

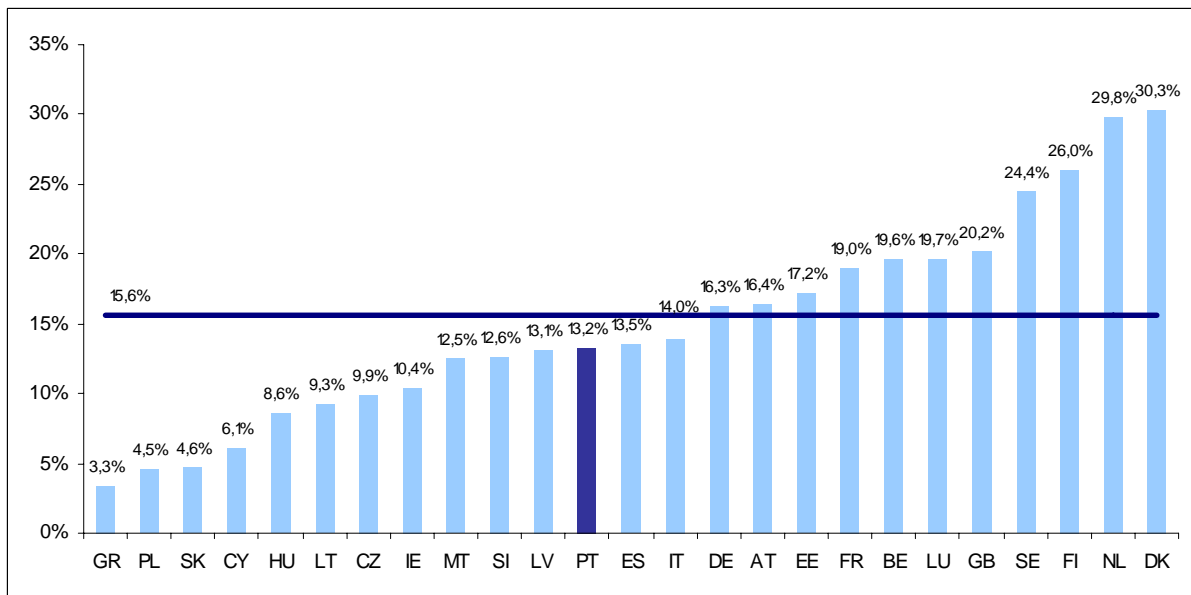
Determination of 4.4.2007

PUBLIC CONSULTATION ON WHOLESALE NAKED DIGITAL SUBSCRIBER LINE (NAKED DSL)

1. INTRODUCTION

Portugal ranks fifteenth in terms of broadband penetration, in the context of the European Union (see Picture 1), ahead of some countries of the pre-adhesion period (such as Greece and Ireland) but remaining behind some countries who have recently joined the European Union (such as Estonia). Portugal's broadband penetration level is 2.4 percentage points below the European Union average, and stands far from the penetration level of best-placed countries (like Denmark and the Netherlands). Notwithstanding, Portugal's position, in the context of the European Union, must be cautiously assessed, taking into account the social and economic environment.

Picture 1. Comparison of the penetration rate of (fixed) broadband access in the EU – 3T2006



Source: ECTA Scorecard 3T06, ICP-ANACOM

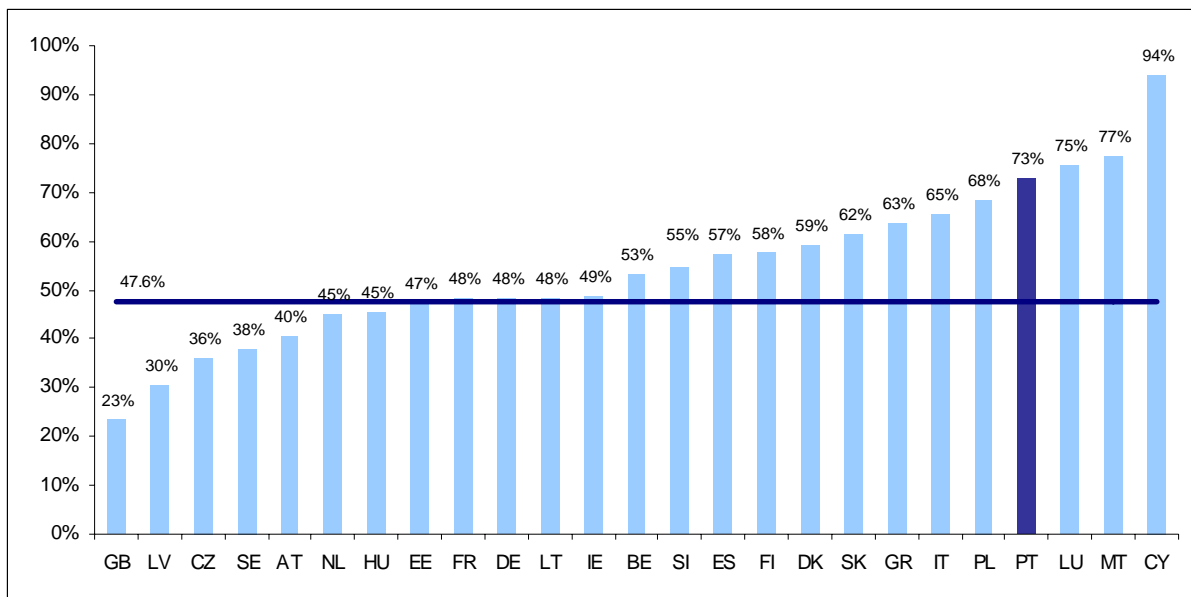
Initially, the development of broadband in Portugal was mainly supported on cable distribution networks which, as widely known, are not associated to wholesale offers, and thus have a very limited effect as far as competition is concerned.

The imposition of wholesale offers on companies of the PT Group and the increase of the efficiency of such offers – a result of monitoring action and determinations issued by ICP-ANACOM – contributed significantly towards the increase of broadband penetration in Portugal. In particular, attention should be drawn to the provision by the PT Group of the Reference Unbundling Offer (RUO) and the “PT ADSL Network” wholesale offer.

The action pursued by other bodies has also contributed towards the development of broadband in the least-favoured regions (for example, projects on community networks).

These offers have also contributed towards the increase of competition in the provision of broadband Internet access services, although the PT Group holds a high market share, namely in the context of the European Union (see Picture 2).

Picture 2. Comparison of incumbent operator market share in terms of (fixed) broadband access in the EU – 3T2006



Source: ECTA Scorecard 3T06, ICP-ANACOM

The inclusion of broadband in the range of services provided by mobile operators – both in a fixed and mobile perspective– will increasingly contribute towards the development of broadband penetration in Portugal.

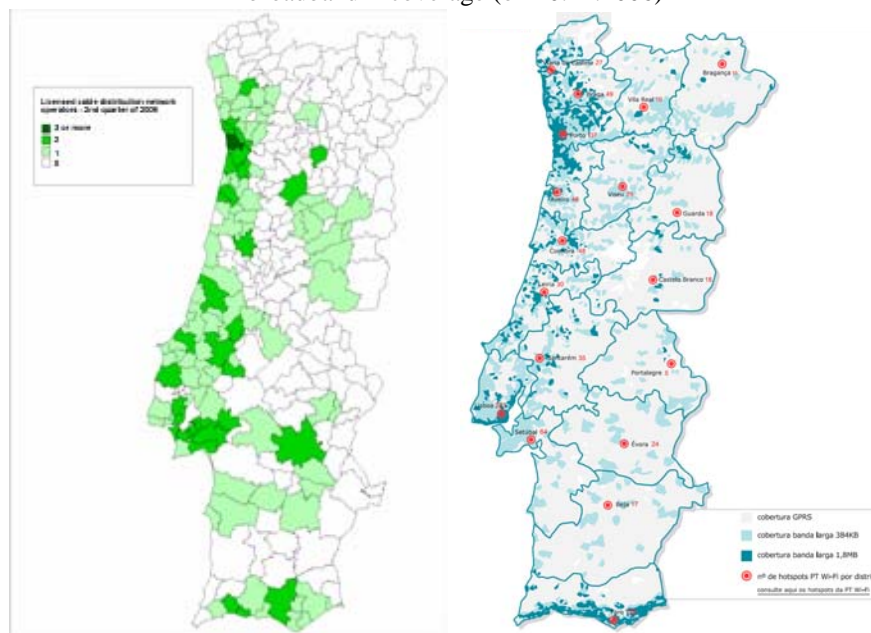
From the assessment of the broadband market in Portugal results an evident double asymmetry in the market:

- (a) the level of competition in the provision of broadband retail services, mainly by operators of cable distribution networks, mobile network (or FWA networks¹) operators and operators and service providers (OSP) who support their broadband services on PTC's wholesale services², is more intense in more densely populated areas;
- (b) Mobile operators benefit from access to wholesale offers imposed on the PT Group, although they are not bound to any access obligations which could enable the access of third parties to their networks, thus promoting a higher level of competition in the retail broadband service market.

This document aims to contribute towards the discussion of measures that are likely to decrease the asymmetry identified above in (a), as the second asymmetry must be analysed in the scope of the assessment of market 15, which shall determine whether there are grounds for imposing conditions of access on mobile operators.

Regional asymmetry occurs mainly between coastlines between Lisbon and Oporto and the Algarve (where there are alternative infrastructures to the copper infrastructure of the Universal Service provider: cable infrastructure, infrastructure owned by mobile operators and also unbundled infrastructure in the scope of the RUO) and the remaining regions of the country. This is illustrated in Pictures 3 and 4.

Picture 3. Coverage of cable distribution networks operators per municipality (2nd quarter of 2006) and “tmn broadband”³ coverage (on 20.12.2006)



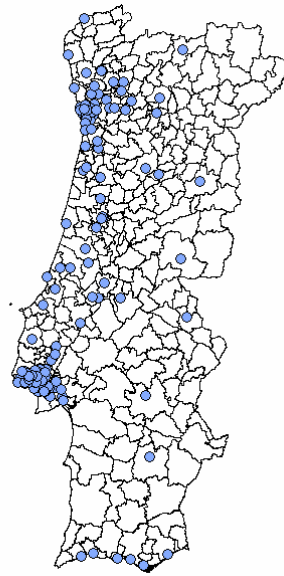
Licensed cable distribution network operators; 2nd quarter of 2006; 3 or more

¹ FWA – Fixed Wireless Access.

² In several countries, more than 50% of broadband connections are provided through wholesale offers of the incumbent operator – “Competition and the role of wholesale as fixed broadband goes mainstream” – OVUM 15.08.2006.

³ Only TMN's coverage is presented as publicly available data on broadband coverage for other operators may not be expediently presented in graphic form.

Picture 4. Location of exchanges where OSP are offered LLU (end of 2006)



This fact, together with the interdependence of the current wholesale offers provided by PTC (RUO and “PT ADSL Network”), explains the above-mentioned asymmetry, taking into consideration that:

- through the “PT ADSL Network” offer, an OSP may provide broadband services to an end-user who enjoys, and maintains, the fixed telephone service (FTS) provided by PTC. Together with the subscriber line resale offer (SLRO), the “PT ADSL Network” allows the OSP to be the sole operator providing the end-user with two services. Thus, broadband services supported on the “PT ADSL Network” offer are currently aimed only at users who wish to enjoy broadband as well as to maintain the FTS.
- through the local loop unbundling offer (LLU), OSP may provide access to broadband Internet, without the end-user being required to engage narrowband services (or vice-versa). Notwithstanding, taking into account the 191 exchanges owned by PTC where OSP are co-installed, the LLU potentially covers only 50% of telephone accesses and offers in the market comprise both types of services, although monthly charges are integrated.

For example, an end user who wishes only to have access to broadband Internet (and not to the FTS) shall pay on a monthly basis⁴:

- €19.95, where he/she resides in a geographic area with LLU coverage; or
- €35.27 euros, where he/she does not reside in a geographic area with LLU coverage (€19.95 for broadband access plus FTS monthly charge of €15.32).

⁴ Data based on a 512Kbps offer disclosed by an OSP (figures include VAT at the statutory rate in force and exclude any extra service or traffic).

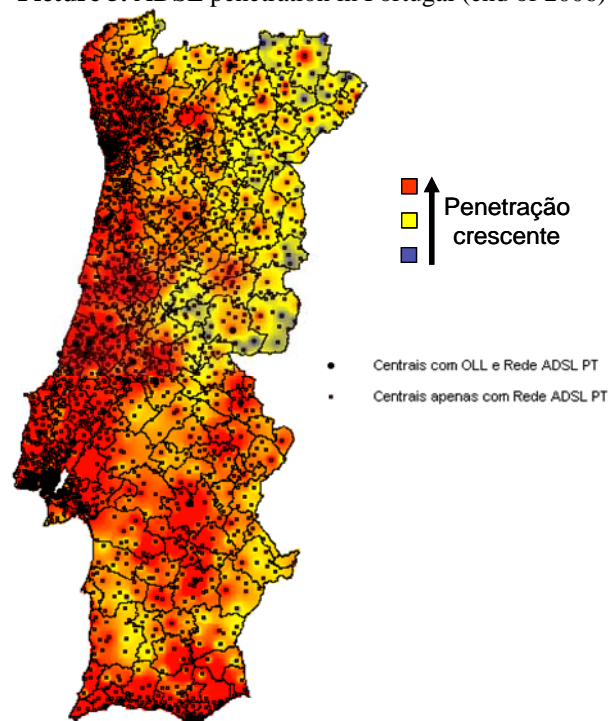
This means that an end-user who wishes only to have access to broadband Internet, and who resides in a geographic area that only allows him/her to resort to this service supported in the “PT ADSL Network” wholesale offer, is subject to a significantly higher cost than if he/she lived in a different geographic area (with LLU coverage). This situation arises from the fact that, if the end-user wishes to be provided with broadband access, he/she is compelled to engage PTC’s FTS.

On the other hand, broadband access offers over cable distribution networks, which allow overcoming the FTS monthly payment, are limited to coastlines between Lisbon and Oporto and the Algarve.

This situation is made worse by the fact that these users reside in geographic areas where average per capita income is usually below national average, which could affect the adoption of broadband services, in the same way as other relevant factors attached to the demand of these services (for example, the level of literacy and digital culture⁵ or social and demographic factors).

Picture 5 shows broadband penetration using ADSL service throughout national territory, and a very particular contrast can be drawn between the level of penetration in coastlines and the interior of the country. In case other technologies were considered – for example, cable modem (see Picture 3) – geographic asymmetries would be even more meaningful.

Picture 5. ADSL penetration in Portugal (end of 2006)

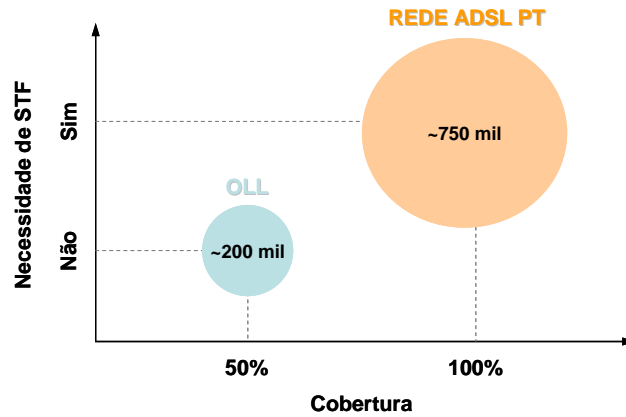


Increasing penetration; Exchanges with LLU and PT ADSL Network; Exchanges using PT ADSL Network only.

⁵ Including owning a computer. For example, according to the study “How skilled are Europeans in using computers and the Internet”, by Eurostat, in 2005, 53% of Portuguese individuals aged 16-74 had never used a computer – the average of EU25 is 34%.

In Portugal, the LLU has stimulated in recent years the development of the broadband market, not only as regards the number of accesses but especially the introduction of innovative offers (for example, the recent IP-TV⁶ offer). The number of ADSL accesses⁶ supported in this offer has reached around 200 thousand by the end of 2006, which represents an increase by 174% relatively to the end of 2005. These accesses represent around 20% of total ADSL accesses. Figure 6 presents some data on the “PT ADSL Network” offer and LLU.

Figure 6. “PT ADSL Network” offer and LLU by the end of 2006.



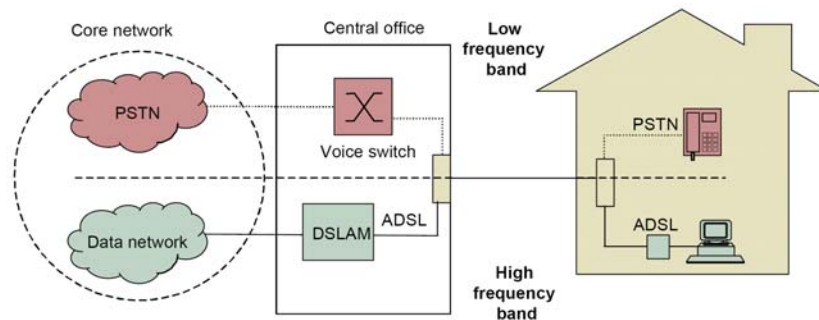
FTS need; No Yes; Coverage; PT ADSL Network; 750 thousand; 200 thousand; Coverage

⁶ Includes SDSL accesses for the provision of leased lines and accesses for the provision of narrowband services (FTS).

2. CONCEPT OF “NAKED DSL”

The naked DSL (NDSL) is a wholesale offer that enables the provision of an ADSL service to the end-user, who is not required by the operator holding the local loop to engage (or maintain) a fixed telephone service (FTS) (this corresponds to the upper part of Picture 7).

Picture 7. Services provided by a local access operator



Source: OVUM

As referred above in the preceding section, OSP may currently provide broadband Internet access services, without the end-user being required to engage PTC's FTS:

- (a) by investing in its own network; and/or
- (b) resorting to the LLU.

As ICP-ANACOM has stated elsewhere, namely in the scope of market assessments, the investment in an own network is a lengthy process, requires obtaining significant capital and is not always a cost-effective solution. At the level of LLU also, the necessary investment may not be cost-efficient for all PTC's exchange areas, namely areas where there are few customers.

The NDSL concept is thus generally associated to the so-called “bitstream” offers, which in Portugal correspond to the “PT ADSL Network” wholesale offer. Some countries are of the opinion that the NDSL concept may also be extended to situations in which the OSP engages a shared access and the end-user does not engage the FTS. However, in Portugal, the concept of NDSL provision on shared access is deemed artificial: in fact, when a customer with broadband access supported on a shared access terminates the incumbent operator's FTS, the shared access turns into full access⁷ (and naturally, the monthly charge is the full access one, as in situations of shared access, network costs are exclusively recovered by the FTS provider at retail level). That is, shared access corresponds to full access when the end-user terminates PTC's FTS.

⁷ When the OSP has previously informed PTC that the FTS subscriber wishes to alter the shared access modality to the full access one.

The NDSL could be provided in combination with the SLRO. In this case, the OSP could provide the end-user with a service which did not include retail FTS; however, this service could also be deemed artificial, and the FTS would in fact be provided by PTC, and the OSP would continue to bear the SLRO resale costs.

It is thus considered that the NDSL wholesale offer should be strictly supported on the current “PT ADSL Network” offer, without the engagement of PTC’s telephone line, that is, without FTS start-up. In this case, the price defined at wholesale level should enable the recovery of specific access line costs, as these costs would cease being recovered by the operator holding the access line through the FTS monthly charge.

- Q1. In your opinion, are current offers, namely the ones supported on alternative infrastructures to PTC’s network and wholesale offers (RUO and “PT ADSL Network” offer in combination with SLRO), appropriate and sufficient to promote competition in broadband Internet access and to safeguard the interests of end-users, as regards quality and price?
- Q2. Do you agree with the idea that the NDSL is meaningful only in the scope of the “PT ADSL Network” offer?

3. THE IMPORTANCE OF THE NAKED DSL

The NDSL may contribute towards:

- (a) the reduction of total costs incurred by end users to access broadband Internet access services;
- (b) info-inclusion and social welfare;
- (c) increase of competition;
- (d) winning back, attracting or maintaining customers with a potential interest in broadband Internet services, but whose level of consumption does not justify the installation of a fixed line and the corresponding cost (thus choosing only mobile services);
- (e) innovation by promoting conditions that favour fixed and mobile communications packages (increasing the potential of MVNO market at national level) and triple or quadruple play,

which shall ultimately contribute towards the promotion of penetration of broadband Internet access services in Portugal.

Nevertheless, these aspects should be assessed taking into consideration the need to maintain the universal service provision, namely as regards the appropriate remuneration of associated investments.

In addition to the above as regards costs borne by end-users in areas where there is no effective competition, there are some studies that refer the price of the broadband Internet access service as one of the reasons that force some individuals not to adopt this service. Thus:

- 9,7% of the respondents consider the price of the service to be the main reason not to have Internet access at home⁸ - consequently, measures that lead to the reduction of total costs borne by users in the access to the service may result in the increase of broadband penetration;
- 27,6% of respondents stated that one of the main reasons not to migrate from the narrowband Internet access service to broadband Internet access service is the high price of the latter⁸;
- 30% of respondents who do not have FTS stated that one of the main reasons not to have fixed line at home is the high price of the monthly line resale⁹ - it should be

⁸ Results of the "Survey on the Use of Broadband", conducted by ANACOM and Metris GFK on December 2006, available at <http://www.anacom.pt/template12.jsp?categoryId=231582>.

⁹ Results of the "E-Communications Household Survey", conducted by Eurobarometer, for the period between December 2005 and January 2006. Aggregated results for the European Union.

stressed that the provision of a telephone line is currently an essential condition for users in areas not covered by other types of access to enjoy Internet access through ADSL.

According to studies carried out by ICP-ANACOM, the incremental price of the broadband access service (that is, disregarding the FTS monthly charge or the price for the television service in cable distribution networks) is, in Portugal, generally below the average of Member States of the European Union¹⁰.

Furthermore:

- Portugal is among the Member States with the lowest FTS household penetration, with 54% - EU25 average is 78%⁹, which indicates, relatively to the penetration of the mobile service, that a high rate of households have only engaged this service;
- 48% of Portuguese respondents who have narrowband Internet connection in their households would change to a broadband Internet access if they were not required to pay the FTS monthly charge⁹.

According also to the “E-Communications Household Survey”, conducted by Eurobarometer, at European level, 47% of households without any FTS have never had a fixed line and 12% had given up their line in the twelve months prior to the survey. These facts may lead to the conclusion that, namely for recently built households, there may be alternative solutions to the FTS that render it unessential, yet require the installation of the copper pair in the household of the user, namely if the latter wishes only to have broadband access. In this context, it should be stressed that Portugal was, by the end of 2004, one of the few EU25 countries where mobile network traffic was higher the fixed network traffic (outranked by Lithuania and Slovakia only)¹¹.

A service such as the NDSL may thus be also provided to users of copper pair access for broadband access even if they do not wish to use the FTS.

It is incumbent upon ANACOM to protect interests of citizens and to ensure, namely, that users derive maximum benefit as regards choice, price, and quality.

In this context, it is clear that measures that promote the reduction of total costs borne by the end user in the scope of broadband internet access, such as NDSL, shall affect the penetration of this service, contributing towards the development of the market, social inclusion and welfare, and allowing people who wish to enjoy broadband internet access services, but who choose not to, as they are not interested in FTS and/or are not willing to pay the monthly charge for that service in areas not covered by the local loop unbundling, to do so.

¹⁰ Survey concerning November 2006, available at <http://www.anacom.pt/template12.jsp?categoryId=233043>.

¹¹ See, for example, the 2005 regulation report, available at <http://www.anacom.pt/template12.jsp?categoryId=200103>.

There are other services available which may be enhanced by the NDSL, such as the Voice over Internet Protocol (VoIP). In this regard, according to the “Survey on the Use of Broadband”, conducted by ANACOM and Metris GFK on December 2006, 15.3% of respondents who have broadband Internet access use the Internet to make voice calls using the computer.

- Q3. Do you think the FTS monthly charge could be a limiting factor as far as the subscription of broadband Internet access service is concerned?
- Q4. Do you think that the NDSL could contribute to decrease costs incurred by end-users in subscribing broadband Internet access services and thus to promote the penetration of these services, especially in least-favoured geographical areas?
- Q5. With the development of NDSL offers, which are in your opinion the likely impacts on FTS?

4. NAKED DSL IN THE EUROPEAN UNION

According to available information¹², several State Members already use the NDSL, following regulatory intervention or the initiative of incumbent operators.

Table 1 identifies Member States where the NDSL is already available or where action has been taken to implement this service, following a brief presentation of the situation in each Member State.

Table 1. NDSL in Member States.

AT	BE	DK	FI	FR	DE	GR	IE	IT	LU	NL	ES	SE	GB
✓	✓	✓		✓			✓	✓		✓		✓	✓

AT In the scope of the assessment of market 12¹³, the national regulatory authority (NRA) imposed on Telekom Austria the obligation to publish a reference offer that included the NDSL in IP and ATM aggregation, at national and regional level. Monthly charges are €40.40 and €43.21, respectively, for regional and national access.

BE Following the assessment of M12, the NDSL was included as an obligation for access incumbent on Belgacom, at the same price as the full access plus the specific bitstream access charge.

DK Following the assessment of M12, the NDSL was included as an obligation for access incumbent on TDC, with an additional monthly charge of €4.3, which corresponds to the difference between the full access monthly charge (€8.6) and the shared access monthly charge (€4.3).

FR France Telecom presented a proposal in order to provide the NDSL as Universal Service Provider. The NRA accepted, and recommended that the service was launched after the SLRO was made available. The installation price is €66 and monthly charge is €21.50.

DE On 12.02.2007, the EC terminated the proceedings on the investigation of the assessment of market 12 submitted by BNetzA¹⁴. In its comments, the EC requested the NRA to impose an obligation of NDSL access in the scope of bitstream access, as this would stimulate competition in retail services and the creation of a level playing field since end-users would not need to have a separate FTS contract.

IE The NRA decided, in the scope of the assessment of M12, that Eircom should negotiate where OSPs requested the NDSL.

¹² This section is based on data of the report “Cross-Country analysis” by Cullen International, of 08/12/2006.

¹³ Market for wholesale broadband access, according to Commission recommendation of 11.02.2003, on relevant markets (2003/311/EC).

¹⁴ Decision available at

<http://forum.europa.eu.int/Public/irc/infso/ecctf/library?l=/germany/registeredsnotifications/de20070576/de-2007-576-enpdf/ EN 1.0 &a=d>.

- IT** Telecom Italia (TI) provides, since July 2005, the NDSL at an additional monthly charge of €10.73. In the scope of the assessment of M12, the NRA confirmed the obligation on TI to provide the NDSL at an additional price based on TI' FTS retail monthly charge, deducted of avoidable commercial costs when marketing the line at wholesale level (estimated at 30%).
- NL** KN provides NDSL at an additional monthly charge of €7.68.
- ES** CMT took the view that there was no reason to force Telefónica to provide NDSL, as OSPs were able to provide broadband retail services by means of the LLU, without the end-user having to engage Telefónica's FTS.
- SE** Following the assessment of markets 1¹⁵, 2¹⁶ and 12, PTS decided to establish on TeliaSonera the obligation to provide retail and wholesale broadband access, regardless of whether or not the end-customer has subscribed FTS.
- GB** Openreach launched a public consultation on a wholesale access product which may support the provision of NDSL. Prior to the launch of this consultation, Ofcom decided not to impose any obligation for the provision of NDSL, as in its opinion (i) any cost savings resulting from the NDSL would not be significant, (ii) unlike other countries where the NDSL was introduced, in the United Kingdom the SLRO has been made available, and its price is lower than the retail product, thus OSP are able to eliminate the contractual relationship between BT and the end-customer and (iii) OSP may use the LLU to develop retail products such as the NDSL.

¹⁵ Market for access to the public telephone network at a fixed location for residential customers, according to Commission Recommendation of 11.02.2003 on relevant markets (2003/311/EC).

¹⁶ Market for access to the public telephone network at a fixed location for non-residential customers, according to Commission Recommendation of 11.02.2003 on relevant markets (2003/311/EC).

5. IMPOSITION OF A NAKED ADSL OFFER

It results from the previous section that in most countries where the regulator imposed the NDSL, this obligation was defined in the scope of the assessment of the wholesale broadband access market.

According to the regulatory framework in force, it is incumbent on the NRA to determine whether or not a relevant market is effectively competitive, within the scope of market analysis, with a view to impose, maintain, amend or withdraw obligations on companies with SMP in that market¹⁷.

Imposed obligations¹⁸:

- must be appropriate with regard to the identified problem, proportional and justified in the light of the basic objectives laid down in article 5 of Law no. 5/2004;
- must be objectively justified as regards networks, services or infrastructure they concern;
- must not give rise to an undue discrimination concerning any other entity;
- must be transparent in regard to its purposes.

Regulatory objectives ultimately incumbent on ICP-ANACOM are to promote competition in the provision of electronic communications networks and services and associated facilities and services, to contribute towards the development of the internal market of the European Union and to promote the interests of citizens¹⁹. Namely, it is incumbent upon ICP-ANACOM to ensure that users derive maximum benefit in terms of choice, price, and quality, to ensure that there is no distortion or restriction of competition in the electronic communications sector and to encourage efficient investment in infrastructure, and to promote innovation.

According to articles 67 to 72 and 74 to 76 of Law no. 5/2004, obligations likely to be imposed on companies holding SMP in the scope of identified markets are as follows:

- (a) Obligation of transparency in relation to the publication of information, including reference offers;
- (b) Obligation of non-discrimination, in relation to access and interconnection provision and respective information provision;

¹⁷ Law no. 5/2004, article 59, paragraph 2.

¹⁸ Law no. 5/2004, article 55, paragraph 3.

¹⁹ Law no. 5/2004, article 5.

- (c) Obligation for accounting separation in relation to specified activities related to access and/or interconnection;
- (d) Obligation to meet reasonable requests for access;
- (e) Obligation of price control and cost accounting.

An obligation to provide NDSL would aim to ensure that users derive maximum benefit in terms of choice, price, and quality – one of the regulation objectives which ICP-ANACOM must comply with – by enabling end-users to subscribe a broadband Internet access service without maintaining the FTS, representing an additional solution available to the customer and allowing the increase of the level of effective competition in the retail broadband Internet access market (especially outside urban areas and coastlines).

The imposition of a wholesale access obligation such as this one seems appropriate, on a preliminary analysis, with regard to the identified problem and is compatible with the regulatory framework in force, which favours the imposition of obligations at the level of associated wholesale markets, regulatory measures for retail markets being imposed only as a last resort²⁰. Account should be taken of the opinion of the EC on the assessment of market 12 in Germany.

It would also be proportional to impose a price control obligation which guaranteed that the incumbent operator recovered line costs which were recovered through the FTS monthly charge.

Q5. Do you agree that the imposition of NDSL should be considered in the scope of the assessment of the wholesale broadband access market? And do you agree with the preliminary arguments put forward by ICP-ANACOM stating that this obligation is adequate, justified and proportional?

As referred in the previous section, one of the obligations likely to be imposed on companies holding SMP is price control, which may be rendered concrete through the principle of cost-orientation of prices²¹.

Q6. Do you agree with the application of the principle of cost-orientation of prices to this service? Please justify your opinion.

²⁰ See Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector - Explanatory Memorandum, Section 4. It should be stressed that the European Commission is currently reviewing the recommendation on relevant markets, yet it is unlikely that the definition of wholesale broadband access market is significantly amended.

²¹ See Law no. 5/2004, article 74, paragraph 1.

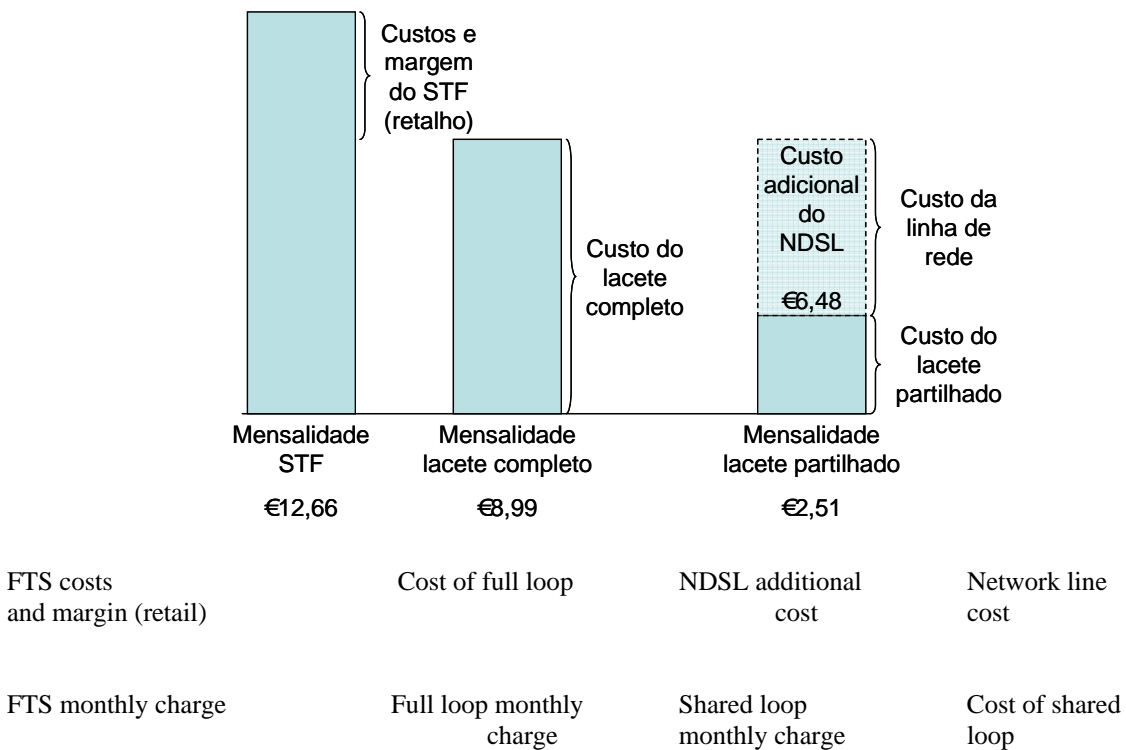
Maximum prices for local loop monthly charge were defined:

- (a) in the case of shared access, based on costs incurred with the provision of broadband services, on the assumption that network line costs are recovered by FTS at retail level;
- (b) in the case of full access, based on the retail FTS monthly charge, deducting avoidable activity or network element costs in the provision of the wholesale offer or adding costs incurred in activities or network elements.

When an end-user who engages shared access terminates PTC's FTS, and where the shared access turns into full access, the local loop monthly charge increases from €2.51 to €8.99. That is, the network line costs, which were recovered by the FTS in the case of the shared access, are assigned to the full access. That is, the network line costs correspond to the difference between the full access monthly charge and the shared access monthly charge (€6.48).

Picture 8 presents a diagram that illustrates the relation between FTS at retail level, full access, shared access and NDSL.

Picture 8. NDSL additional price



Source: ICP-ANACOM based on a study prepared by OVUM²²

The maximum price of local access with ATM aggregation, in the “PT ADSL Network”, was based on the shared access price, to which were added specific broadband offer costs, such as

²² “The impact of naked DSL: an analysis”.

internal connections, co-installation space and DSLAM. The network line cost was not considered, as it would be recovered by the FTS. The same situation occurs as regards the IP aggregation.

Thus, in the NDSL offer, to recover network line costs, the additional cost-orientated price (relatively to prices practised in the “PT ADSL Network” offer) should correspond to the above mentioned €6.48. This price also ensures a tariff consistency between prices of the different access modalities.

- Q7. Do you agree with the approach of ICP-ANACOM to estimate the price that should apply to the NDSL? In the negative, what alternative approach do you propose?
- Q8. At the price stated, and taking into account wholesale and retail offers currently available in the market, would you be interested in engaging the NDSL?

This view is in line with other NRAs who have set a similar price for this service, as well as with some consultants²³. It should be highlighted that this approach (difference between the full access and the shared access monthly charges) is meaningful when the shared access price does not include any components concerning the recovery of the network line costs, some Member States having decided to include in the price of the shared access a percentage of line costs (for example, 50% in Denmark).

²³ For example, in the perspective of OVUM, the wholesale cost of the copper line (which is the metallic pair without any connection to the public switched telephone network) should be the reference to any NDSL incremental price, that is, the additional price charged to recover line costs.

6. IMPLEMENTATION ON THE NAKED DSL

The wholesale provision of a NDSL service does not give rise to significant technical or operational issues (yet it is still necessary to adapt information systems). This service is intended to be provided together with the “PT ADSL Network” offer; however some internal procedures of PTC may have to be adapted, so as to simplify the process of subscription to the broadband access service (and not the FTS start-up for the access under consideration).

In this case, when a NDSL request is made, two different situations could generally take place:

- (a) the end user has concluded a FTS contract with PTC and a broadband internet access contract with an OSP, and wishes to terminate the FTS contract with PTC and maintain the broadband internet access service;
- (b) the end-user does not have a telephone line and wishes to be provided with a broadband internet access service, supplied by an OSP.

In the first case, procedures are the same as those currently in force, with the particularity that, at wholesale level, PTC maintains the service provided through the “PT ADSL Network” offer and terminates the FTS, accordingly updating the charges.

In the second case, which is likely more complex, PTC must provide specific forms at wholesale level, so as to install a line in the premises of the end-user, who is not required to conclude any type of contract with this company.

Notwithstanding the fact that this service is still at an embryonic stage, in some Member States the number of broadband accesses supported on this type of offer is relevant: around 73 thousand accesses in Belgium (on 01.07.2006²⁴) and around 190 thousand accesses in France (by the end of 2006²⁵). These numbers may indicate that there are no technical issues hindering the provision of this type of service.

- Q9. Which implementation issues do you foresee as regards the provision of the NDSL service? Do you think these issues may be easily overcome? Please justify.
- Q10. What sort of timescale would be necessary to render this service operational?
- Q11. Are there any reasons to apply different service supply time limits (for example, repairs, start-up) than those currently in force at the level of the “PT ADSL Network” service?
- Q12. Do you think there may be relevant technical issues with practical consequences at the level of the provision of this type of service? If so, please specify.

²⁴ Source: IRG.

²⁵ Source: ARCEP - <http://www.art-telecom.fr/index.php?id=34&L=1>.

7. IMPACT OF THE NAKED DSL IN THE MARKET

With a service supported on NDSL, and in case all cost savings were passed on by the OSP to the end-user, the latter would save around €7.5²⁶ every month, in case he does not wish to install the FTS.

On the side of OSPs, the existence of a wholesale NDSL offer increases choice and flexibility alternatives as regards the development of retail offers, and enables the expansion of broadband market (and probably of VoIP services) by attracting users who would not be otherwise interested in broadband Internet access services.

Depending on options taken by OSPs as regards the provision of broadband Internet access services, the issue of recovery of costs may arise when the FTS and xDSL are already provided by different companies and the end user decides to terminate the FTS. In this case, the end-user may fail to understand why the retail price of a broadband service provided by an OSP has increased after the FTS has been terminated.

By providing this type of retail product, PTC would cease to receive the FTS line monthly charge. However, regardless of whether the FTS is provided or not, there still are telephone line costs, which may be recovered by PTC at wholesale level. Thus, the wholesale monthly charge of the “PT ADSL Network” service received by PTC would include an amount that concerns the recovery of line costs which continue to be borne. In parallel, with the provision of this service, the end user establishes a relation solely with the OSP, and PTC ceases to have any billing costs (and respective revenues) or a relationship with the end-user.

Taking into consideration the variation of PTC revenues concerning the provision of this type of retail product, it may be concluded that:

- a “new” NDSL broadband access user, that is, a user who is not willing to pay the FTS subscription to have broadband access, would generate for PTC an additional revenue that exceeds €17 (this corresponds to the NDSL additional costs of €6.48, plus an average monthly charge above €10 for the “PT ADSL Network” local access);
- an FTS user who terminates this service and opts for NDSL broadband access would reduce PTC’s gains in €6.18 (which corresponds to the NDSL additional cost of €6.48 deducted of the FTS monthly charge of €12.66).

In the light of the above, it may be concluded that the revenues resulting from the engagement of a “new” NDSL broadband access user would be enough to compensate for the revenues lost for every three users²⁷ who terminate the FTS and opt for NDSL broadband access.

²⁶ Telephone line monthly charge of €12.66, deducted of €6.48, plus VAT.

²⁷ Estimated amount.

Overall, it is deemed that the NDSL implementation in Portugal is likely to bring about benefits to end users, who may subscribe broadband internet access services at lower costs, in case they do not wish to enjoy a fixed telephone service; to alternative operators, who are granted a new option as regards the provision of retail services; and possibly to PTC, who may expand the market and attract users and additional revenues.

Q13. What is your opinion as regards the overall impact of the NDSL implementation in Portugal as far as the electronic communications market is concerned?