

## Local Loop/Subloop Unbundling (Full/Shared) Wholesale - Market 11

### Market Description

The specific market refers to all copper local loops, which is the principal platform for the provision of access services in Greece (other physical media, such as wireless channel and optical fiber are rather limited). Hellenic Telecommunications Organization (OTE S.A.) is the unique provider of copper local loops in Greece. Unbundled access implies that a new provider may have access to the copper loops of certain end users. This access is achieved by the installation of equipment close to (or within) the OTE local exchange that serves the end users (collocation). The access may be full or shared.

Full unbundled access gives the ability to the alternative provider to have full control over the copper pair (OTE ceases to control the access line). Shared unbundled access allows the alternative provider to focus on the provision of high capacity services, while OTE continues to provide voice and other low capacity services through the lower spectrum.

Finally, it is worth noting that the unbundling of subloop is also feasible. Subloop is a fraction of the whole loop and refers to the part from the end user premises up to a cable concentration point prior to the OTE local exchange. The specific solution requires the collocation in the cable concentration point (outdoor cabinet) of OTE.

### Market Analysis Results – Regulatory Obligations

OTE has been appointed as telecommunications organization having Significant Market Power (SMP), based on the following criteria: Market share (it possesses 100%), barriers to entry to new players in the market, lack of counter-vailing buying power by the wholesale clients of OTE, anti-competitive practices history.

Consequently, EETT has imposed the following obligations on the provider being in significant market power status.

1. Access Obligation: The main services and facilities to which OTE is obliged to provide access are the following:
  - > Full and Shared unbundled access to metallic local loops and subloops.
  - > Collocation (physical, remote, virtual where feasible).
  - > Possibility of switching among the various access forms.
  - > Service Level Agreements (SLAs) on the aforementioned services.
2. Non-discrimination Obligation: Same terms in services/information, same quality of services to the alternative providers and the subsidiaries /associated companies of OTE.
3. Transparency Obligation
  - > Reference offer publication.
  - > Publication of specific information, e.g. KPIs, cost accounting information, technical specifications, network characteristics, terms and conditions on provision and use, eventual "Advanced SLAs" apart from "Basic SLA" that may be provided by OTE.
4. Price control and Cost accounting Obligation.
  - > Cost oriented prices for Local Loop Unbundling (LLU) based on specific methodology (LRIC-Long Run Incremental Cost).
  - > Basic LLU services based on "top-down" model.
  - > Related facilities (such as collocation) based on bottom-up methods.
  - > EETT may use its own bottom-up model (introducing to it criteria such as effectiveness, issues regarding economies of scale that may affect the costs etc.) in order to cross-check OTE's top-down model results. The results of EETT's bottom-up model shall be cross-checked with the results of the best practices. As a result of it, EETT may proceed to relevant modifications on the results of top-down model.

## Wholesale Broadband Access Market - Market 12

### Description of the Market

Retail broadband services in Greece are mainly provided over the local loops (twisted metallic pairs). Other physical means are also used but on a limited scale).

Till now, OTE provided the wholesale products ARYS and OKSYA/OKSYA II, which enable providers without owned facilities and infrastructure to provide retail customers with broadband Internet. According to the structure of the specific products, an Internet Service Provider (ISP) wishing to deploy its business activity in the sector, has the following two options (see Figure): (a) To be provided with the OKSYA product that concerns the connection of the broadband remote access server (BRAS) of OTE with its point of presence. (b) To be provided with both OKSYA and ARYS products. ARYS product pertains to the connection of the end client with the broadband remote access server (BRAS) of OTE. It should be noted that in the first model, the ARYS product must be acquired by the retail customer.

It has to be underlined that the specific products allow ISPs minimum possible technical differentiations, so as for them to be able to provide their end clients with different retail products. In a number of European countries there are various wholesale products allowing the interconnection of ISPs, at various points of the incumbent's network. The closest to the end client the ISP chooses to interconnect, the more possibilities it has to differentiate its retail products / services from the respective ones of the installed provider.

### Market Analysis Results – Regulatory Obligations

OTE's designation as the Telecommunication Organization having Significant Market Power (SMP), was based on the following criteria: Market share (it possesses



100%), barriers to entry and expansion of new players in the market, lack of counter-vailing buyer power on behalf of the wholesale clients of OTE.

EETT has imposed the following obligations on the provider with SMP in the specific market:

1. Access Obligation: The main services and facilities to which OTE should grant access are the following:
  - > Access type A – Current access offer.
  - > Access type B – Access to BBRAS.
  - > Possibility of migration from one access type to another.
  - > Conclusion of Service Level Agreements (SLAs) regarding the aforementioned services and facilities.
2. Obligation of Non Discrimination: OTE should sell wholesale inputs and related services to competing operators, according to the same terms and conditions it sells to its own retail operations, subsidiaries /affiliated companies.
  - > OTE shall provide sufficient wholesale products, which enable other Operators to offer all of OTE's retail offers.
3. Obligation of Transparency.
4. Price Control Obligation.
  - > Definition of the margin between the services of Wholesale Broadband Access (WBA) and the respective retail prices.
  - > Prevention of OTE's practices that could lead to a margin squeeze.
  - > Prevention of an extremely high level of prices by OTE. OTE shall be obliged to offer prices for the collocation services and for relevant facilities derived from the bottom up LRIC model.
  - > In case that OTE does not provide EETT with accurate costing data, EETT will be able to revert immediately to its own bottom-up costing model (using as inputs either parameters based on OTE data or market-based data).

## Mobile Call Termination on Individual Mobile Networks - Market 16

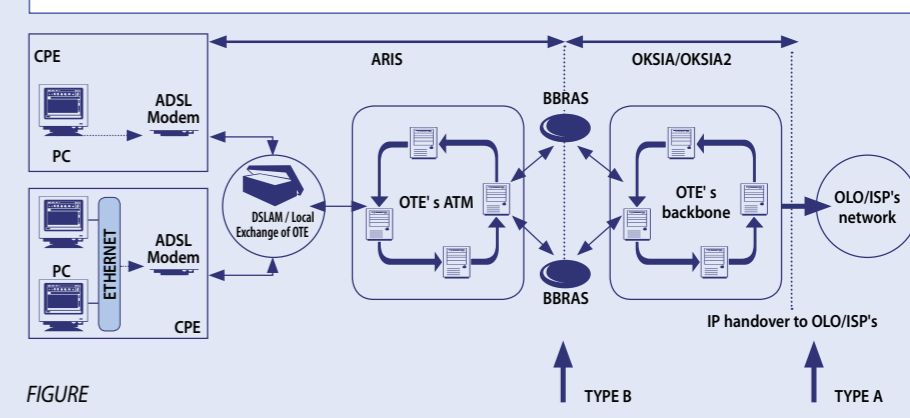
By a recent Decision, EETT has reached the conclusion that there is a distinct market of Mobile Call Termination on Individual Mobile Networks, the geographical amplitude of which is the Hellenic Territory. Moreover, EETT has appointed Vodafone-Panafon, Cosmote and the integrated economic entity TIM-Hellas/ Q-Telecom, as telecommunications organizations with Significant Market Power (SMP) in the specified relevant markets.

In this context, the EETT has suggested to impose on the aforementioned mobile network operators, the following regulatory obligations: 1) The obligation of access and of use of special network facilities. 2) The non discrimination obligation, completed by transparency obligations. 3) The obligation of transparency, including the obligation to publish a Reference Interconnection Offer (RIO) with the appropriate content. 4) The obligation of accounting separation for the activities of the Mobile Network Operators with Significant Market Power in the mobile termination market. 5) The obligation of price control.

Pertaining to the obligation of price control, EETT has specified the obligation for each operator with SMP in the relevant markets to reduce the termination rates (effective rates), following a progressive course i.e.a glide path). For each and every provider a target price (C) has been defined. The said price corresponds to the cost of each operator for terminating calls to its network. The target price has been defined by the use of a long run incremental cost model ("LRIC") based on a bottom up calculation. The progressive reduction will last ten months, starting from 01-08-2006 and it will comprise of two periods, of five (5) months each. After the lapse of glide path (that is after 01-06-2007) and

until a new analysis of the level of competition in the market of mobile call termination on individual mobile networks, is conducted by EETT, each Mobile Network Operator, having been found to hold SMP in the relevant wholesale market of mobile call termination on its network, shall continue to have cost oriented termination rates.

Note that, according to the requirements of the new regulatory framework, EETT conducted a first national public consultation pertaining to the definition of the Market of Mobile Call Termination and the analysis of the level of competition in the said market. The consultation lasted from 3-9-2003 until 3-10-2003. Moreover, EETT held a second national public consultation pertaining to the proposed obligations in the market of termination of calls to mobile networks. The consultation lasted from 11-2-2004 until 18-3-2004. After having collected the comments of the participants in the above consultations, the EETT provided analytical responses on the main points of their remarks. Taking into account the provisions of the new regulatory framework on the Electronic Communications, the EETT notified to the European Commission and the other National Regulatory Authorities (NRAs) the Draft Measure. The Draft Measure was notified for the first time to the European Commission on 1-7-2004. EETT after taking into serious consideration the comments and the remarks of the European Commission, submitted the modified Draft Measure into public consultation, the Draft Measure was re-notified to the European Commission on 14-4-2005. EETT following the transfer of the European regulatory framework into Greek Law that was completed on 3-2-2006, notified the modified Draft Measure on 8-5-2006.



FIGURE