

## CYPRUS

### MAIN MARKET DEVELOPMENTS

The total revenue generated by the Cypriot electronic communications sector in 2009 was €609 million, which was an increase of 5.18% in comparison to the revenue generated during the preceding year. The fixed sector's revenues amounted to €130million, while the mobile market's revenue totalled €279million. Overall investments in the electronic communications sector totalled €113 million, of which €35 million were made by the incumbent in the fixed telephony network, €18 million by alternative operators, and €16 million by mobile operators. The investment over revenue ratio in the Cypriot telecom sector for 2008 was 18.6%.

As of July 2010, 4.81% of the Cypriot population had availed of bundled services offered by four operators (3.4% in December 2008). Market offerings include double-play (fixed voice-broadband access) and triple play (fixed voice- broadband access- IPTV). Mobile bundled products are still not available in the market.

Strong network investment activity by the operators, coupled with the government's intention to develop broadband, as outlined in its draft digital strategy, are expected to enhance the development of the broadband market in Cyprus. Mobile broadband penetration is still the lowest in the EU.

### MAIN REGULATORY DEVELOPMENTS

Within the framework of the Digital Agenda for Europe (DAE), a first draft of the digital strategy for Cyprus was subjected to internal consultation in September 2010, while an Advisory Committee, appointed by the Council of Ministers, is expected to examine the final draft before adoption. The strategy consists of twenty four strategic actions aiming at driving Cyprus into the digital era by empowering human capital, promoting the use of ICT in the public sector and local administration, and promoting green culture and cultural heritage of Cyprus.

The national broadband strategy, which forms part of this digital strategy for Cyprus, sets out broadband targets as outlined in the DAE. The Digital Agenda's internet access targets of at least 2 Mbps for all by 2013 is expected to be achieved by the market (the incumbent's current network expansion of broadband infrastructure is expected to cover the whole of Cyprus by end of 2011). As a means of facilitating further broadband access to internet with technologies other than copper at speeds of more than 2Mbps for all citizens by 2013, the government intends to set geographical coverage and quality of service requirements in the forthcoming spectrum auctions. The targets set for achieving internet access of a speed of more than 30Mbps by 2020 are expected to be met with the deployment of broadband access networks making use of fibre optics and other technologies (ex. wireless), and with the licensing of more spectrum for electronic communication services.

Progress was made during 2010 with the long-awaited auction of the fixed wireless access licence. The licensing of the mobile bands 800, 900, 1800, and 2100 MHz is also under consideration. The auction of the fixed wireless access licence coupled with the introduction of an MVNO access offer by the incumbent should allow the development of alternative access networks in Cyprus. At the same time, the authorisation of two digital terrestrial TV networks (DVB-T) has been completed, with Cyprus set to move to full digital broadcasting on 1 July 2011.

On 17 January 2011, the national regulatory authority, το Γραφείο Επιτρόπου Ρυθμίσεως Ηλεκτρονικών Επικοινωνιών και Ταχυδρομείων (the Office of the Commissioner for Electronic Communications and Postal Regulation 'OCECPR') submitted to a public consultation a comprehensive set of draft legislative amendments aimed at transposing the telecom reform package of 25 November 2010. The amended legislation is to be submitted to the House of Representatives during the first quarter of 2011, and its adoption was intended prior to the parliamentary elections in May 2011.

## **NRA**

The OCECPR and the Department of Electronic Communications (DEC) of the Ministry of Communications and Works have defined responsibilities for the electronic communications sector in Cyprus. The national law on electronic communications guarantees the financial and operational autonomy for the OCECPR. The presentation of the OCECPR's budget provides specific classification of items and amounts allocated to this body. To that end, any potential disapproval on the part of the Cypriot Council of Ministers and/or Parliament of the regulator's budget would relate to a specific item, and not to its totality.

In response to the concerns of market operator's regarding OCECPR's handling of dispute resolution proceedings between operators and consumer complaints (the concerns related to the perceived understaffing of this body), OCECPR launched two public consultations at the end of 2010 on the latter issue in an attempt to set clearer procedures and to enhance transparency concerning consumers' information.

While market operators in general considered that the national regulators were successful in carrying out their tasks during the reporting year, they also pointed to delays in decision making, such as the auctioning of the fixed wireless access license (pending since 2006). Concerns were also raised about the overall strategy pursued by the DEC vis-à-vis the electronic communications sector (e.g. the licensing of a third and four mobile operator, the auctioning of the FWA licence, while MVNO access obligations were imposed by the NRA following respective market analysis) and about the lack of a comprehensive government policy regarding the implementation of the DAE targets.

## **ECONOMIC REGULATION**

### **Broadband**

#### *Broadband plans*

As part of the national broadband strategy work was completed on the national project which envisioned the establishment of satellite services to provide basic Internet connectivity of 1 Mbps for every 5 users to areas in Cyprus where broadband services were not available ('white areas' – 151 rural communities).

A second project foresaw the deployment of a fibre optic infrastructure in the same rural communities, grouped in five geographical clusters. The project envisaged the creation of a passive and active open access backhaul infrastructure with the installation of optical fibre from the existing fixed network to each of these communities to provide broadband services to all relevant communities. However, in June 2010, the incumbent operator announced its intention to expand its broadband infrastructure and install ADSL equipment in all of these

communities by the end of 2011. After consulting the Commission services and given that the said areas could no longer be considered 'white areas', the DEC currently considers other measures to fulfil the overall objectives of the project.

Strong investment activity was also noted during 2010. In this regard, the incumbent continued upgrading its copper network with a view to provide services through VDSL2 on a nationwide basis, which is expected to be finalised by the beginning of 2011. The incumbent proceeded with its NGA plans, and initiated a pilot project based on an FTTH GPON architecture in two small areas in the capital of Cyprus. An alternative fixed operator is currently developing its own FTTH network, yet claiming technical difficulties as to its deployment plans relating to access to buildings, in-building wiring, insufficient capacity and high costs for access to the incumbent's ducts. Other alternative fixed operators have deployed networks in urban areas within a limited geographical range. While a cable operator has expanded its hybrid fibre coaxial network (DOCSIS 3.0), another operator has invested in the fibre network (mainly fibre to the home with backhaul capacity in the inter-city). The second mobile operator has also upgraded its 3G network, reaching population coverage of 82.37%.

### *Market situation*

The fixed broadband penetration in Cyprus continued to increase reaching 24.4% in January 2011 (compared to 22.2% in January 2010) and improving its ranking amongst the EU countries (12<sup>th</sup> out of 27 MS) in population penetration. This figure places Cyprus just behind the EU average of 26.5%. The total number of retail broadband lines reached 194 445 in January 2011, and increased by 10.5% over a year. The number of broadband lines using DSL technology is far greater than the number of lines using any other available access technology (91% of broadband lines were DSL lines in January 2011 compared to 94% in January 2010). Notwithstanding this decrease observed in comparison to the total number of broadband lines available, this slight shift nonetheless denotes the introduction and use of other access technologies (9% of the retail broadband lines were non-DSL lines in January 2011, compared to 5.8% a year ago). Interestingly, broadband lines provided over cable modems have increased by 67.1% during the reporting year reaching 16 332 lines. The network deployments that are currently under way by market operators in access technologies other than copper (fibre and cable) are expected to maintain and strengthen this trend in the near future. On the other hand, mobile broadband does not seem to have captured the interest of the consumer, as its take-up has been limited, and has only slightly increased since January 2010. Mobile broadband penetration reached 2% in January 2011, compared to 1.1% a year ago (calculated as the number of dedicated data services via service cards, modems, and USB keys), placing Cyprus last in the EU ranking of mobile broadband take-up (EU average 7.2%).

While the incumbent operator lost 4% points of its market share in the retail broadband market during the reporting year, it still maintains a very strong presence on this market (74.5% in January 2011 compared to 78.5% in January 2010). It is still amongst the incumbent operators with the highest market share in the broadband market in the EU. In January 2011, alternative operators depend by 65% on local loop unbundling for the provision of their broadband services, and 35% on other non-DSL technologies, mainly on cable modems.

Although the situation is improving, the majority of fixed broadband lines in Cyprus are still within a speed range of 144kbps and 2Mbps. Yet, noticeably, the percentage of the total lines within the 2-10Mbps speed range increased by almost 50% in 2010, which seems to be related

to the decisions taken on the part of the incumbent and a fixed alternative operator to double their internet access speeds for residential and non-residential connections while maintaining the same retail price, but also due to speeds offered over the cable networks.

### *Regulatory issues*

In December 2010, OCECPR started re-analysing the market for wholesale network infrastructure access at a fixed location and the market for wholesale broadband access with the intention of taking into account infrastructural developments which in the meantime occurred in Cyprus. Depending on its findings, the national regulator may have to review its decision to exclude fibre from both wholesale broadband markets (fibre was excluded from these markets in the last market analysis carried out in 2009). The final decisions adopted by OCECPR in the respect of the analysis of the referred wholesale markets have been appealed by the incumbent.

A modified version of the incumbent's existing Reference Unbundling Offer (RUO) was adopted in December 2010. The revised RUO includes new provisions concerning access to a geographical information system, the publication of key performance indicators, and the implementation of an information system for handling orders for LLU products. New provisions concerning access to ducts have also been included. These amendments are expected to address the strong concerns that have been raised by alternative operators concerning discrimination on the timing of the activation and delivery of the loops. An intention was also expressed to expand the use of the Access Network Frequency Plan (ANFP) in the access network in order to enable the co-existence of the different xDSL.

The national regulator also revised and implemented its margin squeeze evaluation model which was applied in conjunction with the price control obligation. The intention was to determine the real margin between wholesale prices (based on the LRIC methodology) and retail prices by introducing real data gathered from alternative operators (concerning costs and dimensioning) for those components of the LRIC model that were not incurred by the incumbent. Any competition concerns derived from the setting of prices at retail level would then be referred to the national competition authority.

By a decision adopted on 18 November 2010, the Supreme Court upheld OCECPR's decision on duct collocation fees.

## **Mobile**

### *Market situation*

The mobile sector maintained the lead in terms of revenue generation (€279 million), although its growth rate has declined by 2.45% in 2009. The mobile penetration rate in Cyprus (based on the number of active mobile subscribers) in October 2010 was 127.6% (increased by 4% in a year) which is above the EU average of 124.2%.

Changes in the market shares of the mobile market operators indicate the development of a more competitive market. The leading operator's (the incumbent's mobile arm) market share has decreased further this year to 76.5%, which means a loss of 6.6% points of market share from October 2009 and 10.3% from October 2008. The second MNO had a market share of 23.5% in October 2010 (18.1% a year ago). The introduction of an MVNO, coupled with the prospect of licensing spectrum for mobile services, could lead to intensified competition in

the mobile market where low retail prices already prevail. No mobile bundled products are yet available.

Mobile termination rates in Cyprus continue to be the lowest in the EU (EU average: 5.46 €-cents), and decreased to 1.84 €-cents in October 2010 from 1.98€-cents in 2009. In accordance with a three year glide path, the termination rates of the second mobile operator were 35% above the cost-oriented MTRs of the leading operator. This percentage was deemed to decrease to 25% by 1 January 2011.

The average price per minute for mobile communications fell by 20% in December 2009, reaching €0.04, which is the lowest in the EU. The annual average revenue per user was above the EU average (€244) and was equal to €286 in December 2009 (€290 in 2008).

### *Regulatory issues*

In accordance with its regulatory obligations, the incumbent operator published a Reference Offer for MVNO access in July 2010, which OCECPR modified and published. Clarifications on the costing methodology relating to the services provided under an MVNO offer (for full MVNO or for Enhanced Service Provider) have led to a delay in its publication. Strong interest was expressed with regard to the provision of MVNO services, with two of the existing fixed operators notifying the development of MVNO networks and services. OCECPR finalised an amendment to the National Numbering Plan for the provision of numbers to operators that own the appropriate network structure. In January 2011, one alternative fixed operator signed an MVNO access agreement with an alternative operator and was allocated numbers.

### *Roaming Regulation*

The mobile providers in Cyprus further reduced their roaming charges in compliance with the provisions of the Roaming Regulation (EC) No 544/2009. According to the data provided by OCECPR, charges per minute for calls made and calls received within the EU decreased to 0.39 €-cents and 0.15 €-cents respectively, equalling the maximum caps introduced by the Regulation. A similar path was followed for the wholesale regulated tariff for data roaming.

## **Fixed**

### *Market situation*

According to OCECPR's statistics, the fixed line penetration rate in Cyprus is around 90% of households. Consumers in Cyprus mostly rely on the incumbent for direct access (91% in July 2010). While the incumbent continues to maintain high market shares in this market, which are amongst the highest in the EU, it continues to lose a small market share for all fixed calls (measured by revenue), which has declined from 84% in December 2008 to 78.7% in December 2009 (91% for all national calls, 92% for calls to mobile, and 69% for international calls). As suggested by the Herfindhal-Hirschman Index on market concentration, the market for national calls is highly concentrated in contrast to the international calls market, which is moving towards effective competition as has been verified by the second round of the respective market analysis undertaken by OCECPR.

In October 2010, the costs for call termination at local, single transit and double transit levels were equal to 34€-cents, 0.55€-cents, and 0.63€-cents respectively, which are all well below the respective EU averages (0.47, 0.68, 0.80 €-cents).

### *Regulatory issues*

On 31 December 2010, OCECPR notified to the European Commission its second round analysis of the wholesale markets for call origination and termination on the public telephone network provided at a fixed location. It also notified its analysis of three markets that were no longer warranted for *ex ante* regulation as per Commission Recommendation 2007/879/EC in accordance with the three criteria test. These markets related to the provision of transit services in the public telephone network at a fixed location (wholesale market), and to the retail markets for publicly available local, national, and international telephone services also provided at a fixed location.

In what concerns the retail markets, OCECPR proposed to deregulate the market for publicly available international telephone services, and to reduce the regulatory obligations previously imposed on the incumbent in the market for publicly available local and/or national telephone services at a fixed location.

As for the abovementioned wholesale markets, the incumbent operator was found to have SMP in all three markets, while three alternative operators were found to have SMP in the wholesale market for fixed call termination. As for the latter, the national regulator intended to eliminate the current price asymmetry in the fixed termination rates (FTRs) by setting the FTRs of the alternative operators equal to those of the incumbent operator at the double transit level from January 2012 onwards.

OCECPR also finalised its second round analysis of the wholesale market for access to the public telephone network at a fixed location. It maintained the same set of remedies on the incumbent operator as it had imposed in its first round analysis in 2006 in particular, the obligations of carrier (pre)selection, wholesale line rental, and the reasonable bundling were among the remedies maintained.

On 29 November 2010, the revised Reference Interconnection Offer was submitted for public consultation. Its adoption was expected to take place along with the adoption of OCECPR's final decisions on the respective market analysis.

## **Broadcasting**

### *Market situation*

In the TV broadcasting market, terrestrial transmission provided services as a basic means of transmission to all Cypriot households. An increasing number of households are also using Internet protocol television (IPTV) – 21.4% in July 2010 compared to 19.6% in the previous year – mainly due to the provision of additional content on each provider's platform. Satellite and cable television served in total around 5% of households.

### *Regulatory issues*

As per the provisions of the national law concerning the termination of analogue transmission in Cyprus, the Cypriot authorities proceeded with licensing DVB-T networks. One license

(one multiplex) was leased to the public broadcaster CyBC through a negotiation procedure, with no spectrum fee. CyBC will carry out audiovisual services only, transmitting the public broadcasting programmes with universal coverage. The second license (consisting of a license for radio frequencies (for DTT) and a licence for electronic communications for the creation and operation of digital networks for both terrestrial TV and electronic communications) includes five multiplexes and was auctioned to a consortium of private licensed free-to-air TV channels and of two IPTV providers. The licence was granted for fifteen years and carries geographical coverage requirements of 75% along with must-carry obligations requiring the transmission of all existing analogue TV stations (local & national).

## **HORIZONTAL REGULATION**

### *Spectrum management*

A call for applications was expected to be launched in the first quarter of 2011 for the auction of a fixed wireless access (FWA) license in the 3.4-3.8GHz and 24.5-26.5GHz frequency bands. No network access technology would be mandated, leaving significant scope for the development and provision of different kinds of networks and services. Geographical coverage (100 % - areas with secondary schools) and quality of service (2Mbps) requirements were also to be set, compliance with which would help achieve the DAE targets of 2013. The starting bidding price for the FWA license was set at €850 000, while the license is to be valid for a period of fifteen years. Plans to auction this license have long been delayed (since 2006), a factor that seems to have reduced the initial interest of potential bidders in participating in the auction, thus inhibiting the development of networks of certain access technologies (like WiMAX) since other kinds of access networks are by now well established in the country (e.g. HSDPA).

The amended GSM Directive (Decision 2009/766/EC) was integrated into the Cypriot legal system with an amendment of the Radiofrequency Plan of the Republic on 30 September 2010. The feedback to be received from the market on the simultaneous authorisations of frequency bands will determine the final decision of the government on how to allow operators to deploy UMTS networks in the relevant bands. Any potential risks of interference to the indented networks would be highlighted in a possible forthcoming public consultation. The government is considering whether to grant simultaneous authorisations for a wide range of bands in the range of 800MHz, 900MHz, 1800MHz, and 2100MHz, in order to give the market more leeway for the efficient use of this spectrum, while also allowing operators to formulate longer-term plans. A 100% geographical coverage requirement for the authorisation in the 800/900Mhz band and service requirements in terms of speed (2Mbps) are also under consideration in order to meet the DAE targets. In a possible future licensing process technological neutrality would also be mandated for the 800MHz band. Final decisions will be taken following the forthcoming public consultation.

A call for applications was announced on 2 July 2010 for the authorisation of the 1790-1800 MHz. One application was received which was disqualified as it did not meet the requirements set out in the auction documents.

Cyprus proceeded with the implementation of the following Commission decisions on radio spectrum harmonisation: 2009/343/EC, 2009/381/EC, 2010/166/EC, 2010/267/EC and 2010/368/EC.

According to information available to the Commission, all of the necessary preparation has been made in Cyprus which would facilitate the granting of an authorisation to the operators of systems providing mobile satellite services selected by the Commission in accordance with European Parliament and Council Decision No 626/2008/EC.

### *Rights of way and facility sharing*

An alternative operator which had established its own submarine cables enabling it to access international internet capacity, managed to overcome problems with the granting of building permits for its landing station in Cyprus by securing those from a neighbouring community. In parallel, it launched judicial proceedings against the local community from where it initially sought the granting of building permits. These cables were activated in January 2010. On 25 January 2011, OCECPR initiated a public consultation to amend the procedures for granting rights of ways in areas under development. Among other issues, the amendments are expected to address the possibilities of developing multiple networks, in particular next generation networks, taking into consideration the provisions of the NGA Recommendation. The national regulator OCECPR, which is the competent authority for the coordination of the procedures of rights of way in public roads, was also working on formulating a harmonised and common approach for access to in building wiring and private land, aimed at establishing specific infrastructure standards to be complied with by building owners based on a technology neutral approach. Requirements for next generation access were also taken into consideration.

Operators highlighted strong concerns regarding the enforcement of procedures for co-location in existing ducts referring to difficulties in the roll-out of a parallel infrastructure in the existing network. Co-location for installing network to access the end-users' premises were also considered problematic, as were the high co-location fees imposed by the incumbent. On the ducting co-location fees, a case was submitted by an operator to the Supreme Court, which on 15 November 2010 upheld the national regulator's decision on the method for calculating the applicable fees and their actual calculation.

## **THE CONSUMER INTEREST**

### **Consumer complaints**

OCECPR is the authority responsible for handling consumer complaints and disputes relating to electronic communications products and services. During the reporting year, a small number of complaints were received (thirty complaints) which were all found to be unreasonable. No rulings on complaints or fines were imposed during 2010.

### **Tariff transparency and quality of service**

In 2010, electronic communications network and service providers in Cyprus complied with the quality indicators for the provision of electronic communication services, as defined in the Quality of Service Order (P.I. 74/2005 as amended by P.I. 384/2007). Likewise, these undertakings were in compliance with their obligation to publish tariffs, connection and maintenance fees, as required under Article 69 of the national law on electronic communications, and under the Decree of Consumers Protection.



## **Number portability/switching**

Around 6 015 mobile number porting transactions took place between October 2009 and October 2010, compared to 11 623 fixed number porting transactions in 2010. In Cyprus, the maximum time needed to port a fixed number was five days in October 2010, which is below the EU average of 7.6 days, and four days to port a mobile number (EU average of 4.1 days). Interestingly, porting a fixed number in Cyprus has the highest cost at EU level and is equal to €16.6, while the price per mobile ported number is the fourth highest amongst the EU amounting to €9.4. Criticism was raised by market operators on the fact that their porting agreements with the incumbent remain unchanged since they were signed five or six years ago, and were never updated to take into account market developments. A one-day period for number porting was considered to be feasible by both fixed and mobile operators (albeit costly). The second mobile operator in Cyprus highlighted concerns about outstanding liabilities for the operators when porting numbers. The possibility of establishing a centralised number portability solution was being examined by OCECPR.

## **Net neutrality**

There is not yet any discussion taking place or any measures so far taken in Cyprus on net neutrality.

## **Universal service**

On 20 October 2010, OCECPR initiated the process for the selection and designation of the Universal Service Provider following the forthcoming expiration of the current universal service provider designation in March 2011.

## **European emergency number 112**

No issues are reported regarding the handling of 112 services in Cyprus.

## **Harmonised numbers for harmonised services of social value (116)**

The decision on the allocation of 116 numbers has been fully implemented into the national numbering plan. The EU harmonised 116 111 and 116 123 numbers were allocated in 2009 to an association for the prevention and handling of violence in the family. The 116 006 and 116 117 numbers have also become available in the national numbering plan since January 2010. To date, no interest has been declared for the use of the 116 000 number. None of these numbers are, as of yet, operational.