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Europe's Digital Progress Report 2017

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Europe's Digital Progress Report (2017)

Telecoms chapter

CYPRUS

1. Competitive environment

Coverage	CY-2015	CY-2016	EU-2016
Fixed broadband coverage (total)	100%	100%	98%
Fixed broadband coverage (rural)	100%	100%	93%
Fixed NGA coverage (total)	84%	88%	76%
Fixed NGA coverage (rural)	57%	60%	40%
4G coverage (average of operators)	no data	64%	84%

Source: Broadband Coverage Study (IHS and Point Topic). Data as of October 2015 and October 2016.

Fixed broadband market

The total coverage of fixed broadband networks in Cyprus remains unchanged at 100% of households, slightly above the EU average of 98%. Networks capable of providing at least 30 Mbps (next-generation access (NGA)) are available to more than almost three quarters (88%) of Cypriot homes, significantly above the EU average (76%). Rural areas remain less covered (60%), but still above the EU average (40%). On 4G coverage Cyprus is lagging significantly behind the EU average (84%) with just 64%. The lowest fixed broadband price (12-30 Mbps, or above) is €33.81, which is the third highest compared to the EU average of €21.33, and significantly higher than the lowest price in EU, which is €11.42[1].

New entrants' DSL subscriptions by type of access (VDSL excluded)	CY-2015	CY-2016	EU-2016
Own network	-	-	0.7%
Full LLU	63.3%	54.4%	75.3%
Shared access	0.1%	0.0%	4.1%
Bitstream	36.6%	45.5%	13.4%
Resale	-	-	6.6%

Source: Communications Committee. Data as of July 2015 and July 2016.

Charges of Local Loop Unbundling (monthly average total cost in €)	CY-2015	CY-2016	EU-2016
Full LLU	9.8	8.8	9.2
Shared Access	2.5	2.5	2.4

Source: Communications Committee. Data as of October 2015 and October 2016.

Fixed broadband market shares	CY-2015	CY-2016	EU-2016
Incumbent market share in fixed broadband	63.1%	60.4%	40.7%
Technology market shares			
DSL	80.5%	79.6%	66.8%
Cable	19.1%	20.3%	19.1%
FTTH/B	0.2%	0.0%	10.7%
Other	0.2%	0.1%	3.4%

Source: Communications Committee. Data as of July 2015 and July 2016.

[1] Source: Fixed broadband prices in Europe in 2016 (Empirica). Prices expressed in EUR/PPP, VAT included. Data as of autumn 2016.

Despite a gradual decrease in its market share during the last few years, Cyta, a state-owned company, still dominates the market.

Mobile market

Mobile market	CY-2015	CY-2016	EU-2016
Market share of market leader	63%	58%	34%
Market share of second largest operator	32%	34%	28%
Number of MNOs	3	3	-
Number of MVNOs	2	2	-
Market share of MVNO (SIM cards)	1%	1%	-

Source: Communications Committee. Data as of October 2015 and October 2016.

Mobile broadband prices	CY-2015	CY-2016	EU-2016
Least expensive offer for handset (1 GB + 300 calls basket)	50	36	30
Least expensive offer for tablet and laptop (5 GB basket)	44	43	18

Source: Mobile Broadband Price Study (Van Dijk). Prices expressed in EUR/PPP, VAT included. Data as of February 2015 and February 2016.

According to the Mobile Broadband Price Study (Van Dijk) from 2016, packages including mobile broadband on handsets in Cyprus are 15% more expensive than the EU-28 average. However, this difference has significantly decreased over the last year. Prices for mobile broadband on laptops and tablets are more stable and in line with the EU-28 averages. In Cyprus, prices for handset packages including mobile broadband went down by 16% between 2015 and 2016 (compared to an average price decrease of -7% in the EU-28).

On fixed broadband, subscription price (the third highest in the EU) remains relatively high, even if the price has gone down since last year. An individual subscribing to a broadband connection must spend on average 2.4% of his income, whereas the EU average is only 1.2%[2]. This could be one of the reasons for the low take-up of fixed broadband in Cyprus, along with the relatively low levels of digital skills and lack of consumer interest due to social factors.

2. Measures supporting deployment and investments in high-speed networks

a. Spectrum

Harmonised band	**MHz of spectrum assigned** [3]	**% of the harmonised spectrum assigned**
700 MHz	0	0
800 MHz	40	100
900 MHz	70	100
1500 MHz	0	0
1800 MHz	150	100

[2] Source: Communications Committee. Data as of July 2015 and July 2016.
[3] Including guard bands.

2000 MHz paired	90	75
2600 MHz	165	86.8
3400-3600 MHz	0	0
3600-3800 MHz	0	0

Overall, Cyprus has assigned 49% of the overall harmonised spectrum for broadband, compared to 68% EU-wide[4]. The main reasons for the low percentage of assigned spectrum are interference problems with the areas not under the control of the government of the Republic of Cyprus, combined with the lack of commercial interest for some frequency bands, partially due to the small nature of the market.

On the authorisation of the 800 MHz band, Cyprus was granted a derogation under Article 6(4) of the Radio Spectrum Policy Programme until 31 December 2015, or until the spectrum issues encountered in the band were effectively resolved, whichever occurred first. This derogation was extended until 31 December 2016, or until the authorisation was completed.

At the beginning of 2016, Cyprus launched a competitive procedure to assign radio frequency rights of use in the 800 and 2600 MHz bands. The available spectrum, to be granted through a multi-round ascending auction, concerned three licences, each comprising 2x10 MHz in the 800 MHz band and 2x20 MHz FDD (Frequency Division Duplex) and 1x15 MHz TDD (Time Division Duplex). The coverage obligation may be fulfilled with spectrum in other bands. The reserve price was set at €5 million. The competitive procedure resulted in the award of two rights of use for radio frequency in the 800 and 2600 MHz bands for 4G broadband network deployment, with speeds of at least 30 Mbps, covering 50% of the territory of the Republic of Cyprus by the end of 2018 and 75% by the end of 2020. Due to interference problems in the remaining channels the third licence has not been issued.

Cyprus is currently carrying out an internal study and consulting all stakeholders as part of its plans to reallocate the 700 MHz band to wireless broadband (WBB). Firstly, Cyprus's request to the ITU for new assignments through the procedures described in the GE06 Plan (Frequency Assignment Plans) has been processed. Secondly, once registration of the new assignments below the 700 MHz band is effective, the existing DVBT (Digital Video Broadcasting-Terrestrial) transmissions in the 700 MHz band will cease and the band will be freed for WBB applications.

b. EU and national investments in broadband

The Cypriot 2012 'digital strategy' sets targets in line with the Digital Agenda for Europe, specifically: 100% coverage at 30 Mbps by 2020; 50% take-up rate for 100 Mbps.

The strategy is divided into six objectives. It also envisages developing future-proof network infrastructure, promoting the digitisation of public services, increasing digital literacy, fostering the digital economy and using ICT for the environment.

Cyprus has a market-based approach as far as infrastructures are concerned; public investment is also planned for NGA network deployment in specific geographical areas. The plan is for

[4] A new frequency band was added in 2017, so the total EU harmonised band is larger.

EU funds of €19 million under the ‘Competitiveness and sustainable development Operational Programme’ to be combined with €3.35 million of national funds in order to fund ultra-high-speed broadband networks.

In 2016, the funds programming was changed and streamlined to better suit needs and guarantee optimal absorption of EU funds: the ‘Deployment of NGA network to provide ultra-high speed (at least 100Mbps) in Cyprus (FTTH)’ project was replaced by three projects worth a total of €22 million, to be financed by EU structural and investment funds (ESIFs) under the 2014-2020 ‘Sustainable Development and Competitiveness’ Operational Programme.

Fixed basic broadband coverage in Cyprus has reached 100%, including in rural areas, and is above the EU average. As price levels are relatively high, it is improbable that end customers would be willing to pay a premium for higher bandwidths. Current measures such as tax deductions were not sufficient to substantially increase take-up rates. Further transparency and regulatory measures may help to decrease prices. Public investment therefore might be needed to incentivise upgrades in existing networks or even deploy technologies with higher capabilities than the existing xDSL solutions[5]. The infrastructure-mapping tool made available by the national regulatory authority (NRA) in 2016 is an appropriate solution for achieving better transparency over existing infrastructures and coverage.

Cyprus needs action to increase digital awareness and interest in broadband, as socioeconomic indicators show that a substantial part of the population cannot or does not want to use digital services. Free wireless local area network, (WLAN) in public institutions is a step in the right direction. Mention should also be made of the recently launched digital awareness-raising initiatives in education (mandatory for pupils in all grades) and in lifelong training (for the military and unemployed people). However, steps still need to be taken steps to further increase digital inclusion in order to bridge the digital divide.

There was no Cypriot project shortlisted for technical assistance as part of the ‘Connected Community’ platform. Two broadband projects still at an early stage were submitted in 2016 to the European Investment Project Portal, EIAH. The first project sought support and technical assistance through the European Fund for Strategic Investments for the deployment of fast and ultra-fast broadband networks, both fixed and mobile, in remote villages and rural areas in order to bridge the digital divide. The second project is a study funded by the European Investment Bank assessing the status of the international sub-marine cable network connecting Cyprus with Europe, the Middle East and Africa. The two projects are to be reassessed at a later stage when they are more mature.

c. State of transposition of the Broadband Cost Reduction Directive

Following the expiry of the deadline for transposing the Broadband Cost Reduction Directive on 1 January 2016, the Commission opened infringement proceedings against Cyprus for failure to notify the Commission of the transposition measures it had taken. In order to transpose the Directive, Cyprus adopted the Regulation of Electronic Communications and Postal Services (Amendment) Law of 2016 (104(I)/2016), which was published in the Cyprus Government Gazette on 14 October 2016. The Office of Electronic Communications & Postal Regulations (OCECPR) has been designed as dispute settlement body.

[5]Source: AteneKom Study ‘NBP in EU’, 2016.

3. Regulatory function

In 2016 the Commission registered two notifications from Cyprus concerning markets 3a and 3b of the 2014 Recommendation on relevant markets. All market analysis for regulated markets, for which it had been more than three years since the previous analysis had expired, have been timely provided. Only seven markets are still entirely regulated in Cyprus, namely markets 1, 2, 3a, 3b and 4 from the 2014 Recommendation and markets 14 and 15 from the 2003 Recommendation.

In 2016 the fixed termination rates cap was €0.1033 per minute whereas the mobile termination rates (MTR) cap was €0.0010112 per minute[6], compared with EU-28 average of €0.0010435 per minute. In order to comply with the 2009 Termination Rates Recommendation for both fixed and mobile termination rates, the Cypriot authorities are working on a new BULRIC costing model using a bottom-up approach, which hopefully will be adopted at the beginning of 2017 and applied to all markets that are still regulated. Once the results of the model are available MTRs will be reviewed accordingly.

Currently MTRs are regulated based on the average termination rate in the EU countries that have implemented pure BULRIC models. The rate imposed is €0.99 per minute for mobile network operators Cyta and MTN and for mobile virtual network operator Cablenet. For the mobile network operator Primetel, which recently acquired spectrum rights, a glide path has been imposed. The glide path goes from 40% above the regulated rate for 2016 to 20% above the regulated rate for 2017 before converging with the regulated rate in 2018.

The presence of a cable operator on the market in urban areas is intensifying infrastructure competition and forcing the incumbent operator to develop a fibre access network fibre to the home Gigabit PON (FTTH-GPON). It is assumed that in rural areas the incumbent will make the most of the available copper access network, using vectoring and/or bonding techniques. This prospect was noted in the OCECPR's end-of-2016 market analysis.

4. Consumer issues

Number portability

Number portability		2015	2016
Fixed	Number of transactions *[1]*	9,781	9,513
	% of total numbers *[1]*	3.0%	3.2%
	Maximum wholesale price *[2]*	17	17
	Maximum time under regulation (number of working days) *[2]*	4	4
Mobile	Number of transactions *[1]*	34,584	34,916
	% of total numbers *[1]*	3.1%	3.0%
	Maximum wholesale price *[2]*	9	9
	Maximum time under regulation (number of working days) *[2]*	4	4

[1] Source: Communications Committee. Data as of January to September 2015 and January to September 2016.

6 Source: Berec Report BoR(16)218 July 2016.

[2] Source: Communications Committee. Data as of October 2015 and October 2016.

The OCECPR has completed a public consultation on number portability and intends to amend the secondary legislation for this area by early 2017. Based on the Consumer Markets Scoreboard 2016[7], overall consumer satisfaction in Cyprus with electronic communications services fell slightly between 2013 and 2015. Satisfaction figures for specific areas was as follows: electronic products (-5.8%); TV subscription (-6.6%); internet provision (-4.8%); fixed telephony services (-1%); mobile telephony services (-3.5%).

During 2016, the NRA investigated problems reported by consumers over penalties related to the termination of contract. The Cyprus Consumers' Association, together with most operators, want to see the NRA perform more self-initiated investigations.

Bundles

The OCECPR recently made available a web-based comparison tool, taking into account the need for more transparency and clarity in the pricing of bundles to make the market fully competitive. The total proportion of bundles in Cyprus is 56%, whereas in EU it reaches only 50%[8]. A bundle in Cyprus is most likely to include internet access (41% versus 40% in EU), followed by mobile telephony (33% versus 23% in EU), fixed telephony (27%, versus 32% in EU) and television (27%, the same as the EU average).

The uptake of internet and mobile in bundles confirms the fixed-mobile convergence trend in the electronic communications market. However, more recent figures from 2016 provided by OCECPR show that most subscriptions are currently bundle-based (85%). TV and content services are present in 47% of the bundles sold. This leads us to conclude that bundled services and TV content drive demand in broadband access services. Around 16% of bundles do not contain fixed telephony.

Transparency

With complex products on the market such as double, triple and quadruple play, and traffic bundles allowing for specific data consumption, consumer perception of the transparency and clarity of contracts is increasingly important. In 2016 OCECPR made available for free on its website an application for the 'performance evaluation of broadband connection services[9]'. Like 86% of EU citizens, 92% of Cyprus consumers think it is essential to guarantee the same level of consumer protection, data protection and security when using over-the-top services. The vast majority of consumers (93%) also think the number portability is an essential issue.

The Eurobarometer survey shows that Cypriot consumers: can easily compare bundle offers (79%, significantly higher than the EU average of 69%); believe it is easier to monitor consumption of mobile (78%, EU average 69%) rather than of fixed contracts (62%, EU average 71%); are quite satisfied with the contract information they receive (81 %, EU average 68%).

Roaming

[7] http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/12_edition/index_en.htm.
[8] Source: Eurobarometer survey N°438 10/2015.
[9] 2B2T, http://2b2t.ocecpr.org.cy.

From 30 April 2016, the Roaming Regulation (EU) No 531/2012, as amended in 2015, provided for a default reduced transition retail price ('Roam Like At Home+', or 'RLAH+'). The OCECPR can fine operators that do not comply with the Roaming Regulation. Besides imposing fines, the OCECPR also can prohibit offers which do not comply with the Regulation. So far, no regulated roaming services provided by Cypriot operators were found not to be in compliance with the current roaming rules. In the event of non-compliance, the OCECPR's first step would be to notify the relevant roaming supplier and to require that the instance of non-compliance be removed immediately.

On 26 April 2016 Cyprus notified the European Commission of an amendment to the first Annex to the Electronic Communications and Postal Services Law that lays down administrative fines for infringements of certain articles of Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union[10]. Fines would be identical with those set out in Articles 3, 4, 5(1), 6e(1), (3) and (4), 11 and 15 and up to a maximum of €170,000. These fines can be doubled for recurring offences and the OCECPR has the power to withdraw the general authorisation of the offending provider.

The average retail Eurotariff price for roaming is €0.193 (EU average €0.112) per minute of outgoing calls and €0.050 per minute of incoming calls (EU average €0.026). Alternative tariffs are cheaper for outgoing calls: €0.061 per text message (EU average: €0.048) and more expensive for incoming calls which are the highest in Europe and also above the price cap. For data in particular, prices went up significantly in the first quarter of 2016 (€0.208 per MB) and are now very far above the EU average of €0.047 per MB[11]. On mobile termination rates the NRA has not recorded any measurable impact on the market, but it fears that there might be a negative impact when the implementing regulation on fair use and sustainability comes into force.

Net neutrality

Cyprus adopted a bill transposing the requirements on penalties in Regulation (EC) No 2015/2120 at the beginning of 2016 and notified these measures to the Commission on 26 April 2016, just before the deadline of 30 April 2016. In particular, the law lays down penalties for infringements of Articles 3, 4 and 5 of the Regulation. Maximum fines would be €170,000 for any infringements of these articles. As in the rules on roaming, these fines can be doubled for recurring offences and the OCECPR can withdraw the general authorisation of the offending provider. Secondary legislation supporting the implementation of the transparency measures was published on 3 March 2017. The OCECPR has the necessary powers to monitor and enforce open internet provisions. There are no ongoing net neutrality investigations.

Universal service

The scope of the universal service is complete and includes access to fixed telephony, special retail packages to users with special needs or low incomes, electronic directories, directory

[10] Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10) amended by Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015.
[11] International Roaming BEREC Benchmark Data Report October 2015 - March 2016 BoR(16)160.

services and free access to emergency number. Enquiry services are included in the scope of the universal service, as are electronic directories. Social tariffs are part of the universal service and are applicable to low income households and individuals with special needs. However, the financing mechanism has not yet been activated. There has been discussion about including basic broadband access as part of the universal service in Cyprus's current and prospective competitive environment. The OCECPR expects to revisit the issue when it drafts a suggestion following the assessment of the NGA network development in Cyprus at the end of 2017.

112 and access for disabled end-users to emergency services

112 emergency number awareness in Cyprus (57%) is similar to the figure for the EU as a whole (61%)[12]. On the implementation of Article 26(4) of the Universal Service Directive (2002/22/EC), which guarantees equivalent access for disabled end-users to emergency services and caller location delivery, deaf people can communicate by fax or by sending a text message via a procedure that is free of charge, but quite lengthy and burdensome. Special equipment is provided to blind people. Alternative means of access will become available in 2017. A 112 application for smart mobile phones was included in a public safety answering point upgrade project aimed at implementing eCall. The tender for the upgrade project includes applications that will ensure access to current emergency services for disabled end-users. Implementation of the project was delayed due to tender procedure challenges but it is expected to be implemented in 2017.

5. Conclusion

The ability of Cyprus to exploit the benefits of the digital economy may be jeopardised by the low take-up of fast fixed broadband and relatively high prices for electronic communications services. Cyprus should identify more concrete measures (including responsibilities, indicators and time frames) on how to tackle digital divide issues,. Possible ways of achieving this would include the increased use of EU financial instruments and more efficient use of existing and upcoming infrastructures.

Cyprus will benefit from closely monitoring implementation of its digital strategy, further adapting it and updating it to the current financial situation. A more effective implementation of Cyprus' digital strategy, including funding, should make it easier to further deploy fast and ultra-fast broadband networks, fixed and mobile, in particular in less commercially viable 'white areas'.

[12] Source: Eurobarometer survey No 438 10/2015.