Europe's Digital Progress Report (2017)

Telecom chapter

Latvia

1. 1. Competitive environment

Coverage	LV-2015	LV-2016	EU-2016
Fixed broadband coverage (total)	93%	93%	98%
Fixed broadband coverage (rural)	78%	83%	93%
Fixed NGA coverage (total)	91%	91%	76%
Fixed NGA coverage (rural)	67%	77%	40%
4G coverage (average of operators)	no data	91%	84%

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

Latvia has relatively low basic fixed broadband coverage (93% compared to the EU average of 98%), primarily because coverage in rural areas is limited. Remarkably, almost all of it (91% of households) is next generation access (NGA). This explains a level of subscription to fast broadband (≥ 30Mbps) that is well above the EU average (62% of total subscriptions, as opposed to only 37% in the EU overall). Rural fixed NGA coverage grew significantly by 10 percentage points to 77% in 2016, well above the EU average. At 91%, 4G coverage is high in comparison with the EU average of 84%.

Fixed broadband market

Fixed broadband market shares	LV-2015	LV-2016	EU-2016
Incumbent market share in fixed broadband	58.8%	58.6%	40.7%
Technology market shares			
DSL	28.1%	26.2%	66.8%
Cable	4.0%	3.6%	19.1%
FTTH/B	59.7%	62.4%	10.7%
Other	8.2%	7.9%	3.4%

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

Charges of Local Loop Unbundling (monthly average total cost in €)	LV-2015	LV-2016	EU-2016
Full LLU	9.9	8.9	9.2
Shared Access	5.8	4.7	2.4

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

New entrants' DSL subscriptions by type of access (VDSL excluded)	LV-2015	LV-2016	EU-2016
Own network	-	-	0.7%
Full LLU	0.6%	0.8%	75.3%
Shared access	1.0%	1.2%	4.1%
Bitstream	28.3%	38.4%	13.4%
Resale	70.1%	59.6%	6.6%

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

Fibre roll-outs are dominated by the incumbent (Lattelecom), though roll-out of alternative infrastructure (mainly FTTx) is increasing. Lattelecom has one of the largest incumbent market shares of fixed broadband subscriptions (58.6%, compared with an average of 40.7% EU-wide). Competition in urban areas is infrastructure-based, with no take-up of regulated wholesale access, although it has been available since 2007. In 2016, the incumbent supplied

only 126 wholesale bitstream DSL lines to new entrants. Although Lattelecom's market share of the DSL lines is close to 100%, in 2016 the DSL subscriptions share of fixed broadband fell to 26.2% from 28.1% in 2015, 18% of which was upgraded to VDSL.

In 2015 Lattelecom launched a network upgrade programme in rural areas, deploying VDSL in areas where it has been unable to deploy fibre. The programme, which continued in 2016, aims to improve internet connection speed for around 180,000 customers.

Latvia has no quadruple-play operators. Lattelecom does not provide mobile services. TeliaSonera, which holds a 49% stake in Lattelecom and 49% in the mobile incumbent LMT, has changed its global governance structure and merged its fixed and mobile affiliates in Estonia. However, it is not clear whether this will also happen in Latvia. In April 2016, the Latvian government[1] rejected the proposed merger between LMT and Lattelecom.

The lowest fixed broadband price (12 Mbps or above) stands at €12.82, compared with €21.33 across the EU.[2]

Mobile market

Mobile market	LV-2015	LV-2016	EU-2016
Market share of market leader	37%	37%	34%
Market share of second largest operator	36%	35%	28%
Number of MNOs	4	4	-
Number of MVNOs	1	3	-
Market share of MVNO (SIM cards)	-	-	-

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

The mobile market in Latvia is dominated by 4G development, with a focus on data services. Mobile and fixed services compete directly in Latvia, and 4G is emerging as an alternative to fixed broadband in rural areas. In rural areas, mobile operators are exerting heavy competitive pressure on Lattelecom's DSL segment, and nationwide LMT is the second broadband provider after Lattelecom. In 2016 two mobile network operators (MNOs) started offering TV services.

Mobile broadband prices	LV-2015	LV-2016	EU-2016
Least expensive offer for handset (1 GB + 300 calls basket)	15	14	30
Least expensive offer for tablet and laptop (5 GB basket)	12	7	18

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

Overall, mobile broadband prices fell again in Latvia in 2016. These prices are significantly below the EU average, regardless of the device on which broadband is used: the offer for the least expensive 1 GB + 300 min calls service is less than half the EU average (14 EUR/PPP versus 30 EUR/PPP), while the least expensive offer for tablet and laptop for a 5 GB service is less than half the EU average (7 EUR/PPP versus 18 EUR/PPP). Some MNOs launched unlimited mobile broadband subscriptions at the very attractive price of €5.

[1] Lattelecom's shareholders are the Latvian Privatisation Agency, which holds 51% on behalf of the Latvian state; and Tilts Communications (49%), a subsidiary of TeliaSonera registered in Denmark. LMT's shareholders are TeliaSonera (49%), Lattelecom (23%), the state-owned Latvian State Radio and Television Centre (23%), and the Latvian Ministry of Transport (5%).

[2] Source: Fixed broadband prices in Europe in 2016 (Empirica). Prices are expressed in EUR/Purchasing Power Parity (PPP) and include VAT. Data as of autumn 2016.

2. Supporting deployment and investment in high-speed networks

a. Spectrum

Harmonised bands	MHz spectrum assigned[3]	% of the harmonised band assigned
700MHz	0	0
800MHz	60	100
900MHz	70	100
1500MHz	0	0
1800MHz	150	100
2000MHz paired	120	100
2600MHz	190	100
3400-3600MHz	190	95
3600-3800MHz	200	100

As regards assignment of the harmonised spectrum, Latvia is performing very well (3rd in the EU, with 90% assigned).

No additional spectrum was assigned in 2016 for wireless broadband. However, one case of spectrum trading was registered in the 2.6 GHz band, while one licence in the 450MHz band and another in the 28GHz band were extended subject to the existing obligations. In addition, the right of use was extended for two operators operating in the 900 MHz and 1800 MHz frequency bands.

LTE technology deployment expanded rapidly, especially in the 800 MHz band, which was opened for mobile communications on 1 July 2015. Currently, three operators offer LTE mobile services. LTE data communications are used in the 800 MHz, 1800 MHz, 2100 MHz and 2600 MHz bands. In addition, LTE TDD implementation got under way in the 2.3 GHz and 2.5 GHz bands.

In line with market demand, operators gradually introduced LTE-Advanced supported carrier aggregation, providing higher data rates. Despite the rapid development of 4G technology, 2G and 3G deployment is still used, especially for voice communications.

In the 450 MHz band, one operator continues to use the CDMA technology.

The table below shows the number of permits for operating base stations for public mobile communications issued by the Electronic Communications Office (VAS ES) in the relevant WBB frequency bands. All permits respect technological neutrality.

[3] Including guard bands.

Frequency band	450 MHz	800 MHz	900 MHz	1800 MHz	2100 MHz	2300 MHz	2600 MHz	Total
Dec. 2015	185	638	2960	1442	1937	15	218	7395
Dec. 2016	178	1421	2982	1628	2078	28	323	8638

For the reasons set out in Article 3 of Decision (EU) 2015/750 regarding the 1500 MHz band, the Decision has not yet been implemented in Latvia. There have been some technical difficulties in coordinating specific aeronautical radio services used in accordance with ITU regulations in Russia and Belarus. However, 'Technical criteria concerning the use of the 1427-1518 MHz band by terrestrial stations in the mobile and fixed services in border areas' was signed with Belarus on 26 May 2016. It is proposed that a similar agreement be signed with the Russian Government.

b. **EU and national investment in broadband**

In 2012, the Government approved Latvia's National Broadband Plan for 2013 – 2020. Latvia's national broadband objectives are to attain 100% coverage with 30 Mbps by 2020 and 50 % household penetration with 100 Mbps service by the same year.

FTTP is widely available throughout Latvia, leading to future-proof connectivity. GPON architecture is the main technology, while p2p architectures are rare. As regards the digital divide, VDSL deployment of the incumbent and mobile 4G technologies are bridging the gap until countrywide FTTP becomes available.

In order to implement the DAE objectives the 'State aid SA.33324 — Latvia Next generation network for rural areas' (C (2011)7699) (referred to as 'SAP' below) middle mile project was launched in 2012, providing optical access points for electronic communication operators that would deploy the last mile to the end-user. The first phase of the SAP was implemented by the Latvian State Radio and Television Centre[4], between 2012 and August 2015. 1813 km of optical cable were laid and 177 access points were built. In 2016, the Latvian State Radio and Television Centre, concluded a contract with Latvia's Central Finance and Contracting Agency to implement SAP's second phase. The construction of the optical network will be launched in 2017. It is foreseen that by 2020 2800 km of optical cable and 220 optical network access points will be built. The co-financing from EU structural funds in SAP's first phase was €23,019,837 (aid intensity: 87.18%) while €43,974,115 (aid intensity: 85%) will be invested in SAP's second phase.

Implementation of the SAP is being monitored by the Optical Network Steering Committee, comprising governmental and municipal authorities, plus non-governmental organisations active in the field of electronic communications. It is tasked with issuing opinions on eligible investment areas ('white areas'), infrastructure access conditions and wholesale tariffs. The NRA plays an advisory role on the committee.

As the rural population is fairly sparse, there is little commercial interest from operators providing the last mile. This in turn leads to high maintenance costs, as the network is under-used. The Ministry of Transport is therefore considering possible ways of enabling the mobile

[4] State Joint Stock Company "Latvian State Radio and Television Centre"

communication operator's base stations to be connected to the middle mile. It is also searching for possible means to encourage the deployment of the last mile.

c. State of transposition the Broadband Cost Reduction Directive

Following the expiry on 1 January 2016 of the deadline for transposing the Broadband Cost Reduction Directive, the Commission opened infringement proceedings against Latvia for failure to notify transposition measures. Measures designed to transpose the Directive, including a new Law on high-speed broadband networks, were adopted in the Latvian Parliament in April 2017.[5]

3. Regulatory function

In Latvia the fixed and mobile termination rates are based on a pure BU-LRIC benchmark. In fact, the pure BU-LRIC fixed termination rate price cap comes to €0.076 per minute, whereas the mobile termination rate price cap is €0.0105 per minute.

On 6 January 2016, SPRK notified the Commission of remedies concerning the *wholesale market for call termination on individual public telephone networks provided at a fixed location* in Latvia. The fourth review of the markets for fixed call termination in Latvia had been notified to and assessed by the Commission in 2014 under case LV/2014/1625. For the level of fixed termination rates (FTRs) SPRK maintained the benchmarking approach previously defined,[6] claiming it lacked the resources to develop its own bottom-up long-run incremental cost (BU-LRIC) model. Lattelecom remained subject to the following obligations: access, transparency (including a requirement to publish a reference offer), non-discrimination, price control and cost accounting, and accounting separation. Regarding the price control obligation, SPRK confirmed the two-part tariff price caps of €0.083 per call and €0.076 per call minute, set on the basis of a benchmark in its previous decision of 2014. SPRK proposed to withdraw all the obligations imposed on the eight operators that no longer have SMP. The Commission issued comments pointing out the need to review the price control obligation in line with the Termination Rates Recommendation. Pending the review of the price control obligation, the Commission asked SPRK to regularly update tariffs based on the benchmark, to take into account the evolution of the relevant average, and to ensure that price caps in Latvia remain consistent with BU-LRIC FTRs across the EU.

After the publication of the 2014 Relevant Market Recommendation, ex-market 2 — *Access to the public telephone network at a fixed location* — of the 2007 relevant market recommendation was still regulated. On 31 May 2016, SPRK notified the Commission concerning wholesale call origination on the public telephone network provided at a fixed location in Latvia following the national consultation that ran from 3 March 2016 to 2 April 2016. SPRK found a substitution effect of fixed and mobile services on the wholesale market. Even though mobile network operators would not pose direct constraints on call origination services providers in the fixed network, they would compete on the retail market, thereby pose indirect constraints on operators offering origination services. Hence SPRK proposed that, since the market is genuinely competitive and does not warrant ex ante regulation, Lattelecom should no longer be considered as having SMP on the identified relevant market and all remedies imposed have to be withdrawn. SPRK proposed that the lifting of the obligations currently in place take effect twelve months after the current draft measure enters

[5] http://eur-lex.europa.eu/legal-content/EN/NIM/?uri=CELEX:32014L0061
[6] In case LV/2014/1538.

into force, to enable operators relying on CS/CPS services to adapt to the new circumstances. In its comments, the Commission called on SPRK to include further reasoning in the final draft measure as to the appropriateness of the twelve-month notice period until the lifting of SMP obligations, and to reconsider its length, if appropriate.

Ex-markets 2 and 5 of the 2003 relevant market recommendation were still regulated — retail markets for publicly available local and/or national voice telephony services provided at a fixed location for residential and non-residential customers. In its analysis[7] SPRK included within the relevant market fixed calls to mobile networks; voice calls transmitted over an IP network; and mobile voice telephony services. As regards demand-side substitutability, SPRK found that fixed and mobile telephony services can be considered demand-side substitutes. The regulator concluded that the relevant market in Latvia is characterised by strong fixed and mobile convergence, and that consumers do not perceive mobile and fixed telephony as complements, but as substitutes. The regulator concluded that there is genuine competition in the market and that there is no need to continue to apply ex-ante remedies. SPRK has therefore decided to revoke the finding of SMP in the relevant market as of 1 January 2017 and to withdraw all remedies as of that date. Having examined the notification provided by SPRK, the Commission had no comments.

4. Consumer issues

Number portability		LV-2015	LV-2016
Fixed	Number of transactions [1]	9,365	10,586
	Transactions as a % of total numbers [1]	0.3%	1.0%
	Maximum wholesale price [2]	9	9
	Maximum time under regulation (number of working days) [2]	1	1
Mobile	Number of transactions [1]	104,407	95,669
	Transactions as a % of total numbers [1]	3.7%	3.5%
	Maximum wholesale price [2]	14	8
	Maximum time under regulation (number of working days) [2]	1	1

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

Bundles

With more complex products in the market (double and triple play, and traffic bundles) becoming increasingly relevant, consumers' perception of transparency and clarity of contracts is increasingly important. The 2015 Eurobarometer survey showed that Latvian consumers could still relatively easily compare bundle offers (65%, though it was below the EU average of 69% and had fallen significantly since 2014). It was also easier to monitor consumption for fixed (74%, EU average 71%), than for mobile offers (65%, EU average 69%). Finally, consumers were quite satisfied with contract information (14% unsatisfied, EU average 16%).

[7] Notified to the Commission under LV/2016/1935.

Transparency

In 2016, SPRK presented on its website a map showing the mobile internet quality of service measurements carried out by the regulator. The map gives an overview of the mobile internet upload and download speeds in different locations as well as a comparison of mobile internet performance between Latvian mobile internet operators.

Consumer complaints

In 2016, SPRK received 63 complaints about the following issues: 12 on quality of service; 11 on billing; 8 on contracts; 7 on tariffs; 2 on number portability and 23 on other issues. In seven instances the complaints were resolved with a decision that favoured the subscriber. Eleven complaints fell outside SPRK's remit.

Roaming

Before the entry into force of the transitional RLAH+ regime on 30 April 2016, in Q1 2016, the average retail Eurotariff price for roaming was €0.183 per minute of calls made and €0.033 per minute of calls received (with no alternative tariffs for outgoing or incoming calls) and €0.056 per text message. However, €0 173 per MB for data was nearly four times the EU average (€0,047 per MB). Sanctions in the case of non-observance of the Roaming Regulation are provided in the Latvian Administrative Violations Code, in particular, Article 158.5.[8]

In 2016, SPRK ruled against an operator for failure to comply with Article 6e of the Roaming Regulation. The operator appealed against the decision, and the hearing is expected to take place in 2017.

Net neutrality

Article 6 of the Telecom Single Market (TSM) regulation (Regulation (EU) 2015/2120) stipulates that EU countries are to lay down the rules on penalties applicable to infringements of Articles 3, 4 and 5. The deadline for notifying the Commission of these rules and measures was 30 April 2016. According to the notification of Latvian authorities of 7 July 2016, the Latvian Administrative Sanctions Code was amended to comply with article 6 of the regulation.[9]

Universal service

As of 2017, the directories and directory enquiry services are removed from the scope of the universal service obligations. Public payphones were removed in 2014.

112 and access for disabled end-users to emergency services

In 2016, no amendments were made to national legislation concerning 112. Caller location accuracy is based on the Cell ID provided by the mobile network operator, or on the installation address in the case of calls placed in fixed networks. However, the 'My security'

[8] Article 158.5 of the Latvian Administrative Sanctions Code states that in the case of non – compliance, a warning shall be issued or a fine shall be imposed on legal persons – from €700 up to €14,000.

[9] Article 158.6 of the Latvian Administrative Sanctions Code was amended to provide the following sanctions for breach of open internet access: 'a warning or imposing a fine on individuals of up to seventy-seven Euro, officials - from forty to one hundred and seven euros, and for legal entities - from two hundred eighty up to fourteen thousand euro.' The new sanctions entered into force on 13 July 2016.

mobile application was launched in 2016 by the State Police with the option of sending GNSS coordinates to the Public Safety Answering Point. Where satellite signal reception conditions are favourable, the level of accuracy can reach 10 meters radius.

An agreement was reached between public institutions and mobile operators to start preparations for introducing the Advanced Mobile Location (AML) in October 2016.

As regards awareness-raising, in 2016 the Latvian authorities organised training courses for 8000 children and information campaigns at Riga International Airport and at railway stations. In addition, Erasmus students were informed on the single European emergency number 112.

5. Conclusion

Latvia is performing very well as regards 4G coverage. Although fixed rural NGA coverage expanded significantly in 2016, more needs to be done to fully bridge the digital divide. Currently, broadband deployment in rural areas benefits from ERDF co-financing. Once fully transposed, the Cost Reduction Directive may help reduce the digital divide further.