of the calculation as to the cost recovery of a dominant company and that (ii) it is for the dominant company to prove that the method used by the Commission is unlawful[311].

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307 Future cash flows are discounted by the company's cost of capital in order to attribute a lower value to later cash flows than those arising more immediately. The cost of capital is an estimate of the price that the company must pay to raise the capital that it employs. It reflects the return required by investors to invest in the company's activities rather than elsewhere. See section 3.1.4 below.

308 Case C-62/86 *Akzo Chemie* v *Commission* [1991] ECR I-3359, Case C-333/94 P *Tetra Pak* v *Commission* [1996] ECR I-5951.

309 *Wanadoo*, paragraphs 72 and 90.

310 Judgement of the court of First Instance of 30.01.07 in Case T 340/03, France Télécom SA vs. Commission, paragraph 129 of the judgement.

311 Judgement of the court of First Instance of 30.01.07 in Case T 340/03, France Télécom SA vs. Commission, paragraph 153 of the judgement.

(332) In the SO[312], the Commission took the view that there were some shortcomings in the DCF approach when used to detect a margin squeeze, which also have been explicitly recognised by the Commission in *Wanadoo*[313], by the UK Competition Appeals Tribunal[314], the UK Office of Fair Trading[315] and by OFCOM[316].

(333) Firstly, the outcome of the test risks relying on unreasonable forecasts[317] made by the company under investigation, thus leading to a "false positive" result. That is, if future profits are assumed to be significant, they may outweigh losses incurred in the early years of a project with the result that a DCF analysis can yield a positive NPV; however, the assumptions about future profits may not be sustainable.

(334) Secondly, the DCF allows the recovery of initial losses by future profits. Therefore, a positive NPV result may reflect the outcome of the anti-competitive behaviour. That is, short-run losses might lead to higher long-run profits, not due to any natural development in the market, but due to the strengthening of the dominant undertaking's market power. Indeed, the DCF method would only show whether Telefónica is expected to earn a positive NPV over the period employed for the analysis, but it would not specify how costs should be recovered in distinct sub-periods. Consequently, a positive NPV could be interpreted not as evidence of the inexistence of an anticompetitive price squeeze but, quite on the contrary, as an evidence of a successful exclusion. For example, consider the application of a DCF approach to a firm that engaged in a successful margin squeeze strategy. The first stage of the strategy involves setting prices that squeeze out competitors. The second stage may involve raising prices to recover the earlier losses, but this is not necessarily the case[318], as it may also involve sustaining those prices above the competitive level because there is no sufficiently significant entry and/or expansion. In this case, it is likely that a DCF analysis would result in a positive NPV even though anti-competitive conduct is involved.

(335) Thirdly, the DCF method would allow a dominant undertaking such as Telefónica to incur substantial initial losses (that would be compensated for in future) while its competitors may not be able to absorb losses during several years.

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312 See paragraphs 388 to 393 of theSO.

313 *Wanadoo*, paragraphs 90 and 92.

314 Napp Pharmaceuticals vs. Director General of Fair Trading ("*Napp*") [2002] CAT 1, [2002] CompAR 13., 2002, paragraph 260.

315 OFT, BSkyB investigation, 30.01.03, paragraphs 382 to390.

316 OFCOM, Investigation by the Director General of Telecommunications into alleged anticompetitive practices by BT in relation to BT Openworld's consumer broadband products, 20.11.03, section 5.

317 In this respect, Telefónica itself acknowledged that forecast errors are inevitable when elaborating business plans in fast growing markets like the Spanish broadband markets: *"Tanto Telefónica de España como Terra contaban con Planes de Negocios, con carácter previo al lanzamiento de sus servicios ADSL minoristas, planes que garantizaban la rentabilidad de dichos servicios a un horizonte temporal razonable – según las estimaciones de mercado previsibles en el momento de su realización -, rentabilidad que en estos mercados debe ser entendida como cobertura de los costes incrementales. Posteriormente, las realizaciones de dichos Planes de Negocio no han sido completas, debido a diversos desfases leves entre las previsiones y la realidad del mercado, pero no puede negarse que, en un mercado emergente dichas divergencias son habituales."* See the letter of Telefónica of 07.04.04 (see page TFCA-220 of the file).

318 Telefónica's retail prices have indeed not increased during the period under investigation.

(336) In its *Reply*[319], Telefónica claimed that the "period by period" approach may be appropriate in a mature market where companies rely on their established positions but not in dynamic markets such as that of retail broadband services to which DCF is more suitable.

(337) Firstly, Telefónica argued that the period-by-period approach ignores the role of investment: short-run losses are in fact investments with a view to achieve future profits. Telefónica takes the view that such a strategy is rational and non-exclusionary in a developing market such as the Spanish retail broadband market. Telefónica argues that the DCF method is more suitable to a growing market, because it correctly accounts for the fact that the expected profit from adopting a particular course of action does not depend on the net cash flows it generates year by year, but on whether the net cash flows generated in the future will lead to an overall profit.

(338) Secondly, Telefónica argued that the period-by-period approach ignores the impact of uncertainty on the strategies of companies. Companies will enter, invest, and remain in the market even if they are making short run losses and are not sure that things will improve in the future. According to Telefónica, this strategy is rational and non exclusionary because, by remaining in the market, the companies retain a valuable option for the future: they may be successful, hit on the winning formula, and become one of the long-running success stories. On the other hand, according to Telefónica, they may be unlucky and choose the wrong strategy but the company still has the option of limiting its losses by exiting.

(339) Moreover, according to Telefónica, an analysis based on assessing the DCF of a company's strategy can be informative when investigating whether that strategy could be exclusionary because it can provide information about likely effect. If the company's strategy is likely to generate a stream of net cash flows in the future which, when discounted and added together, give an overall profit, then it is likely that an equally efficient competitor could replicate this strategy and also earn a profit overall, even if both undertakings are currently making short-run losses.

(340) Telefónica also argued that many of its competitors in the broadband sector are subsidiaries of some of the largest European telecommunications companies, namely France Telecom and Deutsche Telekom. If Telefónica's strategy led them to make losses in some periods, these operators would be able to bear those losses because they are part of major groups.

(341) In the following paragraphs ((342) to (349)) the Commission responds to Telefónica's arguments regarding the alleged appropriateness of the DCF method in the present case.

[319] See *Reply*, at pages 102-106.

(342) In a growing market, it may be reasonable to expect that unit costs may fall over time. This can, for example, be because fixed costs are spread over a growing number of customers (economies of scale), through savings from learning how to provide the service more efficiently (learning by doing) or through falling input costs due to technological improvements. In the present case, service providers offering new or immature services may incur significant initial costs in physical assets (e.g. telecommunications network) and intangible assets (e.g. marketing and business set up costs) to launch their services and win customers. The return on these investments is typically earned over a number of subsequent years. This has implications for the determination of the relevant type of profitability analysis in the present case.

(343) Applying the DCF method in a margin squeeze test presupposes that it is reasonable or appropriate to expect that in a competitive market the profitability of current prices should depend on future cost reductions. If this is not the case, then the use of the DCF method would be inappropriate and unreasonable, and one could have an accurate view of economic profitability by only assessing today's profit or loss using today's costs, i.e. using the period-by-period method. This would for example be the case of a non growing market: in such market there would be a significant risk that assessing a dominant firm's profitability by relying on future cost reductions without assuming concomitant price reductions would be inconsistent with the competitive outcome.

(344) In contrast, for growing markets and services such as retail broadband internet access, some accounting distortions might arise with the period-by-period method. For example, investments are capitalised so that their recovery is allowed to spread over a period of time using standard accounting techniques, usually through straight-line depreciation. However, while the utilisation of the capacity of the physical assets is low in the first years of the product's life, straight-line depreciation implies an equal recovery of the initial investment in each year of the specified life and that the cost of capital employed is larger in the initial years than in later years, because the capital employed declines over time as the asset is depreciated. There could sometimes be reasons why it might be reasonable to defer a larger or smaller amount of the cost recovery to later years than allowed for using straight-line depreciation.

(345) In this respect, the situation in the present case differs from the one in *Wanadoo* in many aspects. In *Wanadoo*, the dominant company was a service provider ("WIN") that did not incur any network rolling out costs. Therefore, in that case, there was no risk of accounting distortion in the evaluation of the network costs which were variable wholesale charges[320]. In the present case, the cost structure of an as efficient competitor using Telefónica's national wholesale offer would be very similar to that of WIN but this would not be the case for an as efficient competitor that uses Telefónica's regional wholesale offer and that consequently has invested in a backbone which entails significant fixed costs.

[320] See *Wanadoo* at paragraphs 45, 48 and 56.

(346) An advantage of the DCF approach in the margin squeeze test in relation to Telefónica's regional wholesale offer is that it avoids accounting distortion that could arise due to straight-line depreciation in a growing market by aggregating Telefónica's revenues and costs over a reasonably long period. However, this is not a reason to allow a margin squeeze test that would "build in" the rewards from an anti-competitive behaviour. The use of the DCF method would be appropriate in the present case only in order to avoid a situation where the 'period-by-period' method would point to a margin squeeze due to accounting distortions resulting from the fact that the market is growing.

(347) In that respect, Telefónica's business plan and cost accounts provide the company's own assessment as to whether its downstream losses can be explained by the lack of maturity of the Spanish broadband market. Indeed, (i) Telefónica expected rapid achievement of profitability on an end-to-end basis[321] in its initial business plan (break-even EBITDA and break-even EBIT in 2002[322]); (ii) the company is indeed profitable on an end-to-end basis but would make losses if it had to pay the wholesale charges it imposes on its competitors and that (iii) the company estimated in its business plan that the break-even volume of end-to-end profitability was 1 million ADSL end users[323], a volume that was reached in February 2003[324]. The mere fact that Telefónica expected rapid achievement of profitability on an end-to-end basis and is indeed profitable on an end-to-end basis but its downstream would still make losses in 2006 is a strong indication that Telefónica's downstream losses cannot be characterised as inevitable losses and cannot be explained by the lack of maturity of the Spanish broadband market[325].

321 i.e. aggregating costs and revenues all over the broadband value chain, thereby allowing the subsidisation of downstream losses by upstream profits

322 See annex 10iii of the letter of Telefónica of 21.07.06: *Análisis de las variables económicas críticas del ADSL, Documento de trabajo, Resumen documento base*, slide 35 (page TFCA-4480 of the file).

323 See annex 11ii of the letter of Telefónica of 21.07.06*: La oportunidad de la Banda Ancha en las operadoras fijas*, slide 46 (page TFCA-4549 of the file).

324 See *ADSL scorecard* in the letter of Telefónica of 31.08.06 (page TFCA-9771 of the file).

325 As already argued in footnote 301 above, the fact that, in the present case, the break-even volume of Telefónica's end-to-end profitability was achieved in February 2003 does not justify the downstream losses incurred by the company before that date.

(348) In connection with Telefónica's argument that many of Telefónica's competitors in the Spanish broadband market are subsidiaries of powerful European companies that are able to bear the same losses as Telefónica, it should be noted that, according to the Court of Justice, the size, financial strength and degree of diversification of competitors at world level do not necessarily deprive the dominant undertaking of its privileged position in the relevant geographic market[326]. The situation of the undertakings affected by Telefónica's conduct must therefore be analysed in the light of the circumstances of the present case. The alleged power of some of Telefónica's competitors (namely France Telecom and Deutsche Telekom) is irrelevant: they may have a financial backing, but none of them enjoys a prominent position in the Spanish broadband market or has a position on the relevant geographic market comparable to that of Telefónica. Indeed, whatever the willingness of the relevant groups to sustain losses incurred in the Spanish broadband market, in contrast with Telefónica, neither France Telecom nor Deutsche Telekom is able to subsidise losses in the retail market by the profits extracted in the upstream markets.[327]

(349) In conclusion, the Commission will conduct the margin squeeze analysis under both the period-by-period and the DCF method in order to avoid the finding of a margin squeeze that would be the result of accounting distortions resulting from the lack of maturity of the Spanish broadband market and ensure that even the method proposed by Telefónica does not disprove the finding of a margin squeeze. The use of the DCF method should not "build in" the rewards of an anti competitive behaviour and should not allow the vertically-integrated company to impose on its downstream competitors' losses that it is not incurring itself (on an end-to-end basis). This will be discussed in detail in the next section.

3.1 Application of the DCF method in the present case

(350) This remainder of this section addresses a number of questions concerning the concrete application of the DCF method in the case at hand.

3.1.1 Relevant period for a margin squeeze analysis with the DCF method

(351) As explained above, the application of the DCF method in the present case allows for initial short term losses that can arise from the specificities of the market at hand (network industry, growth of demand, network effect, learning curve, etc.), but provides for their recovery over a reasonable period (i.e. no account should be taken of whether hypothetical future profits generated beyond that period would recover such losses). The question thus arises what the appropriate period of recovery is for the purposes of the application of the DCF method in the present case.

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326 Case 322/81 *Nederlandsche Banden Industrie Michelin* v *Commission* [1983] ECR 3461, paragraph 59.

327 See also Case T-340/03, *France Telecom v. Commission*, para 114. The CFI rejected Wanado's claim that the competing groups in France had a wide distribution network. In this respect, the CFI pointed out that on French territory, which was the only territory covered by the decision, the distribution networks of competing groups were far from being the size of France Telecom's.

(352) There are several possible approaches to choosing the relevant time period for analysing a business model and, thus, for the calculation of the DCF. For instance, it could be possible to consider the profitability of current investments by using the economic lifetime of the relevant assets. Alternatively one could adopt a very long-run approach which would consider profitability over the whole lifetime of the business or at least over multiple investment cycles. This is typically done by preparing a set of cash flow forecasts over an extended period and then assuming a perpetuity value of the business at the end of the forecast period, usually on the basis of a constant level of profits. Such an approach is often used in valuing businesses when they are bought and sold.

(353) The purpose of the analysis in the context of a margin squeeze analysis is, however, rather different from business valuation, since it is to assess whether a given behaviour in a specific period of time is prone to foreclose competitors in the downstream market. The longer the period considered, the greater the risks (i) of forecast error and (ii) of building in the rewards of anti-competitive behaviour.

(354) Therefore, the most reasonable approach is to limit the period of analysis by reference to the economic lifetime of the assets employed by the business in question. This would ensure that all expected economic benefits arising from the use of those assets were captured in the assessment of its profitability.

(355) In the SO, the Commission carried out a DCF analysis aggregating Telefónica's revenues and costs over the period 2001-2005[328]. In its *Reply*[329], Telefónica did not contest the use of such period and submitted some DCF calculations over the same period suggesting that there was no margin squeeze.

(356) Subsequently, Telefónica provided copies of its initial business plan[330] that show that, on an end-to-end basis (i.e. aggregating costs and revenues all over the broadband value chain, thereby allowing the subsidisation of downstream losses by upstream profits), it expected an EBITDA break-even point in 2002, an EBIT break-even point in 2002 and a positive NPV (without including any terminal value) over September 2001 – December 2006 (i.e. within 5 years and 4 months).

(357) This five year period coincides with the average lifetime of TESAU's network assets (as indicated by the company itself in its initial business plan[331]) which are necessary to offer retail ADSL services on the basis of GigADSL. It is also greater than the average lifetime used for the amortization of TESAU's subscribers' acquisition costs. The five year period also coincides with the average lifetime of alternative network operators' assets (France Telecom[332] and Auna[333]).

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328 See paragraph 442 of the Statement of Objections.

329 See pages 337-339 of the *Reply* .

330 *Análisis de las variables económicas críticas del ADSL, Documento de trabajo, Resumen documento base* at page 35 and *La oportunidad de la Banca Ancha en las operadoras fijas* at page 46

331 In its initial business plan, TESAU amortized its assets relating to its IP network over five years. See the letter of TESAU of 26.04.04 (page TFCA-675 of the file):

*"**CAPEX** […] Se preveía la utilización por 100.000 usuarios de dicho elemento, red IP, amortizándose dicho elemento de manera lineal en cinco años y con un coste de capital del 9.5%."*.

This is also the amortization period indicated by Telefónica in the business plans of its retail offers ADSL Tiempo Libre (see the letter of TESAU of 18.07.05 at pages TFCA-3257 to TFCA-3261 of the

(358) The five year period is also consistent with the time period used in the margin squeeze test[334] carried out by OFCOM (NRA and NCA for the telecommunications sector in the UK) between BT's regional wholesale product ('*ATM interconnection'*) and BT's national wholesale product ('*IPStream'*).[335] OFCOM launched a consultation on its margin squeeze test, and the main alternative ISPs present in the United Kingdom agreed with it that five years is the relevant time period over which to conduct such margin squeeze test. Telefónica UK did not support this line; it held that the period should be shorter than five years[336].

(359) In view of the above, the relevant period for the DCF analysis is September 2001-December 2006 (5 years and 4 months). This period, slightly longer than five years[337] is more favourable to Telefónica, because its downstream margin has been increasing over time.

3.1.2 The terminal value

(360) In a DCF analysis, a terminal value is calculated to reflect the fact that there are key assets that will continue to be used beyond the end of the modelled period. This terminal value is treated as a positive cash flow in the last year of the modelled period. It is intended to reflect the value of the business's cash flows beyond the end of the modelled period. The inclusion of a terminal value may be necessary given that some non recurrent costs are not fully recovered during the modelled period. If the Commission were to conduct the DCF analysis without including a terminal value, this would mean that the costs relating to investments incurred in the last year of the modelled period (acquisition costs, investments in network assets) would need to be recovered by at most one year's worth of subscription revenue.

(361) The question of the appropriate terminal value to include in the DCF calculation is linked to the appropriate period of the latter. Both aim at drawing a timeline beyond which the recovery of losses is no longer taken into account in the DCF analysis.

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file), ADSL a tu medida (see the letter of TESAU of 17.03.05 at page TFCA-1092 of the file) and ADSL MINI. (see the letter of TESAU of 28.04.05 at pages TFCA-2290 and TFCA-2291 of the file)

332 Letter of Uni2 of 25.04.05 (page ISP-410 of the file).

333 Letter of Auna of 08.04.05 (see page ISP-340 of the file).

334 OFCOM, Direction Setting the Margin between IPStream and ATM interconnection prices, 26.08.04. The ex ante margin squeeze test implemented by OFCOM between *ATM interconnection* and *IPStream* is part of the obligations imposed by the British Regulator on BT in order to address BT's strong market power in the 'Wholesale Broadband Access market'.
See http://www.ofcom.org.uk/consult/condocs/adsl_price/statement/statement.pdf

335 Op. cit., see paragraphs 2.177 and 2.178.

336 Op. cit., see paragraph 2.179.

337 For the sake of simplicity, this period will be taken to be five years in the remainder of this decision.

(362) Telefónica's calculations in its initial business plan do not include a terminal value[338] for any assets at the end of the calculation period (i.e. the point of truncation of the DCF analysis), which was acknowledged by the company itself in its reply to the letter of facts[339]. This means that Telefónica expected that it would be profitable over the period 2001-2006, and this in spite of the fact that the NPV included some non recurrent expenditures (network assets, customer acquisition costs) which were not fully recovered and which yielded revenues beyond the modelled period 2001-2006.

(363) In the present decision, the Commission has nonetheless adopted a more favourable approach than the one taken by Telefónica in its initial business plan by including a terminal value that reflects the residual economic life of the physical assets and acquired customers. The size of this terminal value is the cost of unrecovered assets (physical assets and acquisition costs) remaining to be recovered after the five-year period of the analysis[340]. Contrary to calculation methods typically used to derive terminal values in valuation exercises in the context of mergers and acquisitions (see the alternative method proposed by Telefónica, below), which would assume a growth of the business until eternity, the terminal value has been calculated by allocating costs between two periods: the five years before the point of truncation (end of 2006), and the subsequent years:

$$NPV = \sum_{t=2001}^{2006} \frac{\text{Revenues}_t - -\text{CAPEX}_t - \text{OPEX}_t}{(1+\text{WACC})^{t-2001}} + \frac{\text{Terminal Value}_{2006}}{(1+\text{WACC})^5}$$

(364) In its *Reply*[341], Telefónica contested this method. According to Telefónica, the Commission assumes that the installed base of customers in the last year of the modelled period (last year of the DCF calculation) generates no operating profit at all beyond what is necessary to recover unamortized subscriber acquisition and capital-investment costs, and that future subscribers generate no operating profits at all.

(365) Telefónica considers that this approach is unprecedented[342] and inappropriate as (i) the assumption that operators that had been operating in the market for five years would not be able to expect any profits at all from their future subscribers is extremely unrealistic and (ii) it ignores the fact that these companies would have been building valuable assets (brand, know-how, competence, commercial relationships, physical assets) and that they could expect to reap the rewards from this asset building at some point.

338 See annex 11ii of the letter of Telefónica of 21.07.06*: La oportunidad de la Banca Ancha en las operadoras fijas* at slide 46 (page TFCA-4549 of the file).

339 See section 5.1.2 of the reply to the letter of facts.

340 Details of how this terminal value has been calculated are given in Annex C below.

341 See Telefónica's Response, at pages 105-106 and 333-336.

342 See Telefónica's Response, pages 105-106 and 333-336.

(366) According to Telefónica, the DCF analysis should include all future profits. This implies that the terminal value proposed by Telefónica should be the sum of the hypothetical future profits generated after the modelled period, i.e. from 2007 onwards. Telefónica argues that the most reliable method to estimate such terminal value would be to use the value at which Telefónica's downstream business would be acquired at the end of the modelled period. One of the methods that can be used for the valuation of a company in the context of mergers of acquisitions indeed consists in estimating the value of the target company as a multiple of a relevant financial ratio that would characterise such company. The multiple would be estimated on the basis of the already available value of comparable companies. Telefónica has applied this approach on the basis of the transaction-value-to-sales ratios of a sample of comparable transactions from around the middle of 2005 arriving to the conclusion that, on average, buyers believed the long-term value of a telecommunications operator was twice the level of its annual sales.

Table 15 - The method of multiples proposed by Telefónica in its *Reply*[343]

Acquirer	Target	Business model of the target	transaction value (M€)	Sales 2004 (M€)	Ratio value/sales
Tele2	Comunitel	Alt. network operator	257	174	1.48
Ya.com	Albura	Alt. network operator	61.5	45.7	1.35
France Telecom	Amena	Mobile operator	10 600	2 900	3.66
ONO	Auna cable	Cable operator	2 250	836.8	2.69
Tele2	Versatel	Alternative ISP	1 130	601	1.88
TeliaSonera	Chess/Sense		226	125	1.81
Eircom	Meteor	Mobile operator	420	145	2.90
KPN	Telfort	Fixed tel. operator	980	508	1.93
Neuf	Cegetel	Alternative ISP	3 000	2 500	1.20
Telefónica	O2	Mobile operator	25 665	9 358	2.74
CPW	Onetel		132	218	0.61
AVERAGE					**2.02**

[343] See pages 335-336 of the *Reply*.

(367) Telefónica's allegations are incorrect: the Commission's method for the calculation of the terminal value is not unprecedented: it has been used e.g. OFCOM in the British broadband sector[344], whereas Telefónica's method has never been used in the context of the assessment of the existence of a margin squeeze. The Commission's method has also been used by Telefónica in many business plans: either Telefónica did not include any terminal value in its DCF calculation[345] at all or, when it included one, it only included the unamortized investments – as the Commission does in the present decision[346], which was acknowledged by the company itself in its reply to the letter of facts[347].

(368) On the contrary, Telefónica proposes in the present proceedings an alternative approach allowing the compensation of the losses incurred during the modelled period by all future profits, including those which were generated after the modelled period.

(369) The purpose of a DCF analysis in the context of a margin squeeze analysis is rather different from business valuation, since it is to assess whether a dominant company's given pricing behaviour in a specific period of time is contrary to Article 82 EC. It is unreasonable and unjustified in the context of a margin squeeze analysis to extend a DCF analysis beyond a reasonable timescale. As already established in section 3.1.1 above, on the facts of this case, a DCF calculation period longer than 6 years is unreasonable. Given Telefónica's continued market dominance and ability to subsidise its downstream losses by upstream profits (as reflected by the fact that it has been profitable on an end-to-end basis contrary to its competitors), the use of a terminal value that incorporates all profits until perpetuity is inappropriate and unjustified in the context of a margin squeeze test because (i) the average lifetime of Telefónica's asset is five years; (ii) Telefónica itself did not include profits until perpetuity when calculating the NPV in its initial business plan and, (iii) in a competitive market, a new entrant would not rely on such profits (which are at best late, and at worst hypothetical) to subsidise losses incurred for as long as the modelled period (i.e. more than 5 years).

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344 See OFCOM, Direction Setting the Margin between IPStream and ATM interconnection prices, 26.08.04.

345 See footnote 338

346 See the business plans of:

- GigADSL: see annex 15 of the letter of Telefónica of 27.09.06 (page TFCA-13117 of the file).
- The retail offer ADSL a tu medida: See the letter of TESAU of 07.01.05 at pages TFCA-786 (detail of the calculation) and TFCA-769 of the file: "*Dado que el plan de negocio es a 2007, se obtiene un valor residual de inversión de 302 M€ ajustado a la realidad, respecto de unos activos que no estarían obsoletos y que van a ser utilizables para otros servicios de Banda Ancha durante su vida útil*".
- The retail offer ADSL Tiempo Libre: See the letter of TESAU of 18.07.05 (page TFCA-3259 of the file).

347 See section 5.1.2 of the reply to the letter of facts.

(370) It is incorrect to assert that the Commission's approach means that zero profit is assumed beyond the five-year period. It means that profits generated by customers beyond that period cannot be used to subsidise losses made during the period. It is irrelevant in the present case to assess whether Telefónica's losses over the period 2001-2006 could be recovered by hypothetical future profits from 2007 onwards. The DCF method adopted by the Commission already acknowledges that there may be downstream losses in the initial phase of an expanding market (learning effects, economies of scale), but requires that the downstream arm of the dominant company is profitable over a period that corresponds to the lifetime of its assets. If this is not the case, i.e. a negative NPV is found, this means that Telefónica's pricing policy in the Spanish broadband markets is likely to have a negative effect on competition.

(371) Even if it was appropriate – which it is not – to allow the compensation of losses incurred during the modelled period by all hypothetical future profits, including those which were generated after the modelled periodTelefónica's calculation incorporates a number of major flaws that lead to an overestimated terminal value.

(372) Firstly, the terminal value calculated by Telefónica is not based on any estimation of the hypothetical future level of profitability of the downstream arm of the company. Conversely, it can be established in the present case that the expected future profits (if any) during 2007-2011 generated by the subscribers acquired by Telefónica before 2006 are not higher than the terminal value calculated by the Commission in the present case[348]. This means that the terminal value calculated by the Commission is already very favourable to the company.

(373) Secondly, Telefónica's calculation incorporates a number of major flaws that lead to an overestimated terminal value. The method proposed by Telefónica begins with two major choices: The first one relates to the choice of the relevant multiple and the second one to the choice of the firms that are similar to the firm being valued (the "comparables"). The multiple is calculated for each of the comparable firms and the average is computed and used for the valuation of Telefónica's downstream activity. There are a number of different multiples that can be used, ranging from earning multiples (the firm is valued as a multiple of the earnings generated by the company, like the operating income or the EBITDA) to book value multiples (the firm is valued as a multiple of the book value of the assets of the company) to revenue multiples (the firm is valued as a multiple of the revenues generated by the company).

348 See footnote 602 below.

(374) The choices made by Telefónica for the purposes of the valuation of its downstream activity in its *Reply* are contestable. Firstly, firms operating in the same sector may be very different in their business models, with some firms being (i) former monopolies that are vertically integrated and holding strong position in all markets of the telecommunications sector in their respective countries, (ii) vertically integrated mobile network operators that operate in oligopolistic markets whose main characteristics is the limited number of competitors (due to the limited number of licences), (iii) alternative ISPs that operate as mere resellers (although with some added value in some cases) of a wholesale service. The analysis should be applied using companies that share similar characteristics to the acquired company, avoiding the risk that firms with very different characteristics lead to very different multiples. Telefónica's comparables indeed have very different business model which are likely to lead significantly different multiples: (i) mobile operators (e.g. O2, Amena, Meteor) with multiples ranging from 2.74 to 3.66, (ii) a fixed vertically integrated cable operator (Ono) with a multiple of 2.69, (iii) downstream alternative network operators (Comunitel, Tele2, Neuf, Cegetel) with multiples ranging from 1.2 to 1.88 and (iv) downstream alternative network operators not operating in the retail market (Albura) with a multiple of 1.35. Therefore, the data provided by Telefónica itself precisely shows that the multiple is higher for mobile network operators or vertically integrated cable operators than for downstream alternative operators that operate in the retail broadband market.

(375) In addition, it must be pointed out that in the context of all the recent merger involving the Telefónica group (Telefónica / Telefónica Móviles[349], Telefónica / O2[350], Telefónica / Terra Networks[351], Telefónica / Bellsouth[352]), the comparables chosen by the investment banks that provided financial advisory services to Telefónica were ones with a similar business model (and not any telecom operator) as the target company. The comparables were foreign telecoms incumbents for the valuation of Telefónica, Internet Service Providers for the valuation of Terra Networks, mobile network operators for the valuation of Telefónica Móviles, O2 and BellSouth.

(376) In the context of the present decision which assesses whether an as efficient competitor of Telefónica's downstream ADSL arm can compete efficiently in the retail broadband market on the basis of the wholesale charged levied by the incumbent, if the method proposed by Telefónica which consists in including profits generated beyond the modelled period was adequate – which is not – mobile network operators and cable operators, which show very different characteristics as compared to Telefónica's downstream competitors, should be excluded from the multiple analysis, leading to an estimated average revenues multiple of 1.3.

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349 Informe de experto independiente en relación con el proyecto de fusión por absorción de Telefónica Móviles, S.A. por Telefónica, S.A.

350 See Recommended Cash Offer by Goldman Sachs International and Citigroup Global Markets Limited on behalf of Telefónica, S.A. to acquire the entire issued and to be issued share capital of O2 plc not already owned by Telefónica, S.A.

351 Independent expert report in relation to the plan for the merger by absorption of Terra Networks, A.S. by Telefónica, S.A. – KPMG Auditores S.L.

352 Telefónica Móviles, consolidation of leadership in Latin America, 08.03.04.

(377) Moreover the choice of a revenues multiple for the valuation of Telefónica's downstream activity is contestable. Two companies generating the same revenues but different levels of profitability do not have the same value. Take the example of a vertically integrated company and a downstream competitor that generate the same revenues in the downstream market. Telefónica's method would lead to the same value for both companies while the vertically integrated company has some valuable assets (network infrastructure) that should be taken into consideration in the valuation of the company, which Telefónica's does not. Those assets would correspond to operating expenses in the form of wholesale charges in the accounts of the downstream competitors. In this context, an indicator that would be proportionate to the added value of the company (so that the vertically integrated company would be given a higher value that a simple reseller of a wholesale product) and would be linked to the profitability of the company would seem to be more appropriate. For example, the majority of the companies that were recently acquired by Telefónica itseld (see for example, Terra[353] and O2[354]) were valued using a multiple to EBIDTA.

3.1.3 Backward-looking vs. forward-looking analysis

(378) There are two possible approaches to assessing the profitability of Telefónica's downstream activity with the DCF method: a backward-looking and a forward-looking analysis. The backward-looking approach would consist in calculating the NPV on the basis of Telefónica's historical costs while a forward-looking analysis would be based on the forecasts made by Telefónica in its initial business plan.

(379) In the SO, the Commission used Telefónica's historical revenues and costs when available and the forecasts of the company when there was no historical data available[355].

(380) Telefónica argued in its *Reply*[356] that this analysis is flawed because it implicitly assumes that Telefónica had perfect foresight in 2001 when choosing the level at which it set its prices. Telefónica considers that the Commission should use the cash flows projected in its business plan of October 2001, i.e. those based on the information available to Telefónica at the time it entered the retail market in 2001 and set its prices.

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353 *Independent expert report in relation to the plan for the merger by absorption of Terra Networks, A.S. by Telefónica, S.A. – KPMG Auditores S.L.* For the purposes of providing financial advisory services in connection with the merger Telefónica/Terra, Telefónica engaged Morgan Stanley&Co. which valuated Telefónica S.A. and Terrra Network S.A.as a multiple of the EBIDTA of the respective companies. Lehman Brothers applied the average multiple of the comparable companies' enterprise calues to the EBIDTA.

354 See *Recommended Cash Offer by Goldman Sachs International and Citigroup Global Markets Limited on behalf of Telefónica, S.A. to acquire the entire issued and to be issued share capital of O2 plc not already owned by Telefónica, S.A. "Partly because of the above, Telefónica believes that the multiple of Firm Value/EBITDA it is paying for this acquisition is in line with multiples of recent precedent transactions such as the acquisition of Amena by France Telecom (6.8x 2005E EBITDA and 1.0x 2005E EBITDA/05-08E CAGR adjusted by synergies and tax shield value) and Wind by Weather Investments (7.5x 2005E EBITDA and 1.1x 2005E EBITDA/05-08E CAGR)."* (page 15)

355 SeeSO, section 3.5.2.2.

356 See Telefónica'sReply, at pages 106-107.

(381) There is no case law on unfair prices under Article 82 in which the existence of an abuse would have been analysed on the basis of the forecasts of the very company whose conduct is being investigated. In accordance with case law and the practice of the Commission, also in the present case has the Commission based its DCF calculation on Telefónica's historical costs and revenues in the period 2001-2006.

(382) The question could nonetheless arise as to whether Telefónica's pricing policy could be objectively justified if its initial business plan indicated a positive NPV with reasonable forecasts that are compatible with a competitive environment. Therefore, and exclusively for the purpose of assessing whether they indicate that Telefónica's pricing policy could be objectively justified, the Commission has considered Telefónica's forward NPV calculations. As established below (see section VI.D.2.2), Telefónica's pricing policy could not be justified on the basis of forward-looking NPV calculations.

3.1.4 The cost of capital

(383) In the DCF method, future cash flows are discounted by the company's cost of capital in order to attribute a lower value to later cash flows than those arising more immediately. The cost of capital is an estimate of the price that the company must pay to raise the capital that it employs (through debt and equity). It reflects the return required by investors to invest in the company's activities rather than elsewhere.

(384) The same weighted average cost of capital ("WACC") of 15.72% as the one used by the CMT[357] for the calculation of TESAU's wholesale prices was applied. This is also the WACC used by Telefónica in its *Reply*.[358]

(385) Yet, in its reply to the letter of facts[359], Telefónica subsequently contested the use of that WACC, alleging that the value used by the Commission is excessive and has never been approved or used by the CMT. Telefónica's allegation is erroneous: not only was the WACC used by the Commission in the present decision proposed by TESAU itself (TESAU proposed an even higher WACC, actually) following its allegations[360] that the risks associated with its financial costs in its ADSL business are greater than its other businesses, but this WACC was also approved by the CMT and used by the latter[357] for the regulation of TESAU's broadband activities.

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357 See ELMCO cost model (see footnote 516 below) at pages CMT-250 and CMT-251 of the file: *"7.1 Hipótesis de partida para los cálculos [del coste de ADSL-IP] […] para el calculo de los costes de los servicios bitstream en el PAI IP se han considerado las siguientes hipótesis generales: […] Un periodo de amortización de 5 años para el conjunto de elementos considerados y un WACC del 15.72%"*.

358 See Reply, at page 336.

359 See section 5.1.3 of the Reply to the Letter of Facts.

360 Allegations of TESAU in the context of the *OBA 2002*:

"*Telefónica alega que no se valora suficientemente el riesgo empresarial de creación de una nueva red y que la remuneración de la inversión (tasa de coste de capital asociada) debería ser superior a la del negocio tradicional*" (see page CMT-1651 of the file).

"*Según TESAU, el WACC debería ser del 16.74% en lugar del 12.74%, es decir, cuatro puntos porcentuales superior, con lo que permitiría a TESAU recuperar los costes financieros derivados del mayor riesgo de este negocio"* (see page CMT-1727 of the file).

Allegations of TESAU in the context of the *OBA 2004*:

"*En cuanto al WACC que se debería utilizar, Telefónica de España difiere del planteamiento adoptado por Arcome, entendiendo que este servicio tiene peculiaridades, como son la innovación,*

4 The downstream input when testing the replicability of Telefónica's downstream products

(386) Telefónica offers a wide range of retail broadband products with a correspondingly wide range of prices, which leads to the question as to the aggregation level at which the margin squeeze test should be applied: either at the highest level of detail (i.e. at the level of each individual offer) or at the aggregate portfolio level (i.e. at the level of the mix of services marketed on the retail market).

(387) In some circumstances, it may be appropriate to conduct the test at the level of each individual offer. This would be the case for a new offer giving rise to a margin squeeze, which is currently subsidised by other profitable offers but whose volumes could increase substantially in the future, subsequently leading to an overall negative margin in the future.[361]

(388) In the case at hand, the margin squeeze test has been conducted on the basis of an aggregated approach, i.e. on the basis of the mix of services marketed by Telefónica on the relevant retail market. This approach (referred as to the "aggregated approach") is based on the principle that competitors must at least be able to profitably replicate Telefónica's product pattern. This is the approach most favourable to Telefónica, since it gives it maximal flexibility to spread the costs which are common to its retail products (provided that the margin squeeze test yields a positive result with the aggregated approach). The aggregated approach is consistent with a new entrant's internal decision making process in that it assesses the profitability of its investment in a network by considering the complete range of products that it is able to offer in the relevant downstream market.

5 The upstream input when testing the replicability of Telefónica's downstream products

(389) In the SO, the Commission assessed whether Telefónica's retail prices have been replicable on the basis of (i) the national wholesale products (ADSL-IP and ADSL-IP total) on the one hand and (ii) the regional wholesale product on the other hand.

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la incorporación de redes diferentes de la RTB, que permite deligarlo de los razonamientos que avalan el 12.74% para el resto del negocio. De esta forma se sugiere que la cifra utilizada alcance un nivel superior de al menos cuatro puntos porcentuales, de tal forma que la cifra empleada en los diferentes cálculos ha sido el 16.74%." (see page CMT-1275 of the file).

361 Take the example of an operator currently marketing one retail offer to 1.000.000 subscribers at a unit margin of 0.5 €/end-user/month and launching a new retail product with a unit margin of -2 € / end-user / month. Assume that the already established offer generates 100.000 new subscribers and the new offer generates 400.000 new subscribers. The overall monthly unit margin will be:
(0.5*1.100.000–2*400.000)/1.500.000 = -0.17 € /end-user/month.

(390) In its *Reply*[362], Telefónica alleged that the approach of the Commission is artificial and does not reflect the strategy adopted by alternative operators in the retail market. Telefónica argued that in order to operate on the retail market, competitors do not rely on a single specific wholesale product but on a mix of wholesale inputs. For each individual business case and for each region, a competitor can use an optimal wholesale product or optimal combination of wholesale products. Also, according to Telefónica, an equally efficient operator had better use an optimal mix of national and regional inputs. An equally efficient operator had even better use local loop unbundling only.

(391) Moreover, the position taken by Telefónica's in its *Reply* is in contradiction with the one it took when commenting on the complaint lodged by France Telecom that is at the origin of this case: in its allegations[363], Telefónica stated that the assessment of the replicability of its retail prices should be made on the basis of the regional wholesale offer (GigADSL) only.

(392) Due to the risks involved in investments that entail high sunk costs, alternative operators are likely to follow a step-by-step approach to continuously expanding their infrastructure investments. When climbing the 'investment ladder' (see paragraphs (176) and (178) above), alternative operators seek to obtain a minimum "criticalmass" in order to be able to make further investments. It is therefore necessary that there should not be any margin squeeze in relation to any "step" of the ladder, i.e. in relation to any wholesale product. If there was such a margin squeeze, new entrants that are climbing the ladder of investment, would be foreclosed.

(393) All national regulatory authorities agree that the process of climbing of the ladder of investment can only be effective it there is a margin between all the steps of the ladder. This is illustrated by the recent Broadband market competition report (May 2005) of the European Group of Regulators (ERG): *"In order to kick-off the process as well as to ensure that it does not stop and new entrants keep on moving to the next rung, […] pricing of access products must be consistent, i.e. the relative prices must reflect the difference in cost between the products. In other words: the price difference or margin must satisfy the margin squeeze test of covering the incremental cost of providing the 'wider' product"*[364].

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362 See Telefónica's Response, at page 95-97.

363 Telefónica, Contestación al escrito de denuncia, 22.09.03: "*Por tanto, el análisis de un supuesto estrechamiento de márgenes debería realizarse entre el precio del servicio del primer eslabón de la cadena de producción (GigADSL) y el precio final de los servicios de acceso a Internet a clientes finales de TESAU*" (see page TFCA-42 of the file).

364 Broadband market competition report, ERG, page 17 (see page Div-206 of the file).

(394) This is also the view taken by Prof. Martin Cave in a Report commissioned by the European Commission[365]: **"3.2 Relative prices of access products.** A key precondition for neutrality across different wholesale broadband products is satisfaction of a margin squeeze test. […] A prohibition of a margin squeeze thus lends itself to the task of ensuring that prices are set in a way designed to prevent the dominant firm from leveraging its market power from one stage of the production process into a neighbouring one. Applying it consistently over a range of broadband wholesale (and retail) products should avoid exclusionary behaviour of this kind. […] The application of the margin squeeze is illustrated in figure 2, which shows (on the left hand side) a variety for wholesale broadband access and (on the right hand side) a cost stack. […] A margin squeeze test involves comparing the difference in price or margin between any two products with the incremental cost of the components in the 'wider' product"

(395) Telefónica itself indicated to Ofcom, that an appropriate margin between the different wholesale products is vital for the development of competition in the retail market and in the wholesale broadband markets[366]: *"Telefónica UK welcomes the Ofcom initiative to set the margin between IPStream [British Telecom's national wholesale product in the UK] and ATM interconnection [British Telecom's regional wholesale product in the UK]. An appropriate margin between these two platforms is vital to the development of competition in the provision of wholesale DSL services."*

(396) In view of the above, the Commission considers that it is appropriate to examine whether Telefónica's retail prices could be replicated on the basis of each of Telefónica's non substitutable relevant wholesale products taken one by one, as opposed to any specific mix of the three products.

D. The margin squeeze calculation

(397) In the present decision, the Commission will assess whether the spread between Telefónica's upstream and downstream charges covers at least the downstream LRAIC of the company. This chapter is organised as follows: Section 1 assesses Telefónica's downstream incremental revenues and costs on the basis of the information made available by the company. Section 2 assesses the existence of the margin squeeze on the basis of the costs and revenues estimated in Section 1.

1 Assessment of Telefónica's downstream incremental revenues and costs

(398) This section assesses Telefónica's downstream incremental revenues and costs on the basis of the information made available by the company.

365 Martin Cave, Remedies for Broadband Services, Paper prepared for DG INFSO, September 2003 (see pages Div-379 and Div-380 of the file).

366 Telefónica UK Response to the Ofcom Consultation on a Draft Direction Setting the margin between IPStream and ATM Interconnection Prices, 02.07.04 (see page TFCA-3769 of the file).

(399) Since the test is an 'as efficient competitor test', the analysis of both TESAU's and TERRA's retail prices will be based on TESAU's downstream costs[367].

1.1 The sources of information that the Commission used for the assessment of Telefónica's incremental revenues and costs

(400) In a series of requests of information, the Commission requested Telefónica to provide data regarding the costs relative to the additional inputs which are needed to transform its wholesale products (GigADSL, ADSL-IP and ADSL-IP Total) into retail products.

1.1.1 TESAU's business plans

(401) TESAU submitted copies of various business plans to the Commission, in particular its initial business plan dated 16 October 2001 on which the decision to enter the relevant retail market was based ("the initial business plan")[368] as well as the updates of this initial business plan ("updated business plans")[369] and a copy of each year's strategic plan ("strategic plan")[370]. As explicitely indicated by the company, TESAU's business plans are based on incremental costs (at TESAU's own assessment)[371].

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367 However, since TERRA has only been commercializing retail products under the lowest speed and has had a different promotional policy, some cost items will be adjusted. As will be seen below, the only difference in the costs used for TERRA concern:

- Network costs: lower wholesale charges (see Table 25 and Table 26 below) and lower costs for access to the internet (see Table 26 below)
- Net subscribers' acquisition costs: different non recurrent revenues and modem costs (see Table 31 below).

368 See annex 10 of the letter of Telefónica of 21.07.06, in particular "*Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base*" (annex 10iii: pages TFCA-4445 to TFCA-4494 of the file) and its annexes (annexes 10i and 10ii of the same letter: pages TFCA-4387 to TFCA-4444 of the file). The main economic variables of the business plan are summarised in annex 10iv (page TFCA-4495 of the file).

369 See annex 11i of the letter of Telefónica of 21.07.06: "*Actualización de las variables económicas del ADSL-Reunión con la Dirección General de Finanzas y control de Gestión-18.04.02*" (pages TFCA-4496 to TFCA-4512 of the file).
See also annex 9 of the letter of Telefónica of 27.09.06 (pages TFCA-12944 to TFCA-12989 of the file) which provides all the details of the calculations in the updated business plan of 2002 ("Presupuesto 2002" and "PEC Verne").

370 See the letter of Telefónica of 22.08.06 (pages TFCA-8984 to TFCA-9036 of the file): strategic plans for 2002-2005, 2003-2006, 2004-2007 and 2005-2008.

371 See the letter of Telefónica of 07.04.04 (page TFCA-220 of the file): "*Tanto Telefónica de España como Terra contaban con Planes de Negocios, con carácter previo al lanzamiento de sus servicios ADSL minoristas, planes que garantizaban la rentabilidad de dichos servicios a un horizonte temporal razonable – según las estimaciones de mercado previsibles en el momento de su realización -, rentabilidad que en estos mercados debe ser entendida como cobertura de los costes incrementales.*"
See also the business plan of October 2001 in annex 10iii of the letter of Telefónica of 21.07.06 at slides 34 and 35 (pages TFCA-4479 and TFCA-4480 of the file): "*Resultados económicos del negocio de banda ancha de TdE […] EBITDA incremental […] Ingresos incrementales […] OPEX y SAC incremental […] CAPEX incremental*" "*Cuenta de resultados del negocio incremental ADSL […] Valor incremental de banda ancha*".
See also the business plan of April 2002 in annex 11i the letter of Telefónica of 21.07.06: "*Actualización de las variables económicas del ADSL-Reunión con la Dirección General de Finanzas y control de Gestión-18.04.02*" at slides 4 and 5 (pages TFCA-4500 to TFCA-4501 of the file): "*Cuenta de resultados incremental del negocio del ADSL*" "*Valor incremental de la Banda Ancha*".

(402) The margin squeeze calculation made by Telefónica in the *Reply* were based on the incremental costs indicated in TESAU's initial business plan[372].

(403) TESAU also submitted copies of the business plans of the retail ADSL offers launched in 2004 and 2005: *ADSL Tiempo Libre*[373], *ADSL a tu medida*[374] and *ADSL Mini*[375]. All those business plans are based on TESAU's incremental costs[376] estimated by the company itself on the basis of its own assessment of its historical incremental costs[377].

(404) TESAU also submitted a copy of the initial business plan of the wholesale product GigADSL[378].

1.1.2 TESAU's financial results

1.1.2.1 TESAU's audited ADSL cost accounts

(405) TESAU produces every year separate and audited accounts *('TESAU's audited ADSL cost accounts')*[379] for its wholesale (GigADSL and ADSL-IP) and its retail activities. Those cost accounts are based on fully distributed costs and identify clearly the directly or indirectly attributable costs from the unattributable costs[380]. While the LRAIC clearly do not include the unattributable costs, they include the totality of the directly attributable costs and may include a proportion of the indirectly attributable costs (if they are incremental to TESAU's retail broadband activity).

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372 See page 337 (footnote 682 in particular) of the Reply and Section VI.D.2.1.2.3 below.

373 See the letter of TESAU of 18.07.05 (pages TFCA-3257 to TFCA-3261 of the file).

374 See the letter of TESAU of 07.01.05 (pages TFCA-767 to TFCA-769 of the file and pages TFCA-786 and TFCA-787 of the file) and the letter of TESAU of 17.03.05 (page TFCA-1094 of the file)

375 See the letter of TESAU of 28.04.05 (pages TFCA-2290 and TFCA-2291 of the file).

376 See :

- *ADSL a tu medida*: see the letter of TESAU of 07.01.05 (page TFCA-769 of the file): "*Se supone un CAPEX teniendo en cuenta la inversión incremental – material e inmaterial – a realizar para provisionar la estimación de altas consideradas*".
- *ADSL tiempo libre*: see the letter of TESAU of 18.07.05 (pages TFCA-3257 to TFCA-3261 of the file).
- *ADSL Mini*: see the letter of TESAU of 28.04.05 (pages TFCA-2290 and TFCA-2291 of the file): "*Se asume un CAPEX teniendo en cuenta la inversión incremental – material e inmaterial – a realizar para provisionar la estimación de altas considerada*".

377 See for example the letter of TESAU of 07.01.05 (page TFCA-769 of the file): "*Descripción detallada del CAPEX. Para el calculo del CAPEX en el modelo de negocio provisto en la respuesta a la cuestión (1) del cuestionario 3, se imputó una cifra de inversión por alta de 312 Euros, correspondiente a la descripción de las inversiones realizadas en el periodo Julio 2003-Junio 2004, que a continuación se describen. Dicha inversión se abordó para las altas anualizadas del mismo periodo, dando como resultado la cifra de 312 euros por alta mencionada*".

378 See annex 15 of the letter of Telefónica of 27.09.06 (pages TFCA-13094 to TFCA-13117 of the file).

379 "*TESAU's audited ADSL cost accounts"*

The Spanish regulatory framework for the telecommunications established a series of obligations imposed on Telefónica, including the obligations to elaborate a cost accounting separation of its retail and wholesale activities.

- From 2001 to 2004: letter of TESAU of 17.03.05 (pages TFCA-1499 to TFCA-1507 of the file);
- 2005: letter of Telefónica of 07.08.06 (pages TFCA-8165 and TFCA-8166 of the file).

380 Directly attributable costs are those costs that can be directly and unambiguously related to a product of service. Indirectly attributable costs are those costs that can be apportioned to products or services on a measured non-arbitrary basis based on the relationship of the costs with directly attributable costs (i.e.

(406) TESAU also provided the network costs[381] incurred to transform GigADSL into retail products.

1.1.2.2 Economics ADSL

(407) TESAU provided a profit & loss analysis of its retail activity ("*Economics ADSL*")[382] based on its own assessment of the incremental costs[383] of its non network costs (subscribers' acquisition costs and recurrent ISP costs[384]).

1.1.2.3 TESAU's ADSL scorecard

(408) TESAU also provided the monthly scorecard ("*ADSL scorecard*") of its broadband activity[385]. The *ADSL scorecard* is based on TESAU's own assessment of its incremental costs[386]. It has been implemented in order to ensure the correct implementation of the objectives laid down in the business plan, which is based on incremental costs (see section VI.D.1.1.1 above).

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using usage factors for each consuming shared resources). Unattributable costs are cost which can only be attributed on an arbitrary basis. (See the Commission Recommendation of 8 April 1998 on interconnection in a liberalized telecommunications market – Part 2 – page 5).

381 "*TESAU's audited network costs*":
- From 2001 to 2004: Letter of TESAU of 01.04.05 (pages TFCA-1699 to TFCA-1706 of the file);
- 2005: letter of Telefónica of 18.08.06 (pages TFCA-8905 and TFCA-8906 of the file);
- 2006: letter of Telefónica of 17.10.06 (pages TFCA-13119 and TFCA-13120 of the file).

382 "*Economics ADSL*":
- From 2002 to 2004: letter of TESAU of 07.01.05 (pages TFCA-760 to TFCA-762 of the file);
- 2005: annex 8 of the letter of Telefónica of 28.07.06 (pages TFCA-6000 and TFCA-6001 of the file).
- 2006: annex 1 of the letter of Telefónica of 17.10.06 (pages TFCA-13124 and TFCA-13125 of the file).

383 See the letter of TESAU of 01.04.05: "*No obstante, presidiendo del enfoque incremental y directo con el que se ha tratado el análisis de los Economics del Kit ADSL, y en particular de sus costes […].*" (page TFCA-1673 of the file).

384 See section VI.D.1.3.4 for the description of the costs that are included in those headings.

385 *ADSL scorecard*:
- 2002: annex 2 of the letter of Telefónica of 31.08.06 (pages TFCA-9695 to TFCA-9763 of the file);
- 2003: annex 3 of the letter of Telefónica of 31.08.06 (pages TFCA-9764 to TFCA-9856 of the file);
- 2004: annex 10 of the letter of Telefónica of 27.09.06 (pages TFCA-12990 to TFCA-13037 of the file);
- 2005: annexes 11-12 of letter of Telefónica of 27.09.06 (pages TFCA-13038 to TFCA-13076 of the file) and annex 1 of the letter of Telefónica of 06.10.06 (page TFCA-13264 of the file);
- 2006: annexes 13-14 of the letter of Telefónica of 27.09.06 (pages TFCA-13077 to TFCA-13093 of the file) and annex 1 of the letter of Telefónica of 06.10.06 (page TFCA-13265 of the file).

386 See annex 10iii of the letter of Telefónica of 21.07.06: *Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base* at slide 1: "*En concreto el documento […] presenta una cuenta de resultados del negocio ADSL incremental*" (see page TFCA-4446 of the file).

(409) In particular, the ADSL scorecard provides TESAU's own assessment of the capital expenditures ("CAPEX"[387]) that are incremental to its broadband activity[388]. The value of the incremental historical investment is compared every month with the incremental targeted CAPEX (expressed in euros per new subscriber) as laid down in the business plan of the company[389].

(410) Also the broadband scorecard clearly distinguishes[390] the incremental operating expenses ("OPEX"[391]) from the non incremental OPEX and provides TESAU's own assessment of the incremental cost for, *inter alia*, the IP backbone[392] and the connection to the internet[393].

1.1.2.4 The investments that are directly attributable to TESAU's ADSL activity

(411) TESAU also provided the investments incurred for its broadband infrastructure ("*CAPEX ADSL*")[394]. Those investments are directly attributable (therefore incremental) to TESAU's broadband activity. Indeed, the annual amount of investment coincides with the one indicated in TESAU's ADSL scorecard[395] which is based on Telefónica's assessment of its incremental costs (see section 1.1.2.3 above).

1.1.3 TERRA's financial results

(412) TERRA provided a profit & loss analysis of its retail broadband activity[396] based on its own assessment of the incremental costs [397]. This analysis calculates TERRA's profitability on the basis of ADSL-IP.

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387 The capital expenditures ("CAPEX") correspond to the money spent by the company to acquire or upgrade physical assets (network infrastructure).

388 For example the annualized CAPEX for the period July 2003-June 2004 ([…]) indicated in the *ADSL scorecard* for June 2004 (annex 10 of the letter of Telefónica of 27.09.06, page TFCA-13010 of the file) coincides with the incremental CAPEX (i.e. explicitly indicated as incremental by TESAU) used by the company in its business plan of the retail offer *ADSL a tu medida* (see footnote 377 above).

389 See for example the *ADSL scorecard* for December 2002 (see annex 2 of the letter of Telefónica of 31.08.06, pages TFCA-9762 and TFCA-9763 of the file): […].

390 The *ADSL scorecard* makes a distinction between the the incremental EBIDTA and the full cost EBIDTA (at TESAU's own assessment):

- 2004: the annual incremental OPEX is included under the heading 'total gastos' and the non incremental OPEX is included under the heading 'Gastos repercutidos' (see annex 10 of the letter of Telefónica of 27.09.06, page TFCA-13036 of the file).
- 2005: the unit incremental OPEX is included under the heading 'total gastos' and the non incremental OPEX is included under the heading 'Gastos repercutidos' (see annex 1 of the letter of Telefónica of 06.10.06, page TFCA-13264 of the file).
- 2006: the unit incremental OPEX is included under the heading 'Opex (incremental)' and the non incremental OPEX is included under the heading 'Gastos repercutidos' (see annex 1 of the letter of Telefónica of 06.10.06, page TFCA-13265 of the file).

391 The operating expenses ("OPEX") correspond to the expenses incurred in conducting normal business operations, e.g. salaries, wholesale charges, administrative and research and development costs.

392 See cost item 'Mantenimiento Red IP'.

393 See cost item 'Conexión a internet'.

394 See annex 1 of the letter of Telefónica of 17.10.06 (pages TFCA-13126 and TFCA-13127 of the file).

395 See the total amount of investment indicated in *ADSL CAPEX*: […] (page TFCA-13126 of the file). Those amounts correspond to those indicated in the *ADSL scorecard* (see footnote 385: pages TFCA-9762, TFCA-9856, TFCA-13037 and TFCA-13063 of the file).

396 See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefónica of 17.10.06 (page TFCA-13123 of the file).

1.2 Telefónica's revenues

(413) Telefónica's sources of revenues (at retail level) are composed of three items:

- The initial one-off connection fees paid by subscribers for the activation of the end user's connection ("connection fee");
- the initial one-off payments collected from the provision of the end-users' equipment, such as the modem ("modem");
- and the monthly fees ("monthly fee" or "ARPU"[398]), composed of a fixed fee and a possible variable fee for consumption over the monthly usage allowance, paid by subscribers for the provision of retail broadband services.

(414) The one-off revenues (modem and connection fee) will be directly taken into account in the calculation of the net subscribers acquisition costs[399].

(415) In its *Reply*[400], Telefónica argued that the Commission underestimated TESAU's ARPU when dividing the annual revenues by an overestimated average number of end users. This is incorrect, as illustrated by the ARPU calculated by the company itself in its monthly ADSL scorecard[401], which is the one that the Commission directly used (i.e. without any re-treatment) in the present decision:

Table 16 -TESAU's ARPU from 2001 to 2006[401]

(€/month/end user)	2001	2002	2003	2004	2005	2006
ARPU	[…]	[…]	[…]	[…]	[…]	[…]

(416) TERRA's ARPU has also been estimated by the company itself:

Table 17 -TERRA's ARPU from 2001 to 2005[402]

(€/month/end user)	2001	2002	2003	2004	2005
ARPU	[…]	[…]	[…]	[…]	[…]

397 See the letter of TERRA of 26.03.04 (page TFCA-704 of the file).

398 Average Revenue per User.

399 See section VI.D.1.3.4.4 below.

400 See page 328 of the *Response*.

401 See *ADSL scorecard* (see footnote 385) at pages TFCA-9759, TFCA-9852, TFCA-13034, TFCA-13264 and TFCA-13265 of the file. See also *Economics ADSL* (see footnote 382) at pages TFCA-6000 and TFCA-13124 of the file.

402 See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefónica of 17.10.06 (page TFCA-13123 of the file). Revenue item 'Ingresos recurrentes'.

1.3 Telefónica's costs

1.3.1 Introduction

(417) In the course of these proceedings, Telefónica provided to the Commission its costs under two standards: historical costs and current costs. Historical cost accounting ("HCA") uses historical information provided by the accounting system while current cost accounting ("CCA") takes into account the costs that would have been incurred in the past to build a network using current technology: all resources are reassessed at their current cost and for the assets that are not available anymore on the market, the "Modern Equivalent Asset" ("MEA") methodology is used. CCA also excludes exceptional costs (e.g. costs relating to the pre-retirement of employees)[403].

(418) The margin squeeze test is based on CCA (as provided by Telefónica) in order to reflect the Build-Buy of assets decision faced by new entrants. In a HCA model, the evolution of the acquisition costs of assets would not be taken into account. Purchase prices can significantly increase or decrease over time and affect the value of assets. As a new entrant, willing to build a network, would be paying the current price and not the historical price, existing assets must be reassessed at their current value.

(419) Telefónica's costs can be classified in three categories: the network costs, the ISP recurrent costs and the customer acquisition costs.

(420) As will be described in detail in this section, the Commission will base the margin squeeze analysis on TESAU's own assessment of its incremental costs as indicated in the *ADSL scorecard* (see section VI.D.1.1.2.3 above) and the *Economics ADSL* (see section VI.D.1.1.2.2 above), with the exception of the commercialization costs, for the reasons laid down in section VI.D.1.3.4.2 below.

1.3.2 The network costs

(421) The network costs – which depend on the wholesale input that is contracted with Telefónica – are composed of the costs corresponding to the wholesale access prices charged by Telefónica plus the costs of the additional network elements needed to provide a retail broadband access product (estimated using TESAU's LRAIC).

1.3.2.1 The network costs on the basis of GigADSL

(422) In addition to the wholesale charges for GigADSL, alternative operators need to roll out a network composed of (i) an IP network that conveys the traffic from the 109 indirect access points ("PAI") to the ISP point of connection ("IP backbone") and (ii) the access to the internet linking Telefónica's subscribers to all worldwide networks ("access to the internet" or "international connectivity").

1.3.2.1.1 Wholesale charges

(423) The wholesale prices that Telefónica charges to alternative operators are composed of:

[403] Letter of TESAU of 01.04.05 (see pages TFCA-1669 and TFCA-1670 of the file).

(424) A wholesale access charge per end user: this charge is composed of a one-off connection fee for the activation of each new ADSL line and a monthly fee that varies with the modality (or bandwidth) of the final ADSL connection. The average monthly fee per end user ("access charge") is calculated on the basis of the average number of lines of each modality (or speed) of GigADSL. The one-off connection fee ("connection fee") will be treated as an acquisition cost in the margin squeeze test[404].

(425) A wholesale access charge per port occupied at the PAI ("pPAI")[405]: this charge is composed of a one-off fee for the installation of the port at the point of interconnection and a monthly fee for each port occupied at the point of interconnection. Both charges vary with the capacity of the port (2, 34 or 155 Mbit/s). The average cost per end user is calculated dividing the average cost per port by the average number of end users per port, taking into account the occupation ratio per port and the average reserved bandwidth per end user.

Table 18 – Wholesale prices for GigADSL charged by Telefónica

(€/month/end user)	2001	2002	2003	2004	2005	S1 2006
monthly rental fee[406]	[…]	[…]	[…]	[…]	[…]	[…]
pPAI[407]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	[…]	[…]	[…]	[…]	[…]	[…]

1.3.2.1.2 IP backbone costs

(426) The IP backbone is composed of two categories of assets: the IP nodes and the IP transport.

404 See section VI.D.1.3.4.4 below.

405 In the SO (see Table 72 in Annex E), the cost relating to the pPAI had been included in the cost item 'Nodos ATM con PAI incluido'. Following Telefonica's comments in response to the Statement of Objections (see page 323 of the Response) that such item includes some costs that are already included in the GigADSL access charge and consequently not incurred by the alternative operators that contract GigADSL, the Commission has excluded the item 'Nodos ATM con PAI included' from the analysis but included the wholesale charge for the pPAI which obviously is not included in the GigADSL monthly access charge.

406 The average monthly rental fee is calculated on the basis of (i) the monthly rental fee charged by Telefónica for each modality og GigADSL (see Table 10 above) and (ii) the average number of lines of each modality of GigADSL (see Table 61 in Annex B).

407 See Table 10 above. The cost of the 'pPAI' service is composed of a one-off fee (amortized over 5 years) and a monthly fee for each port occupied at the PAI. The average unit cost is computed in function of the following parameters (see the cost model of the CMT disclosed in the Annex 3 of the OBA of 22.07.04 (see page CMT-1637 of the file):

– 50% of the ports are of capacity 155 Mbps and 50% of the ports are of capacity 34 Mbps.
– The occupation ratio per port is 70%.
– The average reserved bandwidth per line of TESAU (see Table 63 in Annex B).

(427) The IP nodes are the commuting and access elements of the IP backbone, i.e.[408] the BRAS[409], the IP routers, the IT system and some other auxiliary equipments. As explained by Telefónica, those equipments are very specific and directly attributable to the provision of broadband services[410].

(428) The IP transport elements correspond[411] to the circuits that connect the IP nodes; they include the transmission equipments, optical fibre cables, trenches, canalisations, etc. In its *Reply*[412], Telefónica argued that it has no transport network that is specific to the IP backbone.

(429) It will be established in the following paragraphs that Telefónica incurred incremental investments relating to its transport network that are directly attributable to its downstream broadband activity.

(430) Firstly, Telefónica explicitly acknowledged in its letter to the Commission dated 23 June 2006 that the assumption that there is no incremental cost relating to IP transport is an approximation and that in fact some investments relating to the transmission equipment are avoidable.[413]

(431) The mere fact that one cost is common to different services does not necessarily imply that the long run incremental cost due to the activity in question is zero. Indeed, the LRAIC also includes the increase in the common costs due to the downstream ADSL activity. This may in particular be the case for common assets whose capacity is progressively adapted to the short and medium term demand of all the services that share the common asset. If the traffic generated by the product in question represents a significant proportion of the traffic generated by the totality of the services that share the common asset, it is highly probable that a significant proportion of the corresponding common cost is an avoidable cost and hence incremental.

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408 See the letter of TESAU of 17.03.05 (page TFCA-1075 of the file).

409 Broadband access server (BRAS). The BRAS converts the signal in IP protocol

410 See page 323 of the *Reply*: "*Mientras que los Nodos IP son específicos de la red IP […] Por esto, los costes de los Nodos IP sí deben considerarse coste incremental de la red IP y deben incluirse en el cálculo de los costes de red del GigADSL.*"
See also the letter of Telefónica of 23.06.06 (page TFCA-13270 of the file): "*los 'Nodos IP' se refieren al Servido de Acceso Banda Ancha (SABA o BRAS), routers IP, equipos de gestión de la red IP, etc., es decir, equipos muy especificos y directamente relacionados con la prestación de los servicios de Banda Ancha."*

411 See the letter of TESAU of 17.03.05 (page TFCA-1075 of the file).

412 See page 94 and 323 of the *Reply*. See also the letter of Telefónica of 23.06.06 (page TFCA-13270 of the file).

413 See the letter of Telefónica of 23.06.06 (page TFCA-13271 of the file): "*El ajuste propuesto por Telefónica ha consistido en suponer que el coste corriente FAC del Transporte IP no es evitable al 100% y por tanto no es incremental. Ciertamente esto se puede considerar una aproximación, ya que probablemente sería evitable el coste de algunos sistemas de transmisión que pudieran quedar vacantes si se dejaran de prestar los servicios ADSL.*"

(432) Although TESAU's transport network is not strictly speaking specific to the retail broadband services of the company, its capacity is dimensioned in function of the traffic of all the services that use it.[414] Therefore, when assessing whether TESAU's transport network elements (optical fibre cables, transmission equipment, etc.) are, partially or totally, avoidable costs (i.e. would not be incurred it Telefónica did not provide downstream broadband services), the increasing proportion of TESAU's broadband activity (not only in terms of revenues and earnings but especially in terms of capacity occupied) must be taken into consideration.

(433) In terms of revenues and earnings – as illustrated in pragraphs (466) and (467) below – the growth of TESAU is driven by its broadband activity while traditional voice services have been declining since 2001 and will continue to decline in the future. While TESAU started providing retail broadband services in September 2001, its broadband activity will represent more than […]%[415] of the total revenues from traffic services[416] of TESAU in 2008. In 2006, TESAU's revenues grew by 2.3%, out of which the contribution of the broadband business was 4.9%, the one of traditional access was -0.5%, that of traditional voice services -2.6% and that of narrowband was -0.5%.[417] TESAU itself considered in its initial business plan[418] that the entry in the retail broadband market would transform a business model (provision of traditional telephony services) without expectations into a growing profitable one. In particular, TESAU estimated that the incremental earnings (in terms of EBIDTA) due to the retail broadband business would represent 35% of the total earnings of the group in 2005[419]. This percentage would have been even higher in 2008 given the increasing proportion of broadband in TESAU's total revenues.

414 See the letter of Telefónica of 25.08.06 (page TFCA-9041 of the file.

415 "*A new world of Broadband Solutions*", presentation of Julio Linares at the Barcelona Investor Conference, 25.04.05 (see page TFCA-3821 of the file).

416 i.e. excluding access revenues (which obviously do not use the transport network).

417 Telefónica's last trimester report of 2006, page 23.

418 See annex 11ii of the letter of Telefónica of 21.07.06: '*La oportunidad de la Banda Ancha en las operadores fijas – documento para discusión – Madrid, 20 de diciembre de 2001*", slide 17 (page TFCA-4530): *"Sin esta estrategia de banda ancha TdE tendría grandes dificultades para retener a sus mejores clientes, con un impacto significativo en la rentabilidad global del negocio fijo. […] La Banda Ancha supone la transformación de un negocio que se creía sin perspectivas en un negocio de crecimiento rentable*."

419 See annex 11ii of the letter of Telefónica of 21.07.06: '*La oportunidad de la Banda Ancha en las operadores fijas – documento para discusión – Madrid, 20 de diciembre de 2001*", slide 17 (page TFCA-4530): Telefónica estimated that its EBIDTA in 2005 would be € 5.576 million in the scenario it would enter the retail broadband market but would only be € 3.615 million in the scenario it would not enter the retail market and consequently would also lose fixed voice telephony customers (according to Telefónica, the entry in the retail broadband market would have a loyalty effect on its clients in the retail fixed telephony market).

(434) In terms of evolution of traffic, the total traffic generated by traditional voice services in Spain has been decreasing from 120 billion minutes in 2001 to 81 billion minutes in 2006[420] (-33%). The traffic by line has been decreasing from 7175 minutes/year/line in 2002 to 5225 minutes/year/line in 2005[421] (-29%). The traffic generated by TESAU's traditional services has also been decreasing constantly since 2001 (in terms of number of minutes, the traffic decreased by 4% in 2003, 7% in 2004, 10% in 2005 and 10% in 2006[422]), which is particularly relevant when assessing whether the increase of capacity of TESAU's transport network would have been avoided if TESAU had continued providing traditional voice services without providing retail broadband services.

(435) The contribution of broadband services will continue to increase in the future years, not only because the Spanish broadband sector is still far from having reached saturation[423] but also because broadband connections are a prerequisite for the provision of a variety of telecommunications services to end-users, i.e. not only internet connections but also telephony over IP which will progressively replace traditional fixed telephony services and also TV over broadband which only started up in 2005.

(436) The increasing share of the traffic used by the broadband activities of Telefónica is illustrated by the table below:

Table 19 – Capacity in the transport segments connecting the IP routers that is used by TESAU's IP services from 2005 to 2006[424]

[…]

420 See CMT 2005 annual Report, page 296 and CMT Fourth Trimestral Report 2006, page 16.

421 See CMT 2005 annual Report, page 298.

422 See the Annual Reports of Telefónica for 2003, 2004, 2005, 2006.

423 Spain's broadband penetration rate is below EU average, which is continuously rising (see section VI.E.2.2.2 below).

424 See the letter of Telefónica of 27.09.06 (page TFCA-12554 of the file).

(437) Telefónica argued[424] that it cannot be concluded from the observed increasing proportion of the capacity used by its IP services that some IP transport costs are directly attributable to it broadband business. Indeed, according to Telefónica, the percentage indicated in Table 19 under the heading "IP" includes other services than broadband, namely narrowband internet services, broadband value-added services (RPV-IP) and the corresponding wholesale services. Yet, the traffic generated by TESAU's narrowband services is negligible compared to the one generated by the broadband services: it represented less than 2% of that of broadband services[425] in 2005 and will represent even less in the forthcoming year as suggested by Telefónica's own forecasts[426]. As to the broadband value-added services (RPV-IP), not only TESAU would not offer them if it would not offer broadband connections but, in any event, as acknowledged by Telefónica itself[427], only a negligible proportion of the IP transport costs is allocated to those services.

(438) In those circumstances, it is highly probable that a significant proportion of the investments dedicated to the transport network would have been avoided if Telefónica had not entered the downstream broadband markets (national wholesale and retail), which is confirmed by the very fact that Telefónica itself considered that the capacity needs for its traditional voice services were already covered in the context of traditional traffic stagnation (in fact decline).[428]

(439) Moreover, internal calculations made available by Telefónica contradict the company's allegations. Firstly, when assessing the profitability of its retail ADSL activity in its initial business plan – which is based on incremental costs[429] – Telefónica included investments relating to its transport network[430]. Also the business plan of the retail offer 'ADSL a tu medida'– which is also based on incremental costs[431] – includes investments relating to the transport network of the company[432].

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425 See annex 8 of the letter of Telefónica of 27.09.06 (page TFCA-12943 of the file): this proportion has been calculated on the basis of the corresponding (variable) costs for access to the internet for both products.

426 While the number of broadband lines will be increasing ([…]) and the consumption (therefore the bandwidth) by end users will also be increasing, the traffic generated by narrowband services will be decreasing by […] % every year from 2004 to 2008. See Telefónica's strategic business plan 2005-2008 (letter of Telefónica of 22.08.06, page TFCA-9027 of the file).

427 See the letter of Telefónica of 28.07.06 (page TFCA-4649 of the file): "*Una parte muy pequeña se distribuye además a 'Soluciones y valores añadidos banda ancha" debido a los accesos dedicados del servicio RPV-IP*"

428 See the presentation of Julio Linares, Executive Chairman Telefónica de España SAU, Third Investor Conference Madrid 2003 (slides 32 and 33).

429 See section VI.D.1.1.1 above.

430 See the letter of TESAU of 21.07.06 (pages TFCA-4227 and TFCA-4228 of the file): "*Descripción de los costes Opex y Capex contemplados en el Plan de Negocio del ADSL de octubre de 2001: […]* ***Capex****: […]* ***Red IP:*** *Conmutación y transmisión IP. Inversión variable a tramos a medida que aumenta el flujo de datos. Dependiente del cambio de velocidad y de mix de los productos ADSL. Se asume una disminución progresiva del coste de los circuitos de transporte. […] Otras inversiones fijas: Inversión en […] planta interior […].*"
See also the letter of Telefónica of 27.09.06 at annex 9 (page TFCA-12978 of the file): the initial business plan of the company shows the following investments in transmission equipment: […].

431 As indicated by TESAU in its letter of 07.01.05, the business plan of 'ADSL a tu medida' only included the incremental investments: "*Se asume un CAPEX teniendo en cuenta la inversión incremental – material e inmaterial – a realizar necesaria para provisionar la estimación de altas considerada*." (see page TFCA-769 of the file)

(440) Telefónica also submitted to the Commission the detail of the incremental investments that are directly attributable to its broadband activity ("*CAPEX ADSL*" – see paragraph (411) above). They include some investments relating to the transport network of Telefónica which amounted to […] from 2001 to 2006:

Table 20 – TESAU's incremental investments relating to its IP backbone[433]

Million euros	2001	2002	2003	2004	2005	2006
IP NODES	[…]	[…]	[…]	[…]	[…]	[…]
Commuting equipment	[…]	[…]	[…]	[…]	[…]	[…]
IT system	[…]	[…]	[…]	[…]	[…]	[…]
IP TRANSPORT	[…]	[…]	[…]	[…]	[…]	[…]
Transmission	[…]	[…]	[…]	[…]	[…]	[…]
Optic fibre	[…]	[…]	[…]	[…]	[…]	[…]
Others	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL IP BACKBONE	[…]	[…]	[…]	[…]	[…]	[…]

(441) Telefónica did not contest in its reply to the letter of facts that the investments in IP transport indicated in Table 20 above are incremental and therefore directly attributable to the broadband activity of the company. Those investments mainly relate to two main categories of assets: optical fibre and transmission equipment.

(442) Independently of whether several services may share the same optical fibre cable, TESAU would not have deployed the same capacity of optic fibre if it would not have decided to provide services which – as illustrated above – represent an increasing proportion of the traffic of TESAU's services. This is not only illustrated by the fact that part of the incremental investments include the deployment of optical fibre (see Table 20 above) but also by TESAU's own statements in its Annual Report of 2001 where TESAU indicated that it rolled out 101 531 kilometres of optic fibre in 2001 for its new downstream broadband activity:

> *"During the year the company also rolled out and implemented the Rima Network, thus completing the process of migration of ADSL customers to this new high performance IP network, which is designed as the largest and most advanced IP network infrastructure in Spain.*
>
> *In this connection, Telefónica de España's commitment to broadband is reflected in a significant increase in the offer of ADSL lines, and in the installation of 101,531 kilometres of fibre optic cable, which have enabled the company to achieve 82% coverage of the lines."*

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432 As explained in footnote 377 above, TESAU estimated the incremental CAPEX on the basis of the investments incurred during the period July 2003-Jnue 2004 which include some investments relating to the transport network.

433 See annex 2 of the letter of Telefónica of 17.10.06 (page TFCA-13127 of the file).

(443) Before TESAU invested in a new IP backbone enabling to offer retail ADSL services, the group had already another IP backbone that, as explained by Telefónica itself, was not dimensioned for the provision of standard ADSL services in a mass market. This distinct backbone which is owned by TDATA and enables to provide retail broadband services on the basis of GigADSL[434], has been dedicated to the provision of tailor-made broadband services to big corporations since the roll out of TESAU's new IP backbone RIMA.[435] Precisely the pre-existence of TDATA's IP backbone is a strong indication that the investments incurred are directly attributable to TESAU's entry in the Spanish retail mass market.

(444) As to the transmission elements, not only Telefónica explicitly recognises that some of them are avoidable and therefore incremental[436], but also CMT included such costs in the retail minus model which is based on LRAIC.[437]

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434 See the letter of TESAU 17.03.05: "*TDATA posee su propia red IP (esto es todos los elementos adicionales que TDATA necesita cuando compra un producto mayorista a TESAU son de su propiedad*". (page TFCA-1065 of the file).

435 See the letter of Telefónica of 21.07.06 (pages TFCA-4230 and TFCA-4231 of the file): "*Como única red IP del Grupo existente hasta 2001, la red IP de Telefónica Data asumió también el soporte de las comunicaciones IP y acceso a Internet […]. Este fue el scenario hasta el año 2001 en el que Telefónica de España decide iniciar su negocio minorista de servicios ADSL.[…] Es por ello que Telefónica Data decidió especializar NURIA como una red de dimensiones más reducidas […], pero con una conectividad en backbone y acceso más orientada a los requerimientos empresariales […] En otras palabras: se especializó a NURIA en la prestación de una tipología de servicios de mayor complejidad, de menor estandarización, destinados a un sector (Corporaciones) demandante de menor volumen de conexiones pero con muy altas exigencias en seguridad, calidad y disponibilidad del servicio. Paralelamente, como consecuencia de la decisión de desarrollar su negocio minorista de ADSL, Telefónica de España decidió desplegar una red IP de gestión propia (RIMA), […] orientada a la prestación de servicios de acceso a Internet para un mercado masivo, principalmente residencial y PYMES. La red IP RIMA nace por tanto, enfocada en la prestación de servicios de perfil muy estándar, de comercialización masiva y con demandas de nivel de servicio no tan exigentes como las requeridas desde el sector de las Corporaciones. "*

436 See paragraph (430) above.

437 See the letter of CMT of 28.01.05 (page CMT-525 of the file) and the letter of CMT of 20.12.04 (page CMT-254 of the file).

(445) Telefónica also recognised that it has been progressively adapting the capacity of its transmission equipment to the increasing demand of its services, which is – as illustrated above – mainly driven by broadband[438]. The capacity of the transmission equipment SDH/JDS has been multiplied by four from 2001 to 2005.[439] Telefónica also indicated that the increase of speed of its retail ADSL offers necessitated the investment in additional transmission equipment in 2004 and 2005[440]. All those investments incurred in order to adapt the capacity of the network to the growth of the broadband business are incremental costs.

(446) As a consequence, some cost elements are directly attributable (and hence are incremental) to TESAU's broadband activity.

(447) In the present decision, the IP backbone LRAIC will therefore be estimated on the basis of Telefónica's own assessment of the CAPEX that are incremental (see Table 20). The IP backbone assets are depreciated over a period of five years. This is the period commonly used by (i) TESAU in its initial business plan (5 years)[441] (ii) the national regulatory authorities for telecommunications (CMT[442], OFCOM[443]) and the main Spanish alternative operators (France Telecom[444] and Auna[445]) which contract GigADSL. A cost of capital is calculated with the WACC (15.72%) used by the CMT[446] for the regulation of TESAU's broadband activities and which had been proposed by TESAU itself following its allegations[447] that its financial costs are riskier in its ADSL business than its other businesses.

(448) The operating costs correspond to the incremental costs indicated in TESAU's ADSL scorecard under the heading 'Mantenimiento Red IP'.

(449) In conclusion, TESAU's incremental IP backbone costs are as follows:

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438 See the letter of Telefónica of 28.07.06: "*Fundamentalmente, la Red de Transporte de TESAU se sustenta sobre Equipos de Transmisión Digital de Jerarquía (SDH/JDS) y sobre portadores de Fibra Óptica. Dado el incremento de necesidades de transporte, se vienen instalando entre los equipos de transmisión y los portadores de Fibra óptica, equipos WDM, que permiten un mayor aprovechamiento de la fibra, al permitir de multiplexar por un mismo par de fibras varios canales de entre 2,5 Gbps y 10 Gbps; hasta 80 canales de 10 Gbps en la actualidad*". (page TFCA-4650 of the file).

439 The capacity of the transmission equipment SDH/JDS increased from 2867 equivalent STM-1 to 11365 equivalent STM-1. See the letter of Telefónica of 28.07.06 (pages TFCA-4650 and TFCA-4651 of the file).

440 See the letter of Telefónica of 25.08.06 (pages TFCA-9043 and TFCA-9044 of the file): Telefónica invested more than 10 million euros in 2004 and 2005 in transmission equipment in order to increase the capacity of its transport network that was necessary to increase the speeds of its retail ADSL offers.

441 See letter of TESAU of 26.04.04 (page TFCA-675 of the file).

442 See ARCOME cost model (see footnote 514 below) at page CMT-524 of the file and ELMCO cost model (see footnote 516 below) at page CMT-251 of the file.

443 OFCOM, Direction Setting the Margin between IPStream and ATM interconnection prices, 26.08.04. See paragraph 2.177: in its margin squeeze test between British Telekom's wholesale product *IPStream* (equivalent to Megavia in the UK) and *ATM interconnection* (equivalent to GigADSL in the UK), the British regulator indicated that the assets required to provide *IPStream* and which are additional to *ATM interconnection* have a lifetime ranging from 3 to 6 years.

444 Letter of Uni2 of 25.04.05 (page ISP-410 of the file).

445 Letter of Auna of 08.04.05 (see page ISP-340 of the file).

446 See footnote 357 above.

447 See footnote 360 above.

Table 21 -TESAU's incremental IP backbone costs[448]

(€/month/end user)	2001	2002	2003	2004	2005	2006
CAPEX[449]	[…]	[…]	[…]	[…]	[…]	[…]
OPEX[450]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	[…]	[…]	[…]	[…]	[…]	[…]

(450) In its letter of facts[451], the Commission provided Telefónica with an opportunity to express its view on (i) the Commission's assessment that the investments indicated in Table 20 above are incremental and directly attributable to Telefónica's broadband activity and on (ii) the subsequent estimation made by the Commission of the unit costs of the company.

(451) In its reply to the letter of facts[452], Telefónica did not contest the Commission's assessment that the investments indicated in Table 20 above are incremental but only claimed that the Commission overestimated the cost of capital by (i) overestimating the net accounting value[453] of the company's assets and by (ii) using an excessive WACC. Telefónica claimed that the Commission only substracted the amortization of the investments made by the company in 2001. This is incorrect, as explicitly shown in Table 64 and Table 65 (see in particular footnote s 802 and 804 below). As to Telefónica's allegation that the Commission overestimated the company's WACC, the Commission has already indicated in section VI.C.3.1.4 above that the WACC used in the present decision is the one proposed by Telefónica to the CMT and used by the latter for the regulation of Telefónica's wholesale broadband products and, above all, that it is the one used by Telefónica itself in its *Reply* to the SO.

1.3.2.1.3 Costs for access to the internet

(452) TESAU's incremental cost is the one indicated in the the ADSL scorecard (based on LRAIC)[454] of the company:

448 The cost item "capacidad portadora" is, as explained by Telefónica in its Reply (322-323), already included in the "IP backbone cost" and therefore has not been added in Telefónica's network costs.

449 Depreciation + cost of capital. See Table 64 and Table 65 in Annex E.

450 See *ADSL scorecard* (see footnote 385): see pages TFCA-9761, TFCA-9855, TFCA-13036, TFCA-13264 and TFCA-13265 of the file.

451 See paragraphs 33 to 35 and annex 2 of the letter of facts.

452 See pages 31-33 of the Reply to the letter of facts.

453 As made explicit in Table 65 below, the net accounting value of an asset is the difference between the gross value of the investment and the cumulated amortization of the latter.

454 *ADSL scorecard* for 2004, 2005 and 2006 (see footnote 385): pages TFCA-13036, TFCA-13264 and TFCA-13265 of the file). In particular, as already indicated in footnote 390 above, the total expenditure in 2004 (75.2 million euros) indicated in the audited accounts of the company is explicicitely indicated as incremental in the scorecard of December 2004.

Table 22 -TESAU's cost for access to the internet[455]

	2001	2002	2003	2004	2005	2006
€/month/end user	[…]	[…]	[…]	[…]	[…]	[…]

1.3.2.2 The network costs on the basis of ADSL-IP and ADSL-IP Total

(453) While ADSL-IP Total is a complete wholesale resale product that does not require any incremental network cost (see Table 23 below) on the part of the alternative operator, an operator contracting ADSL IP needs to provide for international connectivity (see Table 24 below).

(454) TESAU's network costs are as follows:

Table 23 TESAU's network costs on the basis of ADSL-IP Total

€/end user/month	2001	2002	2003	2004	2005	2006
Wholesale charge[456]	[…]	[…]	[…]	[…]	[…]	[…]

Table 24 TESAU's network costs on the basis of ADSL-IP

€/end user/month	2001	2002	2003	2004	2005	2006
Wholesale charges	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP[457]	[…]	[…]	[…]	[…]	[…]	[…]
pPAI-IP[458]	[…]	[…]	[…]	[…]	[…]	[…]
Incremental network costs	[…]	[…]	[…]	[…]	[…]	[…]
Access to the internet[459]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	[…]	[…]	[…]	[…]	[…]	[…]

(455) TERRA's network costs are as follows:

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455 Incremental cost as indicated in the *ADSL scorecard* of the company (see footnote 385): see pages TFCA-9761, TFCA-9855, TFCA-13036, TFCA-13264 and TFCA-13265 of the file.

456 The average monthly rental fee is calculated on the basis of (i) the monthly rental fee charged by Telefónica for each modality (see Table 12 above) and (ii) the average number of lines of each modality (See Table 61 in Annex B).

457 The average monthly fee is calculated on the basis of (i) the monthly rental fee charged by Telefónica for each modality (see Table 11 above) and (ii) the average number of lines of each modality (See Table 61 in Annex B).

458 See Table 11 above. This cost is composed of a one-off fee (amortized over 5 years) and a monthly fee for each port occupied at the PAI-IP. The unit cost is computed in function of the following parameters: (i) all ports are of capacity 155 Mbps; (ii) the occupation ratio per port is 70% and (iii) the average reserved bandwidth per line of TESAU (see Table 63 in Annex B).

459 See Table 22 above.

Table 25 TERRA's network costs on the basis of ADSL-IP Total

€/end user/month	2002	2003	2004	2005
Wholesale charge[460]	[…]	[…]	[…]	[…]

Table 26 TERRA's network costs on the basis of ADSL-IP

€/end user/month	2002	2003	2004	2005
Wholesale charges	[…]	[…]	[…]	[…]
ADSL-IP[461]	[…]	[…]	[…]	[…]
pPAI-IP[462]	[…]	[…]	[…]	[…]
Incremental network costs	[…]	[…]	[…]	[…]
Access to the internet[463]	[…]	[…]	[…]	[…]
TOTAL	[…]	[…]	[…]	[…]

1.3.3 The ISP recurrent costs

(456) The ISP recurrent costs are the recurrent costs distinct from the network costs such as the cost of running the ISP platform (costs of connection and identification of customers, e -mail services, disk space for personal web pages), the customer care costs (commercial and technical hotlines), the customer administration costs (relating *inter alia* to invoicing and debt recovery), the costs related to surveying and monitoring the ADSL market and the taxes on the revenues:

(457) Telefónica's ISP recurrent costs are as follows:

460 Wholesale charge for the 'Modalidad Básica'. See Table 12 above.

461 Wholesale charge for the 'Modalidad Básica'. See Table 11 above.

462 See Table 11 above. This cost is composed of a one-off fee (amortized over 5 years) and a monthly fee for each port occupied at the PAI-IP. The unit cost is computed in function of the following parameters: (i) all ports are of capacity 155 Mbps; (ii) the occupation ratio per port is 70% and (iii) the average reserved bandwidth for the 'Modalidad Básica' (see Table 63 in Annex B).

463 TERRA's own cost for access to the internet (cost item: 'Transito IP'). See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefonica of 17.10.06 (page TFCA-13123 of the file).

Table 27 - Telefónica's ISP recurrent costs

(€/month/end user)	2001[464]	2002	2003	2004	2005	2006
ISP platform[465]	[…]	[…]	[…]	[…]	[…]	[…]
Customer care[466]	[…]	[…]	[…]	[…]	[…]	[…]
Invoicing and debt recovery[467]	[…]	[…]	[…]	[…]	[…]	[…]
Market monitoring[468]	[…]	[…]	[…]	[…]	[…]	[…]
Taxes[469]	[…]	[…]	[…]	[…]	[…]	[…]
Other production costs[470]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL ISP production costs	[…]	[…]	[…]	[…]	[…]	[…]

1.3.4 The subscribers acquisition costs

1.3.4.1 Description of Telefónica's subscribers acquisition costs

(458) Subscribers acquisition costs ("SAC") are the costs of acquiring new ADSL subscribers: the kits and packs distributed to customers, the connection fee, the advertising costs, the commercialisation costs and the promotions (reduced revenue) granted by Telefónica to its new subscribers.

(459) The connection fee is a one-off charge imposed by Telefónica on its competitors for the activation of each new ADSL line (see section IV.C.3 above).

(460) The cost of the modem consists of the modem itself and all the related costs (packaging, logistics, accessories such as filters, installation in the customer's premises if applicable, mailing of the equipment if applicable….).

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464 Since TESAU did not provide (despite having been requested) its unit costs for 2001, the Commission used the most ancient estimation (January 2002 when available in the *ADSL scorecard* or 2002 in the *Economics ADSL*), which was not contested by Telefonica neither in its reply to the SO, nor in its *Reply* to the letter of facts.

465 Following Telefónica's comments in its reply to the letter of facts (page 34), the analysis is based on the cost indicated in *ADSL scorecard* and *Economics ADSL*:
- 2001-2004: cost item 'Plataforma PSI' in '*Economics ADSL'* (see footnote 382 above)*:* see page TFCA-761 of the file.
- 2005-2006: cost item 'Oustourcing ISP' in *ADSL scorecard* (see footnote 385 above): see pages TFCA-13264 and TFCA-13265 of the file.

466 Cost item 'CAT/Help Desk' in '*ADSL scorecard'* (see footnote 385 above): pages TFCA-9761, TFCA-9855, TFCA-13036, TFCA-13264 and TFCA-13265 of the file).

467 Cost items 'Facturación' and 'Gestión de cobro' in '*Economics ADSL'* (see footnote 382 above): see pages TFCA-761, TFCA-6000 and TFCA-13124 of the file.
As regards bad debt, see cost item 'Impago' in "*TESAU's ADSL cost accounts*" (see footnote 379 above): see page TFCA-1507, TFCA-3342 and TFCA-8166 of the file. The cost for 2006 is the same as the one for 2005 (0.23€/end user/line).

468 Cost item 'Estudios de Mercado' in '*Economics ADSL':* (see footnote 382 above): see page TFCA-761, TFCA-6000 and TFCA-13124 of the file.

469 The taxes represent 2% of the revenues. Letter of TESAU of 17.03.05 (page TFCA-1499 of the file).

470 Cost item 'Otros costes de producción ISP' in '*TESAU's ADSL cost accounts'* (see footnote 379 above): see pages TFCA-1504 to TFCA-1507, TFCA-3342 and TFCA-8166 of the file.

(461) The promotions – which are reflected in TESAU's accounts as reduced revenues or negative revenues – are treated as acquisition costs in the present margin squeeze test.

(462) The advertising costs include the advertising budget that supports the retail ADSL services. They do not include general communication expenditure, merely designed to publicise the company and its trade mark in general, but comprise all product specific advertising. In the case in point, the advertising costs are specific to ADSL services, as estimated by the company itself.

(463) The incremental commercialization costs include not only (i) the incentives and commissions (thus excluding salaries) granted to the sales network for each new subscriber but also (ii) the increase in the commercial structure of TESAU that is due to its broadband activity (e.g. salaries, etc).

1.3.4.2 Telefónica underestimated its commercialization costs

(464) As indicated in the SO[471], Telefónica underestimated the LRAIC relating to the commercialization costs by only including the incentives and commissions granted to the sales network for each new subscriber and excluding any cost relating to the commercial structure of the company[472]. Telefónica claimed in its replies to the SO and to the Letter of Facts[473] that its commercial structure is a common cost shared by several services (fixed telephony, broadband internet and TV over broadband) and therefore should not be taken into account in the analysis.

(465) While it is true that TESAU's commercial structure is a common cost, it cannot be asserted that TESAU's commercial structure would have the same size (in terms of number of employees) if the company did not offer retail broadband services. On the contrary, a substantial part of TESAU's commercial structure is generated by and directly attributable to the retail ADSL activity of Telefónica and hence must be taken into account in the calculation of TESAU's LRAIC.

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471 See paragraphs 401-403 of theSO.

472 See page 19 of the letter of TESAU of the 01.04.05 (see page TFCA-1672 of the file):
"Este gasto [en incentivos por ventas del Kit ADSL] se compone de los pagos satisfechos al personal propio en concepto de, stricto sensu, incentives por ventas y de las comisiones pagodas a los canales de distribución del producto […] Dado el enfoque analítico de los 'Economics Kit ADSL', no podían tomarse en consideración ningún otro coste distinto de los mencionados, que fueron imputados directamente. Es evidente que el gasto en incentivos no agota el apartado designado como 'Costes de comercialización'; en éste deben añadirse todos los derivados de la estructura comercial de TESAU (es decir, gastos de personal distinto del afectado directamente a la venta y costes de inmovilizado, estructura y soporte) en lo imputable a la oferta minorista de ADSL […]."

473 See page 326 of the Reply to the SO and sections 5.2.2 and 5.2.3 of the Letter of Facts.

(466) According to Telefónica[474], the growth of the group from 2004 to 2008 will be driven by broadband (CAGR[475] > 20%) while fixed access will only increase slightly thanks to household growth and broadband penetration (CAGR of 1%), Voice Traffic will continue its decline (CAGR of -6%) due to mobile and e-mail substitution and VoIP deployment. Indeed, while TESAU's total revenues (including fixed telephony, broadband and narrowband services) grew by €1 600 million (+16%) from 2002 to 2006, the revenues generated by its traditional services (access and voice traffic) decreased by €150 million (-2%) from 2002 to 2006 and the revenues generated by its broadband services increased by €1 900 million (+525%) from 2002 to 2006[476]. While the number of fixed telephony lines in Spain has remained constant from 2001 to 2005[477], the number of broadband access lines has increased by 275% from 2001 to 2005[478]. TESAU lost 1.4 million retail fixed telephony lines from 2001 to 2006[479] and gained 3.5 million retail broadband lines during the same period[480]. In addition, as acknowledged by Telefónica itself, the provision of retail broadband access services has a loyalty effect on the traditional fixed telephony services[481], i.e. if Telefónica did not provide retail broadband services, its market share in the fixed telephony market would be lower and consequently its revenues in the latter would be lower. All this means that the commercial force of TESAU is mainly dedicated to the growth of its broadband activity.

(467) The contribution of broadband to TESAU's total revenues and earnings has been increasing very significantly since September 2001 when the company started providing retail ADSL services. Broadband will represent […] % of TESAU's revenues in the residential segment[482] in 2008. TESAU's broadband business will have transformed the business model that TESAU considered without expectations into a profitable one[483]. Indeed, if TESAU had not entered the retail broadband market, the earnings (in terms of EBIDTA) would have been […] % lower in 2005[484]. The figure would be even lower in 2008 with the continued decline of the TESAU's traditional business.

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474 "*A new world of Broadband Solutions*", presentation of Julio Linares at the Barcelona Investor Conference, 25.04.05 (see page TFCA-3789 of the file).

475 Compound Annual Growth Rate.

476 See Telefónica's trimestral reports of December 2003 (page 24) and December 2006 (page 22).

477 The number of fixed telephony lines in Spain increased from 17.64 million in 2002 to 17.95 million in 2005. See CMT Annual Report for 2005 (page 295).

478 See Table 60 in Annex A.

479 See Telefónica's annual reports for 2004 (page 75) and 2005 (page 150) and Telefónica's trimestral report of December 2006 (page 22).

480 See Table 60 in Annex A and Telefónica's trimestral report of December 2006 (page 22). .

481 See footnote 484 below.

482 See slide 4 TESAU's strategic plan 2005-2008 (letter of Telefónica of 22.08.06 at page TFCA-9026 of the file).

483 'La oportunidad de la Banda Ancha en las operadores fijas – documento para discusión – Madrid, 20 de diciembre de 2001': "*Sin esta estrategia de banda ancha TdE tendría grandes dificultades para retener a sus mejores clientes, con un impacto significativo en la rentabilidad global del negocio fijo. […] La Banda Ancha supone la transformación de un negocio que se creía sin perspectivas en un negocio de crecimiento rentable*." See annex 11ii of the letter of Telefónica of 21.07.06, slide 17 (page TFCA-4530 of the file).

484 See '*La oportunidad de la Banda Ancha en las operadores fijas – documento para discusión – Madrid, 20 de diciembre de 2001*': Telefónica estimated that its EBIDTA in 2005 would be […] in the scenario it would enter the retail broadband market but would only be […] in the scenario it would not enter the retail market and consequently would also lose fixed voice telephony customers (according to

(468) According to Telefónica itself, the company is building its commercial capabilities by hiring additional commercial staff ([…]) in order to face the expected growth of its broadband activities[485]. Yet, in the context of the present proceedings, Telefónica claimed that the size of its commercial staff has not increased since 1999[486]. However, the fact that the size of Telefónica's commercial staff has not increased since 1999 does not imply that no proportion of Telefónica's commercial structure is incremental or directly attributable to the company's broadband activity.

(469) Telefónica is a company which seeks achieving efficiency and has conducted ambitious plans of costs reductions leading to a significant decrease of the number of its employees. In view of the above, it is highly probable that the commercial structure of TESAU would not have the same size if the company did not offer retail broadband services.

(470) Therefore, as already explained in the SO[487] and in the Letter of Facts[488], including only the incentives and commissions granted to the sales network for each new subscriber and excluding any cost relating to the commercial structure of the company risks reducing costs to a level well below "true" LRAIC which should include a proportion of TESAU's commercial structure.

(471) Although the finding of a margin squeeze is independent from the inclusion of any proportion of Telefónica's common commercialization costs (i.e. Telefónica's downstream margin would remain negative even if one would only include the incentives and commissions from the analysis), the Commission considers that the evaluation of Telefónica's incremental commercialization costs should include a proportion of the costs relating to its commercial structure.

Telefónica, the entry in the retail broadband market would have a fidelization effect on its clients in the retail fixed telephony market). See annex 11ii of the letter of Telefónica of 21.07.06, slide 17 (page TFCA-4530 of the file).

485 *A new world of Broadband Solutions*, op. cit. (see page TFCA-3824 of the file): "*To provide BB Solutions we are reinforcing pour commercial drive. We are building capabilities throughout the commercial areas […] More than 1,000 additional commercial hires by 2008 […] We are developing a web of channels for higher effectiveness […] Develop a multichannel strategy focused on increased capillarity and proximity. Channel mix evolution […] Sales force: 2004: 22% - 2008: 29%. Retail, distributors and Telefónica stores: 2004: 15% - 2008: 27%* .

486 See section 5.2.5 of the reply to the Letter of Facts.

487 See paragraph 403 of the SO.

488 See paragraphs 29-30 of the Letter of Facts

(472) A reasonable estimation of the incremental commercialization cost could be based on the effective dedication of TESAU's commercial staff to the commercialization of retail broadband services, i.e. based on the allocation of the total commercialization cost in proportion to the time dedicated by the commercial staff to the retail broadband products. In this respect, the allocation made by the company in proportion to the turnover of each activity (fixed telephony, broadband internet and TV over broadband) clearly underestimates the cost that is incremental to the retail broadband activity. Indeed, by doing so, a significant proportion of the total commercialization costs of the company that should be allocated to the retail broadband activity is in fact allocated to the retail fixed telephony business despite the former is fast growing and the latter is mature and saturated: an end user that has been Telefónica's client for fixed telephony for many years is not at the origin of any activity of Telefónica's commercial staff but Telefónica's allocation key assumes the contrary. It this respect, the CMT has on repeated occasions criticized the key used by TESAU to allocate its commercialization costs[489] and requested Telefónica to conduct a study estimating the effective dedication of its sales network of each of its retail activity. Such study is still unavailable[490].

(473) Given the information made available by Telefónica and the unavailability of a study analysing the dedication of the commercial staff to each retail business of the company, a precise estimation of Telefónica's "true" LRAIC is unrealistic in the framework of the present proceedings. In the present decision, the allocation of the commercialization costs in proportion to the turnover is therefore used as an approximation of the LRAIC that is favourable to the company.

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489 See the CMT decisión AE 2005/729 of 14.07.05 Resolución sobre la verificación de los resultados de e la contabilidad de costes presentados por Telefónica de España, S.A.U. referidos al ejercicio 2003: "***Nota 5: Asignación de costes de comercialización de la cuenta "Venta de la red Propia"*** *[…]En base a la descripción del principio de causalidad, se considera que estos costes deberían asignarse a servicios en función de la dedicación de los recursos de los canales propios, es decir, en función de la dedicación efectiva del personal de venta de la red propia, ya que el esfuerzo y dedicación de recursos de los comerciales en la captación de un nuevo cliente genera unos ingresos en el ejercicio en curso, y unos potenciales mayores ingresos en ejercicios futuros. Por tanto, y teniendo en cuenta los comentarios anteriores, se considera que la Operadora debería realizar un estudio que reflejase la dedicación efectiva del personal de venta de su red propia. Este estudio serviría de base para fijar los porcentajes de ponderación utilizados en el reparto a servicios de los costes registrados en el sub-centro de actividad "Ventas de la red propia". De igual modo, se considera que Telefónica debería actualizar su Manual Interno de Contabilidad de Costes y su documento de Motivos de Cargo y Abono de tal forma que reflejen los criterios utilizados en el reparto a servicios de los costes registrados en el CAAD "Comercialización"."*

490 See annex 2ii of the letter of Telefónica of 31.07.06 – Deloitte, Informe de revision del Sistema de Contabilidad de Costes bajo el estándar de Costes Corrientes correspondiente al ejercicio anual terminado el 31 diciembre de 2004, 29.07.05. See page 3 of the report (page TFCA-6064 of the file).

1.3.4.3 Amortization of Telefónica's subscribers acquisition costs

(474) Some adjustments to Telefónica's subscribers' acquisition costs have been made in order for the margin squeeze test to provide an adequate measure of the economic equilibrium of Telefónica's retail ADSL services. As already noted in *Wanadoo*[491], in an expanding market such as Spain's retail broadband mass market, the costs of acquiring customers form a substantial proportion of expenditure, the benefit of which lasts for a longer period than the one in which they are incurred. Such costs are treated by Telefónica as expenses and are not capitalised; adjustments have therefore been made to Telefónica's accounts by amortising customer acquisition costs over an adequate period.

(475) In the present case, there are several potential indicators for determining the appropriate amortisation of Telefónica's customer acquisition costs, namely (i) the period in which Telefónica expected to recover these costs in its initial business plan; (ii) Telefónica's subscribers' average lifetime during the period under investigation and (iii) the amortization periods used by other regulators or national competition authorities ("NCA"s) in similar markets (including the one at hand). These indicators will be addressed below.

1.3.4.3.1 Telefónica's initial business plan

(476) At the time Telefónica's business plan was constructed, the company expected to recover (on an end-to-end basis) its subscribers' acquisition costs over a period between 1 and 2 years and its network investment costs over a period of 4 years.[492]

1.3.4.3.2 Telefónica's average subscribers' average lifetime

(477) Telefónica's subscribers' average lifetime constitutes one possible indicator for determining the appropriate amortisation period for Telefonica's subscribers acquisition costs.

(478) However, it must be observed at the outset that this indicator must be handled with caution. Telefónica's subscribers' average lifetime is likely to be higher than it would be in a competitive market, as a consequence of the market power of the dominant undertaking.[493]

(479) In addition, the Commission considers that the subscribers' average lifetime as estimated and provided by Telefónica considerably overestimated the actual average lifetime for the reasons set out below.

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491 *Wanadoo*, paragraph 77.

492 See annex 10iii of the letter of Telefónica of 21.07.06: 'Análisis de las variables económicas criticas del ADSL – documento de trabajo – Resumen documento base – 16 de octubre de 2001', slides 16, 23 (pages TFCA-4461 and TFCA-4468 of the file).

493 This problem is similar to the "cellophane fallacy" in the application of SNIPP test for the purposes of market definition.

(480) Telefónica estimated[494] its average subscribers' lifetime as follows: the average lifetime (in months) is the inverse of the churn rate. The monthly churn rate is the number of subscribers who left the company during the month divided by the average number of subscribers during that month:

$$\begin{cases} \text{Lifetime} = \dfrac{1}{\text{churn}} \\ \text{where churn is the average churn rate during the year:} \\ \text{churn}_{m} = \dfrac{\text{Churners during month m}}{\text{Subscribers in month m}} \end{cases}$$

(481) Based on this formula, Telefónica concludes that the average lifetime of its subscribers is between […] and […] years[494]. This is contradicted by Telefónica's own allegations in its Reply that the retil market is characterised by low switching costs and that Telefónica's monthly churn rate is about […] % per month[495], which leads to an average lifetime of four years. In fact, the data indicated in Telefónica's *ADSL scorecard* shows that Telefónica's formula leads to an estimated average lifetime between […] and […] years[496].

(482) As already explained in *Wanadoo*[497], the churn rates observed over a period in which the number of customers has been growing significantly cannot be considered representative. The only such rates that would be useful for the calculation of the average lifetime would be rates observed among a stabilised customer base. Telefónica's formula may be appropriate in a non growing market (in terms of number of subscribers) but is not in a growing market. Given that the number of subscribers (i.e. the denominator in the above formula) is increasing rapidly every month, the churn rate calculated by Telefónica is underestimated and, consequently, the average lifetime overestimated.

(483) The Commission tested Telefónica's formula with the following four samples:

- Sample 1: 100 new subscribers are acquired each month (N_m=100). All subscribers stay exactly 24 months with the company.
- Sample 2: The number of acquired subscribers increases by 10% every month ($N_m = 1.10 \times N_{m-1}$). All subscribers stay exactly 24 months.
- Sample 3: The number of acquired subscribers increases by 10% every month ($N_m = 1.10 \times N_{m-1}$). 20% of the subscribers stay 24 months; 15% stay 25 (resp. 23) months; 10% stay 26 (resp. 22) months; 5% stay 27 (resp. 21) months; 3% stay 28 (resp. 20) months; 2% stay 29 (resp. 19) months; 1% stay 30 (resp. 18) months; 1% stay 31 (resp. 17) months; 1% stay 32 (resp. 16) months; 1% stay 33 (resp. 15) months; 1% stay 34 (resp. 14) months.
- Sample 4: The number of acquired subscribers increases by 10% every month ($N_m = 1.10 \times N_{m-1}$). 2% of the subscribers stay 1 month, 2% of the subscribers stay 2 months, …. and 2% of the subscribers stay 48 months.

494 Letter of TESAU of 26.03.04 (see page TFCA-680 of the file).
495 See Telefónica's Reply, page 70.
496 See Annex D.
497 See paragraph 78 of the decision.

(484) Whereas the same average lifetime of 2 years should be found for all samples, Telefónica's formula leads to an overestimated average lifetime when the market is growing (samples 2, 3 and 4), which proves that the formula proposed by Telefónica is inappropriate in the present case:

Table 28 Application of Telefónica's formula to samples 2, 3 and 4

	Sample 2		Sample 3		Sample 4	
Year	3	4	3	4	3	4
Average monthly churn rate	1.03%	1.03%	1.02%	1.08%	2.16%	2.23%
Average lifetime (years)	8.1	8.1	8.2	7.7	3.9	3.7

(485) As a conclusion, the Commission considers that the average lifetime estimated and provided by Telefónica is inappropriate for determining the appropriate amortisation for Telefónica's subscribers' acquisition costs. In the absence of sufficient historical data enabling to estimate the average lifetime – most of end users have not arrived to the end of their lifetime – the latter will not be used in the present case.

1.3.4.3.3 The amortisation period used by regulators and national competition authorities in similar markets

(486) In Wanadoo, the Commission amortized Wanadoo Interactive's subscribers' acquisition costs over a period of 4 years, which was the period proposed and accepted by the company.[498] In the present case, a slightly shorter period appears more appropriate in keeping with economic reality and the practice of competition and regulatory authorities.

(487) In its margin squeeze test in the Spanish broadband markets, the Spanish regulatory authority estimated that Telefónica's subscribers' average lifetime should be amortised over a period of 2 years[499]. This 2-year period was defined by the CMT after having consulted the main Spanish ISPs.[500]

(488) Other national competition authorities (NCA) and national regulatory authorities (NRA) for electronic communications use a maximal period of 3 years when amortising the subscribers' acquisition costs in the margin squeeze test they have implemented. In particular, in France, both the ARCEP and the Conseil de la Concurrence amortize France Telecom's subscribers acquisition costs over three years[501].

498 See *Wanadoo*, paragraph 78.

499 CMT's Decision MTZ 2004/609 of 15.07.04. See the description of the margin squeeze test implemented by the CMT (pages 15-16 of the decision)

500 CMT's Decision MTZ 2004/609 of 15.07.04. See also the allegations of the main ISPs in this respect (page 13 of the decision)

501 ART (now ARCEP), Modèle réglementaire du coût de l'accès dégroupé, Notice explicative, Novembre 2004. (pages 8 and 9).

1.3.4.3.4 Conclusion on the amortisation period

(489) On the basis of the above, the Commission considers that the appropriate period for amortizing Telefónica's subscribers' acquisition costs for the purposes of the present case is three years. Three years is the maximal period used by national competition authorities and national regulatory authorities, including the CMT (which uses 2 years). This period is therefore more appropriate than the one used by the Commission in *Wanadoo*. More importantly, the period chosen by the Commission is greater – and thus more favourable to Telefónica – than the expected time of recovery of these costs used by TESAU itself in its initial business plan.

1.3.4.4 Calculation of Telefónica's amortized net subscribers' acquisition costs

(490) TESAU's net subscribers' acquisition costs are as follows:

Table 29 -TESAU's net subscribers' acquisition costs

€/new subscriber	2001[464]	2002	2003	2004	2005	2006
Non recurrent revenues[502]	[…]	[…]	[…]	[…]	[…]	[…]
Acquisition costs	[…]	[…]	[…]	[…]	[…]	[…]
Connexion fee[503]	[…]	[…]	[…]	[…]	[…]	[…]
Modem[504]	[…]	[…]	[…]	[…]	[…]	[…]
Advertising[505]	[…]	[…]	[…]	[…]	[…]	[…]
Sales network[506]	[…]	[…]	[…]	[…]	[…]	[…]
ISP platform[507]	[…]	[…]	[…]	[…]	[…]	[…]
Net acquisition costs	[…]	[…]	[…]	[…]	[…]	[…]

Table 30 – Amortization of TESAU's net subscribers' acquisition costs (3 years)

€/ subscriber / month	2001	2002	2003	2004	2005	2006
Amortisation[508]	[…]	[…]	[…]	[…]	[…]	[…]

(491) TERRA's net subscribers' acquisition costs are as follows:

502 As indicated by Telefónica in its Reply to the letter of facts (see page 34), the source of information should be the same as the one for the ARPU, which is the line taken in the present decision, with the exception of 2001 (this information was only available in the audited cost accounts of the company):
– From 2002 to 2006: Non recurrent revenues (item 'Ingresos SAC' or 'INGRESOS-total SAC conectividad' or 'Ingresos de Conexión y Venta' or 'SAC Minorista-ingresos') and promotions (item 'Promociones') as indicated in the *ADSL scorecard* (see footnote 385 above - pages TFCA-9760, TFCA-9854, TFCA-13036, TFCA-13264 and TFCA-13265 of the file).
– For 2001: Non recurrent revenues (items '90104941-Conexión Servicios IP-ISP', '90104944-Venta y Mantenimiento Equipos IP-ISP' and '90104947-Devoluciones Servicios IP-ISP') in *TESAU's audited ADSL accounts*. See the letter of TESAU of 17.03.05 (page TFCA-1375 of the file).

503 The average connexion fee is calculated on the basis of (i) the fee charged by Telefónica for each modality of GigADSL (see Table 10 above) and (ii) the average number of new subscribers of each modality of GigADSL (see Table 62 below).

504 This item includes (i) the cost of the equipment (item 'Gastos modem' or 'Gastos equipos') and (ii) the installation & sending (item 'Gastos de instalación'). see *ADSL scorecard* (see footnote 385 above) at pages TFCA-9760, TFCA-9854, TFCA-13036, TFCA-13264 and TFCA-13265 of the file).

505 For 2001: cost item 'Marketing y Publicidad – Directos' in *TESAU's audited ADSL accounts* (see footnote 379 above) at page TFCA-1504 of the file. The unit cost is the annual cost divided by the number of acquired customers (see Table 62).
From 2002 to 2006: cost item 'Advertising' in *ADSL scorecard* (see footnote 385 above) at pages TFCA-9761, TFCA-9855, TFCA-13036, TFCA-13264 and TFCA-13265 of the file.

506 Cost item 'Sales network' in '*TESAU's audited ADSL accounts*' (see footnote 379 above) at pages TFCA-1504 to TFCA-1507, TFCA-3342 and TFCA-8166 of the file. The unit cost is the annual cost divided by the number of acquired customers (see Table 62). The unit cost for 2006 is the same as the one for 2005

507 See the letter of TESAU of the 17.03.05 (pages TFCA-1618 and TFCA-1630 of the file).

508 Assuming that the SAC of year N were incurred in the middle of the year, 16% of them are allocated to year N, 33% to year N+1, 33% to year N+2 and 16% to year N+3. See Table 66 below.

Table 31 -TERRA's net subscribers' acquisition costs

€/new subscriber	2002	2003	2004	2005
Non recurrent revenues[509]	[…]	[…]	[…]	[…]
Acquisition costs	[…]	[…]	[…]	[…]
Connexion fee[510]	[…]	[…]	[…]	[…]
Modem[511]	[…]	[…]	[…]	[…]
Advertising	[…]	[…]	[…]	[…]
Sales network	[…]	[…]	[…]	[…]
ISP platform	[…]	[…]	[…]	[…]
Net acquisition costs	[…]	[…]	[…]	[…]

Table 32 – Amortization of TERRA's net subscribers' acquisition costs (3 years)

€/ subscriber / month	2002	2003	2004	2005
Amortisation[508]	[…]	[…]	[…]	[…]

1.4 The difference with the cost model of the CMT

(492) In its *Reply*, Telefónica claimed that the Commission did not take account of the cost model of the CMT – which is based on LRAIC – which is precisely designed to ensure the absence of a margin squeeze and on the basis of which the CMT defined the maximal prices for wholesale broadband access at regional level (GigADSL)[512].

509 Revenue and cost items 'Ingresos envoi de modems' and 'Pregalos promocionales' in TERRA's cost accounts. See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefónica of 17.10.06 (page TFCA-13123 of the file).

510 Cot item 'Cuota de alta servicio mayorista' in TERRA's cost accounts. See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefónica of 17.10.06 (page TFCA-13123 of the file).

511 Cost item 'Modems y envío' in TERRA's cost accounts. See the letter of TERRA of 26.03.04 (page TFCA-707 of the file), the letter of TERRA of 07.01.04 (page TFCA-840 of the file) and the letter of Telefónica of 17.10.06 (page TFCA-13123 of the file).

512 See Telefónica's *Response*, pages 98-99.

(493) As explained by Telefónica[513], the CMT's cost model was implemented by an external consultant that modelled the incremental costs of an as efficient alternative operator that would build its retail offers on GigADSL. The first cost model was implemented by ARCOME in March 2002[514] in the framework of CMT's decision *OBA 2002*[515] while the consultant ELMCO[516] implemented an actualised cost model in 2004 in the framework of CMT's decision *OBA 2004*[517]. CMT introduced minor changes in relation to the parameters[513] of the cost model of ELMCO following Telefónica's proposal to duplicate the speed of its retail products on July 2004[518] and May 2005[519].

(494) As will be established below, the cost data used by the CMT in its *ex ante* decisions is inappropriate for the assessment of the compatibility with Article 82 EC of Telefónica's prices for broadband access in the present case because (i) the CMT's cost model does not rely on Telefónica's historical costs but rather on estimates made by the external consultants on the basis of information provided with by the company in October 2001 and (ii) those estimated costs are significantly lower than Telefónica's historical costs and lower than the costs forecasted by Telefónica in its initial business plan.

1.4.1 The CMT cost model does not rely on historical data on the costs effectively incurred by Telefónica but rather on ex ante estimates made by the external consultants on the basis of information provided by Telefónica in 2001

(495) The CMT acknowledged that it did not possess all the data necessary to identify the costs of providing the different forms of wholesale access included in Telefónica's reference offer. This means that the CMT was not in possession of the information required to conduct a margin squeeze test[520] between Telefónica's prices for regional wholesale and retail broadband access that would be as comprehensive and detailed as the one made in this Decision.

(496) ARCOME consulting explicitly indicated that it did not have precise information on Telefónica's network architecture, or on the network equipment used by the company[521].

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513 See Telefónica's *Reply*, at pages 159-160.

514 "*ARCOME cost model*": see Annex 2 of the letter of the CMT of 28.01.05: *Estudio adicional sobre los precios de la Oferta de Acceso al bucle de Abonado de Telefónica: estudio de costes en PAI-IP & Análisis Retail Minus de la oferta minorista ADSL* (pages CMT-519 to CMT-557 of the file).

515 See CMT Decision OBA 2002.

516 "*ELMCO cost model*": see Annex IV of the letter of the CMT of 20.12.04: *Actualización de los estudios realizados por Arome sobre precios de la Oferta de Acceso al bucle de abonado de Telefónica* (pages CMT-198 to CMT-312 of the file).

517 See CMT Decision OBA 2004 (see footnote 94 above).

518 See CMT Decision OBA 2004 (2) (see footnote 103 above) at page CMT-1637 of the file.

519 See CMT Decision OBA 2005 (see footnote 104 above) at page TFCA-3160 of the file:

520 See statements of the CMT in its decision *OBA 2004* ((see footnote 94 above, page CMT-1273 of the file): "*En la tramitación del presente expediente de revisión de la OBA* ***nos encontramos con la misma dificultad que en 2002: la información de contabilidad de costes que ha proporcionado TESAU no es suficiente para poder conocer los costes de producción de los diferentes servicios de la OBA****. En consecuencia, siguiendo el mismo enfoque que en la OBA 2002, se ha optado por la actualización de los estudios que permitieron el establecimiento de los precios de la OBA actualmente vigente*."

(497) The network costs in the CMT's cost model were based on data provided by Telefónica in the reply to a request for information sent by the CMT in October 2001, i.e. only 1 month after the launch of its retail ADSL services[521]. On that occasion, Telefónica provided an estimate (i.e. not the effectively incurred cost) of the costs relating to a network with a capacity of […] lines. Telefónica's number of lines[522] had already exceeded that volume in September 2001[523]. As indicated in Telefónica's internal business plan, the company had already at that time estimates relating to a network with a capacity (at the level of the IP backbone) exceeding […] lines at the end of 2001 and exceeding […] lines at the end of 2005[524]. The number of lines that were effectively achieved exceeded […] at the end of 2001 and […] lines at the end of 2005[523].

(498) As explained by Telefónica itself in its *Reply*[525], no additional information was requested to Telefónica for up-dating the costs of the company.

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521 ARCOME cost model (see footnote 514 above): "*Al no disponer de informaciones precisas sobre la arquitectura de red desplegada por Telefónica y el tipo de equipos utilizados, se ha tomado como hipótesis de partida el análisis en el anexo 4.4 de la respuesta al requerimiento de información del 19 de octubre de 2001. En ese análisis Telefónica tomó como hipótesis […]. A partir de esta hipótesis de partida se ha estimado el tipo de red que podría tener Telefónica evaluando las inversiones necesarias a que debería hacer frente para soportar las nuevas configuraciones de abonados par el 2002 […].*" (page CMT-523 of the file).
ELMCO cost model (see footnote 516 above): "*Al igual que hizo Arcome en su estudio de 2002, aquí se ha tomado como hipótesis de partida el modelo de red propuesto para el análisis de costes detallado del servicio PAI IP que realizó la propia Telefónica y que está incluido en el anexo 4.4 de su respuesta al requerimiento de información del 19 de octubre de 2001. En ese análisis Telefónica asumía la hipótesis de […]. A partir de esta hipótesis de partida se ha estimado el tipo de red que debería implementar Telefónica, y se han evaluado las inversiones necesarias que se deberían llevar a cabo para soportar las nuevas configuraciones de abonados para 2004 […].*" (page CMT-250 of the file).

522 National wholesale lines + Retail lines.

523 The retail and wholesale volumes of TERRA and TDATA (which are national wholesale volumes for TESAU) had already exceeded that volume at that date. See footnote 794 below.

524 See Telefónica's business plan. See annex 10 of the letter of Telefónica of 21.07.06, in particular "*Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base*" (annex 10iii: page TFCA-4452 of the file).

525 See Telefónica's Response, at pages 159-160:
"*En el año 2002, y coincidiendo con la modificación de la OBA, la CMT encargo a la consultora ARCOME la elaboración de un modelo de costes de los servicios de acceso mayoristas, desagregado, compartido e indirecto. La CMT consideró que la información disponible en aquel momento era suficiente ya que no se requirió a Telefónica información adicional alguna. No obstante, la CMT aportó a la consultora cuanta información de costes de Telefónica obrada en su poder.*
[…]
En el año 2003 no se produjo ninguna decisión de la CMT sobre precios mayoristas. Se mantuvieron los porcentajes de retail minus. Telefónica aportó a la CMT, el 31 de julio de ese año, la contabilidad de costes históricos y corrientes totalmente distribuidos correspondientes al año 2002.
En el año 2004 y coincidiendo con la modificación de OBA, la CMT encargo a la consultora ELMCO que actualizara el modelo de ARCOME y no le requirió a Telefónica ninguna información especifica para llevar a cabo esta actualización. […] En julio, y como consecuencia de la propuesta de elevación de velocidad solicitada por Telefónica, la CMT ajustó los parámetros del modelo ELMCO […]. En esta decisión Telefónica no fue requerida para aportar ninguna información relativa a los costes.
[…]
En el año 2005 y coincidiendo con la respuesta de Telefónica de elevación de velocidad del mes de mayo, la CMT volvió, sin requerir información adicional a Telefónica, a ajustar los parámetros del modelo ELMCO y modificó ligeramente los precios del GigADSL." "

(499) Therefore, the costs indicated in the model implemented by the external consultants are not those that were effectively incurred by the company but only estimates on the basis of information relating to a network with a capacity of […] lines. The consultants estimated – without requesting additional cost information from Telefónica[525] – what would have been the necessary incremental investments that the incumbent would have to make for the roll out of a network with a capacity of […] users in 2002 and […] users in 2004. According to the consultants, those estimations were made without any precise information on the architecture of the network and on the type of network equipments rolled out by Telefónica[521].

(500) On the contrary, in the present proceedings, Telefónica provided to the Commission with its business plans in which Telefónica's forecasted costs are indicated. Telefónica also provided information in relation to its effectively incurred costs. In particular, the Commission obtained not only the audited cost accounts based on fully distributed costs (which are also provided to the CMT[526]) but also all the business plans of the company, the ADSL scorecard which identifies the incremental investments and operating costs and the Economics ADSL which provides the company's own assessment of its incremental service costs (ISP recurrent costs + subscribers' acquisition costs). Telefónica did not contest that the costs indicated in its business plans were the incremental costs that were forecasted by the company. It did not contest that the costs indicated in its ADSL scorecard are the effectively incurred incremental costs.

(501) In these circumstances, it would be unjustified and unreasonable to use in the present case the costs used in the decisions of the CMT.

1.4.2 The costs used in the CMT's cost model are lower than the historical costs effectively incurred by Telefónica

1.4.2.1 The economies of scale of Telefónica used for the CMT's cost model are higher than the economies of scale actually achieved by the company

(502) The cost study made by the consultant ELMCO in 2004 calculated a market share and a subsequent level of economies of scale at the level of the IP backbone that Telefónica has effectively not been able to achieve, leading to a underestimation of the cost that the company effectively incurred.[527] By contrast, the Commission's model is based on Telefónica's actual market share.

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526 Telefónica submits its audited costs accounts of year N on 31st July of year N+1. Therefore, the CMT only had the cost accounts for 1999 and 2000 when ARCOME's model was implemented in 2002. It only had the cost accounts for 2001 and 2002 when ELMCO model was implemented in 2004.

527 See ELMCO cost model (see footnote 516 above): "*7.1 Hipótesis de partida para los cálculos […] A partir de esta hipótesis de partidas se ha estimado el tipo de red que deberia implementar Telefónica, y se han evaluado las inversiones necesarias que se deberian llevar a cabo para soportar las nuevas configuraciones de abonados para 2004 que se detallan a continuación: […] se ha supuesto que en promedio […] hacen uso de la infraestructura hasta el PAI-IP*." (page CMT-250 of the file). In fact, the average number of customers that used Telefónica's IP backbone in 2004 was much lower ([…]).

1.4.2.2 The incremental network costs used in CMT's cost model are lower than the incremental costs estimated by Telefónica in its business plan and lower than the costs effectively incurred by the company

(503) Firstly, the incremental investments (CAPEX) relating to Telefónica's IP backbone (IP nodes + IP transport) that were used in the CMT's cost model are much lower than (i) the incremental investments that were estimated by Telefónica in its business plans and also much lower than the (ii) the incremental investments effectively incurred by the company.

(504) As illustrated in Table 33 below, the business plan dated April 2002 already indicated that Telefónica expected to incur higher investments than those used by the CMT in its cost model. This business plan already indicated that the investments that were effectively incurred in 2001. The latter had already exceeded the estimated cumulated investments used by the CMT for 2001-2002 (ARCOME cost model) and for 2001-2004 (ELMCO cost model). Also, the data accumulated in the monthly scorecards shows that Telefónica knew that the effectively incurred investments exceeded to a significant extent the investments used in CMT's cost model.

(505) In particular, the cumulated investment (CAPEX) over the period 2001-2002 that was used in the cost model of 2002 (ARCOME) is […][528] for the IP Nodes and less than […][529] for the IP transport. The corresponding investment that was effectively incurred by Telefónica was: as regards the investments relating to the IP Nodes only: […] for 2001 and €205 million for 2001-2002 and as regards the IP Transport: […] for 2001 only and […] for 2001-2002[530]. The cumulated investment (CAPEX) over the period 2001-2004 that was used in the cost model of 2004 (ELMCO)is […][531] for the IP nodes and […][532] for the IP transport whereas the corresponding investment that was effectively incurred by Telefónica was […][530] for the IP Nodes and […][530] for the IP Transport.

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528 See ARCOME cost model (see footnote 514 above) at page CMT-554 of the file: […] (cost item 'Inversión PAI-Nodo de RED IP') + […] (cost item 'Costes red IP') + […] (cost item 'Costes Sistemas de Gestión').

529 See ARCOME cost model (see footnote 514 above) at page CMT-554 of the file: […] (cost item 'Costes transimision IP').

530 See Table 20 above.

531 See ELMCO cost model (see footnote 516 above) at page CMT-304 of the file: […] (cost item 'Inversión PAI-Nodo de RED IP') + […] (cost item 'Costes red IP') + […] (cost item 'Costes Sistemas de Gestión').

532 See ELMCO cost model (see footnote 516 above) at page CMT-304 of the file (cost item 'Transmision IP').

Table 33 – Differences between the incremental investments (CAPEX) relating to Telefónica's IP backbone (IP nodes + IP transport) used in the CMT's cost model and the incremental investments that were estimated and effectively incurred by Telefónica

Million €	Total 2001	Total 2001-2002		Total 2001-2004	
	historical[533]	forecast[534]	historical[533]	forecast[534]	historical[533]
CMT model April 2002[535]	[…]	[…]	[…]	[…]	[…]
CMT model April 2004[536]	[…]	[…]	[…]	[…]	[…]
Business plan 18 April 2002[537]	[…]	[…]	[…]	[…]	[…]
Scorecards up to February 2002[538]	[…]	[…]	[…]	[…]	[…]
Scorecards up to April 2002[539]	[…]	[…]	[…]	[…]	[…]
Scorecards up to December 2002[540]	[…]	[…]	[…]	[…]	[…]
Scorecards up to December 2004[541]	[…]	[…]	[…]	[…]	[…]
CAPEX scorecard[530]	[…]	[…]	[…]	[…]	[…]

533 Cumulated investment effectively incurred by Telefónica.

534 Cumulated investement forecasted by Telefónica in its business plan or estimated by the CMT in its cost model.

535 See footnotes 528 and 529 above.

536 See footnotes 531 and 532 above.

537 See the letter of Telefónica of 27.09.06 at annex 9 (pages TFCA-12968 and TFCA-12969 of the file). Cost item 'Red IP' or 'SABA+BACKBONE'.

538 Anualized unit CAPEX × number of lines (Megabase + retail) at the end of February 2002. See ADSL Scorecard (see footnote 385above) at pages TFCA-9701 and TFCA-9704 of the file.

539 The cumulated investment since 2001 is calculated by multiplying the anualized unit CAPEX by the number of lines (Megabase + retail) at the end of April 2002. The cumulated investment in 2002 is calculated by multiplying the unit cumulated CAPEX by the cumulated number of new lines (Megabase + retail) in 2002. See ADSL Scorecard (see footnote 385above) at pages TFCA-9711 and TFCA-9715 of the file. The cumulated investment in 2001 is the difference between the cumulated investment since 2001 and the cumulated investment in 2002.

540 The cumulated investment in 2001 is calculated above. The cumulated investment in 2002 is calculated by multiplying the unit CAPEX by the number of new lines (Megabase + retail) in 2002. See ADSL Scorecard (see footnote 385above) at pages TFCA-9758 and TFCA-9762 of the file.

541 The cumulated investment in 2001 and in 2001-2002 is calculated above. The cumulated investment in 2003 and 2004 is calculated by multiplying the unit CAPEX by the number of new lines (Megabase + retail) in 2003 and 2004. See ADSL Scorecard (see footnote 385above) at pages TFCA-9851, TFCA-9856, TFCA-13035 and TFCA-13037 of the file.

(506) Secondly, the operating cost (OPEX) relating to Telefónica's IP backbone (IP nodes + IP transport) that was used in the CMT's cost model is much lower than (i) the cost that were estimated by Telefónica in its business plans and also much lower than the (ii) the cost effectively incurred by the company. The operating costs (OPEX) in 2002 that was used in the cost model is […][542] whereas the corresponding cost that was effectively incurred by Telefónica was […][543]. The operating costs (OPEX) in 2004 that was used in the cost model is […][544] whereas the corresponding cost that was effectively incurred by Telefónica was […][545].

Table 34 – Differences between the incremental operating costs (OPEX) relating to Telefónica's IP backbone that were used in the CMT's cost model and the incremental operating costs that were estimated and effectively incurred by Telefónica

€/month/user	2002		2004	
	forecast[546]	historical[547]	forecast[546]	historical[547]
CMT model 2002[548]	[…]	[…]	[…]	[…]
CMT model 2004[549]	[…]	[…]	[…]	[…]
Business plan 16 Oct 2001[550]	[…]	[…]	[…]	[…]
Business plan 18 April 2002[551]	[…]	[…]	[…]	[…]
Scorecard February 2002[552]	[…]	[…]	[…]	[…]
Scorecard April 2002[553]	[…]	[…]	[…]	[…]
Scorecard December 2002[554]	[…]	[…]	[…]	[…]
Scorecard December 2004[555]	[…]	[…]	[…]	[…]

542 See ARCOME cost model (see footnote 514 above) at page CMT-525 of the file (cost item 'costes de explotacion de red': 91 pesetas/month).
543 See Table 21 above.
544 See ELMCO cost model (see footnote 516 above) at page CMT-254 of the file (cost item 'costes de explotacion de red').
545 See Table 21 above.
546 Unit monlhly cost effectively incurred by Telefónica.
547 Unit monthly cost forecasted by Telefónica in its business plan or by the CMT in its cost model.
548 See ARCOME cost model (see footnote 514 above) at page CMT-525 of the file (cost item 'costes de explotacion de red': […].
549 See ELMCO cost model (see footnote 516 above) at page CMT-254 of the file (cost item 'costes de explotacion de red').
550 See annex 10i of the letter of Telefónica of 21.07.06 at page TFCA-4402 of the file.
551 See the letter of Telefónica of 27.09.06 at annex 9 (page TFCA-12984 of the file).
552 See ADSL Scorecard (see footnote 385above) at page TFCA-9703 of the file.
553 See ADSL Scorecard (see footnote 385above) at page TFCA-9714 of the file.
554 See ADSL Scorecard (see footnote 385above) at page TFCA-9761 of the file.
555 See ADSL Scorecard (see footnote 385above) at page TFCA-13004 of the file.

(507) Thirdly, the costs relating to to the access to the internet that were used in the CMT's cost model are much lower than (i) the costs that were estimated by Telefónica in its business plans and also much lower than the (ii) the costs effectively incurred by the company.

Table 35 – Differences between the incremental costs relating to the access to the internet that were used in the CMT's cost model and the incremental costs that were estimated and effectively incurred by Telefónica

€/month/user	2002		2004	
	forecast[546]	historical[547]	forecast[546]	historical[547]
CMT model 2002[556]	[…]	[…]	[…]	[…]
CMT model 2004[556]	[…]	[…]	[…]	[…]
Business plan 16 Oct 2001[550]	[…]	[…]	[…]	[…]
Business plan April 2002[551]	[…]	[…]	[…]	[…]
Scorecard February 2002[552]	[…]	[…]	[…]	[…]
Scorecard April 2002[553]	[…]	[…]	[…]	[…]
Scorecard December 2002[554]	[…]	[…]	[…]	[…]
Scorecard December 2004[555]	[…]	[…]	[…]	[…]

1.4.2.3 The non network costs used in the CMT's cost model were estimated as a percentage of Telefónica's revenues

(508) The CMT includes in its cost model a "service margin"[557] (ISP recurrent costs, acquisition costs and margin on revenues) estimated as a percentage of the retail price.

Table 36 Service margin in CMT's cost model

Modality	OBA 2002[558]	OBA 2004 (2)[559]
Premium	[…]	[…]
Class	[…]	[…]
Avanzada	[…]	[…]
Básica	[…]	[…]

556 See Telefónica's Reply, page 99.

557 See item " margen de operaciones" in the CMT's cost model. See ARCOME cost model (see footnote 514 above) at page CMT-530 of the file.

558 See ARCOME cost model (see footnote 514 above) at page CMT-530 of the file.

559 Annex 3 (page 33/34) of CMT decisión *OBA 2004 (2)*, at page CMT-1637 of the file.

(509) In its letter of 17.01.05, the Commission asked the CMT to provide the detail of the costs that are included in the "service margin"[560]. In its response[561], the CMT stated that more detailed information than the percentage calculated by the consultant was not available.

(510) In these circumstances, given the much more detailed and precise information provided with by Telefónica in the present proceedings, the estimated non network cost – a particularly significant cost that represents 30% of the retail price –indicated in the CMT's cost model cannot be relied upon for the assessment of the existence of a margin squeeze in the Spanish broadband market.

1.4.3 Conclusion on the difference between the Commission's and the CMT's models

(511) In view of the above, the cost model used by the CMT in its ex ante decisions to ensure the absence of a margin squeeze differs significantly from the assessment of the compatibility with Article 82 EC of Telefónica's prices for broadband access in the present case. The CMT's cost model rely on forecasts provided by Telefónica in October 2001 whereas the Commission's model relies on the most recent historical data (for the period-by-period and the backward DCF method) and the initial business plan (for the forward DCF method) as provided by the company and used by the latter for its defence in the *Reply*[562]. In conclusion, the Commission considers that the costs used by the CMT in its cost model are not appropriate for the assessment of the compatibility with Article 82 EC of Telefónica's prices for broadband access in the present case.

2 The results of the margin squeeze test

(512) Following the methodology set out above, this section analyses the evidence as to whether Telefónica's retail broadband prices were replicable on the basis of the wholesale charges levied from September 2001 to December 2006. More precisely, it will be established that the retail broadband prices levied by Telefónica's subsidiaries (TESAU and TERRA) have not been replicable either on the basis of its national wholesale offers (ADSL-IP and ADSL-IP Total) or on the basis of its regional wholesale offer (GigADSL).

(513) This section is structured as follows: section 2.1 analyses the replicability of Telefónica's retail prices on the basis of the company's historical costs and section 2.1.2.3 analyses the margin squeeze calculations made by Telefónica in its *Reply* on the basis of the forecasts made by the company in its initial business plan.

2.1 Replicability of Telefónica's retail prices on the basis of Telefónica's historical costs

(514) As established below, from September 2001 to December 2006, Telefónica's retail broadband prices were not replicable either on the basis of its national wholesale offers (see section 2.1.1 below) or on the basis of its regional wholesale offer (see section 2.1.1.3 below).

560 See the letter of the Commission to the CMT of 17.01.05 (pages CMT-498 and CMT-499 of the file).
561 See the letter of CMT of 02.02.05 (pages CMT-569 to CMT-572 of the file).
562 See section VI.D.2.2 below.

2.1.1 Analysis on the basis of ADSL-IP and ADSL-IP Total

2.1.1.1 The 'period-by-period' method

(515) As can be seen from the calculation below, if TESAU would have had to pay the ADSL-IP (see Table 38 below) and ADSL -IP Total (see Table 37 below) charges imposed on its competitors from September 2001 to December 2006, its margin would have been have been negative.

Table 37 – Analysis of TESAU's retail prices on the basis of ADSL-IP Total

	u.o.	2001	2002	2003	2004	2005	2006
ARPU[563]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[564]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[565]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[566]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Margin[567]	**€/month/user**	[…]	[…]	[…]	[…]	[…]	[…]
	Million €[568]	[…]	[…]	[…]	[…]	[…]	[…]

Table 38 – Analysis of TESAU's retail prices on the basis of ADSL-IP

	u.o.	2001	2002	2003	2004	2005	2006
ARPU[563]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[569]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Network[569]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[565]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[566]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Margin[567]	**€/month/user**	[…]	[…]	[…]	[…]	[…]	[…]
	Million €[568]	[…]	[…]	[…]	[…]	[…]	[…]

(516) The margin squeeze test leads to a similar result for TERRA's retail prices[570]:

563 See Table 16 above.
564 See Table 23 above.
565 See Table 27 above.
566 See Table 30 above.
567 ARPU – Wholesale charge – Network cost – ISP cost –Net SAC.
568 Unit monthly margin (in €/month/user) × average number of end users in the year (see Table 61 in Annex B) × 12.
569 See Table 24 above.
570 A similar result can be found with TERRA's own costs.

Table 39 – Analysis of TERRA's retail prices on the basis of ADSL-IP Total

€/month/user	2002	2003	2004	2005
ARPU[571]	[…]	[…]	[…]	[…]
Wholesale charge[572]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]
ISP[573]	[…]	[…]	[…]	[…]
Net SAC[574]	[…]	[…]	[…]	[…]
Margin[567]	[…]	[…]	[…]	[…]

Table 40 – Analysis test of TERRA's retail prices on the basis of ADSL-IP

€/month/user	2002	2003	2004	2005
ARPU[571]	[…]	[…]	[…]	[…]
Wholesale charge[575]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]
Network[575]	[…]	[…]	[…]	[…]
ISP[573]	[…]	[…]	[…]	[…]
Net SAC[574]	[…]	[…]	[…]	[…]
Margin[567]	[…]	[…]	[…]	[…]

2.1.1.2 The Discounted Cash Flow ("DCF") method

(517) An analysis under the DCF method proposed by Telefónica – which as explained in paragraph (345) above was considered not appropriate in Wanadoo in similar circumstances – also leads to a negative result over the modelled period September 2001- December 2006:

(518) The test is based on the following unit values:

571 See Table 17 above.
572 See Table 25 above.
573 See Table 27 above.
574 See Table 32 above.
575 See Table 26 above.

Table 41 Evolution of TESAU's unit revenues and costs 2001-2006 (on the basis of ADSL-IP)

	u.o.	2001	2002	2003	2004	2005	2006
ARPU[576]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[577]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs		[…]	[…]	[…]	[…]	[…]	[…]
Network (OPEX)[577]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[576]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[576]	€ /new user	[…]	[…]	[…]	[…]	[…]	[…]
Average no. of users[576]	'000	[…]	[…]	[…]	[…]	[…]	[…]
No. of users end of year[576]	'000	[…]	[…]	[…]	[…]	[…]	[…]
New end-users (SAC) [576]	'000	[…]	[…]	[…]	[…]	[…]	[…]

(519) As a result, the analysis under the DCF method leads to a negative NPV of […]. This means that Telefónica's retail prices on the basis of its own wholesale products were not replicable by ADSL alternative operators due to the margin squeeze.

576 See Table 44 below. The DCF analysis on the basis of ADSL-IP is the same as the one on the basis of GigADSL, except for the IP backbone costs (in the analysis on the basis of ADSL-IP, the IP backbone costs are replaced by the wholesale prices charged by Telefónica, see the item "Network (OPEX)" in the present table (as Telefónica did in its DCF calculation on the basis of ADSL-IP).

577 See Table 24 above.

Table 42 The NPV of TESAU's downstream activity over 2001-2006 (on the basis of ADSL-IP)

Million euros	2001	2002	2003	2004	2005	2006
Revenues[578]	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charges[578]	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (OPEX)[578]	[…]	[…]	[…]	[…]	[…]	[…]
ISP recurrent costs[578]	[…]	[…]	[…]	[…]	[…]	[…]
Net Acquisition costs[579]	[…]	[…]	[…]	[…]	[…]	[…]
Net cash flow[580]	[…]	[…]	[…]	[…]	[…]	[…]
NPV_0 (excl. terminal value)[581]	[…]	[…]	[…]	[…]	[…]	[…]
Terminal value[582]	[…]	[…]	[…]	[…]	[…]	[…]
NPV (incl. terminal value)[583]	[…]	[…]	[…]	[…]	[…]	[…]

2.1.1.3 Conclusion as to the existence of a margin squeeze between Telefónica's national wholesale and retail prices

(520) In view of the above, both the period-by-period and the DCF methods lead to the finding of a margin squeeze between Telefónica's retail and national wholesale prices.

2.1.2 Analysis on the basis of GigADSL

2.1.2.1 The 'period-by-period' method

(521) As can be seen from the calculation below, if TESAU would have had to pay the GigADSL charges it has imposed on its competitors from September 2001 to December 2006, its margin would always have been negative.

578 Unit value × average number of end users × 12 (see Table 41 above).

579 Unit value × number of new end users × 12 (see Table 41 above).

580 Total annual revenues – total annual wholesale charges – total annual incremental costs.

581 Sum of the discounted annual net cash flows. See formula in paragraph (329) above.

582 See Table 68 in Annex C. This terminal value is higher than the discounted value in 2006 of the expected future profits during 2007-2011 generated by the subscribers acquired by Telefónica before 2006 (See Table 69 in Annex C).

583 NPV_0 (excl. terminal value) – discounted terminal value.

Table 43 – Replicability test of TESAU's retail prices on the basis of GigADSL

	u.o.	2001	2002	2003	2004	2005	2006
ARPU[584]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[585]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Network[586]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[587]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[588]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Margin[567]	**€/month/user**	[…]	[…]	[…]	[…]	[…]	[…]
	Million €[568]	[…]	[…]	[…]	[…]	[…]	[…]

2.1.2.2 The Discounted Cash Flow ("DCF") method

(522) The DCF method leads to the same conclusion as the period-by-period method, namely that the NPV of Telefónica's downstream activity was negative over the period September 2001-December 2006. This means that Telefónica's retail prices on the basis of its own wholesale products were not replicable by ADSL alternative operators due to the margin squeeze.

(523) The test is based on the following unit values:

584 See Table 16 above.
585 See Table 18 above.
586 See Table 21 and Table 22 above.
587 See Table 27 above.
588 See Table 30 above.

Table 44 Evolution of TESAU's unit revenues and costs 2001-2006

	u.o.	2001	2002	2003	2004	2005	2006
ARPU[589]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[590]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs		[…]	[…]	[…]	[…]	[…]	[…]
Network (CAPEX)[591]	€ /new user	[…]	[…]	[…]	[…]	[…]	[…]
Network (OPEX) [592]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[593]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[594]	€ /new user	[…]	[…]	[…]	[…]	[…]	[…]
Average no. of users[595]	'000	[…]	[…]	[…]	[…]	[…]	[…]
No. of users end of year[595]	'000	[…]	[…]	[…]	[…]	[…]	[…]
New end-users (SAC)[596]	'000	[…]	[…]	[…]	[…]	[…]	[…]
New end-users (CAPEX)[597]	'000	[…]	[…]	[…]	[…]	[…]	[…]

(524) As a result, the analysis under the DCF method leads to a negative NPV of […] (including the terminal value), meaning that entry on the basis of GigADSL could not be profitable over 2001-2006:

589 See Table 16 above.

590 See Table 18 above.

591 See *ADSL scorecard* for 2002 to 2006 (see footnote 385 above): pages TFCA-9762, TFCA-9856, TFCA-13037, TFCA-13063 and TFCA-13087 of the file.
See the updated business plan PEC Verne for 2001 (annex 9 of the letter of Telefónica of 27.09.06) at page TFCA-12976 of the file) This updated business plan includes the historical CAPEX for 2001 (€ 381.36 million for Telefonica's entire ADSL business in 2001 -see page TFCA-12968 of the file) which is indicated in annex 1 of the letter of Telefónica of 17.10.06 (page TFCA-13126 of the file).
The unit network CAPEX (€/new subscriber) for the margin squeeze test between Telefonica's retail and GigADSL prices is the difference between the unit CAPEX for a Megabase line and the unit CAPEX for a GigADSL line.

592 See Table 21 and Table 22 above.

593 See Table 27 above.

594 See Table 29above.

595 See Table 60 in Annex A and Table 61 in Annex B for 2001-2005 and Telefónica Trimestral Report December 2006 (p. 20) for 2006: the number of TESAU's subscribers at the end of 2006 is 3 742 700. The subsequent estimated average number of subscribers in 2006 is 3 122 800.

596 From 2001 to 2005: see Table 62 in Annex B. The lines transferred from TDATA to TESAU in 2001 are excluded because they did not generate any subscriber acquisition cost in 2001. For 2006: it is assumed that the churn remains the same in 2006 as in 2005.

597 From 2002 to 2006: see footnote 596 above. For 2001: number of new retail subscribers (195 256) used by Telefonica for the calculation of the unit CAPEX for 2001 (see footnote 591 above) in annex 9 of the letter of Telefónica of 27.09.06) at page TFCA-12969 of the file).

Table 45 The NPV of TESAU's downstream activity over 2001-2006

Million euros	2001	2002	2003	2004	2005	2006
Revenues[598]	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charges[598]	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (CAPEX)[599]	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (OPEX) [598]	[…]	[…]	[…]	[…]	[…]	[…]
ISP recurrent costs[598]	[…]	[…]	[…]	[…]	[…]	[…]
Net Acquisition costs[599]	[…]	[…]	[…]	[…]	[…]	[…]
Net cash flow[600]	[…]	[…]	[…]	[…]	[…]	[…]
NPV_0 (excl. terminal value)[601]	[…]	[…]	[…]	[…]	[…]	[…]
Terminal value[602]	[…]	[…]	[…]	[…]	[…]	[…]
NPV (incl. terminal value)[603]	[…]	[…]	[…]	[…]	[…]	[…]

2.1.2.3 Conclusion as to the existence of a margin squeeze between Telefónica's regional wholesale and retail prices

(525) In view of the above, both the period-by-period and the DCF methods lead to the finding of a margin squeeze between Telefónica's retail and regional wholesale prices.

2.2 Replicability of Telefónica's retail prices on the basis of the forecasts made by Telefónica in its business plan

(526) In its *Reply*[604], Telefónica submitted a forward DCF calculation based on the forecasts it made in its initial business plan[605] and that allegedly led to a positive downstream margin.

598 Unit value × average number of end users × 12 (see Table 44 above).
599 Unit value × new acquired end users (see Table 44 above).
600 Total annual revenues – total annual wholesale charges – total annual incremental costs.
601 Sum of the discounted annual net cash flows. See formula in paragraph (329) above.
602 See Table 67 and Table 68 in Annex C.. This terminal value is higher than the discounted value in 2006 of the expected future profits during 2007-2011 generated by the subscribers acquired by Telefónica before 2006 (see Table 70 in Annex C).
603 NPV_0 (excl. terminal value) – discounted terminal value.
604 See pages 337-339 of the *Response.*
605 See footnote 368 above.

(527) As already explained in section VI.C.3.1.3 above, the forecasts of the dominant company in its initial business plan cannot be used for establishing the existence or not of an abuse in the form of unfair prices. In any event, Telefónica's forward DCF calculation relies on a number of assumptions or methods that are unjustified or implausible and omits and significantly underestimates some relevant costs (see sections 2.2.2 and 2.2.3 below). In fact, Telefónica's initial business plan indicated that the downstream activity of the company would generate a negative NPV over 2001-2006 while its overall activity would generate a positive NPV over the same period (see sections 2.2.1 and 2.2.4 below).

2.2.1 Telefónica's calculations in its initial business plan in fact directly indicated the existence of a margin squeeze

(528) In fact it is not necessary to make a DCF forward calculation to show the existence of a margin squeeze. Indeed, the final results indicated in Telefónica's initial business plan show (without any necessary calculation) the existence of such margin squeeze: the value (NPV) generated by a wholesale ADSL line (GigADSL or ADSL-IP) is higher than the value generated by a complete retail ADSL line. This means that Telefónica was aware that its downstream activity was loss making:

Table 46 The NPV of one ADSL line indicated in TESAU's initial business plan[606]

Euros / end user	2002-2006	Time of pay-out
One retail line	[…]	[…]
One ADSL-IP line	[…]	[…]
One GigADSL line	[…]	[…]

2.2.2 The DCF calculation presented by Telefónica in its Reply to the SO

(529) In its *Reply*[607], Telefónica made a DCF calculation based on the forecasts made in its business plan aiming at proving the absence of the margin squeeze. It argued that its calculations[608] lead to a negative NPV without including any terminal value but a positive NPV when including a terminal value (based on multiples[609]) at the end of 2005 of […][610].

606 See annex 10iii of the letter of Telefónica of 21.07.06: "*Análisis de las variables económicas críticas del ADSL – Documento de trabajo – Resumen documento base*", slide 23 (page TFCA-4468 of the file).
607 See pages 337-339 of the *Response*.
608 See page 339 (Table 7) of the *Response*.
609 See section VI.C.3.1.2 above.
610 See page 336 of the *Response*.

Table 47 – Foreward NPV over 2001-2005 calculated by Telefónica in its *Reply*[611]

Million €	excluding terminal value	including terminal value
On the basis of GigADSL	[…]	[…]
On the basis of ADSL-IP	[…]	[…]

(530) However, Telefónica indicated in its letter dated 4 August 2006 that the calculations submitted in its *Reply* contained a number of errors and the company submitted an amended DCF calculation. Telefónica's amended DCF calculation is based on the following unit values:

Table 48 - Unit values used by Telefónica in its DCF calculation

	u.o.	2001	2002	2003	2004	2005
ARPU[612]						
excl. SVA	€/month/user	[…]	[…]	[…]	[…]	[…]
incl. SVA	€/month/user	[…]	[…]	[…]	[…]	[…]
Wholesale charge[612]						
GigADSL	€/month/user	[…]	[…]	[…]	[…]	[…]
ADSL-IP	€/month/user	[…]	[…]	[…]	[…]	[…]
Incremental costs[612]						
Network (CAPEX)						
GigADSL	€ /new user	[…]	[…]	[…]	[…]	[…]
ADSL-IP	€ /new user	[…]	[…]	[…]	[…]	[…]
OPEX						
excl. SVA	€/month/user	[…]	[…]	[…]	[…]	[…]
incl. SVA	€/month/user	[…]	[…]	[…]	[…]	[…]
Net SAC	€ /new user	[…]	[…]	[…]	[…]	[…]
Nb. of users end of year[612]	‘000	[…]	[…]	[…]	[…]	[…]
Average nb. of users[613]	‘000	[…]	[…]	[…]	[…]	[…]
New acquired users[613]	‘000	[…]	[…]	[…]	[…]	[…]

611 See page 339 (Table 14) of the *Response*.

612 As calculated by Telefónica in annex 2 of the letter of Telefónica of 04.08.06, at page TFCA-12532 of the file.

613 As calculated by Telefónica in annex 2 of the letter of Telefónica of 04.08.06, at page TFCA-12530 of the file.

(531) In its amended DCF calculation, Telefónica finds a negative NPV without including any terminal value but finds a positive NPV when including the same terminal value of € […].

Table 49 – Amended foreward NPV over 2001-2005 calculated by Telefónica[614]

Million €	excluding terminal value	including terminal value
On the basis of GigADSL	[…]	[…]
On the basis of ADSL-IP	[…]	[…]

(532) The errors made by Telefónica in its *Reply* and subsequently corrected in its letter of 4 August 2006 were so significant – with an impact of […] on the NPV (NPV on the basis of GigADSL excluding the terminal value)[615] – that Telefónica's positive result strongly relies on the inclusion of a terminal value that includes profits generated beyond the modelled period.

2.2.3 Deficiencies of Telefónica's DCF calculations in the context of a margin squeeze analysis

(533) In this section, the Commission will establish that even Telefónica's amended DCF calculation relied on a number of assumptions and methods that are unjustified or implausible. Firstly, Telefónica proceeded on the basis of unjustified and implausible assumptions as to the levels of future revenues. Secondly, Telefónica included in its DCF calculation a termination value that extends the NPV analysis over an excessively long period. Thirdly, Telefónica omitted and significantly underestimated some relevant costs in its DCF analysis.

614 As calculated by Telefónica in annex 2 of the letter of Telefónica of 04.08.06, at page TFCA-12530 of the file.

615 Difference between the NPV (excluding the terminal value) in Table 47 and Table 49 above.

(534) Firstly, Telefónica's forecasts are incompatible with competitive conditions. Indeed, Telefónica's calculation relies on the assumption that its unit costs would fall over time while its average revenue per customer would increase over the same period[616]. The effect of this assumption is significant and contributes to Telefónica's forecasts of future profitability which in the Commission's view are inconsistent with a competitive market and are therefore likely to mask the presence of losses that would be irrecoverable under competitive conditions. Indeed, under conditions of competition, one would expect to see, over time, reductions in underlying costs being "competed away", i.e. passed on to consumers in price reductions, rather than being retained by the companies in the form of higher margins. Moreover, under competitive conditions, future margins can be expected to tend towards a level that provides for a reasonable return on investment. The Commission concludes that Telefónica's forecasts should not be used to sustain a reasonable expectation on Telefónica's part that it would be able to recover its initial losses from subsequent profits within reasonable timescales and under competitive conditions.

(535) Secondly, the terminal value calculated by Telefónica corresponds to the value at which the company would be acquired at the end of the modelled period. De facto, it includes in the NPV all profits generated until perpetuity. As already explained in section VI.C.3.1.1 above, it is unreasonable and unjustified in the context of a margin squeeze analysis in the present case to extend a DCF analysis beyond a reasonable timescale. On the facts of this case, a DCF calculation period longer than 6 years is unreasonable. In particular, the use of a terminal value that incorporates all profits until perpetuity is unreasonable in the context of a margin squeeze analysis. Therefore, the terminal value proposed by Telefónica is inappropriate and unreasonable. Only the residual value (calculated as the amount of unamortized costs during the modelled period) is to be included in the DCF analysis.

616 Telefónica assumes that, while its unit costs decrease constantly from 2001 to 2006 (see Table 48 above), its average unit revenues (ARPU excluding value added services) increase over time (see Table 48 above), it is able to maintain a market share in the ADSL segment above 80%, decreasing very slightly from 84% in 2002 to 81% at the end of 2005. (see graph 1 of the letter of Telefónica of 23.06.06 at page TFCA-13277 of the file).

(536) Thirdly, the Commission has identified a number of instances in which Telefónica's DCF calculations omitted certain relevant costs and overstated other costs. Such deficiencies only appear in Telefónica's DCF calculation in the *Reply* but do not appear in its initial business plan. Firstly, Telefónica should have included in its calculation the one-off connection fee, which is a wholesale charge imposed by Telefónica on its downstream competitors for the activation of each new ADSL line. Moreover, Telefónica underestimated the annual amount of capital invested (CAPEX) and of subscribers acquisition cost (SAC) when multiplying the corresponding unit values (expressed in euros by new subscriber) by the net increase of the number of subscribers in the year[617] (instead of the number of new subscribers[618]). Telefónica's calculation is false because the unit CAPEX is, as calculated by Telefónica in its initial business plan[619] and ADSL scorecard[620], the total expenditure divided by the number of new subscribers and not the net increase of subscribers. Given that some subscribers leave Telefónica during the year, the net increase of subscribers is obviously lower than the number of subscribers[618].

2.2.4 The result

(537) In the present decision, it is not necessary to assess which forecast revenues were compatible with a competitive environment. Indeed the Commission has reached a negative result by only (i) correcting Telefónica's calculation errors and (ii) including an appropriate terminal value:

(538) The unit values indicated in the initial business plan of the company are as follows:

617 As illustrated by Table 48 above

618 As illustrated by Table 50 below.

619 See annex 9 of the letter of Telefónica of 27.09.06 (page TFCA-12969 of the file).

620 See annex 2 and 3 of the letter of Telefónica of 31.08.06 and annex 10, 11 and 13 of the letter of Telefónica of 27.09.06 (pages TFCA-9762, TFCA-9856, TFCA-13037, TFCA-13063 and TFCA-13087 of the file).

Table 50 Evolution of TESAU's unit revenues and costs in its initial business plan

	u.o.	2001	2002	2003	2004	2005	2006[621]
ARPU (excl. SVA)[622]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charge[622]		[…]	[…]	[…]	[…]	[…]	[…]
GigADSL	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs		[…]	[…]	[…]	[…]	[…]	[…]
Network (CAPEX)[622]		[…]	[…]	[…]	[…]	[…]	[…]
GigADSL	€ /new user	[…]	[…]	[…]	[…]	[…]	[…]
Network (OPEX)[623]		[…]	[…]	[…]	[…]	[…]	[…]
GigADSL	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
ISP[624]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
Net SAC[625]	€ /new user	[…]	[…]	[…]	[…]	[…]	[…]
Nb. of users end of year[622]	'000	[…]	[…]	[…]	[…]	[…]	[…]
Average nb. of users[622]	'000	[…]	[…]	[…]	[…]	[…]	[…]
New acquired users[624]	'000	[…]	[…]	[…]	[…]	[…]	[…]

(539) When adjusting Telefónica's DCF calculation, a negative NPV is found both for the analysis in relation to ADSL-IP (see Table 51 below) and the analysis in relation to GigADSL (see Table 52 below):

621 The unit costs and revenues for 2006 are the same as in 2005 (as Telefónica also assumed in its business plan: see annex 9 of the letter of Telefónica of 27.09.06, page TFCA-12985 of the file).

622 As calculated by Telefónica (see Table 48 above).

623 See annex 10iv of the letter of Telefónica of 21.07.06 (page TFCA-4495 of the file): Difference between the cost corresponding to a retail line and the cost corresponding to a GigADSL (resp. ADSL-IP) line (as explained by Telefónica in its letter of 23.06.06, page TFCA-13278 of the file).

624 See annex 10iv of the letter of Telefónica of 21.07.06 (page TFCA-4495 of the file). The item 'SVA' is excluded.

625 See annex 10iv of the letter of Telefónica of 21.07.06 (page TFCA-4495 of the file): Difference between the cost corresponding to a retail line and the cost corresponding to a GigADSL line (as explained by Telefónica in its letter of 23.06.06, page TFCA-13278 of the file).

Table 51 The adjusted forward DCF calculation on the basis of ADSL-IP

Million euros	2001	2002	2003	2004	2005	2006
Revenues[626]	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charges[626]	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (OPEX)[626]	[…]	[…]	[…]	[…]	[…]	[…]
ISP recurrent costs[626]	[…]	[…]	[…]	[…]	[…]	[…]
Net Acquisition costs[627]	[…]	[…]	[…]	[…]	[…]	[…]
Net cash flow[628]	[…]	[…]	[…]	[…]	[…]	[…]
NPV_0 (excl. terminal value) [629]	[…]	[…]	[…]	[…]	[…]	[…]
Terminal value[630]	[…]	[…]	[…]	[…]	[…]	[…]
NPV (incl. terminal value) [631]	[…]	[…]	[…]	[…]	[…]	[…]

Table 52 The adjusted forward DCF calculation on the basis of GigADSL

Million euros	2001	2002	2003	2004	2005	2006
Revenues	[…]	[…]	[…]	[…]	[…]	[…]
Wholesale charges	[…]	[…]	[…]	[…]	[…]	[…]
Incremental costs	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (CAPEX)	[…]	[…]	[…]	[…]	[…]	[…]
Network costs (OPEX)	[…]	[…]	[…]	[…]	[…]	[…]
ISP recurrent costs	[…]	[…]	[…]	[…]	[…]	[…]
Net Acquisition costs	[…]	[…]	[…]	[…]	[…]	[…]
Net cash flow[628]	[…]	[…]	[…]	[…]	[…]	[…]
NPV_0 (excl. terminal value)[629]	[…]	[…]	[…]	[…]	[…]	[…]
Terminal value[632]	[…]	[…]	[…]	[…]	[…]	[…]
NPV (incl. terminal value)[631]	[…]	[…]	[…]	[…]	[…]	[…]

626 Unit value × average number of end users × 12 (see Table 48 above).

627 Unit value × new acquired end users (see Table 48 above).

628 Total annual revenues – total annual wholesale charges – total annual incremental costs.

629 Sum of the discounted annual net cash flows. See formula in paragraph (329) above.

630 See Table 72 in Annex 3.

631 NPV_0 (excl. terminal value) – discounted terminal value.

632 See Table 71 and Table 72 in Annex 3.

(540) In conclusion, an analysis based on the forecasts made by Telefónica made in its business plan does not invalidate the Commission's finding, namely that the forward DCF analysis also leads to a negative NPV.

3 Overall conclusion as to the existence of a margin squeeze

(541) Both the period-by-period method and the DCF method result in a margin squeeze, i.e. the retail broadband prices levied by Telefónica's subsidiaries (TESAU and TERRA) have not been replicable either on the basis of its national wholesale offers (ADSL-IP and ADSL-IP Total) or on the basis of its regional wholesale offer (GigADSL)[633] from September 2001 to December 2006.

(542) The results of the margin squeeze test are summarised as follows

Table 53 – Margin squeeze test on TESAU's retail prices under the period-by period method

	u.o.	2001	2002	2003	2004	2005	2006
ADSL IP Total[634]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP[635]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]
GigADSL[636]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]

Table 54 – Margin squeeze test on TESAU's retail prices under the DCF method

NPV over 2001-2006 (million €)	ADSL-IP	GigADSL
On the basis of Telefónica's historical costs[637]	[…]	[…]
On the basis of Telefónica's forecasts[638]	[…]	[…]

633 This implies that the finding of margin squeeze is independent from the finding that regional wholesale access and national wholesale access belong to separate product markets.

634 See Table 37 above.

635 See Table 38 above.

636 See Table 43 above.

637 See Table 42 and Table 45 above.

638 See Table 51 and Table 52 above.

E. Impact on competition

(543) The Court of First Instance has ruled that, "for the purposes of establishing an infringement of Article 82 EC, it is not necessary to demonstrate that the abuse in question had a concrete effect on the markets concerned. It is sufficient in that respect to demonstrate that the abusive conduct of the undertaking in a dominant position tends to restrict competition, or, in other words, that the conduct is capable of having, or likely to have, such an effect."[639] Furthermore, it should be added that, "where an undertaking in a dominant position actually implements a practice whose object is to oust a competitor, the fact that the result hoped for is not achieved is not sufficient to prevent that being an abuse of a dominant position within the meaning of Article 82 EC".[640] Finally, Article 82 EC is aimed not only at practices which may cause prejudice to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure, such as is mentioned in Article 3(1)(g) EC.[641] Article 82 does not require the Commission to examine specifically whether the conduct of the dominant undertaking has caused prejudice to consumers.[642]

(544) In the present case however, the Commission has examined the impact of Telefónica's practices and has established that Telefónica's conduct was not only capable of restricting, or in other words, likely to restrict competition in the retail market, but it also had an actual impact on the competitive structure of the relevant market and a detrimental impact for end users.

1 Likely impact of Telefónica's conduct on the relevant markets and on consumers

(545) In the following, it will be established that Telefónica's conduct was capable of restricting, or, in other words, was likely to restrict competition in the relevant markets (see section 1.1 below) and that it was likely to have detrimental effects directly for consumers (see section 1.2 below).

1.1 Telefónica's conduct was likely to constrain the ability of ADSL operators to grow sustainably in the retail market

(546) Since ADSL operators had to undercut Telefónica's retail prices in order to gain customers (see section V.C.3.2 above), their activity resulted in losses similar to those of Telefónica's downstream arm, regardless of whether they contracted Telefónica's regional or national wholesale offers. It has been established that such losses are not recoverable within a reasonable period of time in a competitive market.

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639 Judgment of the Court of First Instance of 17 December 2003 in Case T-219/99 British Airways plc vs. Commission of the European Communities, paragraph 293..

640 Judgment of 30 January 2007, Case T-340/03, France Télécom, paragraph 196; Joined Cases T-24/93 to T-26/93 and T-28/93 Compagnie maritime belge transports and Others v Commission [1996] ECR II-1201, paragraph 149, and Case T-228/97 Irish Sugar v Commission [1999] ECR II-2969, paragraph 191.

641 Judgment of 15 March 2007, Case C-95/04 P, British Airways, paragraphs 106-107; Case 6/72 Europemballage and Continental Can v Commission [1973] ECR 215, paragraph 26.

642 Case C-95/04 P, British Airways, paragraph 107.

(547) ADSL competitors in the retail market could not substitute away from the regional and national wholesale inputs provided by Telefónica by turning to an alternative viable (in terms of price, geographical coverage and capacity) wholesale input. Telefónica is the only provider of regional wholesale access (see section V.C.1 above). Also, Telefónica has always been in a position to exert decisive influence on the availability of viable alternative national wholesale offers (which were based on Telefónica's other wholesale offers) with national coverage (see section V.C.2 above).

(548) What is more, the mere existence of Telefónica's wholesale product for access at regional level since 1999 and the existence of regulatory obligations imposing such access (see Section IV.D.2.2 above) have structured the Spanish broadband markets in an irreversible manner: alternative operators have incurred considerable investments in order to use Telefónica's wholesale products and connect at the regional level. This has contributed to create a relationship of reliance of the rivals on Telefónica's wholesale products.

(549) As a consequence of the above, Telefónica's conduct was likely to make the continued presence on the market of equally efficient competitors difficult to sustain and to impose on the latter additional efficiency constraints which the downstream arm of the vertically integrated company did not have to support[643].

(550) Given the scale of customer acquisition costs (advertising campaigns, promotions, commercialization) and the network investments (if the ISP does not seek to merely resell the incumbent's national wholesale products), Telefónica has been able, by imposing a margin squeeze in relation to its wholesale inputs, to force alternative ISPs to make a trade-off between profitability and market share growth (i.e. by having to match (at least) both Telefónica's prices and expenditures to maintain market share).

(551) As a result, ISPs in Spain have been confronted with the following choices:

i) enter the downstream market with a high risk of exit;

ii) where their financial resources are such that they must scale back investments, forego market share and become smaller players: these ISPs would enter the retail market passively, minimising certain strategic items of expenditure such as customer acquisition costs, in particular advertising, and adopting minimal quantitative sales targets.;

iii) or, even if they meet the dominant undertaking both on retail prices, investments and marketing expenditure, strive to gain market share and offer a vigorous competitive challenge to the dominant undertaking, which is not sustainable in the long run due to their continuing losses.

(552) The nature and extent of the trade off between profitability and market share growth was likely to contain the competitive pressure on Telefónica. It would not have existed absent the margin squeeze.

643 *Deutsche Telekom*, paragraphs 108 and 141.

(553) In theory, due to the margin squeeze, the only viable entry would have been to duplicate Telefónica's regional wholesale product on the basis of local loop unbundling. However, this option, in addition not to being a substitute to Telefónica's other wholesale inputs, is extremely expensive and risky (see section V.A.3.1 above) and has only been available with significant delays (see section IV.F above). Telefónica's conduct therefore was likely to raise significantly the costs of rivals and new entrants.

(554) By imposing a margin squeeze on its competitors, Telefónica's conduct was likely to delay[644] the entry and growth of competitors, and the achievement by those operators of a level of economies of scale which would have justified investments in their own infrastructure to use local loop unbundling. In so doing, Telefónica's conduct also was likely to delay the moment competitors could threaten its dominance in the regional and national markets. This conduct was likely to exhaust financially its competitors.

(555) Given the high proportion of ADSL in the retail market (representing almost 80% of all the broadband connections at the end of 2006), the foreclosure effect of the margin squeeze was likely to be significant.

1.2 Telefónica's conduct was likely to negatively affect end users

(556) In the present case, the immediate harm to consumers was likely to be significant: the competition that has been restricted by means of the margin squeeze would have been effective in driving down retail prices.

(557) As set out above, the competitiveness of the market was likely to be restricted relative to the situation that would have prevailed in the absence of the margin squeeze. This inevitably leads to likely harm to consumers. All else being equal, consumers will ultimately be worse off in a market in which the structure of competition is distorted, restricted or impaired. Absent the distortions resulting from Telefónica's margin squeeze in this case, the retail market for broadband services would have been likely to have witnessed more vigorous competition between ISPs, unhindered by current restricted decision making in terms of the trade-off between volume growth and profitability. Without such constraints on competing ISPs, it is likely that the market would have delivered greater benefits to consumers as a whole such as increased choice and innovation.

644 Economic theory establishes that a dominant company engaging in below-cost pricing in a market characterised by learning effects and economies of scales may reinforce the barriers to entry in such market. See, for example, P. Bolton, J. Brodley and M. Riordan, 2000, 'Predatory Pricing: strategic theory and legal policy', 88, *Georgetown Law Journal*, p. 51.

(558) Consumers are also likely to have been harmed by higher retail prices than would have prevailed in the absence of the margin squeeze. Contrary to Telefónica's allegations[645], there is no contradiction between the existence of a margin squeeze and high retail prices. The present case differs significantly from a predatory pricing case from the consumers' point of view. In a predatory pricing case, consumers benefit in the short run from low prices, but suffer in the longer term as the dominant firm exploits its strengthened market position and the entry barrier it has created through its predatory pricing. On the contrary, margin squeeze does not require such a trade-off. Consumers may suffer both in the short run and in the long run from a margin squeeze. This is because a margin squeeze may involve a high retail price (relative to end-to end costs) in the short-run as well as the long run, which would arise because of the high charge set for the wholesale service.

(559) Telefónica stood to benefit the most from the foreclosure of its retail ADSL competitors. This is because neither cable operators nor the progressive development of local loop unbundling could neutralise the likely effects of Telefónica's conduct on end users.

(560) Indeed, as established above (see section V.C.3 above) although Telefónica does not control the cable operators' access to wholesale inputs, the latter have not exercised a pricing discipline on Telefónica in the retail market and thereby could not reduce or neutralise the likely effects of Telefónica's conduct on retail prices.

(561) In theory, due to the margin squeeze, the only viable entry would have been to duplicate Telefónica's regional wholesale product on the basis of local loop unbundling. However, this option, in addition to not being a substitute to Telefónica's other wholesale inputs, is extremely expensive and risky (see section V.A.3.1 above) and has only been available with significant delays (see section IV.F above).

(562) Independently of such constraints, local loop unbundling has been limited in time and in geographic scope. (see paragraph (266) above). In other words, despite the progressive development of local loop unbundling, even in 2006 the margin squeeze that Telefónica imposed on its competitors was still likely to have repercussions on the market structure, as illustrated by the growth of Telefónica's market share in 2005 and 2006 despite its levying of retail prices that are among the highest (if not the highest) in the EU (see section 2.2 below). In this respect, it is symptomatic that, despite the take up of local loop unbundling in some regions of Spain, in June 2006 the Spanish regulator considered it necessary to maintain access obligations at regional and national level in the whole of the Spanish territory.

1.3 Conclusion

(563) In view of the above, Telefónica's conduct was likely to restrict competition in the relevant markets.

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645 See *Response*, page 125.

2 Impact of Telefónica's conduct on the relevant markets: empirical evidence

2.1 Foreclosure effects

(564) There is empirical evidence that shows that the margin squeeze has had concrete foreclosure effects in the retail market, in particular that due to the margin squeeze, sustainable entry and growth in the retail market has not been possible, and this containment of competition has allowed Telefónica (i) to benefit from growth rates surpassing by far that of its competitors and thus (ii) to remain by far the largest broadband operator in Spain, in contrast with the situation it held in the narrowband internet access market.

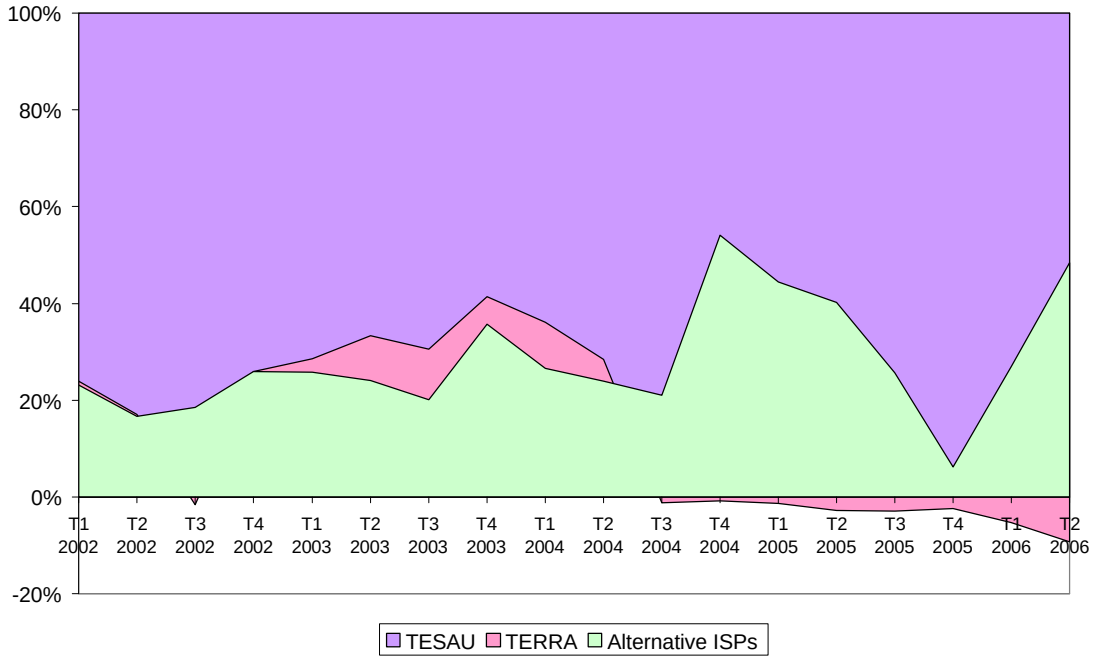
(565) There is also empirical evidence as to the fact that the margin squeeze also contained the competitive pressure on Telefónica in the national wholesale market, thus preserving its dominance therein.

(566) The remaining limited competition in the retail market is insufficient to disprove the existence of foreclosure effects. Only subsidiaries backed up by foreign incumbents have been able to survive in the market. They did so due to the expectation that they would achieve, at loss, the critical size and the level of economies of scale allowing to avoid the margin squeeze by using a viable local loop unbundling offer at one point in time.

2.1.1 Telefónica's growth has surpassed by far that of its competitors

(567) In an expanding market, Telefónica has been able to obtain the largest share of new subscribers in the retail ADSL segment.

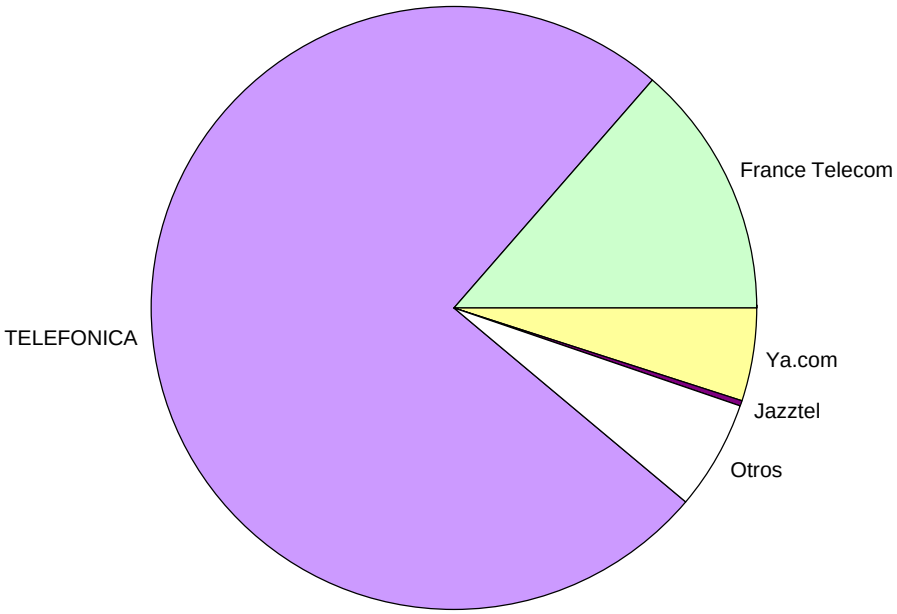
Figure 14 – Share of net additions of Telefónica (TESAU+TERRA) and alternative ISPs from 2002 to 2006[646]



(568) Between January 2002 and October 2004, Telefónica (TESAU+TERRA) grew at the retail level at a rate that was 4 times higher than all its ADSL competitors put together, 6 times higher than its largest ADSL competitor France Telecom (which merged at the end of 2002 with an ISP of the same size) and 14 times than its second largest ADSL competitor Ya.com.

646 Net additions calculated on the basis of the evolution of (i) the retail lines of TESAU and TERRA and of (ii) the wholesale lines sold by Telefónica to alternative operators. See Table 60 in Annex A.

Figure 15 - Shares of net additions of retail ADSL customers, January 2002 to October 2004[647]

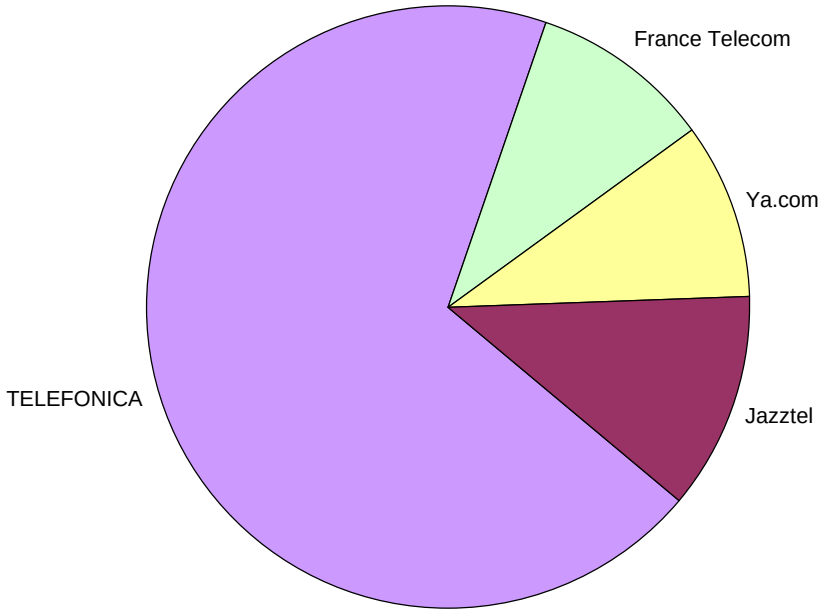


(569) In the last quarter of 2004 and the first semester of 2005, Telefónica absorbed nearly 70% of the growth of the ADSL market. Albeit this remains a very high portion, it is less than any time since September 2001 and is explained by the unprecedented commercial efforts made by Telefónica's ADSL competitors which decreased very significantly their prices. This period coincided with the very first real (but yet limited) take-up of local loop unbundling.

(570) However, this progressive increased provision of competing retail offers based on local loop unbundling – which as will be illustrated in section IV.F above, has been limited in time and in geographic scope – did not prevent Telefónica from capturing again more than 70% of new subscribers from April 2005 to July 2006, and thereby from increasing its market share during that period. This shows not only that Telefónica has the resources to contain any competitive challenges, even more so because these challenges (that are almost systematically mounted in the Christmas-period) cannot be sustained over time by Telefónica's competitors due to their squeezed margins.

647 Net additions calculated on the basis of the evolution of the retail lines of Telefónica, France Telecom, Ya.com and Jazztel (see footnote 205 below).

Figure 16 - Shares of net additions of retail ADSL customers, April 2005 to July 2006[647]



2.1.2 Telefónica remained by far the largest ADSL-based supplier on the retail mass market during the period covered by the investigation

(571) The result has been the continued and unchallenged high market share of TESAU and the maintenance of competitors in the ADSL segment at very low levels of market penetration. Indeed, as Figure 13 shows: Telefónica remained by far the largest supplier of services in the retail mass market with a market share around 55% in terms of number of end users during the period covered by the investigation (maximum: 58% and minimum 52%). The market share even increased from June 2005 to June 2006, despite the development of local loop unbundling. From 2001 to 2004, Telefónica's revenues have been more than 9 times bigger than those of its largest competitor in the ADSL segment (France Telecom) and more than 14 times than those of Ya.com. In 2005, Telefónica's revenues were more than 6 times bigger than those of France Telecom and 12 times bigger than those of Ya.com.[648] The significant increase of France Telecom's market share in 2003 is in fact explained by its acquisition of Eresmas (i.e. Auna's ISP which enjoyed the same market share as France Telecom) at the end of 2002.

[648] See CMT decision AEM 2003/1632 de 24.07.04 (page CMT-75 of the file), CMT Annual Reports for, 2003 (page 359), 2004 (page 396) and 2005 (page 365).

(572) In its *Reply*[649], Telefónica argued that its market share is below EU average. This is incorrect. As established by the Commission in its 11th Implementation Report[650], both the shares of the retail market and the share of the retail ADSL segment that Telefónica held in 2005 were above EU-15 and EU-25 average[651]. Telefónica has been able to increase those shares in 2006.

(573) In any event, the fact that some of the competitors may have slightly increased their market shares does not mean that no abuse within the meaning of Article 82 of the Treaty has occurred or that it has had no effects since, in the absence of the above-mentioned margin squeeze, the markets shares of those competitors could have grown more significantly[652].

2.1.3 Unlike its ADSL based competitors, Telefónica gained a larger share of the retail broadband market than it had enjoyed in narrowband services

(574) It is instructive to compare the shares enjoyed by undertakings in retail narrowband services in Spain with the shares that they were able to achieve during the period covered by the investigation on the retail broadband market:

(575) Although narrowband and broadband services do not form part of the same market, it has been clear since at least the start of the period covered by the investigation that narrowband services would ultimately become increasingly obsolete, and that undertakings active on the markets for residential narrowband services would therefore need to make the transition to being retail broadband suppliers if they were to survive as ISPs. Such undertakings therefore had a strong incentive to compete with Telefónica on the retail market for broadband services.

(576) Moreover, it is reasonable to assume that they would be able to use their established brand and customer base in the markets for narrowband services to assist them in building their position in the retail market for residential broadband services.

(577) The relevant comparison is portrayed below:

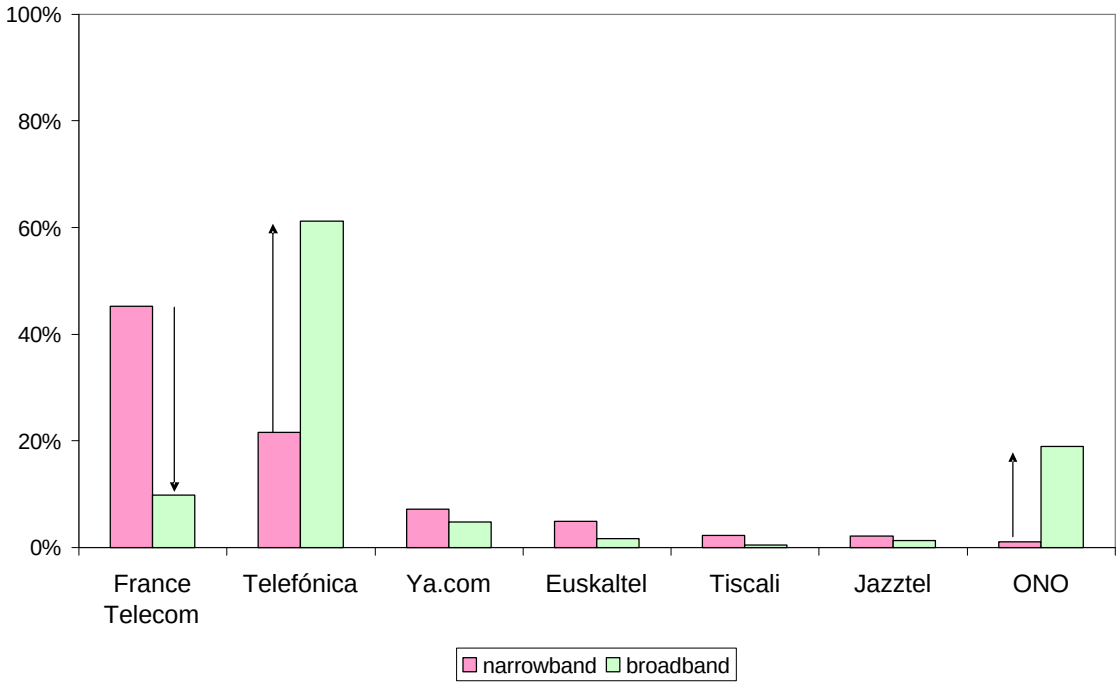
649 See Telefónica's Reply, pages 58-59 referring to 11th Implementation Report (see footnote 650 below)..

650 Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, 11th Report on the Implementation of the Telecommunications Regulatory Package, 20.02.06 ("11th Implementation Report"), available at: http://preprod.europa.infso.cec.eu.int/information_society/policy/ecomm/implementation_enforcement/annualreports/11threport/index_en.htm

651 See Figure 65 of Annex 2 of the 11th Implementation Report.

652 Judgment of the Court of First Instance of 08.10.96 in Compagnie Maritime Belge in joined cases T-24/93, T-25/95, T-26/93 and T-28/93, paragraph 149.

Figure 17 – Shares (in terms of revenues) in the provision of retail narrowband and broadband services in 2005[653]



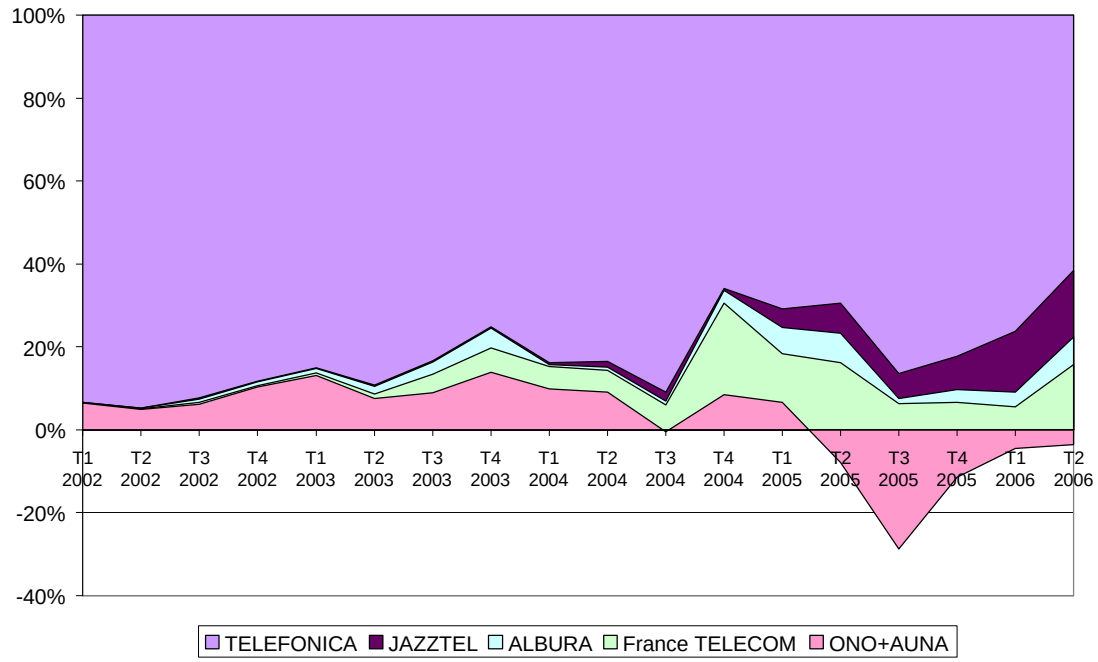
(578) It is notable that, as the figure above shows that France Telecom was not able to capitalise on its strong position in narrowband services to achieve a comparable presence in the retail market for broadband access. Its share in narrowband services is significantly lower than in broadband services. Telefónica, by contrast, was able to achieve a significant higher share in broadband services than it had enjoyed in narrowband services. Cable-based supplier ONO, which was not reliant on Telefónica's wholesale inputs succeeded in winning larger shares in broadband services than it had enjoyed in narrowband.

2.1.4 Telefónica's conduct has also contained competition in the national wholesale market

(579) The comparative growth of the lines in the national wholesale market during the period under investigation is a revealing indicator of the effect of Telefónica's margin squeeze strategy in containing upstream competition.

653 Shares (in terms of revenues) in the provision of retail broadband and retail narrowband access in Spain in 2005. See CMT 2005 Annual Report (pages 367 and 370).

Figure 18 – Share of net additions in the national wholesale market from 2002 to 2006[654]



(580) Between January 2002 and October 2004, Telefónica grew at the national wholesale level at a rate that was 6 times higher than all its ADSL competitors put together, 10 times higher than its largest ADSL competitor Auna (now Ono) and 30 times than its second largest ADSL competitor France Telecom.

(581) From October 2004, following the investments made by France Telecom, Albura and Jazztel enabling the latter to use local loop unbundling in some parts of Spain, Telefónica grew at the national wholesale level at a rate that was 3 times higher than all its ADSL competitors put together, 7 times higher than its largest ADSL competitor France Telecom and 10 times than its second largest ADSL competitor Jazztel. Auna, which was Telefónica's largest competitor in the national wholesale market, decreased in volume during that period

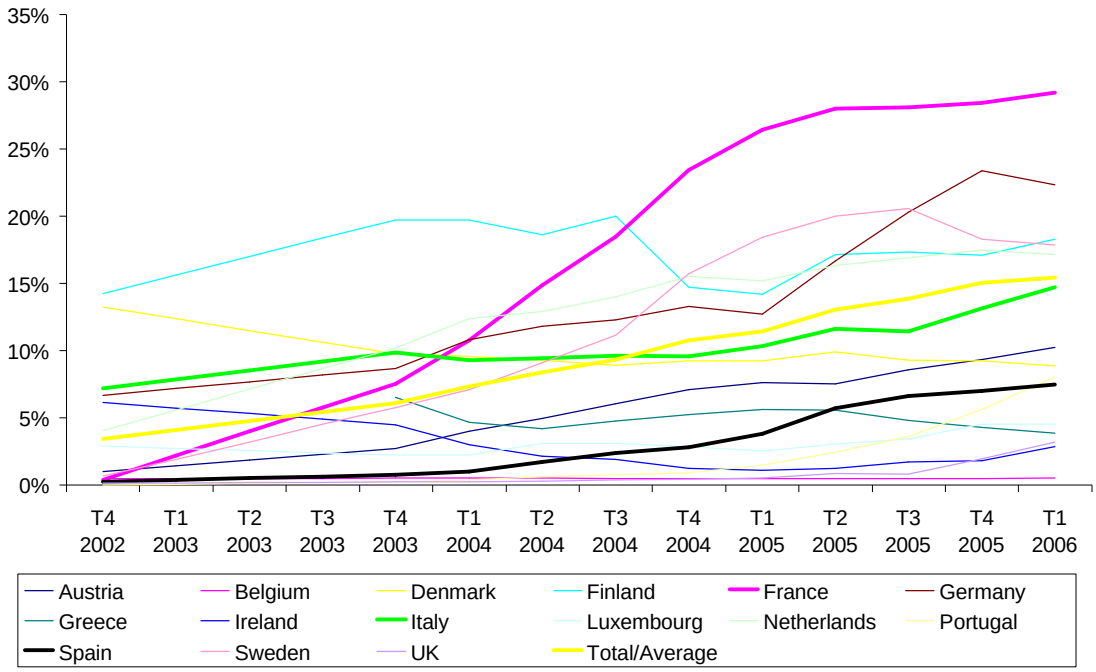
(582) Telefónica's competitors' growth has not only been limited in volume, but it has also been limited in terms of geographic scope. This is illustrated by the fact that even today, all alternative ADSL operators that operate on a national scale (France Telecom, Ya.com and Jazztel) still rely on Telefónica's inputs for wholesale access at national level in a significant part of the territory – in fact where there is no viable input for wholesale access at national level due to the margin squeeze in relation to regional wholesale access.

654 Net additions calculated on the basis of the evolution of the lines (including self provision) in the national wholesale market. See footnote 201 above.

(583) In its *Reply*, Telefónica alleged that the concentration of alternative infrastructures in certain geographic areas is a logical business strategy used by its competitors that is aimed at maximising the profitability of their activities. Yet, it is symptomatic that Telefónica's main competitors in the national wholesale market (Auna and Albura[655]) have withdrawn operations from some of the demarcations of the regional wholesale offer. In March 2005, Albura withdrew 51 out of 109 demarcations.

(584) The evolution of the number of local loops rented to competitors is a revealing indicator of the effect of Telefónica's margin squeeze strategy in delaying the growth of competitors and thereby the development of alternative infrastructures. In that respect, the Spanish market remains far behind Europe in terms of network deployment: the total number of unbundled lines, despite a (very late) take up in the end of 2004, remains still very low compared with the figures in other EU-Member States.

Figure 19 – Evolution of the number of unbundled lines (shared access and full unbundling) in % of the total broadband lines in EU 15 from 2002 to 2006[656]



2.1.5 The remaining limited competition in the retail market is insufficient to disprove that the margin squeeze has foreclosed competition

(585) In its *Reply*, Telefónica alleged that it has faced intense competition from a very large number of effective competitors.

655 According to the letter of Albura to Uni2 of 03.02.05 (Annex 1 of the letter of Uni2 to the Commission of 07.04.05 (see page ISP-407 of the file), on 15 March 2005, Albura deactivated 51 out of the 109 GigADSL demarcations where it had been active so far.

656 Source : ECTA broadband scorecard. See http://www.ectaportal.com/en/basic650.html.

(586) The establishment of foreclosure effects does not mean that rivals are forced to exit the market: it is sufficient that the rivals are disadvantaged and consequently led to compete less aggressively. In the case at hand, there is foreclosure because the margin squeeze has affected Telefónica's competitors' ability to enter the relevant market and exert a competitive constraint on Telefónica.

(587) This conduct exhausted financially its competitors so that only companies with a sufficiently strong financial backing have been able to survive and grow (slightly, and at loss) in the mass market. These operators (France Telecom and Ya.com) remained in the retail mass market due to the expectation that in future they would achieve a critical mass enabling them to self-supply Telefónica's regional wholesale offer in some areas of Spain on the basis of an effectively available local loop unbundling product. This is why they have not exited the market, but also why they have not been able to provide the competitive challenge that could have been mounted (in particular in the light of the high level of retail prices, see section 2.2 below) absent the margin squeeze.

(588) Putting aside Wanadoo and Ya.com, none of the ADSL operators (Tiscali, Jazztel, Tele 2, BT, etc) – some of which were already alleging in 2001 that they could not replicate Telefónica's retail prices on the basis of its wholesale prices – achieved a market share of 1% until 2005. The failure of these ISPs (that could have been potential competitors in the mass market, as they are in other Member States) to expand in a strategically important market such as broadband is consistent with the obstacles to expansion brought about by the margin squeeze. These ISPs simply cannot be expected to sustain significant durable losses.

(589) This situation contrasts with the situation observed in other Member States. For example in France, contrary to the situation observed in Spain, there are ISPs (Free, Neuf Telecom, Cegetel, Tele 2) that are not backed up by incumbents from other Member States and that achieved a significant market shares in 2004.

(590) The position of Jazztel in the retail market is particularly worthy of mention in this regard. This ISP has not been able to reach a market share of more than 1% using Telefónica's regional and national wholesale products. In 2005, Jazztel invested massively in its own infrastructure with a view to using LLU and consequently duplicating Telefónica's regional wholesale offer in a significant part of the Spanish territory. This strategy was riskier than that of Wanadoo and Ya.com because, contrary to the latter, Jazztel had not built any minimum level of economies of scale before incurring the above-mentioned heavy investments. Jazztel's market share rose to 1.3% (in terms of annual revenues) in 2005 and is increasing. However, it is not clear whether such growth is sustainable because (i) the company has been significantly affected by the unavailability of LLU in 2005, especially in terms of the company's image[657], (ii) Jazztel constantly missed the targets laid down in its business plan (in terms of number of customers, revenues), (iii) it is currently incurring heavy losses (its net income represented -73 % of its revenues in 2006[658]) and has seen the prices of its share falling by 2/3 from April 2005 to October 2006.

(591) It is acknowledged that precisely due to their size, it is difficult to monitor all the entries to and the exits from the market of small ISPs. However, it is noteworthy that in its 2004 Report the CMT noted that that year saw the disappearance of an important number of ISPs that had offered services in the relevant retail market[659].

2.2 Harm to consumers

2.2.1 Telefónica's conduct resulted in retail prices that are among, if not, the highest in EU-15

(592) In the SO[660], the Commission took the view that the margin squeeze imposed by Telefónica has been felt at the level of the end-user prices.

(593) All studies comparing retail prices for broadband access conclude that Spanish prices are among the highest in the EU.

(594) According to an OCDE report, the average monthly fee of a broadband internet connection in Spain is one of the most expensive in Europe in terms of price and performance ratio[661], as confirmed by a recent study of the Spanish consumers association OCU[662].

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657 The company acquired end users to which it was not in a position to provide retail services because Telefónica did not make available the corresponding wholesale lines. As of June 2005, more than 50% of its ADSL lines were not in service.

658 Jazztel Annual Report 2006, page 23.

659 CMT Report 2004, p. 118.

660 See paragraphs 485-488 of theSO.

661 See for example « Benchmarking broadband prices in the OECD », Working Party on Telecommunications and Information Services Policies, 18 June 2004, p. 50 (see page Div-53 of the file): *"Overall, broadband access prices available in Spain are relatively expensive in terms of the price and performance ratio"*.

662 OCU, Las tarifas españolas, muy altas respecto a Europa, May 2005 (see page Div-101 of the file).

(595) The CMT also considers that the retail broadband prices in Spain are high, and clearly above EU average. In its 2004 Annual Report it indicated that in that year the prices were "still far from the EU standards"[663]. In its 2005 Annual Report, it reiterated that these prices remain in the "upper band" of the prices levied in neighbouring countries ("de nuestro entorno")[664]. In the same context[665], the President of the CMT stated that broadband prices in Spain are 25% above the EU average. In a Decision issued on 16 November 2006, the CMT noted that "*TESAU ha podido mantener unos precios excepcionalmente altos en los mercados minoristas de banda ancha*"[666].

(596) This is confirmed by a recent study[667] commissioned by the Irish NRA ComrReg from the consultant Teligen which is regularly in charge of the benchmarking of prices in the telecommunications sector for the OECD.

(597) Teligen followed an approach consisting of comparing the ADSL offerings[668] from the incumbent operator or associated ISP in each of the EU-15 countries. Teligen's benchmarking model assumes an average usage profile of 25 hours per month, with each session being 1 hour long in each country. It further assumes a download usage of 10 Gigabytes every month for each service. The data presented in the following chart compares under these usage assumptions the actual prices for the cheapest retail ADSL offer of each country. Results are given in €/PPPs[669] excluding VAT[670].

(598) As illustrated below, Spain is ranked last among EU-15 countries, with a monthly subscription (45.2 €/PPP) 85% higher than the EU Average (24.0 €/PPP)[671]:

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663 CMT Annual Report for 2004, page 101.

664 CMT Annual Report for 2005, page 88.

665 See *El coste del ADSL en España es un 25% superior a la media de la UE*, El pais, 12.07.06. See also La CMT constata el insuficiente crecimiento de la banda ancha en España, El mundo, 11.07.06.

666 CMT decision RO 2004/1811 of 16.11.2006 (page 130).

667 Comreg, Quarterly Key Data Report, December 2006 (pages 23 to 25) available at: http://www.comreg.ie/_fileupload/publications/ComReg0668.pdf.

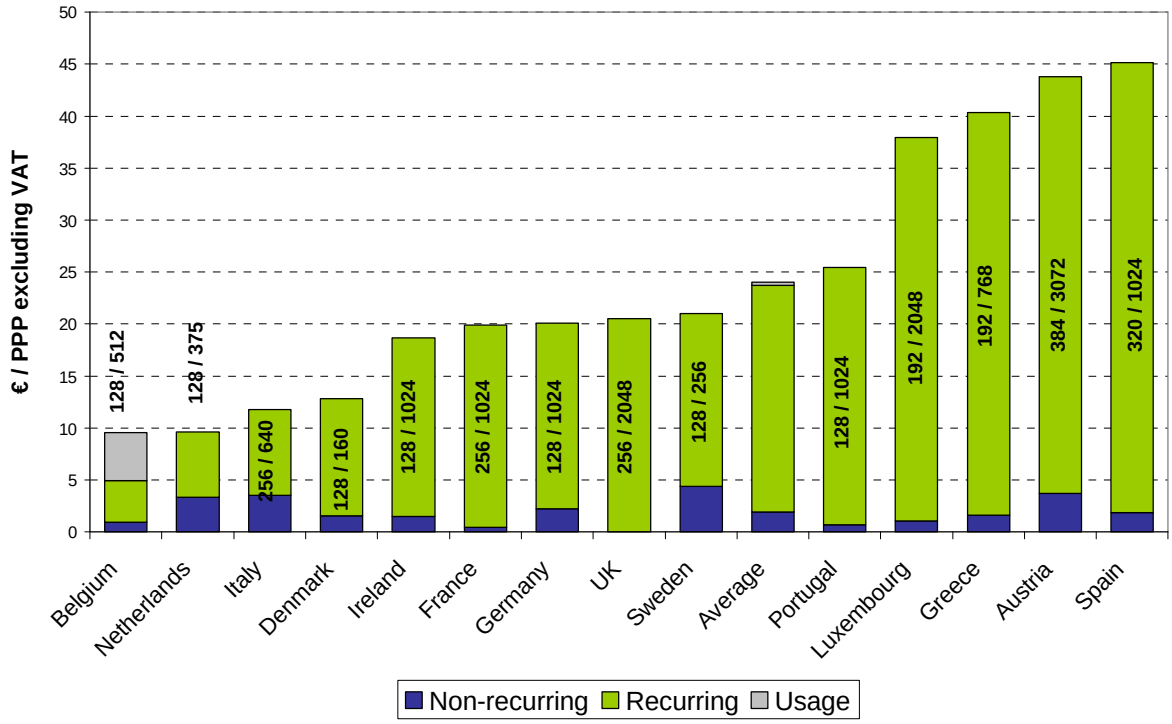
668 The tariffs used in the comparison relate to the installation and rental of the ADSL service only, not to the provision of the standard telephone line over which DSL is provided. Charges for modems or routers and ISP subscription charges are only included in the comparison in cases where they are bundled in with the complete service offering. Promotional offers such as "free connection" are not included unless such promotions are unlimited (e.g. permanent free connection promotions where the user never pays a connection fee)

669 Prices are expressed in Purchasing Power Parities ("PPPs"), i.e. at currency conversion rates that both convert to a common currency and equalise the purchasing power of different currencies. In other words, they eliminate the differences in price levels between countries in the process of conversion. See the explanatory memorandum which accompanies the Teligen report : Comreg, Quarterly Key – Explanatory Memoreandum, December 2006 (page 15).

670 The Teligen Report is originally based on prices that are inclusive of VAT. However, following Telefonica's comment (see page 44 of the reply to the letter of facts) that VAT rates are not homogeneous in the EU, the Commission deducted VAT from the retail prices (See Comreg, Quarterly Key – Explanatory Memoreandum, December 2006, page 15).

671 Teligen also compared ADSL prices in EU-15 on the basis of the lowest price for 1 Mbit/s bitrate (the price is produced by (i) adding the upload and download bitrates to get a total bitrate and (ii) dividing the monthly rental by the calculated total bitrate and multiplied with 1024 to give the price per 1 Mbit/s). This benchmarking model also led to the conclusion that Spain is ranked last in EU-15, with a price 75% higher than the EU Average.

Figure 20 - Lowest Monthly Rental ADSL Basket[672] – November '06



(599) In its reply to the letter of facts[673], Telefónica claimed that it cannot be concluded from the Teligen Report that Telefónica's conduct has had an effect on retail prices in Spain because (i) Teligen did not take into account the promotions offered by Telefónica and (ii) only compared the incumbents' prices which do not necessarily reflect the prices effectively paid by end users.

(600) Yet, Telefónica's comment regarding the inclusion of promotions in Teligen's benchmarking model does not affect the conclusions of the latter: Telefónica's non-recurrent fee represents less than 1.9 €/PPP in Teligen model (see Figure 20) and other promotion amounts to less than 1.0 €/PPP[674]. As a result, assuming that incumbents do not offer promotions to their subscribers (this assumption is very unlikely and in any event very favourable to Telefónica) the gap between EU-15 average and Telefónica's retail prices is only reduced by less than 2.0 €/PPP (8% of EU average price). Thus, Telefónica's retail prices remain at least 18.0 €/PPP (more than 75%) higher than EU-15 average.

(601) As to Telefónica's comment that the Teligen Report only benchmarks the retail prices offered by the incumbents in their respective countries, it must be pointed out that the fact that Telefónica has been able to charge end users high retail prices while increasing its market share (above 70% of ADSL connections) in 2005 and 2006.

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672 Figures in boxes represent the upload / download speed (kb/s) of the service offered. See Comreg, Quarterly Key Data Report - December 2006 (page 24) and Quarterly Key Data Report - December 2006: Raw Data (page T4).

673 See page 44 of the Reply to the letter of facts.

674 Promotions amounted to 30.12 €/new subscriber in 2006 (see the letter of Telefónica of 06.10.06 at page TFCA-13265 of the file), i.e. 0.84 €/end-user/month (amortization over 3 years).

(602) In any event, Telefónica acknowledged in its *Reply*[675] that a simple comparison of retail prices among Member States leads to the conclusion that Spanish retail prices are among the highest in EU-15 over the period 1999-2005. According to Telefónica itself, broadband prices in Spain are the highest in the EU-15 after Austria and the average monthly subscription in Spain is more than 7.6 € / month / user higher than in the rest of the EU (20% higher than the EU-15 average). Given that Telefónica's retail prices are above the average retail prices in Spain (the difference was 4€/month in 2004[676]), the gap between EU average and Telefónica's retail prices is even higher (more than 11 € / month / user).

2.2.2 Spain's broadband penetration rate is below the EU-15 average

(603) Prices are critical to the development of the market. Thus it is symptomatic that, whereas Spain was in the top head of the EU Member States in terms number of broadband internet subscribers at the end of 2001[677], broadband penetration in Spain now ranks below the EU-15 and EU-25 average. The increase of that rate is also below the EU-15 and EU-25 average. This is illustrated in the table below:

Table 55 - Broadband penetration rate in Spain in 2004 and 2005

% population	2004[678]	2005[679]	Increase 2004/2005
Spain	8.2	11.7	+3.5
EU-15	9.9	14.5	+4.6
EU-25	8.8	12.8	+4.0

2.2.3 Telefónica's arguments regarding harm to consumers

(604) In its *Reply*[680], Telefónica alleged that the Commission has not proved that retail prices are excessive in Spain and that consumers do not benefit from innovative products.

(605) According to Telefónica, no conclusions on the impact of Telefónica's conduct on retail prices can be obtained from the analysis contained in the studies referred to by the Commission because a simple comparison of prices across countries that reveals heterogeneity in price levels is simply an indication of the fact that demand and cost conditions differ across countries. One cannot attribute to a single factor (namely, Telefónica's pricing strategy) the existence of these differences in prices without considering the possibility that these are due to cross-country differences in other price determinants.

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675 See pages 353-354 of the *Reply*.
676 See Telefónica's Reply, at page 130.
677 See paragraph (626) below.
678 See Telefónica's *Reply* at page 124.
679 See CMT Decision RO 2004/1811 (page 123). See also CMT 2005 Annual Report (page 90).
680 See Telefónica's *Reply* at pages 125-132.

(606) In its *Reply*[681], Telefónica provided an empirical estimation of the explanatory factors for the divergences in ADSL prices across the EU. Telefónica's economic consultant's regression specification is a fixed effect specification that explains prices (ARPU) with country fixed effects, demand and cost factors. The country fixed effect in the resulting regressions are interpreted as the determinant of the price that are specific to the country and independent of the demand and supply variables controlled for in the regression. Since the explanatory variables include the determinants of demand and cost, the country fixed effect could capture institutional factors such as the competitive environment. Telefónica's economic consultant finds that the fixed effect for Spain indicates that the Spanish prices are not relatively higher and may be even relatively lower than predicted by demand and cost conditions in the country.

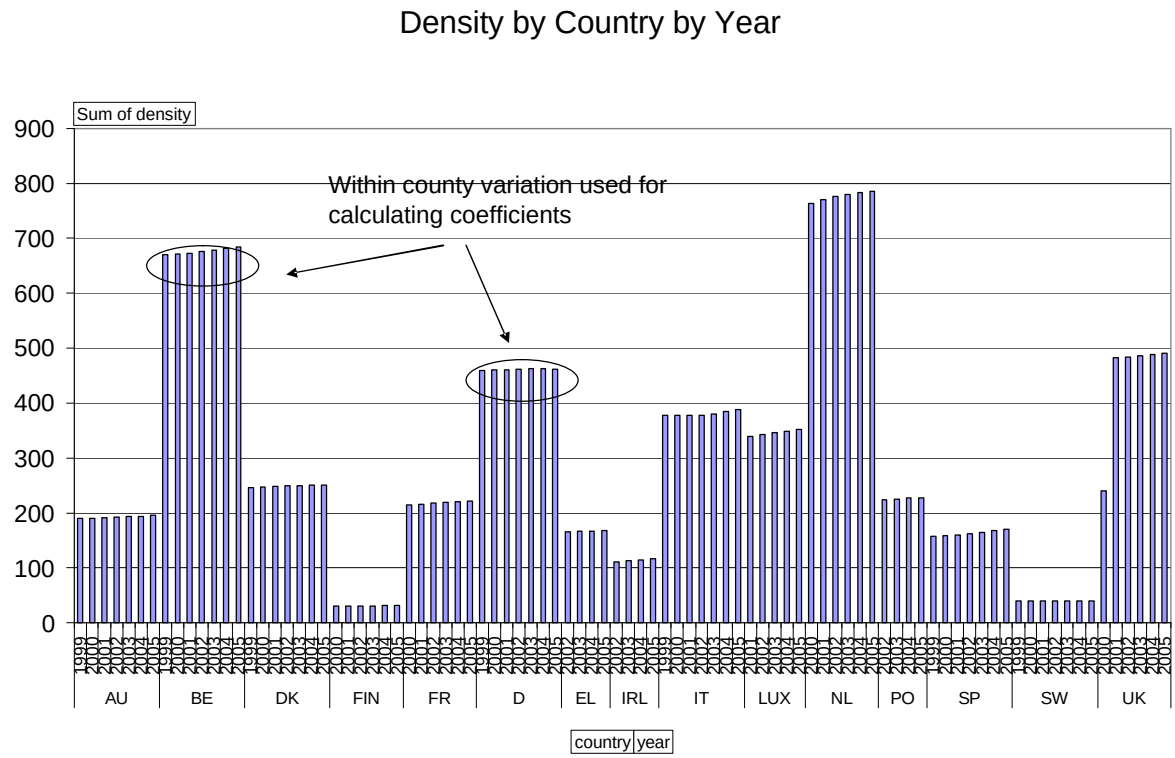
2.2.4 Comments on the methodology of the expert report submitted by Telefónica

2.2.4.1 The specification is not adequate for this particular exercise

(607) The specification submitted by Telefónica is meant to control for differences in the determinants of costs and demand across countries to isolate the effect of the remaining factors, such as the competitive environment, on the prices. However, the specification used (fixed effect regression) uses the variation of demand and cost variables within countries to determine the effect of demand and cost variables on price. The explanatory variables in the model are: population density, per capita GDP, population, population under the age of 30, households with a PC, households with internet access, and households with broadband access. It is extremely unlikely that the changes in those variables within a country between 1999 and 2005 have any meaningful effect on the cost or demand for ADSL. For example the effect of the population density is calculated averaging effects of each country's changes in population density on the country ADSL price. The underlying assumption is that increases in population density of 13 more people per km^2 between 1999 and 2005 had an effect on the cost of the network and therefore on the price of ADSL. The figure below illustrates this point and shows the data on population density by country by year. We see that, although there is potentially meaningful variation across country, the variation within country is small and unlikely to affect demand and supply in any significant way over the years examined. It is obvious that the coefficients are calculated based on a range of variation that cannot possibly have an effect on the outcome measured.

(608) The coefficients in this model are calculated on economically meaningless variation and are most likely only capturing spurious correlations in the data: probably correlated trends and/or potential non-linearities. It is also apparent from the regression results that the low degree of within-country variation with respect to the significant cross country variation introduces a severe multicollinearity problems due to the inclusion of country fixed effects. This is evidenced by the imprecise and statistically insignificant estimates combined with a high R square. Multicollinearity to such an extent is an indication of a mis-specified model and the resulting coefficients are not reliable estimates. Therefore, no conclusions can be drawn on the basis of Telefónica's economic consultant's report.

681 See Annex 6 of Telefónica's *Reply*.



2.2.4.2 Exploiting cross sectional variation

(609) A way to exploit cross sectional variation across countries to explain price differentials is to regress the ARPU on country fixed effects and a time variable that captures the time since ADSL subscriptions started. This produces an average estimated relative price by country controlling for the stage of development of the network. We can then regress these estimates on the cost and demand variables to see how much of the countries' average prices are explained by those factors. We find that the coefficients for the demand and supply factors provided by the parties are insignificant and do not explain either individually nor jointly the price differentials across countries.

3 The margin squeeze has been a rational, profitable strategy for Telefónica

(610) As a result, Telefónica's pricing strategy has been rational and subsequently profitable in three ways:

(611) Firstly, even though a high level of wholesale prices (relative to the retail prices) may affect Telefónica's revenues at the wholesale level, by reducing the competitive constraints at the retail level, Telefónica is able to sustain a high level of retail prices (as will be established in section 2.2 below, retail prices for broadband access in Spain are among the highest in EU). The profits extracted from a high level of retail prices surpass by far the forsaken profits related to the forsaken wholesale sales as a result of the high wholesale prices (relative to the retail prices).

(612) Secondly, creating and maintaining a leading position in the fast growing market of retail broadband access allows Telefónica to protect its position in adjacent retail mass markets like fixed telephony. Indeed, as acknowledged by Telefónica itself, the provision of retail broadband access services has a loyalty effect on the traditional fixed telephony services[682], i.e. if Telefónica did not provide retail broadband services, its market share and revenues in the fixed telephony market would be lower. End users are more likely to choose the same provider for all electronic communications services, i.e. fixed telephony, broadband internet, television over broadband and also mobile telephony.

(613) Moreover, many of these services, in particular voice over IP and television over broadband are rapidly growing, and Telefónica's conduct therefore allows it to be in a position to pre-empt these future booming retail markets.

4 Conclusion on effect on competition and consumers

(614) The case law makes clear that it is not necessary to wait until there are concrete observable effects resulting from a margin squeeze before concluding that such conduct is abusive[683].

(615) Given the specific circumstances of the present case, Telefónica's conduct comprising a *prima facie* margin squeeze was capable of, or in other words, was likely to restrict competition by making the continued presence of equally efficient competitors difficult to sustain: they may ultimately have had to exit; or they may have been constrained in their ability to invest and increase their market share. Even if they had been able to meet the dominant undertaking both on prices and marketing expenditure, they were likely to be poorly placed in the long run to offer a vigorous competitive challenge to the dominant undertaking as a result of their continuing losses.

(616) Absent the distortions resulting from Telefónica's margin squeeze in this case, the retail market for broadband services was likely to witness more vigorous competition between ISPs, unhindered by current restricted decision making in terms of the trade-off between volume growth and profitability. Without such constraints on competing ISPs, it is likely that the market in the absence of Telefónica's conduct would have delivered greater benefits for consumers in terms of lower prices and more choice.

(617) In addition, empirical evidence confirms that Telefónica's conduct had an impact on the relevant markets. In particular, Telefónica has gained the largest share of new subscribers in the retail broadband mass market, and its behaviour has constrained the growth of its competitors. Only competitors backed up by incumbents from other Member States have survived in the retail mass market and indeed stayed in the latter with the expectation that they would be in a position to avoid the margin squeeze via recourse to a viable LLU at a later point in time in some regions of Spain.

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682 See annex 11i of the letter of Telefónica of 21.07.06 : '*La oportunidad de la banda ancha en la operadoras fijas*', slide 17 (page TFCA-4530 of the file).

683 Joined Cases T-24/93, T-25/93, T-26/93 and T-28/93 Compagnie maritime belge and others v Commission, paragraph 149. See also Case T- 219/99, British Airways v. Commission, para. 293 and Case C- 95/04 P, British Airways v. Commission, para.77, 93 and 98; Suiker Unie and others v. Commission; [1975] ECR 1663; para. 514 to 516; and Case 163/96; Reference for a preliminary ruling: Criminal proceedings against Silvano Raso and Others; [1998] ECR I-593.

(618) There is concrete evidence showing that end-user prices in Spain are well above (by 20% at least) EU average, affecting millions of end-users. None of the demand or supply factors presented by Telefónica can adequately explain the high level of the Spanish retail prices. It follows that Telefónica's conduct has led to significant consumer harm.

F. Objective justification and efficiencies

1 Introduction

(619) Exclusionary conduct may escape the prohibition of Article 82 if the dominant undertaking can provide an objective justification for its behaviour or it can demonstrate that its conduct produces efficiencies which outweigh the negative effect on competition. The burden of proof for such an objective justification or efficiency defence is on the dominant company[684]. It is for the company invoking the benefit of a defence against a finding of an infringement to demonstrate to the required legal standard of proof that the conditions for applying such defence are satisfied[685].

(620) In the present case, Telefónica has alleged that (i) Telefónica's downstream losses are, in the context of a non mature market, investments with a view to achieve future profits; (ii) that Telefónica was forced to align itself on the retail prices charged by its downstream competitors ("meeting competition defence") and (iii) that its conduct has resulted in efficiencies which have benefited the consumers ("efficiency defence").

(621) In the following sections, the Commission responds to Telefónica's claimed objective justifications and efficiencies.

2 Lack of objective justification on the grounds of objective necessity

2.1 Telefónica's downstream losses cannot be considered as necessary investments in future profits in the context of a non mature sector

(622) Telefónica claimed[686] that the Spanish broadband market is immature and that it legitimately incurred losses as an investment in future profitability

684 See Case T-203/01 Manufacture française des pneumatiques Michelin v Commission (Michelin II) [2003] ECR II-4071, paragraphs 107-109.

685 See Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 04.01.2003, recital 5 and article 2.

686 See *Reply*, pages 90-91 and 102-103.

(623) In this respect, nothing in Article 82 of the Treaty or in the Community case law provides for an exception to the application of the competition rules to sectors which are allegedly not yet fully mature. In Wanadoo, the Court of First Instance considered that the fact that the relevant market is fast-growing cannot preclude application of the competition rules, in particular, Article 82 EC[687]. To subordinate the application of the competition rules to a complete stabilisation of the market would be to deprive the competition authorities of the power to act in time before the abuses established have exerted their full effect and the positions unduly acquired have thus been finally consolidated.

(624) The relevant question in the present case is whether all as efficient downstream market players have been in a position to enter the developing Spanish broadband market on an equal footing without being financially exhausted by the strategy of the dominant undertaking. In this respect, it follows from the case law that unfair prices are to be penalised whenever there is a risk that competitors will be eliminated, as the aim pursued by the Treaty, which is to maintain undistorted competition[688], rules out waiting until such a strategy leads to the actual elimination of competitors[689].

(625) In all events, the broadband market has strong links with the market for local access in the telecommunications sector, which for its part possesses none of the features of an emerging market. Indeed, Telefónica's local access network was rolled out during decades protected by exclusive rights and was funded by monopoly rents. The telecommunications sector and local access in particular, is still deeply affected by the preponderance of Telefónica which is the former telecommunications monopoly and which controls almost all access to the final consumers. The resulting risks of a leverage effect make it impossible for Telefónica's conduct to be exempted from the ordinary rules of Community competition law.[690]

687 See the Judgment of the Court of First Instance of 30.01.07 in Case T-340/03, France Télécom SA vs. Commission, paragraph 107.

688 In accordance with the objective set out in Article 3(g) of the Treaty.

689 Court of Justice in *Tetra Pak*, paragraph 44.

690 *Wanadoo*, paragraph 302.

(626) Although the Spanish retail broadband market is still in expansion, it certainly cannot be regarded as entirely new or in a phase of pure experimentation. TERRA has been marketing ADSL services since 1999. At the end of 2000, there were more than 60 000[691] broadband subscribers in Spain and at the end of 2001, there were already […].[692] It is quite clear that, already since the end of 2001, broadband internet access services had gone well beyond the stage of simple commercial or technical experimentation. At the end of 2001, Spain was even in the top head of the EU Member States in term of number of broadband internet subscribers[693]: while Spain had 375 000 ADSL subscribers at the end of 2001, France had 400 000 ADSL subscribers, the UK had 136 000 ADSL subscribers, Sweden 143 000 ADSL subscribers and the Netherlands had 121 000 ADSL subscribers. Therefore, it cannot be asserted that Telefónica's development on the broadband internet markets as from September 2001 took place against a background of uncertainty and instability associated with an entirely new type of product. On the contrary, a rather stable hierarchy was established in the relevant markets with Telefónica at their head.

(627) Furthermore, in the context of the development of ADSL products in Spain, although instant profitability is not possible from the very first month of provision of such services, the incurring of significant losses by Telefónica's downstream arm for more than five years is not inevitable or necessary. The fact that the Spanish retail broadband market is still growing does not justify a conduct forcing Telefónica's retail competitors to incur significant losses for such a long period.

(628) Telefónica's argument that the margin squeeze is inevitable because of the immatureness of the Spanish broadband market is invalidated by the fact that (i) Telefónica expected rapid achievement of profitability on an end-to-end basis[694] in its initial business plan (break-even EBITDA and break-even EBIT in 2002[695]); (ii) that the company is indeed profitable on an end-to-end basis but would make losses if it had to pay the wholesale charges it imposes on its competitors and that (iii) the company estimated in its business plan that the break-even volume for end-to-end profitability was 1 million ADSL end users[696], a volume that was reached in February 2003. This means that the company did not rely on projected growth after February 2003 to achieve profitability (on an end-to-end basis). The mere fact that Telefónica expected rapid achievement of profitability on an end-to-end basis and is indeed profitable on an end-to-end basis but would still make losses in 2006 – i.e. more than five years after the launch of its first retail ADSL offer – if it had to pay the wholesale charges it has been imposing on its downstream competitors is a strong indication that Telefónica's downstream losses cannot be explained by the lack of maturity of the Spanish retail broadband market[697] and are the consequence of Telefónica's pricing policy in the wholesale and retail broadband markets.

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691 CMT Annual Report 2002 (see page CMT-3006 of the file)

692 See Table 60 in Annex A.

693 CMT Annual Report 2001 (see page CMT-4320 of the file).

694 i.e. aggregating costs and revenues all over the broadband value chain, thereby allowing the subsidisation of downstream losses by upstream profits

695 See footnote 322 above.

696 See footnote 323 above.

697 As already argued in footnote 301 above, the fact that, in the present case, the break-even volume of Telefónica's end-to-end profitability was achieved in […] does not justify the downstream losses incurred by the company before that date.

(629) Telefónica's downstream losses cannot be justified objectively on the ground that its initial losses would be recovered by future profits either. The business plan of the company indeed indicates that the broadband activity of the company was expected to generate a positive net present value during the period 2001-2006 ('end-to-end' basis) but, as evidenced above, would have expected to generate a negative net present value if the company had had to pay the wholesale prices charged to competitors. In other words, the business plan of the company shows that Telefónica's initial downstream losses could not be expected by the company to be recovered by future profits over a reasonable period (5 years and 4 months in the present case).

2.2 Telefónica's conduct was not necessary for avoiding losses at wholesale level or for securing investments in infrastructure

(630) As already illustrated above, Telefónica is profitable on an end-to-end basis, but would have made losses if it had had to pay the wholesale charges it imposes on its competitors. As a result, Telefónica could have avoided engaging in a margin squeeze and consequently risking restricting competition, by lowering its wholesale prices while still being profitable at all the levels of the value chain.

(631) In this respect, Telefónica's allegation that it has been incurring losses at the wholesale level until 2005 is incorrect: as clearly indicated in the cost accounts provided by the company[698], the alleged losses of the regional wholesale activity in […] rely, *inter alia*, on the inclusion of advertising costs ([…]) that were incurred for the provision of retail services and consequently should have been allocated to the retail activity and not to the wholesale activity of the company. Therefore, Telefónica's regional wholesale activity has been profitable since 2002, which is confirmed by Telefónica itself in its *Reply*:

Table 56 – Profitability of Telefónica's regional wholesale product as indicated by the company in its *Reply*[699]

	2002	2003	2004	S1 2005
Average Revenue (€ / month / line)	[…]	[…]	[…]	[…]
Average Cost (€ / month / line)	[…]	[…]	[…]	[…]
Local access (shared access)	[…]	[…]	[…]	[…]
DSLAM, ADSL, ATM	[…]	[…]	[…]	[…]
Margin (€ / month / line)	[…]	[…]	[…]	[…]
Margin (% of revenues)	[…]	[…]	[…]	[…]

698 See *TESAU's audited ADSL cost accounts* for 2002 in the letter of TESAU of 17.03.05, page TFCA-1505 of the file.

699 See Table 3 at page 98 of Telefónica's *Reply*.

(632) In particular, Telefónica's conduct was not necessary for securing its infrastructure investments. Telefónica's upstream infrastructure is to a large extent the fruit of investments undertaken for reasons not related to the provision of broadband services but rather the provision of traditional fixed telephony services in a context where the company was benefiting from special or exclusive rights that shielded it from competition. Indeed, Telefónica's local access network and regional and national backhaul were funded by monopoly rents during periods of time protected by exclusive rights. It is true that Telefónica incurred investments in order to enter the regional and national wholesale markets[700] but these investments have only been related to the costs associated with enabling the existing network elements to support broadband traffic (installation of broadband specific equipment[701], modernisation of the transport network, and increase of capacity of the latter).

(633) In comparison, an operator considering building a completely new upstream infrastructure would face considerable investments which are of an order of magnitude much greater than the mentioned broadband enabling investments. As acknowledged by Telefónica[702], the company did not have to roll out a specific transport network for the provision of broadband services. In particular, the building of canalisations – which represent the most significant cost of one fixed telecommunications network – were undertaken for reasons not related at all to the provision of broadband services.

(634) In any event, all the broadband enabling investments relating to the regional wholesale market were incurred after the Ministerial Order 8181 of 26 March 1999[703], which defined the plan of the progressive deployment of ADSL technology in Spain and the mandatory access to Telefónica's regional wholesale network. As a consequence, Telefónica's *ex ante* incentive to invest in its regional access network could not have been affected by its responsibility as dominant company not to engage in exclusionary conduct in the form of, *inter alia*, margin squeeze.

(635) Telefónica's argument that a lowering of wholesale prices would have reduced the incentives of competitors to invest in their own infrastructure is also incorrect. As established above (See Section VI.E.2.1.4), Telefónica's conduct has actually considerably delayed the growth of alternative infrastructures. This is consistent with the viewpoint shared by all national regulatory authorities for telecommunications in the EU, that the process whereby alternative operators climb "the ladder of investment" (i.e. gradually invest in their own infrastructure) can only be effective if there is no margin squeeze between all the steps of the ladder. This is illustrated by the recent Broadband market competition report (May 2005) of the European Group of Regulators (ERG):

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700 See paragraph (305) above.

701 DSLAM, BRAS, commuting equipment, routers, etc.

702 See paragraph (305) above..

703 Orden de 26 de marzo de 1999 por la que se dispone la publicación del Acuerdo de la Comisión Delegada del Gobierno para Asuntos Económicos, de 25 de marzo de 1999, por el que se determinan los precios que los operadores autorizados deberán abonar a Telefónica, Sociedad Anónima, por la provisión del acceso indirecto al bucle de abonado de la red pública telefónica fija, hasta el 31 de diciembre del año 2000 – BOE 86 pages 13513 to 13515 (see page CMT-573 of the file).

"In order to kick-off the process as well as to ensure that it does not stop and new entrants keep on moving to the next rung, […] pricing of access products must be consistent, i.e. the relative prices must reflect the difference in cost between the products. In other words: the price difference or margin must satisfy the margin squeeze test of covering the incremental cost of providing the 'wider' product"[704].

(636) This is also the view taken by Telefónica that considers that an appropriate margin between the different wholesale products is vital for the development of competition in the retail market and in the wholesale broadband markets[705].

3 Meeting competition defence

(637) According to Telefónica[706], meeting competition represents an objective justification for margin squeeze allegations. Telefónica claims that it it has always reacted to its competitors' offers by aligning its prices to those charged by competitors and that it has never taken the initiative in price reductions and promotions on the retail market.

(638) The Community Courts have considered that defending own commercial and economic interests in the face of action taken by certain competitors may be a legitimate aim[707]. A dominant operator is not strictly speaking prohibited from aligning its prices with those of competitors[708]. However, the meeting competition defence may not legitimise a margin squeeze that enables the vertically integrated company to impose losses on its competitors that it does not incur itself. The meeting competition defence may not legitimise a behaviour whose effect is to leverage and abuse an upstream dominance.

(639) However, the meeting competition defence will only apply if it is shown that the response is suitable, indispensable and proportionate. This requires that there are no other economically practicable and less anti-competitive alternatives, which is unlikely to be the case in a margin squeeze case. In the present case, Telefónica's conduct is certainly not indispensable because Telefónica could have lowered its wholesale prices without increasing its retail prices and still be profitable overall.

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704 Broadband market competition report, ERG, page 17 (see page Div-206 of the file).

705 Telefónica UK Response to the Ofcom Consultation on a Draft Direction Setting the margin between IPStream and ATM Interconnection Prices, 02.07.04 (see page TFCA-3769 of the file): *"Telefónica UK welcomes the Ofcom initiative to set the margin between IPStream [British Telekom's national wholesale product in the UK] and ATM interconnection [British Telekom's regional wholesale product in the UK]. An appropriate margin between these two platforms is vital to the development of competition in the provision of wholesale DSL services."*

706 See Response, at pages 88-90.

707 Case 27/76 United Brands, paragraphs 189-191; Case T-65/89 BPB Industries Plc and British Gypsum Ltd v Commission [1993] ECR II-39, paragraph 69; T-228/97 Irish Sugar, paragraphs 112 ,

708 *Akzo*, paragraph 135.

(640) Also in the present case, Telefónica's nominal retail prices are those which were defined by the company in its initial business plan and have not been changed since that date. A margin squeeze still exists if the costs relating to the promotions are excluded from the calculation[709]. Therefore, it cannot be considered that the margin squeeze is a response to low pricing by competitors. Moreover, the mere fact that the initial business plan of the company shows that the net present value of its broadband business generates a positive net present value on an end-to-end basis while its downstream activity generates a negative present value (see section VI.D.2.1.2.3 above) is a strong evidence that the objective aim of Telefónica's conduct was to foreclose competitors.

4 Efficiency defence

(641) In the present case, Telefónica alleged[710] that its conduct has resulted in efficiencies, which have thus benefited consumers. Therefore, according to the company, its conduct as such is objectively justified and cannot constitute an infringement of Article 82 EC

(642) Telefónica argued that its conduct must be assessed within the context of the market background in which it launched its retail products in 2001. A business strategy that kick-starts and increases the size of a market is welfare-enhancing. According to the company, its conduct seeks to achieve supply side efficiencies (economies of scale and learning effects) and demand side efficiencies (overcome market inertia, network effects, and incentives for the development of New Generation Networks).

(643) According to Telefónica, its conduct was indispensable to realise these efficiencies. Firstly, higher retail prices would have created less market-expanding efficiencies and would have resulted in a direct consumer-welfare loss. Secondly, lower wholesale prices would not have been an economically viable or realistic alternative because (i) Telefónica sold at a loss its wholesale products until 2005, (ii) a reduction of wholesale prices would have distorted the company's incentives to invest in its infrastructure and (iii) would have resulted in a transfer from Telefónica to its wholesale customers allowing them to free-ride on its infrastructure investments and (iv) a lowering of wholesale prices would have reduced the incentives of competitors to invest in their own infrastructure.

(644) Telefónica further alleged that the attained efficiencies have directly benefited consumers, in particular the economies of scale and learning effects attained by Telefónica have enabled it to upgrade its services at no cost.

(645) Lastly, Telefónica argued that its conduct has not been and is not liable to result in an elimination of competition and stressed, on the contrary, that the efficiencies realised as a result of its conduct have benefited to all broadband operators.

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709 Promotions amounted to […] €/new subscriber in 2005 and […] €/new subscriber in 2006 (see the letter of Telefónica of 06.10.06 at pages TFCA-13264 and TFCA-13265 of the file), less than […] €/end-user/month (amortization over 3 years).

710 See pages 144-155 of the *Reply*.

4.1 Lack of justification in the form of positive externalities on the demand side

(646) Telefónica claimed that stimulating demand by attractive pricing has a particular benefit on a market for a new technology. In particular, Telefónica suggests that its pricing policy was indispensable to increase awareness of broadband and thereby stimulate demand, which would in turn have benefited its competitors and the market in general.

(647) Telefónica's argument is deficient in one essential respect: there is no proof that the margin squeeze would alone have made it possible to attain the desired objective of increased broadband use in Spain. The positive effects linked to market growth could have been brought about had the market developed under competitive conditions. If it had really been Telefónica's intention to develop the broadband market, Telefónica could have priced all its wholesale products at low levels encouraging the entry of competitors (avoiding a margin squeeze while still being profitable). Telefónica chose instead to oblige its retail competitors to incur losses, thereby diverting the market growth to its advantage. It cannot therefore cogently be maintained that Telefónica was guided by a desire to develop the market for the benefit of all stakeholders.

(648) Above all, Telefónica's argument is invalidated by the fact that, as already established, its conduct allowed it to sustain the highest retail prices in Europe, thereby negatively affecting consumers and the market as a whole, with a below EU average rate of penetration.

4.2 Lack of justification in the form of economies of scale and learning effects

(649) Telefónica argued that its investments will only be profitable if it can reach a minimum scale of operations. An attractive retail price attracts users to the service and thereby enables Telefónica to achieve economies of scale faster than if the price was set so as to cover costs already at the outset. Telefónica also explains that all companies operate on a “learning curve” and the company’s effectiveness will increase as it becomes more experienced, i.e. as the number of customers increases. By attracting more customers at an early stage with attractive prices, a company is able to run down the learning curve faster than would otherwise be possible.

(650) In case of significant economies of scale or strong learning effects, in exceptional cases there could be reasons which could justify temporary prices below LRAIC. However, Telefónica's downstream losses cannot be regarded as temporary or aimed at searching scale economies and learning effects because Telefónica's downstream activity still generates losses more than 5 years after its start.

(651) Telefónica's argument, instead of objectively legitimising a margin squeeze, highlights on the contrary one of the rational objectives thereof. One of the objectives of a margin squeeze conduct may be to reserve for the company engaging in the practice the benefit of economies of scale on the downstream market and to delay accordingly for downstream competitors their arrival at the same volume threshold allowing the economies of scale. Moreover, a combination of being at a higher point on the learning curve than competitors and having higher output thanks to below-cost pricing may have exclusion effects capable of consolidating the dominant company's hegemony.[711]

(652) Thus, while the search for scale economies and learning effects may be included among the rational justifications for below cost pricing, it may not serve to legitimise a margin squeeze that enables the vertically integrated company to impose losses upon its competitors that it does not incur itself.

(653) In addition, Telefónica would in fact have benefited from higher economies of scale if it had lowered its wholesale prices, as this would have allowed it to increase its sales at the wholesale level.

(654) Finally, and in any event, contrary to Telefónica's statements, the economies of scale attained by Telefónica have never benefited its wholesale customers by way of improvements to the regulated wholesale products because the prices of the relevant wholesale products have not changed until the CMT decision of 21 December 2006[712].

4.3 It is highly unlikely that in the long run the supply side efficiencies invoked by Telefónica would be passed on to the customers and that these benefits outweigh the restriction of competition brought about by the margin squeeze

(655) For an argument based on efficiency gains to be admissible, the dominant company must show that efficiencies brought about by the conduct concerned outweigh the likely negative effects on competition that the conduct might otherwise have. The greater the effects on competition, the more one must be sure that the claimed efficiencies are substantial, likely to be realised, and to be passed on, to a sufficient degree, to consumers.

(656) The incentive on the part of the dominant company to pass cost efficiencies on to consumers is often related to the existence of competitive pressure from the remaining firms in the market and from potential entry.

(657) An efficiency defence must be rejected if the short-term efficiency gains (if any) are weighed by longer-term losses stemming *inter alia* from expenditures incurred by the dominant company to maintain or reinforce its position (rent seeking), misallocation of resources, reduced innovation and higher prices. This is consistent with the fact that rivalry between undertakings is an essential driver of economic efficiency, including dynamic efficiencies in the shape of innovation. Ultimately, the protection of rivalry and the competitive process is given priority over possible short-term efficiency gains.

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711 See, for example, Bolton et al., op. cit., p. 51.

712 See section IV.D.2.4 above.

(658) In the present case, Telefónica's conduct consists in preventing its downstream rivals from replicat ing profitably its retail prices. Given Telefónica's market power at the retail level (see Section V.C.3 above) the incumbent is not forced to pass on the alleged efficiencies, if any, to the consumers. Moreover, the fact that Telefónica's retail prices are among the highest in the EU is a strong indication that Telefónica has rather profited from the alleged efficiencies in order to increase its profitability. It is therefore highly unlikely that the present exclusionary conduct that consists in raising rivals' costs can be justified on the ground that efficiency gains would be sufficient to outweigh its actual or likely anti-competitive effects and would benefit consumers.

5 Telefónica's duty to supply wholesale access to its competitors means that its conduct cannot be objectively justified

(659) Telefónica has argued that its conducts was necessary in that it sought a legitimate commercial interest, and that it has produced important efficiencies to the welfare of consumers. However, there are circumstances in which a finding of margin squeeze is particularly likely to amount to an unjustified, and, thus, abusive conduct. This will in particular be the case where the national legislat or or regulator, in accordance with Community law, has determined that imposing or facilitating access at the wholesale level is in the public interest, and the dominant undertaking makes that determination ineffective, e.g. by engaging in a margin squeeze.

(660) In the present case, as already indicated above, not only does the national regulation oblige Telefónica to supply wholesale access to its competitors at regional and national level, but it also does not allow Telefónica to terminate any supply relationship without the prior authorisation of the CMT and obliges Telefónica to ensure that its retail prices are replicable on the basis of its wholesale products.

(661) Telefónica's duty to supply wholesale access at regional and national level has been imposed in accordance with Community legislation. When in 2006 the CMT carried over Telefónica's obligation to supply these services, this was based on the fact that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end-user's interest[713]. It was considered that the need to promote downstream competition in the long term by imposing upstream access under reasonable terms (no margin squeeze) exceeds the need to preserve Telefónica's *ex ante* incentives to invest in its own upstream infrastructure(see paragraphs (303) to (308) above).

(662) As a consequence, Telefónica's argument that a decrease of its wholesale prices would have distorted the company's incentives to invest in its infrastructure is irrelevant.

(663) Therefore, in the circumstances of this specific case, there cannot be any plausible implication that the margin squeeze can be objectively justified or produced efficiencies that are likely to outweigh the foreclosure effects of that conduct.

[713] .See paragraph (297) above.

6 Conclusion on objective justification and efficiencies

(664) In conclusion, it follows from the above that Telefónica's behaviour is not objectively justified and did not produce efficiencies.

G. Scope for avoiding the margin squeeze

1 Telefónica's autonomy to set the level of the prices

(665) In its *Reply*, Telefónica recalled that the Spanish broadband market has been supervised through *ex ante* and *ex post* resolutions by the Spanish regulator and that it therefore lacked autonomy in setting the relevant prices[714].

(666) In this respect, the Court of Justice and the Court of First Instance have consistently held that competition rules may apply where sector specific legislation does not preclude the undertakings it governs from engaging in autonomous conduct that prevents, restricts or distort competition[715].

(667) On related markets on which competitors buy wholesale services from the established operator, and depend on the established operator in order to compete on a downstream product or service market, there can very well be a margin squeeze between regulated wholesale and retail prices. The key question is whether the undertaking subject to price regulation has the commercial discretion to avoid or end the margin squeeze on its own initiative.[716]

(668) In view of the above, it is necessary to assess the extent to which regulation applied to Telefónica's provision of retail and wholesale ADSL services has granted Telefónica the possibility of avoiding an anticompetitive margin squeeze when establishing its prices.

(669) As is clear from the above (see Section IV.D), since September 2001, Telefónica could have avoided the above evidenced margin squeezes, for example by increasing its retail charges or by decreasing its wholesale charges.

(670) At the retail level, TESAU has been free at any time to propose to raise its retail charges for broadband access. Indeed, TES AU has always enjoyed commercial discretion to the extent that until October 2003 it proposed the prices to be approved by the regulatory authority and was entitled to request a price review, and after that date its retail prices were liberalized and are only subject to advance communication.

(671) As to the national wholesale services, Telefónica has been free at any time since September 2001 to reduce the charges of national wholesale services, which have never been subject to any price regulation until December 2006.

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714 See Telefónica's Reply, pages 156 and 167.

715 Court of Justice in Joined Cases C-359/95 and C-379/95 P *Commission and France vs. Ladroke Racing* [1997] ECR I-6225, paragraph 34; Court of First Instance in Case T-228/97 *Irish Sugar vs. Commission* [1999] ECR II-296, paragraph 130; Court of First Instance in Case T-513 *Consiglio Nazionale degli Spedizionieri Doganali* [2000] II-1807, paragraphs 59 et seq.

716 *Deutsche Telekom*, paragraph 105.

(672) TESAU could also have decreased at any time the charges for its regional wholesale service. In formal terms, though, any adjustment of the charges had to be notified to the regulatory authority. Telefónica was entitled to take the initiative and to apply for authorisation at any time. On the contrary, Telefónica asked the CMT to maintain its wholesale prices whenever it decreased its retail prices, be it through the duplication of speeds without any price adjustment or through the launching of the semi-flat products 'ADSL Tiempo Libre', 'ADSL a tu medida' and 'ADSL mini'.

(673) The CMT itself confirmed in a letter to the Commission that the prices for GigADSL are maximal prices and that Telefónica has been free to apply for a reduction of its prices.[717]

(674) The maximal character of the prices of GigADSL could not have been ignored by Telefónica, as the CMT has reminded it on various occasions, in response to similar allegations of TESAU at national level, that TESAU has commercial discretion to modify the charges of GigADSL. [718] This has been recognised by TESAU itself at national level.[719]

(675) It is therefore evident that during the whole reference period for which an infringement of Article 82 has been established, nothing precluded Telefónica from putting an end to the above evidenced margin squeezes by proposing lower wholesale prices to its competitors or by requesting from the CMT a decrease of the GigADSL prices.

2 The CMT's decisions regarding margin squeeze do not provide Telefónica with immunity from the application of Article 82

(676) Telefónica considers that in the present case[720], the Commission is not entitled to adopt a decision, because contrary to the situation in *Deutsche Telekom*, the Commission would be deciding on a subject matter on which there are already several national decisions by the regulator that has been enforcing competition law. Telefónica also claims that this competence of the CMT to apply competition law has been recognised by the Spanish Courts[721].

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717 Letter of the CMT of 02.02.05 (see page CMT-568 of the file).

718 CMT, Decision AJ 2001/5172 of 08.11.01, Resolución por la que resuelve el recurso de reposición presentado por Retevisión I, S.A.U. contra la resolución de la CMT de fecha 5 de julio de 2001 relativa a las medidas cautelares dictadas dentro del expediente MTZ 2001/4935 sobre el establecimiento de condiciones para el acceso indirecto al bucle de abonado de la red Telefónica pública fija de Telefónica de España, S.A.U. con el objeto de articular los mecanismos que posibiliten la prestación de servicios ADSL en competencia (see page CMT-4676 of the file).

719 Decisión MTZ - 2001/4038 of the CMT of 29.04.02 ("OBA 2002") - Resolución por la que se insta la modificación de la oferta de acceso al bucle de abonado publicada por Telefónica de España, S.A.U. en fecha 20 de enero de 2001 (see page CMT-623 of the file).

720 See Telefónica's *Reply*, pages 168-180.

721 See Telefónica's *Reply* (page 169) which refers to the judgments of Audiencia Nacional of 17 October 2000 and 17 September 2005.

(677) It is clear from the case law of the Court that the Commission is entitled to adopt at any time individual decisions under Articles 81 and 82 of the Treaty, even where an agreement or practice has already been the subject of a decision by a national Court or the decision contemplated by the Commission conflicts with that national court's decision[722].

(678) In any case, the CMT is not a competition authority but a regulatory authority within the meaning of Article 5 of the Framework Directive 2002/21/EC[723]. It has never intervened to enforce Article 82 of the Treaty. As Telefónica itself acknowledges[724], Article 25 of the *Ley de Defensa de la Competencia* (Spanish Competition Law), modified by the Law 52/99, provides that it is within the competence of the Tribunal de Defensa de la Competencia to enforce Articles 81 and 82 of the Treaty in Spain. Therefore, the enforcement of those Articles is not the responsibility of the CMT and at no time have those competences been entrusted to the CMT. None of the resolutions of the CMT mentioned by Telefónica have as their legal basis Article 82 of the Treaty or even the Spanish equivalent Article 6 of the *Ley de Defensa de la Competencia*.

(679) This has also been recognized by the *Audiencia Nacional* in a judgment[721] to which Telefónica refers in its *Reply*. The above judgment was the result of an attempt by Telefónica's to have a CMT resolution annulled on the grounds that the CMT does not have the power under the Spanish competition laws to declare that a conduct is anticompetitive (which strikes as being the opposite position of the one defended by Telefónica in these proceedings). In its judgment, the Audiencia Nacional made a clear distinction between the application of competition law, which falls under the competence of the Spanish National Competition Authority and the CMT's power to adopt resolutions to safeguard competition in the telecommunications market.

(680) CMT's competence to "safeguard competition" is much more general than the enforcement of competition law as such. It enables the CMT to impose certain behavioural obligations in the Spanish telecommunications sector. The legal basis for the intervention of the CMT is found in Article 48 of Law 32/2003 General of Telecommunications:

> *"2. La Comisión del Mercado de las Telecomunicaciones tendrá por objeto el establecimiento y supervisión de las obligaciones específicas que hayan de cumplir los operadores en los mercados de telecomunicaciones y el fomento de la competencia en los mercados de los servicios audiovisuales, conforme a lo previsto por su normativa reguladora, la resolución de los conflictos entre los operadores y, en su caso, el ejercicio como órgano arbitral de las controversias entre los mismos.*
> *3. En las materias de telecomunicaciones reguladas en esta ley la Comisión del Mercado de las Telecomunicaciones ejercerá las siguientes funciones:*
> *[…]*

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722 Judgment of the Court of 14 December 2000 in Case C-344/98 Masterfoods Ltd vs. HB Ice Cream Ltd ("*Masterfoods*") , paragraph 48.

723 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services ("Framework Directive").

724 Letter of Telefónica of 22.09.03 (see page CMT-68 of the file).

e) Adoptar las medidas necesarias para salvaguardar la pluralidad de oferta del servicio, el acceso a las redes de comunicaciones electrónicas por los operadores, la interconexión de las redes y la explotación de red en condiciones de red abierta, y la política de precios y comercialización por los prestadores de los servicios. A estos efectos, sin perjuicio de las funciones encomendadas en el capítulo III del título II de esta ley y en su normativa de desarrollo, la Comisión ejercerá las siguientes funciones:
[…]
2.a Pondrá en conocimiento del Servicio de Defensa de la Competencia los actos, acuerdos, prácticas o conductas de los que pudiera tener noticia en el ejercicio de sus atribuciones y que presenten indicios de ser contrarios a la Ley 16/1989, de 17 de julio, de Defensa de la Competencia. A tal fin, la Comisión del Mercado de las Telecomunicaciones comunicará al Servicio de Defensa de la Competencia todos los elementos de hecho a su alcance y, en su caso, remitirá dictamen no vinculante de la calificación que le merecen dichos hechos."

(681) The CMT exercises its power to safeguard competition alongside other policy objectives and regulatory principles guiding its work as a national regulatory authority, such as the promotion of network investments.

(682) The wording of the CMT in its decision AJ 2004/1407 of 17 March 2005 illustrates how the role of the CMT to safeguard competition (by imposing obligations or paralysing some offers) is exercised:

"No puede ignorarse que se trata aquí de ejercer el control, ex ante, de las promociones que el Grupo Telefónica pone en el mercado, es decir, de ***prevenir o neutralizar los eventuales efectos anticompetitivos*** *(no de sancionar a posteriori un eventual abuso), que las mismas son susceptibles de producir en el mercado, mediante la imposición de obligaciones, sean estas de no hacer (prohibiendo su lanzamiento) o de hacer (paralizando su comercialización, cuando está no esta sometida a la obligación de comunicación)."*[725] (emphasis added)

(683) In any event, the CMT has not adopted decisions regarding all the practices to which the present decision refers. In particular, the existence of a margin squeeze involving Telefónica's national wholesale offers has never been analysed by the CMT which did not price-regulate Telefónica's national wholesale offers until December 2006.

[725] CMT in decision AJ 2004/1407 of 17.03.05 (see page CMT-4879 of the file)

(684) As regards the regulation of the prices of GigADSL – regulation that, as already demonstrated above, has never precluded Telefónica from avoiding a margin squeeze – the CMT decided not to require that the GigADSL be cost oriented and instead implemented a retail-minus system to incite alternative network operators to invest in their own infrastructure. Despite this emphasis on investment in alternative infrastructure, the CMT also believed that its retail minus system allowed avoiding any situation of margin squeeze between the wholesale offer and Telefónica's retail offers[726]. The establishment of an infringement of Article 82 in the form of a margin squeeze is therefore not in contradiction of the CMT's policy since, for the reasons explained in Section D.1.4 above, the CMT was not successful at ensuring such a margin between Telefónica's wholesale and retail prices.

(685) In any event, the *ne bis in idem* principle is not at stake in the present case, because it is clear from the reasons set out above that when analysing Telefónica's pricing conduct, the CMT assessed whether the existing regulatory obligations have been breached, whereas the object of this Decision is to establish whether a breach of Article 82 has occurred.

H. Conclusion on the abuse

(686) In carrying out its investigation, the Commission has concluded that the relevant downstream market is the mass market for retail broadband access and the upstream markets are those of (i) wholesale broadband access at regional level and (ii) wholesale broadband access at national level.

(687) It is uneconomical to duplicate Telefónica's nationwide local access network. Therefore alternative operators have had no choice but to contract one of the available (and mandated) wholesale products, all of which are based on Telefónica's local access infrastructure. Entry on the basis of alternative technologies (cable-modem) has not been possible.

(688) Telefónica is dominant in all the upstream markets. It holds a monopoly in the provision of wholesale access at local level and in the provision of wholesale access at regional level. Since the last quarter of 2002, there are competing national wholesale access products. All of them are based on Telefónica's other wholesale inputs. Telefónica has been in the position to influence the availability of competing national inputs (margin squeeze, generalised delays in the provision of local loop unbundling). In fact, Telefónica controls the entire ADSL value chain in Spain.

(689) The mere existence of Telefónica's wholesale products for access at regional and national level since 1999 and the existence of regulatory obligations imposing such access have structured the Spanish broadband markets in an irreversible manner: alternative operators have incurred considerable investments in order to use Telefónica's wholesale products and connect at different levels of Telefónica's network. This has contributed to create a relationship of reliance of the rivals on Telefónica's wholesale products.

[726] See CMT decision *OBA 2004* (see footnote 94 above). See also CMT decision *OBA 2004 (2)* (see footnote 103 above)

(690) At the same time, cable operators – which do not rely on Telefónica's wholesale inputs for the provision of retail broadband services – have not exercised a pricing discipline on Telefónica at the retail level and have not exercised a sufficient competitive constraint on Telefónica's ability to leverage its upstream power.

(691) The Commission has assessed whether the margin between Telefónica's downstream and upstream prices has been sufficient to cover its downstream incremental costs. Using the period-by-period method, the Commission has found that Telefónica's prices for wholesale broadband access at regional and at national level do not allow an as efficient competitor to replicate Telefónica's prices for retail broadband access since September 2001. The Commission has also considered whether Telefónica's downstream activity was profitable over the period 2001-2006, thereby allowing the incurring of short run losses provided that the latter are recovered from future profits, within reasonable timescales and under competitive conditions. The Commission has concluded that Telefónica would not have been able to recover its *ex ante* downstream costs (i.e. the downstream costs indicated in its initial business plan of 2001). The results of the margin squeeze test are summarised as follows

Table 57 – Margin squeeze test on TESAU's retail prices under the period-by period method

	u.o.	2001	2002	2003	2004	2005	2006
ADSL IP Total[727]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP[728]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]
GigADSL[729]	€/month/user	[…]	[…]	[…]	[…]	[…]	[…]
	Million €	[…]	[…]	[…]	[…]	[…]	[…]

Table 58 – Margin squeeze test on TESAU's retail prices under the DCF method

NPV over 2001-2006 (million €)	ADSL-IP	GigADSL
On the basis of Telefónica's historical costs[730]	[…]	[…]
On the basis of Telefónica's forecasts[731]	[…]	[…]

727 See Table 37 above.
728 See Table 38 above.
729 See Table 43 above.
730 See Table 42 and Table 45 above.
731 See Table 51 and Table 52 above.

(692) The Commission has established that not only was Telefónica's conduct capable of resticting and was likely to restrict competition in the retail market but that empirical evidence is entirely consistent with Telefónica's conduct having produced actual restrictive effects. The Commission has also concluded that Telefónica's conduct has resulted in consumer harm.

(693) The Commission has assessed whether Telefónica's conduct can be objectively justified or it produces efficiencies which outweigh the negative effect on competition. The Commission has concluded that (i) Telefónica's downstream losses cannot be considered as necessary investments in future profits in the context of a non mature sector; (ii) that Telefónica's conduct was not necessary for avoiding losses at wholesale level or for securing investments in infrastructure and that the meeting competition defence is not an objective justification in the present case. The Commission has conclude that it is highly unlikely that in the long run the efficiencies invoked by Telefónica would be passed on to the customers and that these benefits outweigh the restriction of competition brought about by a margin squeeze.

(694) It follows that "Telefónica" (i.e. the economic entity formed by Telefónica S.A.and TESAU, TDATA and TERRA) has infringed Article 82 of the EC Treaty by imposing unfair prices on its competitors in the form of a margin squeeze between the prices for retail broadband access in the Spanish "mass market" and the regional and national wholesale broadband access markets respectively, throughout the period from September 2001 to December 2006.

VII. EFFECTS ON TRADE BETWEEN MEMBER STATES

(695) The Court of Justice held that "Article 82 does not require it to be proved that abusive conduct has in fact appreciably affected trade between Member States, but that it is capable of having that effect"[732].As already indicated in section (543) above, the conduct of a dominant undertaking is not to be regarded as abusive within the meaning of Article 82 EC only once it has concrete negative effects. What is to be proved is, rather, that Telefónica's practice is capable of foreclosing competition.

(696) Trade between Member States is generally affected by the conditions governing access to the telecommunications infrastructure and wholesale services of the dominant network operators, in particular those of the historical operators of fixed and mobile networks, who formerly enjoyed a State monopoly in national markets that were defined geographically and segregated. This is because the services provided over telecommunications networks can be traded within the Community and the conditions governing access to infrastructure and wholesale services determine the capabilities of competitors, who require such access in order to offer their own services[733].

(697) In the present case, trade between Member States is affected because the pricing policy described above relates to the access services of the dominant operator, which extend over the entire territory of Kingdom of Spain, and that territory constitutes a substantial part of the internal market. These practices affect market structure by raising barriers to entry to telecommunications markets in Spain, including operators such as Wanadoo or Ya.com, which form part of group of undertakings providing telecommunications services throughout the EU (respectively France Télécom and Deutsche Telekom). The prospect of operating unprofitably or facing significantly higher costs of entry undoubtedly constitutes an obstacle to the possibility for companies active in other Member States to establish themselves in Spain; therefore Telefónica's conduct affected trade between Member States.[734]

732 Case 3222/81 Michelin vs. Commission [1983] ECR 3461, paragraph 104.

733 Access Notice, paragraphs 144 to 148.

734 See judgement of the Court of Justice in case C-26/96, Carlo Bagnasco and Others v Banca Popolare di Novara soc. coop. arl. (BNP) (C-215/96) and Cassa di Risparmio di Genova e Imperia SpA (Carige) (C-216/96), paragraph 51-53 and judgment of the Court of Justice in case C-309/99, J.C.J. Wouters, paragraph 96.

VIII. LIABILITY FOR INFRINGEMENT AND THE ADDRESSEES OF THE DECISION

(698) In order to identify the addressees of this decision, it is necessary to determine the legal entity or entities which are liable for the infringement.

A. The case law regarding the determination of liability

(699) Community competition law recognises that different companies belonging to the same group form an economic unit and therefore an undertaking within the meaning of Articles 81 EC and 82 EC if the companies concerned do not determine independently their own conduct on the market.[735]

(700) The Court of Justice has held that the fact that a subsidiary has separate legal entity is not sufficient to exclude the possibility of imputing its conduct to the parent company. Such may be the case in particular where the subsidiary, although having separate legal personality, does not decide independently upon its own conduct on the market, but carries out, in all material respects, the instructions given to it by the parent company[736]. In such scenario, both legal entities – the mother company and its subsidiary – can be considered as a single economic entity, liable for the infringement.

(701) In the case of wholly owned subsidiaries, the Commission is entitled to assume that the infringement implemented at the level of the wholly owned subsidiary is attributable to the parent company, as the parent company is presumed to have exercised decisive influence over the wholly owned subsidiary[737]. A parent company can also be held accountable if it has been aware (or could not have been unaware) of the behaviour in question and did not intervene. In such a case, it is for the parent company to adopt, in regard to its subsidiary, any measure necessary to prevent the continuation of the infringement of which it was not unaware[738].

(702) When an undertaking assumes all the rights and liabilities of another undertaking, it must be treated as the economic successor of the old undertaking[739].

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735 Case 170/83 Hydrotherm [1984] ECR 2999, paragraph 11; Case T-102/92 Viho v Commission [1995] ECR II-17, paragraph 50.

736 Judgement of the Court of Justice of 14.7.1972 in Case 48/69 Imperial Chemical Industries Ltd. ([1972] ECR 619), recital 132. See also Judgement of the Court of Justice of 25.10.83 in Case 107/82 Allgemeine Elektricitäts-Gesellschaft AEG-Telefunken AG vs. Commission, recital 49.

737 Case T-305/94 PVC, paragraphs 961 and 984; Case 107/82 Allgemeine Elektricitäts-Gesellschaft AEG-Telefunken AG vs. Commission, paragraph 50. For the application to a shareholding below 100%, but above 99%, see Case T-203/01 Michelin v Commission, paragraph 290.

738 Case T-347/94 Mayr-Melnhof v Commission [1998] ECR II-1751, paragraphs 397-398; Case T-354/94 Stora v Commission [1998] ECR II-2122, paragraph 83.

739 Judgment of the Court in joined Cases 40/73 to 48/73, 50/73, 54/73 to 56/73, 111/73, 113/73 and 114/73 Suiker Unie and Others v Commission [1975] ECR 1663, paragraph 84. See also the judgment of the Court of Justice in case C-49/92, Commission vs. Anic Partecipazioni, paragraph 145.

B. Liability for the infringement

(703) In this case, the abusive practices relate to the behaviour of Telefónica S.A., its subsidiaries Telefónica de España, S.A.U. ("TESAU"), Telefónica Data de España, S.A.U ("TDATA") and Terra Networks España S.A. ("TERRA"). For the reasons explained below, all four entities have constituted and acted as a single economic entity in the Spanish broadband markets since September 2001.

(704) In its *Reply*, Telefónica did not dispute that Telefónica, TESAU, TDATA and TERRA have constituted and acted as a single economic entities. It did not dispute that the correct adressees of the alleged abuse were Telefónica, TESAU, TDATA and TERRA.

(705) In a series of decisions the CMT has taken, Telefónica, TESAU, TDATA and TERRA have continuously been considered to form a single economic unit.[740]

(706) Indeed, TESAU and TDATA have always been 100% owned subsidiaries of Telefónica S.A. during the whole period under investigation. In view of these shareholdings, there are reasonable grounds for concluding that these subsidiaries do not determine independently their own conduct on the market. Consequently, Telefónica S.A., TESAU and TDATA have not only constituted but also presumably have acted as a single economic unit in the Spanish broadband market during the whole period under investigation.

(707) Moreover the parent company Telefónica could not have been unaware of TESAU's behaviour. Indeed, the initial business plan of TESAU – which was presented to its parent company in 2001[741] – shows that the incumbent's downstream activity was unprofitable over 2001-2006 (as established in section VI.D.2.2.4 above).

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740 See for example the decisions of the CMT in case AJ 2001/5172 on 08.11.200 1 and in case 0M 2001/5678 on 19.09.02.

741 See the letter of Telefónica of 21.07.06, page TFCA-4446 of the file: "*El objectivo de este documento es server de base de discussion para elaborar un marco de referencia que permita, a partir del mismo, elaborar documentos específicos, bien sea para presenter al Centro Corporativo, a analistas financieros u otros. Para eloo se describe brevemente el scenario de Banda Ancha del Plan Estratégico de TdE y se analyzan las principales variables económicas críticas del ADSL. En oncreto el documento: Presenta el plan de despliegue que Telefónica de España ha previsto en su Plan Estratégico 2002-2005; analiza las principales variables económicas y el valor de los diferentes productos ADSL (GigADSL, Megabase y ADSL minorista para el escenario base […] Introduce la primera versión del esquema de seguimiento (parámetros económicos) definido para garantizar el correcto desarroloo del plan; presenta una cuenta de resultados del negocio de ADSL incremental*".

(708) TERRA has always been a 100% subsidiary of Terra Networks S.A. which was only taken over by Telefónica in July 2005. However, in view of the shares of Terra Networks S.A. owned by Telefónica since September 2001 (38% until July 2003 and 76% until July 2005) and the wide dispersion of the remaining shares giving Telefónica a *de facto* comfortable majority of the votes (above 80%), it is considered that Telefónica was able to exercise decisive influence on the strategy and the commercial strategy of its subsidiary Terra Networks S.A. during the entire period under investigation. Through the control Telefónica exercised on the board of directors of Terra Networks S.A.[742], Telefónica also actually exercised such decisive influence on TERRA.

(709) The unity of conduct of Telefónica S.A. and its subsidiaries TESAU, TDATA and TERRA in the Spanish broadband markets is in particular illustrated by the preferential treatment TESAU granted to TERRA in the provision of wholesale services in 2001 and 2002. Whereas TESAU and TERRA already marketed retail broadband services on the basis of ADSL-IP in September 2001[743], the latter was only made available to alternative operators towards May 2002[744], because the CMT ordered TESAU not to discriminate against its retail ADSL competitors[745]. TERRA enjoyed a similar type of preferential treatment in its ability to market "self install" retail broadband services since October 2001, whereas such possibility was not offered to the Telefónica group's competitors until January 2002[746].

(710) It can therefore be concluded that since September 2001, TESAU, TDATA and also TERRA did not act independently one from the other and from the parent company Telefónica S.A. and have constituted and acted as a single economic entity in the Spanish broadband markets. This was not contested by Telefónica in its *Reply*.

(711) However, considering that TESAU and TDATA merged on 30 June 2006 and constitute one legal entity (TESAU) since that date and that TESAU and TERRA merged on 7 July 2006 and constitute one legal entity (TESAU) since that date, the liability of the infringement must be imputed to Telefónica and TESAU only.

(712) Therefore, Telefónica S.A. and Telefónica de España, S.A.U. are the addressees of this Decision.

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742 Since the creation of Terra Networks S.A., the majority of the members of the board of directors of TERRA Networks S.A. have been appointed as per proposal of Telefónica and with the votes cast by Telefónica. See paragraphs 124 and 125 of the Statement of objections.

743 See the letter of TESAU of 18.07.05 (page TFCA-3262 of the file).

744 Letter of Telefónica's of 22.09.03 (see pages TFCA-49 and TFCA-50 of the file).

745 CMT Decision OBA 2002 (see page CMT-618 of the file).

746 See paragraph (258) below.

IX. IMPOSITION OF A FINE

A. Article 15 (2) of Regulation N°17 and Article 23 (2) of Regulation (EC) N° 1/2003

(713) Under Article 23 (2) of Regulation (EC) N° 1/2003, the Commission may by decision impose fines on undertakings, where they infringe, either intentionally or negligently, Article 82 of the Treaty.

(714) Under Article 15 (2) of Regulation No 17, which was applicable during the initial period of the infringement until 1 May 2003, the fine for each undertaking participating in the infringement cannot exceed 10% of its total turnover in the preceding business year. The same limitation results from Article 23 (2) of Regulation (EC) No 1/2003.

(715) Pursuant to both Article 15 (2) of Regulation No 17 and Article 23 (3) of Regulation (EC) No 1/2003, the Commission must, in fixing the amount of the fine, have regard to all relevant circumstances and particularly the gravity and duration of the infringement, which are the two criteria explicitly referred to in those Regulations. In doing so, the Commission is entitled to set the fine at a level sufficient to ensure deterrence.

(716) In its *Reply*[747], Telefónica claimed that the Commission should not impose a fine for the following reasons:

(717) Firstly, Telefónica argued that it cannot be held to have acted either intentionally or negligently when adopting the conduct the Commission considers to be an infringement of Article 82 of the Treaty.

- Telefónica's conduct was not intentional because it has never been aware that its practices could have resulted in a margin squeeze.

- Telefónica's conduct was not negligent because the company could not have reasonably foreseen that its pricing structure could be deemed to infringe Article 82 for three reasons: firstly, the market definition is contrary to the regulatory framework, has the effect of overstating Telefónica's position on each of the wholesale markets and leads to a misleading result in the calculation of the margin squeeze. Secondly, Telefónica argues that it did not have sufficient room for manoeuvre to avoid the margin squeeze. Thirdly, Telefónica argues that it could not have possibly envisaged that its practices, which were allegedly approved by the CMT, could have resulted in an infringement of European competition law.

747 See Telefónica's *Reply*, pages 185-190.

(718) Secondly, Telefónica argued that, if there were to be an infringement, it would neither be clear-cut nor based on established analysis. Telefónica alleged that, the nature of the infringement in the present case is not clear and the Commission's analysis is based on novel elements: (i) novel definition of the relevant market; (ii) novel margin squeeze test; and (iii) novel application of a margin squeeze test in relation to an emerging market and an input which is not indispensable. Telefónica also argued that the Commission's argumentation in the present case is based on its *Deutsche Telekom* decision, even though the latter is still under review by the Court of First Instance.

(719) The Commission considers that Telefónica's arguments cannot be accepted for the following reasons:

1 Intentionality and/or negligence

(720) Telefónica's argument that it did not act negligently is incorrect.

(721) Firstly, regarding the market definition, Telefónica's argument amounts to a claim that it could not have been aware of its dominant position. This claim is without merit, given that Telefónica, as a diligent economic operator, must have been familiar with the principles underlying market definition in competition cases.[748] Irrespective of the precise market definition, Telefónica could not ignore the position it held as the historic monopolist and as the owner of the only significant infrastructure network for the supply of the wholesale services subject to this decision[749]. Moreover, this claim is contradicted by the fact that Telefónica had been found to be dominant in 1999 in the provision of indirect wholesale access to the local loop in 1999[750]. Such dominance is at the origin of the regulatory obligations (in particular the obligation to provide wholesale access at regional level) imposed on Telefónica.

748 Commission notice on the definition of the relevant market for the purposes of Community competition law, Official Journal C 372, 9.12.1997, p. 5–13.

749 See e.g. Resolución del Tribunal de Defensa de la Competencia de 29 de abril de 2002 (Expte. 518/01 Internautas/Telefónica), p. 7, 21-23 (http://www.tdcompetencia.es/PDFs/resoluciones/2002/1655.pdf).

750 Orden de 26 de marzo de 1999 por la que se dispone la publicación del Acuerdo de la Comisión Delegada del Gobierno para Asuntos Económicos, de 25 de marzo de 1999, por el que se determinan los precios que los operadores autorizados deberán abonar a Telefónica, Sociedad Anónima, por la provisión del acceso indirecto al bucle de abonado de la red pública telefónica fija, hasta el 31 de diciembre del año 2000 – BOE 86 pages 13513 to 13515 (see page CMT-573 of the file).

(722) Moreover, the allegation of Telefónica that the market definition is contrary to the regulatory framework is also incorrect. Already in 2000 in its Communication on unbundled access to the local loop[751], the Commission noted that wholesale broadband access (at regional and/or national level) should be seen as complementing (not substituting) the unbundling of the local loop. Moreover, the finding that local loop unbundling and regional wholesale access do not belong to the same relevant market is in accordance with the Community regulatory framework for electronic communications. According to the Commission Recommendation 2003/311/EC on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation, the market for unbundled access to the local loop[752] is a distinct market from the market for wholesale broadband access[753]. This is also the position taken by all the national regulatory authorities ('NRAs') for electronic communications that have analysed the wholesale broadband market in their respective countries on the basis of competition law principles [754] – including the CMT[755]. It is also recalled that in its letter of September 2003, in response to the complaint which is at the origin of the present proceedings, Telefónica itself considered that there were two separate wholesale markets (i.e. precisely the one for local loop unbundling, on one hand, and national and regional wholesale, on the other) (See section V.A.3).

751 Communication from the Commission on unbundled access to the local loops (COM(2000) 237, 26.4.2000), See page 18.

752 Market 11 of the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

753 Market 12 of the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accorcance with Directive 2002/21/EC of the European Parliament and of teh Council on a common regulatory framework for electronic communications networks and services;

754 Within the review mecanism established by Article 7 of the Framework Directive 2002/21/EC.

755 CMT, decision of 1 July 2006 in case AEM2005/1454, Resolución por la que se aprueba la definición del mercado de acesso mayorista de banda ancha, el análisis del mismo, la designación de operadores con poder significativo de mercado y la imposición de obligaciones específicas, y se acuerda su notificación a la Comisión Europea.

(723) Concerning the distinction between national wholesale access and regional wholesale access to this market, the Commission notes that NRAs in Member States where the broadband market has a similar structure (existence of wholesale access at local, regional and national level), in particular ARCEP in France[756] and OFTEL (now OFCOM) in the UK[757]) have also concluded that there is lack of substitutability between regional wholesale access and national wholesale access. Not only has the CMT always considered that regional wholesale access and local loop unbundling are not substitutable, but in its decision of 10 July 2003 the CMT also considered that regional wholesale access and national wholesale access were not substitutable[758]. In any event, the precise boundaries between the regional and national wholesale markets are not determinative because Telefónica is dominant in both of them and a margin squeeze has been identified in this decision in relation to both the regional and national wholesale access products. Therefore, it is reasonable to conclude that Telefónica could not be unaware of the appropriate market definition and cannot validly claim that it could not foresee that it would be found to hold a dominant position under a reasonable market definition.

(724) Secondly, it is also incorrect that Telefónica did not have sufficient room for manoeuvre to avoid the margin squeeze found in this case: as is established in section VI.G above, the prices of Telefónica's national wholesale products have never been regulated until December 2006. As to Telefónica's regional wholesale product (GigADSL), as explicitly confirmed by the CMT, sector specific regulation only imposed a maximum level on Telefónica's prices and allowed Telefónica to avoid the margin squeeze by decreasing the wholesale prices on its own initiative. It should be pointed out that Telefónica was also free to increase its retail prices at any time (Section VI.F.6).

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756 In July 2005, the Commission cleared a notification by the French regulator, ARCEP (previously ART) in which the latter defined a national wholesale market distinct from the regional wholesale market (FR/2005/0206).

757 In December 2003, the British regulator defined a wholesale market for broadband origination (which corresponds to regional wholesale access in the present case) and a wholesale market for broadband conveyance (which corresponds to national wholesale access in the present case). See OTFEL, Wholesale Broadband Access Market, Identification and analysis of markets, Determination of market power and Setting of SMP conditions, Explanatory Statement and Notification; 16 December 2003.

758 CMT, decisión of 10 July 2003 in case OM 2002/7330, Resolución sobre la comisión de practicas contrarias a la libre competencia por parte del Grupo Telefónica en la comercialización de servicios ADSL mayoristas.

(725) Thirdly, regarding Telefónica's argument that it could not have possibly foreseen that its practices, which were approved by the CMT, could have resulted in an infringement of European law, the Commission observes that, according to established case law, intention or negligence do not require the relevant undertaking to have been aware that it was infringing competition law[759]. For an infringement to be regarded as having been committed intentionally, it is not necessary for the undertaking to have been aware that it was infringing the prohibition laid down by the competition rules in the Treaty applicable to undertakings; it is sufficient that it could not have been unaware that the contested conduct had as its object or could have had as its effect the distortion of competition in the common market.[760] Therefore, the only relevant question is whether the intervention of the national regulatory authority could have led a sufficiently diligent undertaking to believe that the relationship between its wholesale and retail prices would, as a matter of fact, have not amounted to a margin squeeze (i.e. that Telefónica's retail prices could be replicated using Telefónica's wholesale products without making a loss).

(726) In this regard, it is recalled that the CMT has never assessed (*ex ante* or *ex post*) the existence of a margin squeeze in relation to Telefónica's national wholesale products (ADSL-IP and ADSL-IP Total) during the period under investigation. Telefónica's argument is, (cf. paragraph (725)) therefore , irrelevant for the margin squeeze identified between its national wholesale products and the retail level. It is moreover important to note that these national wholesale products were of a larger importance than the regional wholesale product over the whole period of infringement[761]

759 Cases 19/77 *Miller v. Commission*, [1978] ECR 131, at paragraph 18; 96/82 *IAZ v. Commission*, [1983] ECR 3368, at paragraphs 43-45; T-62/98, *Volkswagen v Commission*, [2000] ECR II-2707, at paragraph 334.

760 Case T-65/89, BPB Industries and British Gypsum v. Commission, [1993] ECR II-389, paragraph 165, and Case T-15/89, Chemie Linz, [1992] ECR II-1275, paragraph 350.

761 Telefónica's national wholesale products (ADSL-IP and ADSL-Ip total) represented […]% of Telefónica's wholesale products concerned by the decision (ADSL, ADSL-IP total and GigADSL) at the end of December 2001, […]% in June 2002, […]% in December 2002, […]% in December 2003, […]% in December 2004, […]% in December 2005 and […]% in June 2006. See Table 60 below.

(727) As to Telefónica's regional wholesale product (GigADSL), the CMT never assessed the existence of a margin squeeze between the latter and Telefónica's retail products on the basis of Telefónica's historical actual costs. In particular, CMT's interventions were not based on the accounting data known to Telefónica and which has been accessible to the Commission during the present investigation (see section VI.D.1.4 above and Table 59 below), such as Telefónica's scorecard for its broadband activity from January 2002 to June 2006[762], the Economics for Telefónica's ADSL retail activity from 2002 to 2006[763], the scorecard for Telefónica's network investments[764] and the business plans[765] dated 16 October 2001 and 18 April 2002, all of which are based on Telefónica's LRAIC[766]. The CMT only calculated maximum regional wholesale prices on the basis of forecasts made by Telefónica itself in response to a questionnaire sent by CMT on 19 October 2001. As explained in the CMT's retail minus model of March 2002[767], that cost information related to a network with a capacity of […] lines[768]. However, at that stage already it should have been clear to Telefónica that this forecast was unrealistic, since Telefónica's number of lines had already exceeded that volume in September 2001[768], and the company had already at that time estimates relating to a network with a capacity (at the level of the IP backbone) exceeding […] lines at the end of 2001 and […] lines at the end of 2005[768].

762 See section VI.D.1.1.2.3 above. The non network incremental costs were already available in the monthly scorecard (see footnote 385above) of January 2002 (see pages TFCA-9696 to TFCA-9698 of the file).

763 See section VI.D.1.1.2.2 above.

764 See section VI.D.1.1.2.4 above.

765 See section VI.D.1.1.1 above.

766 See section VI.D.1.1 above.

767 See ARCOME cost model referred to in paragraph 526 above.

768 See section VI.D.1.4.1 above.

(728) Furthermore, it must have been clear for Telefónica that the estimated costs indicated in CMT's cost models of 2002[769] and 2004[770] were significantly lower than the incremental costs indicated in the intial (16 October 2001) and updated (18 April 2002) business plans of the company[771] and that those business plans showed explicitly[772] that there was a margin squeeze between the regional wholesale and the retail prices of the company. Telefónica could not have been unaware that the non network costs used in the CMT retail minus had been estimated as a percentage of its revenues[773]. It should also have been clear for Telefónica, at least as early as April 2002[771], that the estimated network costs indicated in CMT's retail minus model of March 2002 were not being confirmed *ex post* and were significantly lower than the incremental costs that were effectively incurred[771]. It should have been clear for Telefonica that its monthly scorecards of February 2002, April 2002, December 2002, December 2003, March 2004 and December 2004 showed that the company was incurring downstream losses[774]. This is confirmed by the margin squeeze calculations made by the Commission in the present decision which show that Telefonica incurred downstream losses from September 2001 to December 2006[775]. This shows that Telefónica could not have been unaware that the estimations made ex-ante by the CMT were not confirmed in reality by market developments, which Telefonica was in a position to observe. It is therefore reasonable to conclude that a diligent economic operator, who is in possession of detailed information about its own actual cost and revenue data, must have realized that the actual data were quite different from the estimates used by the CMT during the relevant period.

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769 See ARCOME cost model referred to in paragraph 526 above.

770 See ELMCO cost model referred to in paragraph 526 above.

771 See section VI.D.1.4.2.2 above.

772 Business plan dated 16 October 2001: according to Telefonica's own calculations, the NPV over […] of a retail line was […] € while the NPV of a regional wholesale line was […] €. The NPV over […] of a retail line was […] € and the NPV of a regional wholesale line was […] €. See annex 10iii of the letter of Telefónica of 21.07.06 at page TFCA-4468 of the file. See also section VI.D.2.2.1 above.
Business plan dated 18 April 2002: according to Telefonica's own calculations, the NPV over […] of a retail line was […] while the NPV of a regional wholesale line was […]. See annex 11i of the letter of Telefónica of 21.07.06 at page TFCA-4502 of the file.

773 See section VI.D.1.4.2.3 above.

774 Monthly scorecards (see footnote 385above) of February 2002, April 2002 and December 2002: the spread between the retail and the regional wholesale prices is insufficient to cover the retail operating costs (on the basis ot the forecasts made by Telefónica or on the basis of the effectively incurred costs). See pages TFCA-9701, TFCA-9703, TFCA-9712; TFCA-9714, TFCA-9759 and TFCA-9761 of the file.
Monthly scorecards (see footnote 385above) of June 2003 and December 2003: the spread between the retail and the regional wholesale prices is insufficient to cover the incremental downstream costs, i.e. the operating costs plus the subscribers' acquisition costs (amortised over […] years) and the network CAPEX (amortized over […] years with a WACC of […]%). See pages TFCA-9804, TFCA-9806 to TFCA-9808, TFCA-9852 and TFCA-9854 to TFCA-9856 of the file.
Monthly scorecards (see footnote 385above) of March 2004 and December 2004: the spread between the retail and the regional wholesale prices is insufficient to cover the incremental downstream costs. See pages TFCA-12999 to TFCA-13000 and TFCA-13035 to TFCA-13037 of the file.

775 See section VI.D.2 above.

Table 59 – The evidence as to whether Telefonica could not have been unaware that the costs used in the CMT's retail minus model would and did not correspond to reality

ADSL-IP and ADSL-IP Total	**GigADSL**		
	Data used by CMT in its retail minus model	Information showing that Telefonica could not be unaware that the costs used in the CMT's retail minus model would and did not correspond to reality	Information showing that Telefonica could not be unaware that it was incurring downstream losses
No margin squeeze calculation	**CMT's model of March 2002** The lack of cost data is acknowledged by the CMT[768]. The network costs were estimated on the basis of Telefonica's estimations relating to a network of […] lines [768] in response to a questionnaire dated 19 October 2001. Adjustments were made without any precise information on Telefonica's network[768] and without any additional cost data from Telefonica[768]. The service costs were estimated as a percentage of Telefonica's revenues (not justified by any cost data)[773]. **CMT's model of March 2004** The lack of cost data is acknowledged by the CMT[768]. The network costs used in the model of 2002 were updated without additional cost data from Telefonica[768]. The service costs used in the model of 2002 were updated without any justification[773].	**Business plans** 16 October 2001: the size of the network is much higher than […] lines[768]. The forecasted network costs are much higher than those used by the CMT[771]. 18 April 2002: the historical network investments for 2001 are much higher than the cumulated investments for 2001-2002 used by the CMT[771]. The forecasted network costs for 2001-2002 are even higher[771]. **Monthly scorecard** February 2002: the network costs effectively incurred by Telefónica exceed significantly those used by the CMT in its retail minus model. [771] April & Dec 2002: idem[771] April & Dec 2004: idem[771] December 2004: idem[771] **Invesments scorecard** February 2002: the investments effectively incurred by Telefónica exceed significantly those used by the CMT in its retail minus model. [771]	**Business plans** 16 October 2001: a retail line generates (on an end-to-end basis) less value than a wholesale line[772]. The DCF calculation confirms the existence of a margin squeeze[775]. 18 April 2002: a retail line generates (on an end-to-end basis) less value than a wholesale line[772]. **Monthly scorecard** February 2002: the costs and revenues indicated in Telefónica's scorecard show the existence of a margin squeeze[774]. April & Dec 2002: idem[774]. June & Dec 2003: idem[774]. March & Dec 2004: idem[774].

(729) In view of the above, it is reasonable to conclude that Telefónica has acted intentionally. With regard to GigADSL, it must be concluded that, even under the favourable assumption that Telefónica could have believed at the outset that the CMT's model was based on realistic estimations, very soon it must have, or should have, realized that the actual cost data did not match these estimates. The Commission does not find that Telefónica submitted false information to the CMT (despite the mismatch between the information supplied and the data of its own business plan). However, Telefónica could not have been unaware of its own actual network capacity and its own actual cost and revenue data as they became available. It could not have been unaware of the limited and necessarily approximate information used by the CMT in its *ex ante* model, and should have been vigilant as to the evolution of actual data. Seen in the most favourable light for the company, any continued reliance of Telefónica on the accuracy of the CMT's estimates and calculations, despite the accumulation of actual data to the contrary, is –at the very least– seriously negligent behaviour.

(730) Therefore, in view of the fact that the CMT intervention concerned in particular only one of the products (which is moreover of a smaller importance over the whole period), and that it was based on *ex ante* estimations which, as Telefónica was in a position very soon –if not immediately– to realize, were not matched by the actual data in its possession, the CMT's intervention cannot provide a shield to Telefónica for its abusive margin squeeze. If at all relevant, this regulatory intervention in relation to the regional wholesale product (GigADSL) may justify the existence of a mitigating circumstance (see Section C below).

2 Telefónica's infringement is a clear-cut abuse for which there are precedents

(731) As described in section VI above, this decision is in line with the established case law of the European Courts and with the decisional practice of the Commission.

(732) Firstly, it was clear from the beginning of the infringement that wholesale broadband access (at regional and/or national level) should be seen as complementing (not substituting) unbundled access to the local loop. Not only has the CMT always considered that regional wholesale access and local loop unbundling are not substitutable, but in its decision of 10 July 2003 the CMT also considered that regional wholesale access and national wholesale access were not substitutable[776]. In any event, as explained, the precise boundaries between the regional and national wholesale markets are not determinative because Telefónica is dominant in both of them and a margin squeeze has been identified in relation to both the regional and national wholesale access products.

[776] CMT, decisión of 10 July 2003 in case OM 2002/7330, Resolución sobre la comisión de practicas contrarias a la libre competencia por parte del Grupo Telefónica en la comercialización de servicios ADSL mayoristas.

(733) Secondly, the four pillars of the methodology used by the Commission ("equally efficient operator" test, use of the LRAIC, the 'period-by-period' approach and the no mixing across upstream markets) were already clear from past decisional practice of the Commission and the case law. Both the "equally efficient operator" principle, the LRAIC standard and the 'period-by-period' approach were used in *Napier Brown*[777]. From the judgment in *Industrie des Poudres Sphériques*, it is clear that the margin squeeze analysis could be done between one upstream product and one downstream product without taking into account any particular mix of upstream products[778]. Also, the methodology used in the present decision is not in contradiction with the methodology used by the CMT in 2001 in its ex ante retail-minus model: CMT's ex ante margin squeeze model is also based on the "equally efficient operator" principle, it also uses the LRAIC standard and the 'period-by-period' approach'. As explained above, the difference as to the finding of a margin squeeze between Telefónica's regional wholesale and retail prices is explained by the fact that the data used were different while the methodology was the same: the cost forecasts indicated in CMT's retail-minus model are significantly lower that the cost forecasts and the historical costs submitted by Telefónica to the Commission. In any event, even Telefónica's proposed methodology (the DCF method) yields a finding of a margin squeeze over the relevant time period.

777 See *Napier Brown- British Sugar* at paragraph 66 where the Commission referred to the dominant undertaking's failure to reflect its own costs of transforming the raw material into the derived product in the margin between the upstream and downstream price.

778 Industrie des Poudres Sphériques, paragraph 178

(734) Thirdly, the Commission cannot accept Telefónica's argument that this case would concern a novel application of a margin squeeze test in relation to an emerging market and an input which is not indispensable. Telefónica does not explain how the alleged lack of maturity of the Spanish broadband sector could possibily affect the finding of an abuse in the present case, namely, that Telefónic has abused its dominant position. Telefónica's downstream losses – which lasted from September 2001 to December 2006 – cannot be characterised as short term losses that would be inevitable in the context of an alleged emerging market, not least because the DCF methodology also yields a negative NPV over the relevant period. The mere fact that (i) Telefónica expected rapid achievement of profitability on an end-to-end basis in its initial business plan[779], (ii) that it did not rely on projected growth after February 2003[780] to achieve profitability on an end-to-end basis and (iii) that the company is indeed profitable on an end-to-end basis but would still make downstream losses in 2006 – i.e. more than five years after the launch of its first retail ADSL offer – if it had to pay the wholesale charges it has been imposing on its downstream competitors - is a strong indication that Telefónica's downstream losses cannot be explained by the lack of maturity of the Spanish retail broadband market[781]. In any event, the Spanish retail broadband market could under no circumstances be considered as an emerging one (see section VI.F.2.1 above) at the starting of the infringement. Telefónica's argument must also be rejected in so far as it misconstrues the *Oscar Bronner* judgment in interpreting the legal standard applicable to this case. Indenpendently of whether Telefónica's inputs are indispensable or not, it must be pointed out that the analysis of alternatives to local loop access in *Deutsche Telekom*[782] was carried out for the purposes of market definition and that, in *Napier Brown*, the Commission concluded to an abuse of a dominant position in the form of a margin squeeze while alternatives to the upstream product (beet sugar) provided by British Sugar, in the form of continental beet sugar[783] and (British) Tate&Lyle cane sugar were available [784].

779 The company estimated in its business plan that the break-even EBITDA and the break-even EBIT would be reached in 2002. See annex 10iii of the letter of Telefónica of 21.07.06: *Análisis de las variables económicas críticas del ADSL, Documento de trabajo, Resumen documento base*, slide 35 (page TFCA-4480 of the file).

780 The company estimated in its business plan that the break-even volume for end-to-end profitability was 1 million ADSL end users (see annex 11ii of the letter of Telefónica of 21.07.06*: La oportunidad de la Banda Ancha en las operadoras fijas*, slide 46 at page TFCA-4549 of the file), a volume that was reached in February 2003.

781 As already argued in footnote 301 above, the fact that, in the present case, the break-even volume of Telefónica's end-to-end profitability was achieved in […] does not justify the downstream losses incurred by the company before that date.

782 See paragraphs 83-91 of the decision.

783 *Napier Brown*, paragraphs 23 and 44.

784 *Napier Brown*, paragraphs 50, 51.

(735) In any event, the *Deutsche Telekom* decision constitutes a clear precedent for this case, clarifying in particular the conditions of application of Article 82 EC to an economic activity subject to sector-specific *ex ante* reg ulation. The fact that the *Deutsche Telekom* decision is currently under appeal does not mean that the margin squeeze methodology applied in that decision can be ignored. Nor does it mean that the abuse in question cannot be clear-cut. The analysis applied in the present decision has precedents in the case-law of the European Courts and in Commission decisions prior to *Deutsche Telekom*. Furthermore, the *Deutsche Telekom* decision which was publicly available as of October 2003, should have been sufficient to put the company on notice that the type of behaviour it has engaged into constituted, in the Commission's view, a clear-cut abuse of a dominant position under Article 82 EC.

(736) In the light of the above, Telefónica's arguments that the infringement would be neither clear-cut nor based on established analysis cannot be accepted. The Commission concludes that, at the very least since October 2003, Telefónica's behaviour amounts to a clear-cut abuse of a dominant position.

B. The basic amount of the fine

(737) The basic amount of the fine is determined according to the gravity and duration of the infringement[785]. In doing so, the Commission is entitled to set the fines at a level sufficient to sanction the abuse and ensure deterrence.

1 Gravity of the infringement

(738) In assessing the gravity of the infringement, consideration must be given to the nature of the infringement, its actual impact on the market (where it can be measured) and the size of the relevant geographic market.[786]

1.1 Nature of the infringements

(739) The abuse committed by Telefónica consists in the imposition of unfair prices in the form of a margin squeeze to the detriment of Telefónica's competitors and, ultimately, consumers.

(740) As established in section A.1 above, Telefónica's infringement is not novel but, to the contrary, is a clear cut abuse for which there are precedents. In particular, after the *Deutsche Telekom* decision (published in October 2003) the conditions of application of Article 82 EC to an economic activity subject to sector specific ex ante regulation were to a large extent clarified and known to Telefónica.

(741) It has also been established in this decision that Telefónica holds a dominant position and even a monopoly position (100% market share) in the market for the provision of wholesale broadband access at regional level, which is a necessary input for alternative operators to be active at downstream and upstream level.

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785 Articles 15 (2) of Regulation No 17 and 23 (3) of Regulation (EC) No 1/2003.

786 Guidelines on the method of setting fines imposed pursuant to Article 15(2) of Regulation N° 17 and Article 65(5) of the ECSC Treaty. OJ 98/C 9/03 of 14.01.98.

(742) Thus, Telefónica's abuse constitutes a clear-cut abuse by an undertaking holding a virtual monopoly. Such abuse is capable of being qualified as a very serious infringement under the Commission guidelines on fines applicable at the relevant period of time.

(743) As the Commission indicated in *Deutsche Telekom*, the type of abuse committed by Telefónica jeopardises the objective of achieving EU-wide establishment of an internal market for telecommunications networks and services with undistorted competition, and can certainly be ranked as a very serious infringement.[787]

(744) In *Deutsche Telekom*, the Commission nevertheless did not qualify Deutsche Telekom's abuse as a very serious infringement for the following reasons: firstly, the method applied in that decision to establish the margin squeeze had not previously been the subject of a formal Commission decision. Secondly, through tariff adjustment at retail and wholesale level, Deutsche Telekom had steadily reduced the margin squeeze since at least 1999. Furtheremore, from 2002, Deutsche Telekom's only legal means for reducing the margin squeeze had been limited to increases in the T-DSL charges (i.e. only one retail product, namely broadband retail access).

(745) None of those reasons apply in the present case.

(746) As already indicated above (see paragraph (733)), the margin squeeze methodology used in the present decision is based on methodologies used in previous occasions by the Commission. In addition, the margin squeeze is also established with the methodology proposed by Telefónica itself.

(747) Contrary to the behaviour of Deutsche Telekom, Telefónica has not adjusted its retail or wholesale tariffs with a view to reducing (or eliminating) the identified margin squeeze. In fact, the abuse ended with the intervention of the Spanish regulator in December 2006, which reduced the wholesale prices between a range of 22% to 61% (depending on the speed of the offer).

(748) Yet, Telefónica had large room for manoeuvre to avoid the identified margin squeezes (between the national wholesale and the retail level on one hand and between the regional wholesale and the retail level on the other hand) by just reducing its wholesale prices. It is recalled that the national wholesale prices have never bee n regulated until December 2006, and the regional wholesale prices were only subject to a maximum level . The room for manoeuvre left by regulation to Telefónica was therefore much wider than that in *Deutsche Telekom*: Deutsche Telekom's wholesale prices were set at cost oriented level and therefore could not be reduced. Most of the retail prices were regulated by means of a prica cap formula. In January 2002, Deutsche Telekom's room for manoeuvre was limited to one out of three retail prices. Consequently, none of the circumstances of the regulatory environment which constrained Deutsche Telekom’s room for manoeuvre were applicable in Telefónica’s case.

[787] See *Deutsche Telekom*, paragraph 203-204.

(749) The Commission reiterates that the clear-cut nature of the abuse should have been known to Telefonica throughout the relevant period and, in any event, at least since October 2003. Furthermore, Telefónica failed to adjust its prices despite the accumulation of historical data pointing to the continued existence of a margin squeeze.

(750) In conclusion, taking into account the Commission's Guidelines on fines and the relevant case law, the Commission concludes that, in the specific circumstances of the present case, the overall gravity of the infringement should be considered to be very serious. But the Commission will take also due account of all the factors explained above when setting the basic amount of the fine.

1.2 Impact on the market

(751) In determining the gravity of the infringement, the Commission has taken into consideration the fact that the relevant markets in this Decision are markets of considerable economic importance and which play a crucial role in the creation of the Information Society. Broadband connections are a prerequisite for the provision of a variety of telecommunications services to end-users.

(752) Telefónica's argument that its conduct has not had any anticompetitive effects in the relevant markets cannot be accepted. Telefónica's margin squeeze has had exclusionary effects on the Spanish retail broadband market since 2001. As explained in Section VI.E, Telefónica's conduct has constrained the ability of ADSL operators to grow sustainably in the retail market and appears to be an important factor that led to Spanish retail prices being among the highest in Europe, at least 20% above the EU average[788]. None of the demand or supply factors in Spain presented by Telefónica can adequately explain the high level of Spain's retail prices. Telefónica's conduct has led to significant consumer harm, given that, over time, it came to affect several millions of Spanish end-users (see section VI.E.2.2 on consumer harm).

(753) In conclusion, the Commission considers that the impact of Telefónica's abuse on the retail market has been significant.

1.3 Size of the relevant geographic market

(754) The market for the provision of wholesale and retail broadband services is the territory of Spain. Telefónica argues that an infringement of Article 82 EC limited to one single Member State cannot be considered very serious. As a matter of law, this is incorrect. To the contrary, it is clear that the assessment of the gravity of an infringement has to be determined in the light of all the circumstances of the case. In its practice, the Commission takes into account the size of the relevant geographic market together with all other relevant factors and circumstances, and assesses them in combination.

[788] See section VI.E.2.2 above.

(755) The Spanish broadband market is the fifth largest national broadband market in the European Union[789] and has significant growth potential since the broadband penetration rate is lower than the EU-average[790]. Furthermore, in the telecommunications sector, margin squeeze cases are necessarily limited to one Member State (the geographic scope of the incumbent's network) but prevent new entrants from other Member States from entering a fast growing market. In so doing, as indicated above, they jeopardise the objective of establishing an a EU-wide internal market for telecommunications networks and services and run counter to the very objective of the liberalisation process started in 1998.

1.4 Conclusion

(756) In view of all the factors considered above the infringement must overall be qualified as very serious, although it may have not been necessarily of uniform gravity throughout the period. Therefore, the initial amount of the fine takes into account the fact that the gravity of Telefónica's abuse became in any event clearer in particular after the *Deutsche Telekom* decision.

(757) The initial amount of the fine to be imposed on Telefónica to reflect the gravity of the infringement should be, in the light of the specific circumstances of this case, 90 000 000 euros.

(758) When calculating the initial amount of the fine, account should be taken of the necessity of setting the fine at a level that ensures that it also has a sufficient deterrent effect. In order to do so, it is necessary to determine whether any upward adjustment of the initial amount is necessary. Given Telefónica's significant economic capacity[791], in order to ensure a sufficient deterrent effect on Telefónica, the initial amount should be adjusted upwards by a factor of 1.25 to 112 500 000 euros.

2 Duration

(759) Telefónica's abusive conduct started in September 2001 and ceased after the CMT adopted, on 21 December 2006, provisional measures leading to substantial reductions of the prices of the regional and national wholesale products respectively (see Section IV.D.2.4 above). With these wholesale prices there is no longer a margin squeeze in relation to these product markets. The overall duration of the abuse is therefore five years and four months, which is considered as an abuse of long-duration[792].

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789 See annex 2 of the European Commission's 12nd Implementation Report (page 62) available at : http://preprod.europa.infso.cec.eu.int/information_society/policy/ecomm/doc/implementation_enforcement/annualreports/12threport/sec_2007_403_annex2.pdf

790 See section VI.E.2.2.2 above.

791 Telefónica is currently the largest telecommunications incumbent in Europe in terms of market capitalisation (see Telefónica's Annual Report for 2006 at page 22). Telefónica's resources and profits are also significant. Telefónica's Securities and Exchange Commission filing for the fiscal year 2006 reveals that it possessed a cash (and short term investment) reserve of 5 472 million euros on 31 December 2006. As regards profits, this SEC filing indicates that in the fiscal year 2006, Telefónica earned profits of 6 579 million euros on revenues of 52 901 million euros.

792 Guidelines on the method of setting fines imponed pursuant to Article 15 (2) of Regulation No 17 and Article 65 (5) of the ECSC Treaty; OJ [1998] C9/03.

(760) Consequently, the amount of the fine to be imposed on the basis of the gravity of the infringement should be increased by 50% to take account of its duration. In applying this increase on account of the duration of the infringement, the Commission does not take into consideration the gravity of the infringement over time, which has already been considered in setting the initial amount.

(761) In light of the above, the basic amount of the fine is 168 750 000 euros.

C. Mitigating circumstances

(762) In its *Reply*, Telefónica argued that the novelty of the present case constitutes a mitigating circumstance and should be taken into account when determining the amount of the fine.

(763) As discussed above (see section A), this decision is not based on novel elements. As already mentioned above, the *Deutsche Telekom* decision should have clarified for Telefónica, if there were any doubts, the conditions of application of Article 82 EC to an economic activity which is subject to sector-specific *ex ante* regulation. Therefore, the Commission does not recognise a mitigating circumstance in this respect.

(764) As also discussed above (see section A.1), Telefónica acted intentionally or at least negligently.

(765) However, on the basis of all the evidence available, the Commission considers that the existence of certain mitigating circumstances can be recognised in this specific case, taking the view most favourable to the company (see recitals (727) to (729) above). The Commission guidelines on fines foresee that the basic amount will be reduced where the infringement is committed as a result of negligence or unintentionally. In the present case, this mitigating circumstance may apply, if at all, with respect to one of the products concerned by the infringement. In addition, Telefónica's negligence must have been extremely serious, given the wealth of data accumulated over time, consistently showing significant divergences between actual costs and the estimates used by the CMT in its *ex ante* analysis.

(766) Therefore, in the present case a 10 % reduction from the basic amount mentioned in paragraph (761) is to be made, which leads to the final amount of 151 875 000 euros.

(767) Lastly, Telefónica sought to rely on its effective cooperation in the course of these proceedings as mitigating circumstances. The Commission notes, however, that the company merely complied in a normal manner with its obligations under Regulation No 17 and Regulation 1/2003 with regard to the provision of information to the Commission therefore it does not raise to any mitigating circumstances.

D. Conclusion

(768) In the light of the above considerations, it is appropriate to set the amount of the fine at 151 875 000 euros in respect of Telefónica.

HAS ADOPTED THIS DECISION:

Article 1

Telefónica S.A. and Telefónica de España S.A.U. have infringed Article 82 of the EC Treaty by applying unfair tariffs in the form of disproportion between its wholesale and retail broadband access prices from September 2001 to December 2006.

Article 2

For the infringement referred to in Article 1, a fine of 151 875 000 euros is imposed on Telefónica S.A. and Telefónica de España S.A.U., jointly and severally liable.

Within three months of the notification of this decision, the fine shall be paid in euro into Bank Account N° 375-1017300-43 of the European Commission with ING, Agence Bruxelles-Européenne, RP Schuman, B-1040 Bruxelles (IBAN Code: BE66 3751 0173 0043; SWIFT Code: BBRUBEBB).

After expiry of that period, interest shall automatically be payable at the interest rate applied by the European Central Bank to its main refinancing operations on the first day of the month in which this decision was adopted, plus 3.5 percentage points.

Article 3

This decision is addressed to Telefónica S.A. (C/ Gran Vía 28, 28013 Madrid, Spain) and Telefónica de España S.A.U. (C/ Gran Vía 28, 28013 Madrid, Spain),

This decision shall be enforceable pursuant to Article 256 of the Treaty.

Done at Brussels, […]

For the Commission
[…]
Member of the Commission

X. ANNEXES

A. The retail broadband mass market

Table 60 - Size of the relevant retail market

Thousand end-users	Dec 01	June 02	Dec 02	Dec 03	Sept 04	Dec 04	June 05	Dec 05	June 06	Dec 06
Telefónica's retail ADSL lines[793]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Telefónica's wholesale ADSL lines[794]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
ADSL-IP and ADSL IP total	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
GigADSL	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Shared access	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
ADSL full unbundled lines[795]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL ADSL segment	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Retail cable-modem lines[796]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL Relevant retail market	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

793 Until June 2006: see *ADSL scorecard* (see footnote 385 above) for TESAU and the letter of Telefónica of 28.07.06 (pages TFCA-4656 and TFCA-4657 of the file) for TERRA. December 2006: see Telefónica January-December 2006 Trimestral Results (page 20).

794 See the letter of Telefónica of 28.07.06 (pages TFCA-4653 to TFCA-4660 of the file) and CMT monthly report of December 2006 (page 9).

795 Auna (now Ono)'s full unbundled lines that are not commercialised in the relevant retail market are excluded. See the letter of Auna of 08.04.05 (page ISP-339 of the file) and of 04.07.05 (page ISP-357 of the file). See also Ono's 'Q4 and full year 2006 results' (page 18).

796 CMT annual reports for 2002 (page 378), 2003 (page 360), 2004 (page 397), 2005 (page 367) and annex ('stadísticas del sector') of the CMT trimestrial reports of September 2005, (page 31) and December 2006 (page 41).

B. Telefónica's costs

1 TESAU and TERRA's retail volumes

Table 61 – TESAU: Average number of subscribers and new subscribers

	2001	2002	2003	2004	2005	S1 2006
Thousand end-users [797]	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Básica[798]	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Class[798]	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Avanzada[798]	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Premium[798]	[…]	[…]	[…]	[…]	[…]	[…]

Table 62 – TESAU: number of new acquired subscribers

Until 30.04.02	2001	2002
	total	until April
Thousand end-users[799]	[…]	[…]
Modalidad Básica[798]	[…]	[…]
Kit ADSL[798]	[…]	[…]
Modalidad Class[798]	[…]	[…]
Modalidad Premium[798]	[…]	[…]

From 01.05.02	2002		2003	2004			2005	S1 2006
	from May	total	total	until May	from June	total	total	total
Thousand end-users[799]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Línea RDSI[798]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

[797] See *ADSL scorecard* (see footnote 385 above) for the monthly evolution of TESAU's number of end users. The average number of subscribers in the year is the mean of the number of subscribers in each month (estimated as the semi sum of the number of subscribers at the beginning and the end of the month) of the year (following Telefónica's comments in its Reply, see page 328).

[798] See the letter of TESAU of 17.03.05 (pages TFCA-1103 to TFCA-1114 of the file), the letter of TESAU of 18.07.05 (pages TFCA-3243 to TFCA-3248 of the file) and annex 1a of the letter of Telefónica of 21.07.06 (pages TFCA-4233 to TFCA-4244 of the file).

[799] See *ADSL scorecard* (see footnote 385 above). The lines transferred from TDATA to TESAU in December 2001 are excluded.

Table 63 TESAU: Reserved bandwidth per retail ADSL line[800]

Kbps / line	2001	2002	2003	2004	2005	S1 2006
TOTAL ADSL minorista	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Básica	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Class	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Avanzada	[…]	[…]	[…]	[…]	[…]	[…]
Modalidad Premium	[…]	[…]	[…]	[…]	[…]	[…]

2 IP backbone costs

Table 64 – IP backbone - Amortization of the CAPEX

		2001	2002	2003	2004	2005	S1 2006
Investments[801]	Million €	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (5 years)[802]		[…]	[…]	[…]	[…]	[…]	[…]
of 2001 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 CAPEX	Million €	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	Million €	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	€/user/month	[…]	[…]	[…]	[…]	[…]	[…]
Average nb. of users[803]	thousand	[…]	[…]	[…]	[…]	[…]	[…]

800 The average reserved bandwidth is calculated on the basis of the average number of lines of each GigADSL modality (see Table 61). The reserved bandwidth for the four respective modalities is:
– Before duplication of speeds in September 2004: 12.8 – 51.2 – 102.4 – 204.8;
– After duplication of speeds in September 2004 and before duplication of speeds in July 2005: 25.6 – 102.4 – 204.8 – 409.6;
– After duplication of speeds in July 2005: 50.0 – 204.8 – 409.6 – 711.25.

801 See the letter of Telefónica of 17.10.06 (page TFCA-13127 of the file).

802 Assuming that the CAPEX of year N were incurred in the middle of the year, 10% of them are allocated to year N, 20% to year N+1, 20% to year N+2, 20% to year N+3, 20% to year N+4 and 10% to year N+5.

803 Average number of TESAU's IP backbone users as calculated by Telefónica itself. See the letter of Telefónica of 21.08.06 (page TFCA-8949 of the file) and the letter of Telefónica of 17 October 2006 (see page TFCA-13120 of the file).

Table 65 – IP backbone - Cost of capital

		2001	2002	2003	2004	2005	S1 2006
Valor neto contable[804]	Million €	[…]	[…]	[…]	[…]	[…]	[…]
Cost of capital[805]	Million €	[…]	[…]	[…]	[…]	[…]	[…]
	€/user/month	[…]	[…]	[…]	[…]	[…]	[…]
Average nb. of users[803]	thousand	[…]	[…]	[…]	[…]	[…]	[…]

3 Subscribers' acquisition costs

Table 66 – Amortization of TESAU's subscribers' acquisition costs (3 years)

		2001	2002	2003	2004	2005	S1 2006
Expenditure [806]	Million €	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (3 years) [807]		[…]	[…]	[…]	[…]	[…]	[…]
of 2001 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 SAC	Million €	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	Million €	[…]	[…]	[…]	[…]	[…]	[…]
TOTAL	€/user/month	[…]	[…]	[…]	[…]	[…]	[…]

804 Cumulated CAPEX – Cumulated Amortization.

805 See paragraph (447) above.

806 Unit value × number of new acquired subscribers (see Table 29 and Table 62 above).

807 Assuming that the SAC of year N were incurred in the middle of the year, 16% of them are allocated to year N, 33% to year N+1, 33% to year N+2 and 16% to year N+3.

C. Calculation of the terminal value in the DCF analysis

1 The backward DCF model

Table 67 – Calculation of the residual value (Network CAPEX)

Million €	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Investment[808]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (5 years)[802]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2001 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Residual Value	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

808 See unit CAPEX (€/new subscriber) and the number of new subscribers in Table 44 above.

Table 68 – Calculation of the residual value (Net Subscribers' acquisition costs)

Million €	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Expenditure[809]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (3 years) [807]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2001 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 SAC	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]
Residual Value	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

809 See unit net SAC (€/new subscriber) and the number of new subscribers in Table 50 above.

Table 69 – Telefónica's expected profits (on the basis of ADSL-IP) during 2007-2011 generated by the subscribers acquired during 2001-2006[810]

Million euros	2006	2007	2008	2009	2010	2011
Revenues[811]		[…]	[…]	[…]	[…]	[…]
Wholesale charges		[…]	[…]	[…]	[…]	[…]
Incremental costs		[…]	[…]	[…]	[…]	[…]
Network costs (OPEX)[816]		[…]	[…]	[…]	[…]	[…]
ISP recurrent costs[816]		[…]	[…]	[…]	[…]	[…]
Net Acquisition costs		[…]	[…]	[…]	[…]	[…]
EBIT[812]		[…]	[…]	[…]	[…]	[…]
Income taxes		[…]	[…]	[…]	[…]	[…]
Net cash flow		[…]	[…]	[…]	[…]	[…]
NPV (excl. residual value)	[…]					
Average no. of users ('000)	[…]	[…]	[…]	[…]	[…]	[…]
No. of users end of year ('000)[813]	[…]	[…]	[…]	[…]	[…]	[…]
New acquired users ('000)[814]	[…]	[…]	[…]	[…]	[…]	[…]

[810] This calculation is similar to that in Telefónica's initial business plan where the company made a DCF calculation over 2002-2011 that takes into account the profits generated in 2006-2011 by the subscribers that are acquired before 2006 but excludes the profits generated by the subscribers acquired after 2006 (See the letter of Telefónica of of 27.09.06 at page TFCA-12988 of the file.

[811] Unit value × average number of end users × 12 (the unit value is indicated in Table 41 above).

[812] Revenues – Network costs (OPEX) – ISP recurrent costs – Net acquisition costs – Amortization.

[813] The number of end users decreases over time because (i) subscribers acquired after 2006 are excluded and (ii) subscribers acquired before 2006 progressively churn (as in 2006, 25% of the subscribers at the beginning of the year left during that year).

[814] The cash flows generated by the subscribers acquired after 2006 is excluded.

Table 70 – Telefónica's expected profits (on the basis of GigADSL) during 2007-2011 generated by the subscribers acquired during 2001-2006[815]

Million euros	2006	2007	2008	2009	2010	2011
Revenues[816]		[…]	[…]	[…]	[…]	[…]
Wholesale charges		[…]	[…]	[…]	[…]	[…]
Incremental costs		[…]	[…]	[…]	[…]	[…]
Network costs (CAPEX)		[…]	[…]	[…]	[…]	[…]
Network costs (OPEX)[816]		[…]	[…]	[…]	[…]	[…]
ISP recurrent costs[816]		[…]	[…]	[…]	[…]	[…]
Net Acquisition costs		[…]	[…]	[…]	[…]	[…]
Amortization of Network CAPEX[817]		[…]	[…]	[…]	[…]	[…]
EBIT[818]		[…]	[…]	[…]	[…]	[…]
Income taxes		[…]	[…]	[…]	[…]	[…]
Net cash flow		[…]	[…]	[…]	[…]	[…]
NPV (excl. residual value)	[…]					
Average no. of users ('000)	[…]	[…]	[…]	[…]	[…]	[…]
No. of users end of year ('000)[819]	[…]	[…]	[…]	[…]	[…]	[…]
New acquired users ('000)[820]	[…]	[…]	[…]	[…]	[…]	[…]

815 This calculation is similar to that in Telefónica's initial business plan where the company made a DCF calculation over 2002-2011 that takes into account the profits generated in 2006-2011 by the subscribers that are acquired before 2006 but excludes the profits generated by the subscribers acquired after 2006 (See the letter of Telefónica of of 27.09.06 at page TFCA-12988 of the file.

816 Unit value × average number of end users × 12 (the unit value is indicated in Table 44 above).

817 See Table 67 above.

818 Revenues – Network costs (OPEX) – ISP recurrent costs – Net acquisition costs – Amortization.

819 The number of end users decreases over time because (i) subscribers acquired after 2006 are excluded and (ii) subscribers acquired before 2006 churn progressively (as in 2006, 25% of the subscribers at the beginning of the year churn during that year).

820 The cash flows generated by the subscribers acquired after 2006 is excluded.

2 The foreward DCF model

Table 71 – Calculation of the residual value (Network CAPEX)

Million €	2001	2002	2003	2004	2005	2006
Investment[821]	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (5 years) [802]	[…]	[…]	[…]	[…]	[…]	[…]
of 2001 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 CAPEX	[…]	[…]	[…]	[…]	[…]	[…]
Residual Value	[…]	[…]	[…]	[…]	[…]	[…]

Table 72 – Calculation of the residual value (Net Subscribers' acquisition costs)

Million €	2001	2002	2003	2004	2005	2006
Expenditure[822]	[…]	[…]	[…]	[…]	[…]	[…]
Amortization (3 years) [807]	[…]	[…]	[…]	[…]	[…]	[…]
of 2001 SAC	[…]	[…]	[…]	[…]	[…]	[…]
of 2002 SAC	[…]	[…]	[…]	[…]	[…]	[…]
of 2003 SAC	[…]	[…]	[…]	[…]	[…]	[…]
of 2004 SAC	[…]	[…]	[…]	[…]	[…]	[…]
of 2005 SAC	[…]	[…]	[…]	[…]	[…]	[…]
of 2006 SAC	[…]	[…]	[…]	[…]	[…]	[…]
Residual Value	[…]	[…]	[…]	[…]	[…]	[…]

821 See unit CAPEX (€/new subscriber) and the number of new subscribers in Table 50 above.

822 See unit net SAC (€/new subscriber) and the number of new subscribers in Table 50 above.

D. Telefónica's subscribers' average lifetime

(769) Telefónica estimates[823] its average subscribers' lifetime as follows:

$$\begin{cases} \text{Lifetime} = \dfrac{1}{\text{churn}} \\ \text{where churn is the average churn rate during the year:} \\ \text{churn}_{m} = \dfrac{\text{Churners during month m}}{\text{Subscribers in month m}} \end{cases}$$

(770) Based on this formula, TESAU's subscribers' average lifetime is given in the following table:

Table 73 Calculation of TESAU's churn based on the company's formula[824]

[…]

[823] Letter of TESAU of 26.03.04 (see page TFCA-680 of the file).

[824] The volumes are directly extracted from Telefónica's ADSL scorecard (see footnote 385 above).

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