Europe's Digital Progress Report (EDPR) 2016

Telecom Factsheet

LUXEMBOURG

1. MEASURES FACILITATING DEPLOYMENT AND INVESTMENTS IN HIGH SPEED NETWORKS

1.1. Spectrum

Harmonised bands	MHz spectrum assigned[1]	% of the harmonised band assigned
800MHz	60	100%
900MHz	70	100%
1500MHz	-	0%
1800MHz	150	100%
2000MHz paired	90	75%
2600MHz	180	94.7%
3400-3600MHz	0	0%
3600-3800MHz	0	0%

Luxembourg has assigned 53.4% of the overall harmonised spectrum for BB.

In 2015, no frequency auctions took place. However, on the basis of public consultations conducted **that year, it was concluded in January 2016 that no market demand existed for the 3.4 to 3.8 GHz** band and that all three 2.1 GHz licences would be aligned to end in July 2018.

1.2. State of transposition of the BB CRD (Directive 2014/61/EU)

A measure to transpose the Cost Reduction Directive that was submitted to the Council of State in July 2015 is still pending adoption.

1.3. EU and National investments in broadband

Fixed basic broadband coverage of rural areas is above the EU average (99.97% vs 90.6%).

In 2010, the Luxembourgish Government set up the "National strategy for very high-speed networks - Very high-speed broadband for all", in which it aimed to have 1 Gbps downstream and 500 Mbps upstream by 2020 for everybody. This plan surpasses the goals of the DAE.

The Luxembourgish Government intends to achieve its goals by market-driven broadband roll-out based on competition among the operators. Furthermore, it should be noted that the Government does not plan to spend public money on this project, but it will rather favourably influence the costs of network deployment. This will be achieved by (1) ensuring access to the local loop, (2) putting in place a national construction works register, (3) putting in place a national infrastructure register, (4) introducing an obligation to roll out associated facilities for optical fibre, (5) in-house wiring in new

[1] Including guard bands.

buildings, and (6) broadening the mandate of Luxconnect (private company created by the Luxembourgish Government aimed to improve the national dark fibre network).

2. COMPETITIVE LANDSCAPE

Fixed broadband subscriptions - operator market shares[2]

Incumbent market share		New entrants market share	
July 2014	July 2015 (EU average)	July 2014	July 2015 (EU average)
71.1%	67.3% (40.6%)	28.9%	32.7% (59.4%)

Fixed broadband subscriptions - technology market shares[3]

DSL (including VDSL) (EU)	Cable Modem (EU)	FTTH/B (EU)	Other[4] (EU)
77.2% (69.2%)	11.2% (18.6%)	11.1% (8.7%)	0.5% (3.5%)

There has been a decrease of the market share of the incumbent from 71.1% in 2014 to 67.3% in 2015. The share of DSL (slight increase of 0.01% to 77.2% in 2015) and the share of FTTH/B (slight decrease of 1.0% to 11.1% in 2015) are over the EU average of, respectively, 69.2% and 8.7%. The other technology means, cable, and others, remain significantly below the EU average.

Mobile sector[5]

Number of MNOs	Market shares of the first 2 MNOs		Number of MVNOs (overall share)
3	53.0%	36%	3 (N/A)

3. REGULATORY FUNCTION

New entrants` DSL subscriptions by type of access at EU level (VDSL and VULA excluded) [6]

Own network (EU)	Full ULL (EU)	Shared Access (EU)	Bitstream (EU)	Resale (EU)
- (0,6%)	68.6% (78.1%)	-% (2,3%)	-% (12%)	31.4% (7%)

LLU prices: 11.5EUR (EU Average; 9.5EUR) [7]

In 2015, the ILR notified to the Commission analyses of markets 7 and 14 of the 2003 Recommendation and of markets 1 and 6 of the 2007 Recommendation,[8] as well as a range of price setting decisions covering markets 1, 2, 3b and 4 of the 2014 Recommendation and markets 1 and 2 of the 2007 Recommendation.

[2] Source: Communications Committee. Data as of July 2014 and July 2015.
[3] Source: Communications Committee. Data as of July 2015
[4] Including fixed wireless.
[5] Source: Communications Committee. Data as of October 2015.
[6] Source: Communications Committee. Data as of July 2015.
[7] Full LLU monthly average total cost in EUR; source: Communications Committee. Data as of October 2015.
[8] Respectively retail market for leased lines, wholesale market for leased lines, access to the public telephone network at a fixed location for residential and non-residential use, wholesale market for leased lines, wholesale voice call termination on individual mobile networks, and wholesale local access provided at a fixed location.

With these notifications, Luxembourg fully aligned its market review cycle with EU law and was thus not included in the investigation of delays launched by the Commission services in 2015. Luxemburg still maintains regulation of some markets no longer recommended for ex ante regulation under the 2014 Recommendation. These are the markets for access to the public telephone network at a fixed location for residential and non-residential customers and fixed voice call origination (markets 1 and 2 of 2007 Recommendation). For both fixed and mobile termination rates, the ILR has applied its own pure BU-LRIC cost model, in accordance with the 2009 Recommendation on Termination Rates.

4. CONSUMER ISSUES

The average retail Eurotariff price for roaming is 0.180EUR per minute of calls made and 0.043EUR per minute of calls received (with alternative tariffs respectively cheaper for calls made and more expensive for calls received), 0.058EUR per SMS and 0.183EUR per MB. All prices are above the EU average[9].

Number portability		**2014**	**2015**
Fixed	Number of transactions[10]	N/A	N/A
	% of total numbers[11]	N/A	N/A
	Maximum wholesale price[12]	N/A	N/A
	Maximum time under regulation (number of working days) [13]	1	1
Mobile	Number of transactions[14]	26,146	33,704
	% of total numbers[15]	3.1%	3.9%
	Maximum wholesale price[16]	7	7
	Maximum time under regulation (number of working days) [17]	1	1

With more complex products (double and triple play as well as traffic bundles) becoming increasingly relevant in the market, the perception of transparency and clarity of contracts by consumers is increasingly important. The 2015 Eurobarometer survey shows that Luxembourgish consumers can easily compare bundle offers, which is the same as last year. It is easier to monitor consumption for mobile (69, the same as the EU average) than for fixed (64%, EU average 71%). However, 24% of Luxembourgish consumers were unsatisfied with the information in their communications contract (14% low satisfaction, and 10% no satisfaction). This is higher than the EU average, namely

[9] International Roaming BEREC Benchmark Data Report October 2014 – March 2015 BoR(15)134.
[10] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[11] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[12] Source: Communications Committee. Data as of October 2014 and October 2015.
[13] Source: Communications Committee. Data as of October 2014 and October 2015.
[14] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[15] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[16] Source: Communications Committee. Data as of October 2014 and October 2015.
[17] Source: Communications Committee. Data as of October 2014 and October 2015.

respectively 9% and 7%. As universal service is voluntarily provided by incumbent operator Post Luxembourg, no obligations have been formally imposed.