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Telecommunication Market and Regulatory Developments

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ESTONIA

1. MAIN MARKET & REGULATORY DEVELOPMENTS: BEST PRACTICES AND CHALLENGES

Development of the sector

Despite the economic downturn and the decrease in **revenues** in recent years, operators continued to develop their networks to enable faster broadband connections. However, current **investments** level with approximately €68 million is still far from the two years old result of €96 million. – *Section 3*

The growth slowdown in **fixed broadband** penetration could be noticed already for the third consecutive year in Estonia, and with a penetration rate of 27.2% Estonia has dropped below the EU average of 27.7%. The declining rate of growth in fixed broadband lines may be explained by the increasing popularity of mobile broadband services and the overall growth in broadband is taken over by mobile. The **mobile broadband** penetration rate, measured by all active users, reached 42%. As of summer 2011 all three mobile network operators (EMT, Elisa and Tele2) offer packages with unlimited data volume at around 11€/month applying reasonable usage principles. – *Section 4.1*

With a relatively high proportion of mobile traffic from the total volume of voice traffic – 74.1% in 2010 and with three strong players – EMT, Elisa and Tele2 - the Estonian **mobile market** could be characterised by intense competition. The market share, by subscribers, of the leading operator EMT dropped to 42% in October 2011. The second operator (Tele2) and the third market player (Elisa) changed their market positions in mobile communications.

As regards the **fixed voice market**, in general the market is mature and continues decline gradually with the fixed penetration rate of 25% reflecting the continuous trend of fixed-to-mobile substitution. Moreover, fixed voice traffic accounted for only 25.9% of total voice traffic in 2010, which is well below the EU average of 46.5%. In many cases the fixed voice service is considered by end-users as a complementary service offered together with broadband and broadcasting services, either on very favourable conditions, or often for free on-net usage. – *Section 5*

As regards **number portability**, in Estonia it took on average, 10 working days to port a fixed number, and 8 days for a mobile number. – *Section 7.5*

Progress in broadband deployment and take-up

In 2011, good progress was made towards the goals of the Estonian broadband strategy, EStWin, aiming to build a country-wide broadband network capable of delivering 100 Mbps connections to the majority of Estonian households and businesses by the end of 2015.

Fixed infrastructure-based competition continues to be based on alternative infrastructures rather than the use of the regulated wholesale products of the fixed incumbent. DSL technology represents 39% of all fixed broadband subscriptions, and DLS market is dominated by the incumbent operator (Elion) with the remarkable market share of 99.8%. While the incumbent operator is pioneering FTTx deployment in the country, its market share is 44% in this market segment. Cable operators, which were mainly present in cities, were able to offer the highest speeds of up to 150 Mbps at

competitive prices. With approximately 66.5% of all fixed broadband subscriptions had a download speed of at least 2 Mbps, the most popular bandwidth is the range of 2-10 Mbps (50.3%); yet, the biggest gap compared with the EU average remains in the range of 10-30 Mbps – 4.9% compared to the EU level of 40.5%. Some operators upgraded the speeds of their end-user packages while the prices remained the same, despite increase in speed. – *Section 4*

Independence and effectiveness of the NRA

The lack of effective structural separation of regulatory functions in the field of electronic communications from activities associated with ownership or control of providers of electronic communications networks or services has been an issue in Estonia in 2011. – *Section 2*

Implementation of the framework

Estonia was among the first Member States to notify the full transposition of the new EU regulatory framework for electronic communications into national legislation. The amendments to Electronic Communications Act were adopted on 22 February 2011 with an entry into force on 25 May 2011. – *ad hoc*

Spectrum management

In 2011, the Estonian NRA conducted an auction for unused spectrum in the 1800 MHz frequency band. The coordination agreement between Estonia and Russia of August 2011 has opened up the way for the construction of mobile networks using the 800 MHz spectrum. In addition, Estonia still faces the challenge of coordinating frequencies in this band with Latvia. – *Section 6*

Citizens and consumer protection

Two harmonised numbers for harmonised services of social value, 116111 (Child helplines) and 116 000 (Hotline for missing children) were operational in Estonia in 2011. – *Section 7.1* 112 is operating well in Estonia and its awareness remains relatively high. In September 2011, an action plan for full transition to the single emergency number 112 by the end of 2014 was approved. – *Section 7.2* The majority of consumer complaints concerned mobile and fixed voice services (62%), followed by complaints regarding Internet (19%) and TV (19%). – *Section 7.4* Net neutrality is not considered to be an issue at the moment in Estonia. – *Section 7.3* As regards ePrivacy, the Data Protection Inspectorate has lately published general guidelines regarding the use of electronic contact details for direct marketing, following a survey conducted on the same topic in the first half of 2011. – *Section 7.7*

2. NATIONAL REGULATORY AUTHORITIES (NRA)

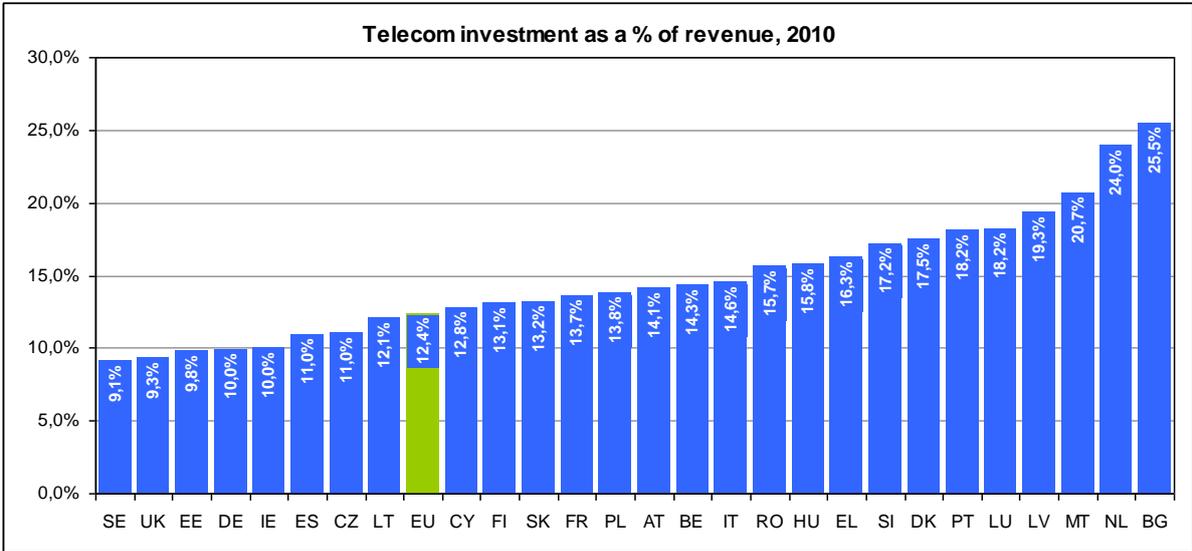
The lack of effective structural separation of regulatory functions in the field of electronic communications from activities associated with ownership or control of providers of electronic communications networks or services has been an issue in Estonia in 2011.

Most of the responsibilities under the regulatory framework are performed by two regulatory authorities - the Estonian Competition Authority (*Konkurentsiamet*, ECA) and the Estonian Technical Surveillance Authority (*Tehnilise Järelevalve Amet*, ETSA). However, the Ministry of Economic Affairs and Communications (the Ministry) is directly involved in the procedures leading to the approval of the National Radio Frequency Allocation Table and Numbering Plan, as well as in the elaboration of regulations governing the provision of

universal service in Estonia. At the same time, the Ministry carries out activities associated with both ownership and control of providers of electronic communications networks or services, in particular where a company provides inter alia broadcasting transmission and wireless broadband. A letter of formal notice was sent to the Estonian authorities in September 2011 concerning incorrect application of EU law by Estonia, namely Article 3(2) of the Framework Directive 2002/21/EC as regards the compatibility with the requirements of effective structural separation between regulatory functions and functions related to the control or ownership of electronic communications providers.

3. REVENUES AND INVESTMENTS

Despite the economic downturn and the decrease in revenues in recent years, operators continued to develop their networks to enable faster broadband connections. However, current **investments** level with approximately €68 million is still far from the two years old result of €96 million.



Source: Commission services

The total turnover of the Estonian electronic communications sector was €697 million as of December 2010 compared to €717 million in 2009, representing an annual decrease for the second consecutive year, by about 2.8% in 2010. The decrease in mobile revenues has been even higher – 5.6%, down from €407 million in 2009 to €384 million in 2010, while revenues generated by the fixed market have slightly increased over the year, totalling €215 million in 2010 compared with €213 million in 2009. Operators pointed the economic downturn and intense competitive environment as reasons to decrease in revenues.

Despite the fall in revenues Estonian operators increased their investment by as much as 4.4% over a year, to approximately €68 million, resulting in an investment over revenues ratio of 9.8%, still well below the EU average of 12.2%. However, current investments level is still far from the two years old result of €96 million. As of December 2010, the total value of investment by alternative operators was around €7 million, mobile operators invested close to €37 million, while the fixed incumbent invested approximately €23 million. According to the regulator, low investment figures can be explained by the slowdown in the construction industry and the national economy in general. The main investments continued to be made in order to develop the mobile networks to enable faster mobile broadband, which is the most rapidly developing sector, as well as the rollout of fibre.

Furthermore, some market consolidation has taken place in 2011. One of the three major players in Estonian telecom market acquired a subsidiary of the Estonian energy company, providing data transmission services to local and international carriers, and wireless Internet access service to approximately 20,000 retail customers in 450 MHz band. The acquisition gives to the buyer a stronger presence towards business customers in the Estonian market, with full control over its 1600 km of fibre-optic transmission network until 2025 to obtain a service that they had purchased so far.

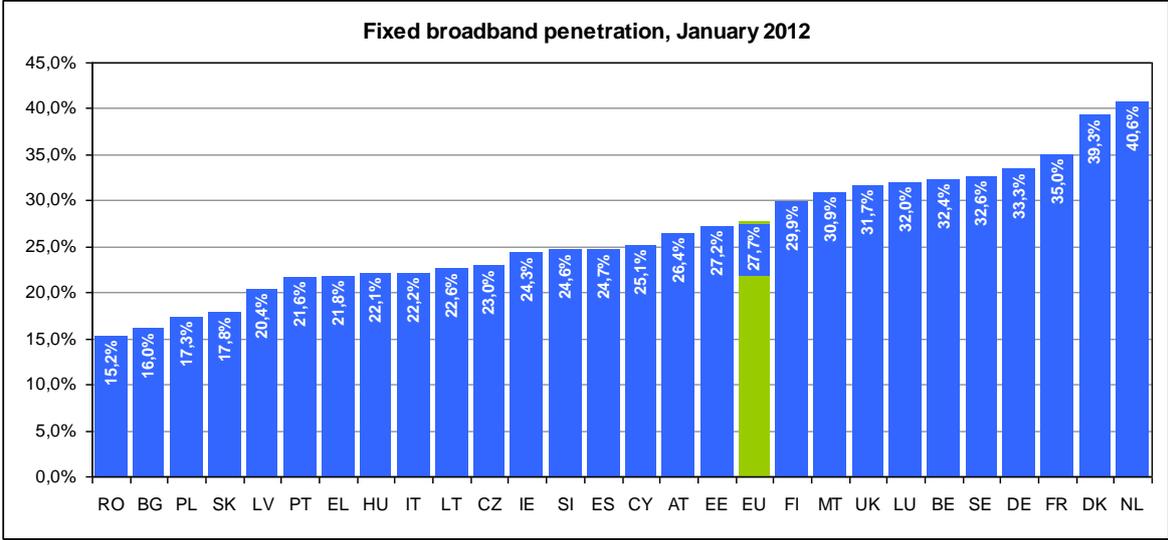
4. BROADBAND

The growth slowdown in **fixed broadband** penetration could be noticed already for the third consecutive year in Estonia, and with a penetration rate of 27.2% Estonia has dropped below the EU average of 27.7%. The declining rate of growth in fixed broadband lines may be explained by the increasing popularity of mobile broadband services and the overall growth in broadband is taken over by mobile. The **mobile broadband** penetration rate, measured by all active users, reached 42%. As of summer 2011 all three mobile network operators (EMT, Elisa and Tele2) offer packages with unlimited data volume at around 11€/month applying reasonable usage principles.

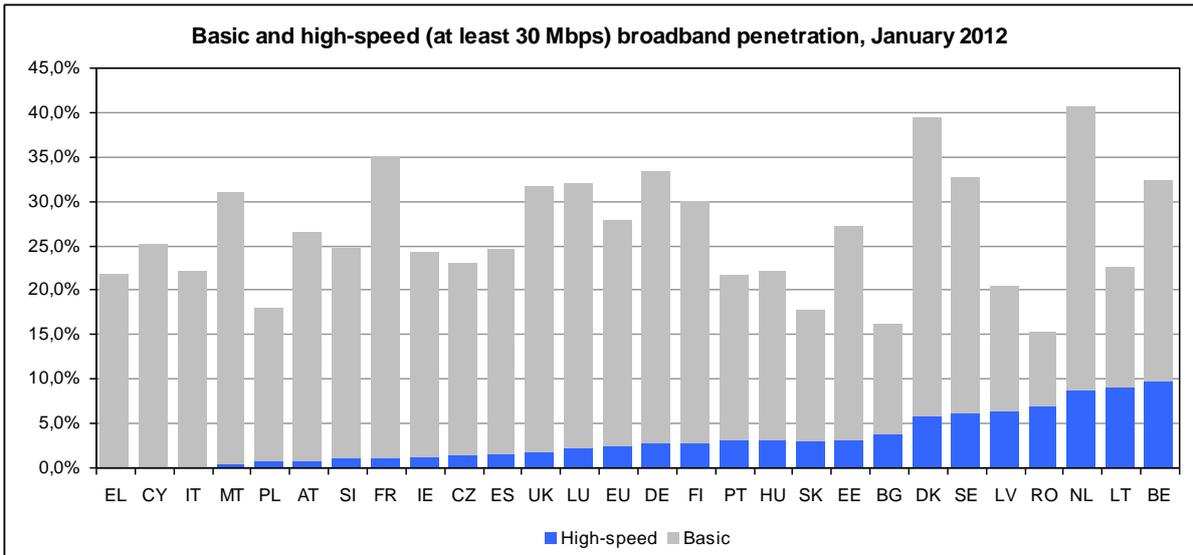
In 2011, good progress was made towards the goals of the Estonian broadband strategy, EStWin, aiming to build a country-wide broadband network capable of delivering 100 Mbps connections to the majority of Estonian households and businesses by the end of 2015.

4.1. Market situation and regulatory developments

In January 2012, in the European ranking for fixed broadband penetration with the penetration rate of 27.2% Estonia has dropped below the EU average of 27.7%, placing Estonia eleventh in the EU.

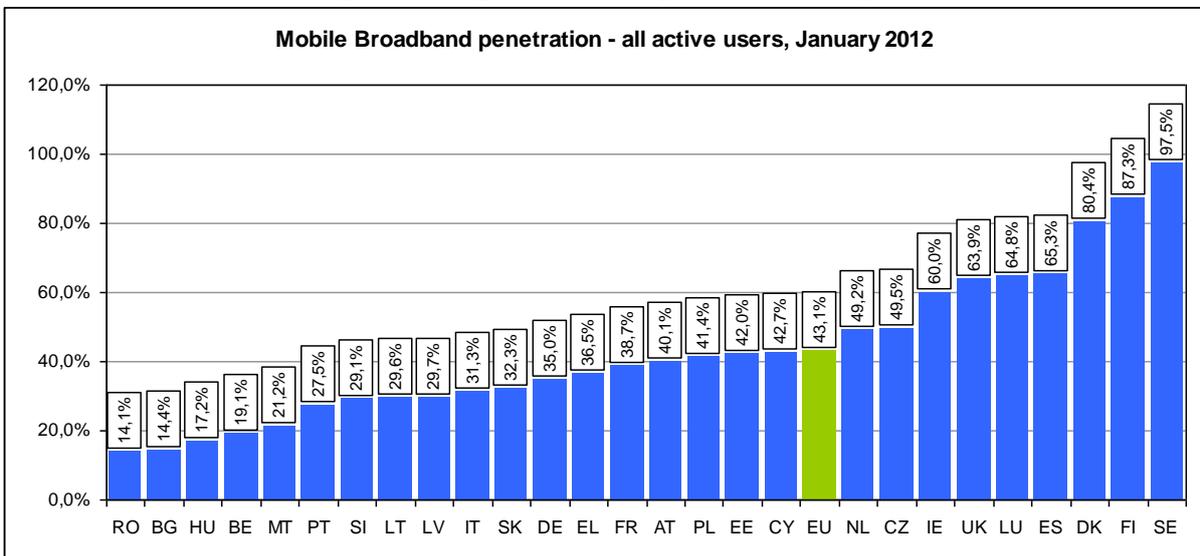


Source: Communications Committee



Source: Communications Committee

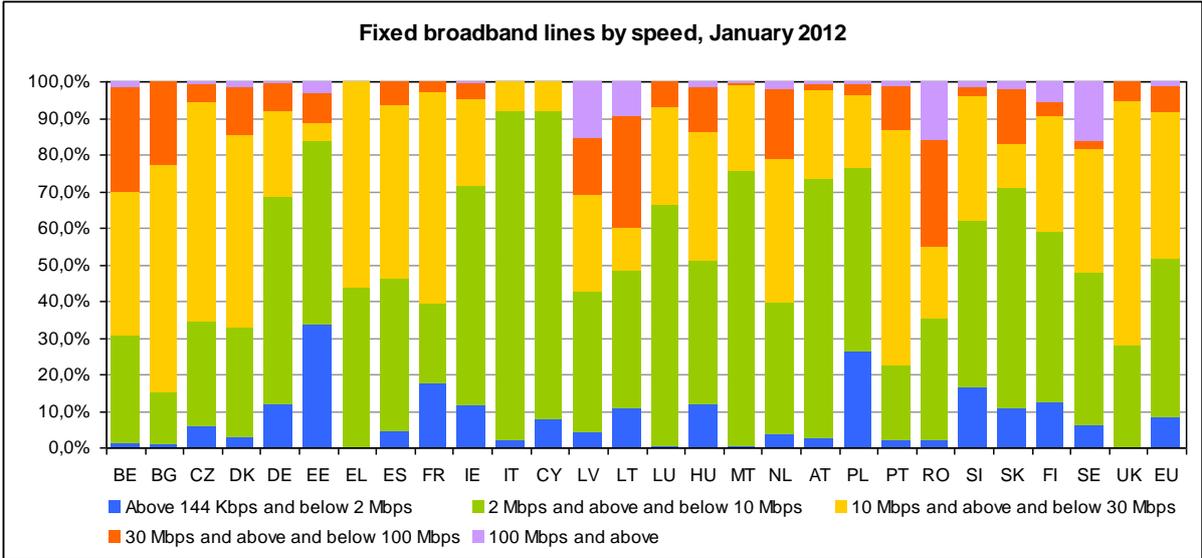
The declining rate of growth in fixed broadband lines may be explained by the increasing popularity of mobile broadband services and the overall growth in broadband is taken over by mobile sector in Estonia. The mobile broadband penetration measured by use of dedicated data cards/modems/keys has increased to 10.7% in January 2012. This was up from 5.2% in January 2011, and makes Estonia sixth in the EU (8.1%). While measured by all active users, the mobile penetration rate reached 42%, however, below the EU average of 43.1%. As of summer 2011 all three mobile network operators offer packages with unlimited data volume at around 11€/month applying reasonable usage principles. In addition, they have had rolled out 3.5G networks covering 80-90% of the population and 50-60% of the territory by the end of 2011. Mobile network operators reported a strong rise in the usage of data services.



Source: Communications Committee

The market leader launched 4G services commercially, and continued its LTE roll-out in the 2.6 GHz band throughout 2011, reaching by the end of the year 30% coverage by population. In addition, two other mobile operators are running their 4G test networks since June 2010. According to the operators, the commercial launch of 4G depends on the complete technical readiness to offer high quality 4G services, but also the easy availability of 4G consumer devices remains an important factor in this regard.

In terms of fixed broadband speeds, in January 2012, approximately 66.5% of all fixed broadband subscriptions had a download speed of at least 2 Mbps, up from 58.9% a year earlier. However, in the range of 2-10 Mbps, which is the most popular bandwidth in the EU (43.4% of all end-users), there have been no significant changes over one year (50.3% in January 2012 compared to 49% in January 2011). Some increase could be noted in the range above 10 Mbps – up from 9.9% in January 2011 to 16.2% in January 2012; yet, the biggest gap compared with the EU average remains in the range of 10-30 Mbps – 4.9% compared to the EU level of 39.9%. With some premium residential offers on the market currently offering a broadband connection up to 150Mbps, a low demand for very high speed products was noted by the industry. Some operators also upgraded the speeds of their end-user packages while the prices remained the same, despite increase in speed.



Source: Communications Committee

On the fixed broadband market, competition between the platforms continues to be intense. DSL technology represents 44% of all fixed broadband subscriptions, which is substantially lower than the EU average with 76%. DLS market is dominated by the incumbent operator with the remarkable market share of 99.7%, which has even risen over the year by 5.3 percentage points. The share of cable modem subscriptions has slightly decreased compared with last year and stood at 20% in January 2012, while FTTx represented 24.9% of all fixed broadband subscriptions, up from 20.2% in January 2011. While the incumbent operator is pioneering FTTx deployment in the country with approximately 36 000 retail lines, its market share is 44% in this market segment. Cable operators, which were mainly present in cities, were also able to offer the highest speeds of up to 150 Mbps at competitive prices. The total number of next generation access (NGA) lines as a % of total fixed broadband lines was 31% in January 2012.

Fixed infrastructure-based competition continues to be based on alternative infrastructures rather than the use of the regulated wholesale products of the fixed incumbent. Despite several regulatory initiatives, including price control remedies for physical network infrastructure access since January 2010, and supervisory activities, but also the inclusion and full regulation of access to cable ducts, take-up of wholesale access services has even slowed down in 2011. An important reason for the poor take-up by alternative operators of the fixed incumbent's regulated wholesale offers could be the insufficient margin between the wholesale costs and retail prices, but also difficulties when negotiating issues such as collocation with the incumbent operator. In February 2012, one market player announced that they would wind down their DSL and WiMAX based Internet services to end-users.

According to the measures applicable to fibre-based physical infrastructure access since 2009, ECA differentiated fibre from metallic local loops in respect of the non-discrimination and cost orientation obligations, although it considers both forms of access as part of the same relevant market. This is despite the fact that the Commission invited ECA to ensure that access measures for fibre loops are supplemented by appropriate non-discrimination and costing remedies in view of the competition problems identified for this market. In addition, according to the EC, the remedies should further ensure that appropriate passive infrastructure access options, such as access to unused fibre, and arrangements for the migration of alternative operators to fibre networks, are in place.

As regards the imposed remedies in the wholesale broadband access markets, the regulator excluded the application of any price control with regard to access to optical fibre lines at the DSLAM level, ignoring the EC's recommendation regarding this.

Since it seems that the regulatory measures in the wholesale (physical) infrastructure access market and in the wholesale broadband access market have not resulted in a growth of the take-up of the wholesale access services, the ECA intends to initiate the next round of market analyses for markets 4 and 5 (markets for physical network infrastructure access (LLU) and wholesale broadband access) in 2012.

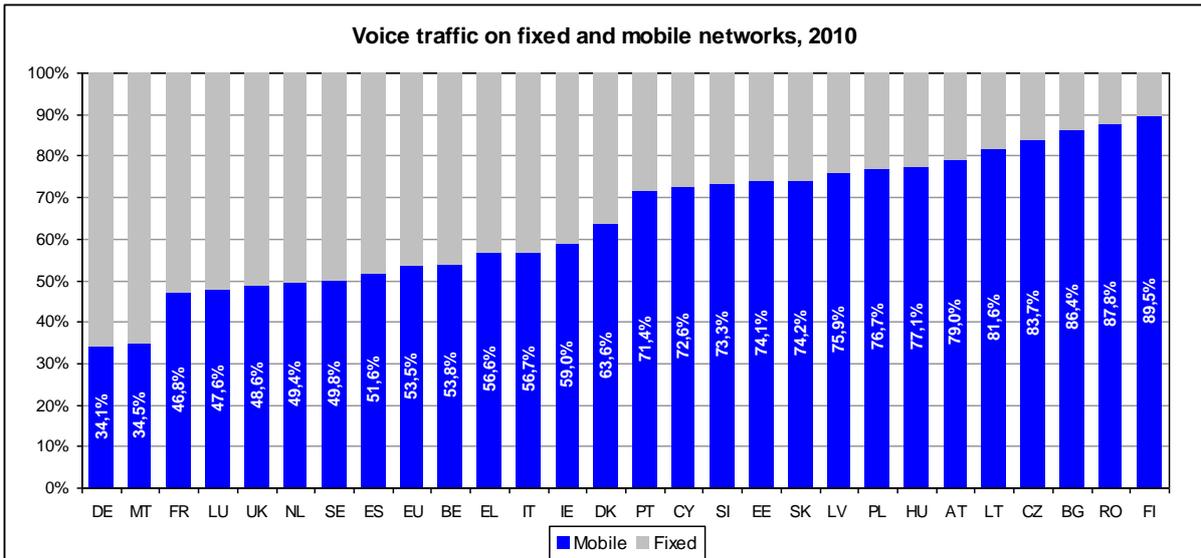
In 2011 the Estonian authorities initiated a study on Rights of Way, regarding all infrastructures with the Ministry of Justice leading the process, which is the first initiative to develop a policy in this area.

4.2. National Plans, private & public investments

The Estonian Broadband Plan, the EstWin project, aiming to build a country-wide broadband network capable of delivering 100 Mbps connections to the majority of Estonian households and businesses by the end of 2015, was notified to the European Commission in May 2010, in order to determine its compatibility with the EU rules on State Aid, and was approved in July 2010. The estimated overall costs of rolling out the 2000 km of Phase I, consisting of approximately 10 different sub-projects, are estimated at €25 million, while a total amount of €22.36 million is planned in State Aid. The first sub-project was launched in August 2010. By the end of 2011, altogether 1100 km of fibre-optic networks, out of 6500 km foreseen to be rolled out by the whole project, had been built and is available for all service providers. As the network became operational, the Estonian Broadband Development Foundation, which is responsible for carrying out the EstWin project, including the organisation of the operation of the built network, and its sustainable management and administration, has to coordinate with the ECA the wholesale access price level that would be reasonable and non-discriminatory. Altogether 23 projects were finished, 2 were in progress and 24 in the planning stage by the end of 2011.

5. VOICE AND OTHER COMMUNICATION SERVICES

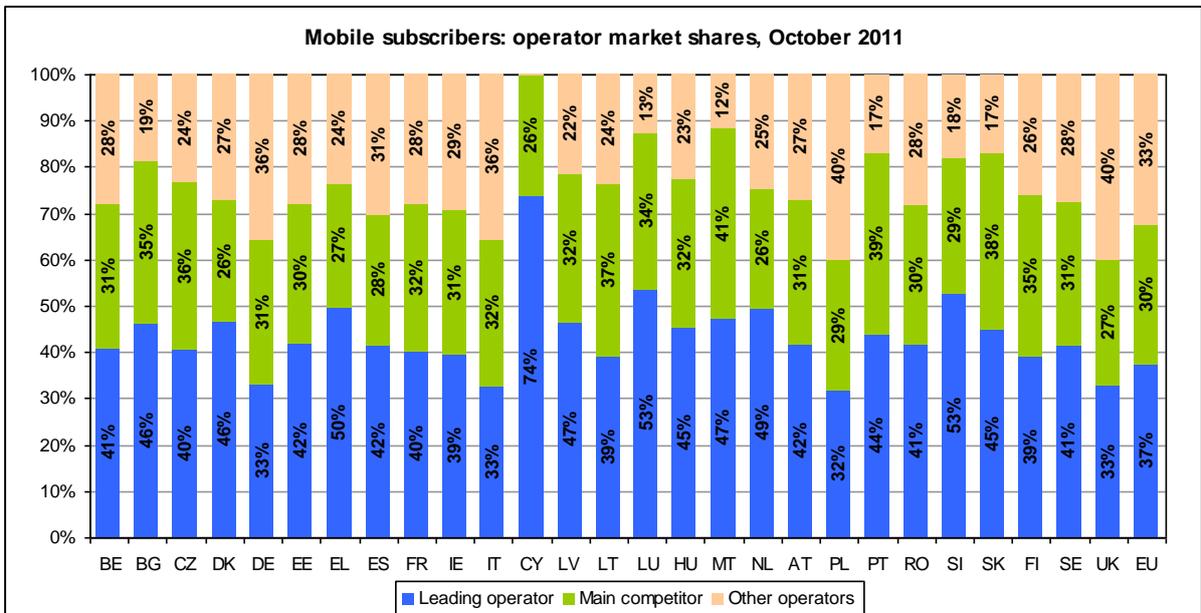
<p>Mobile services continued to be very popular with competitive retail offers in the market. As regards the fixed voice market, in general the market is mature and continues decline gradually. The incumbent was able to defend its high market share through attractive service bundles. In addition, cable operators remained in a strong position.</p>



Source: Commission services

5.1. Mobile services

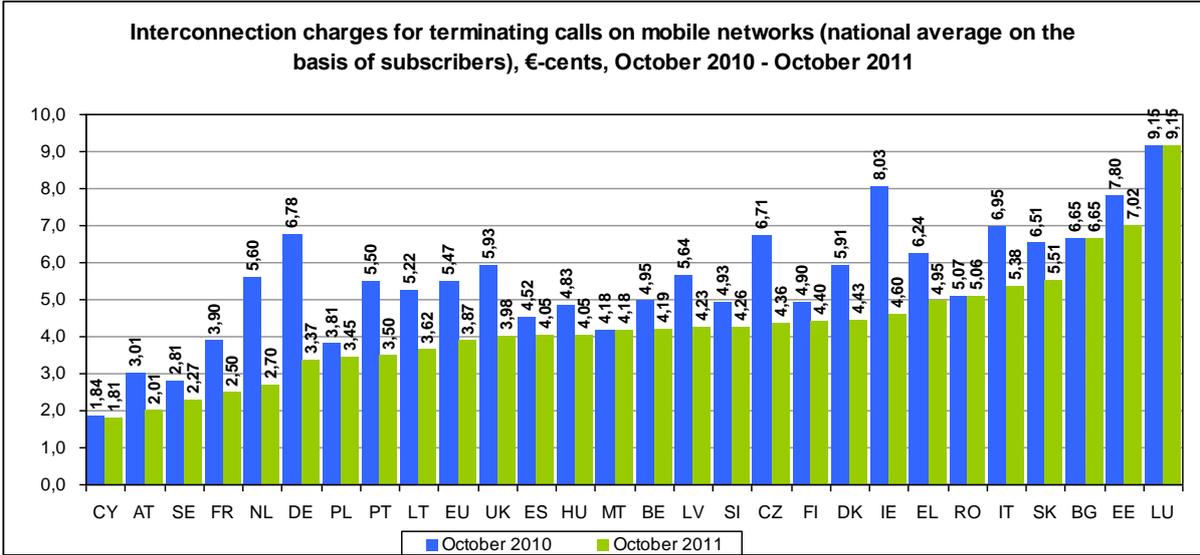
The mobile penetration rate reached 134% in October 2011, (compared to 120% in October 2010), well above the EU average of 127%. With a relatively high proportion of mobile traffic from the total volume of voice traffic on mobile and fixed networks – 74.1% in 2010 and with three strong players, the Estonian mobile market could be characterised by intense competition and operators' market shares have somewhat changed since last year. The market share, by subscribers, of the leading operator dropped to 42% in October 2011, compared to 46.3% in October 2010. The second and the third market player changed their market positions in mobile communications. The previous second operator, who has positioned itself as a price leader, has experienced strong price attack by the previous third competitor. All operators hold both, GSM and UMTS licences.



Source: Commission services

Prices for mobile phone calls in Estonia are still relatively low. In this regard, the average revenue per minute of mobile communications, excluding VAT, was €0.07. The average annual revenue per user in 2010 was €278. On the contrary, despite the low retail prices,

Estonian Mobile Termination Rates (MTRs) are among the highest in the EU (€0.0702 compared to €0.0387 in the EU). However, in the national consultation of the draft decision to regulate the mobile termination market launched by the ECA in January 2012, the NRA proposed a lower MTR level since 1 July 2012. In addition, as regards the price control remedy, ECA proposed to continue with benchmarking in a way that instead of applying the average rate in the ERG countries together with a +/-10% cap, as in the current regulation, it would use the benchmarks only of those countries which already apply MTR of an efficient operator in line with the Commission's comments to the previous market analysis.



Source: Commission services

5.2. Roaming

As regards the roaming, all three mobile operators in the Estonian market seemed to comply duly and on time with the obligations, as required by the amended Roaming Regulation. The eurotariff offered by operators reflects the maximum price cap set in the Regulation with a few exceptions for more favourable prices when calling from neighbouring countries. Furthermore, the retail prices for data service are still remarkably higher than the wholesale price cap set in the Regulation, except for some temporary offers in the market. Some operators have lowered their roaming prices for voice services when calling from the most visited third countries.

5.3. Fixed

As regards the fixed voice market, in general the market is mature and continues decline gradually with the fixed penetration rate of 25% reflecting the continuous trend of fixed-to-mobile substitution. Moreover, fixed voice traffic accounted for only 25.9% of total voice traffic in 2010, which is well below the EU average of 46.5%. In many cases the fixed voice service is considered by end-users as a complementary service offered together with broadband and broadcasting services, either on very favourable conditions, or often for free on-net usage. There are 6 operators offering voice telephony through direct access based on full LLU and 7 based on proprietary infrastructure. However, the position of the incumbent operator in the fixed voice market remains unchallenged. The market share of VoIP operators on fixed calls stood at 15% in October 2011, which was well below the EU average of 23.1%.

As regards the market analysis of the market for access to the public telephone network at a fixed location in 2010, the European Commission invited ECA to impose a wholesale line rental (WLR) obligation as soon as possible in order to render CS/CPS obligations more effective. While at that time the Estonian legislation did not foresee the possibility to impose a WLR remedy, such a power has been given to the NRA with the amended Electronic Communications Act since May 2011.

Following the second round of market analyses, ECA withdrew regulation from the wholesale market for the trunk segments of leased lines and continued with the regulation in the market for the terminating segments of leased lines, in relation to which the Commission issued comments concerning the lack of clear boundaries between these two markets. In addition, the Commission underlined the need for monitoring the latter market with a view to its possible extension to Ethernet leased lines.

In the recent Court Judgement, the incumbent challenged the ECA's prescription regarding the applied methodology of calculation of LLU prices, and was granted initial legal protection. However, the case was concluded in May 2011 with a compromise between the parties.

5.4. Broadcasting

Following the digital switch-over in July 2010, approximately 30.2% of households received TV broadcasting via digital terrestrial TV (DTTV). Competition between the platforms continues to be intense with 38.4% of cable TV's market share (up from 37.4% in 2010), and well established IPTV platform with market share of 23.2% of households (up from 20.3 in 2010). The satellite platform continues to mainly be supplementary to other platforms, with a market share of 8.2%.

Following the full transition to digital television, there are 5 national free-to-air channels in the terrestrial digital broadcasting network. Three terrestrial multiplexers (MUX) are in operation, one for free-to-air digital TV channels with a 100% coverage of the territory, and two others with conditional access covering 90% of the territory. In November 2011, the public tender for providing digital television broadcasting services in the frequency band of 470–790 MHz was completed, and the biggest cable operator was declared the winner. The respective frequency authorisation grants the right to broadcast television broadcasts and programmes via three multiplexers.

The Government has decided not to establish a regulation establishing digital switchover also in cable networks since the main cable operators already provide digital services.

Although the market for broadcasting transmission services is no longer recommended by the Commission for ex ante regulation, the new analysis of the wholesale market for broadcasting transmission services proposing to maintain the regulatory measures was notified by ECA to the Commission in early 2011.

6. SPECTRUM MANAGEMENT

<p>In 2011, the Estonian NRA conducted an auction for unused spectrum in the 1800 MHz frequency band. The coordination agreement between Estonia and Russia of August 2011 has opened up the way for the construction of mobile networks using the 800 MHz spectrum. In addition, Estonia still faces the challenge of coordinating frequencies in this band with Latvia.</p>

Unused spectrum in the 1800 MHz frequency band was put on auction in the second half of 2011. The threshold for one licence was €300 000 and the final result of the auction was €0.916 million. The winning bids were submitted by the three existing mobile market players and a total of three licenses have been issued of 2*8.4 MHz each. The winners are obliged to put the allocated frequencies into use in at least 30 base stations all over Estonia by December 2012 at the latest. Depending on the results of the auction the need for re-farming of this band will be considered.

In addition, secondary legislation was adopted according to which re-farming of 900 MHz band to create continuous spectrum blocks will be conducted in January 2014. Until then one operator, who has two contiguous slots in this band, is not allowed to cross use them to avoid any competitive advantage in front of the other operators.

In the end of 2011, the ETSA and the Ministry of Economic Affairs and Communications started preparations for organising a public competition for finding communication undertakings to provide mobile broadband services in the frequency band of 790-862 MHz and launched a public consultation to gather the views of different stakeholders.

According to the Estonian Digital Dividend Plan, the 790 – 862 MHz frequency range, which currently is used by the TV broadcasting transmission service provider until 1 July 2012, should be used also for the provision of mobile broadband services. While so far the use of the 800 MHz frequency band for that purpose has been restricted in Estonia due to military use of that range by Russia, an agreement reducing the restriction area has been reached in August 2011 between Russia and Estonia. This agreement allows for the provision of high-quality mobile services in that frequency band throughout the territory of Estonia, however, with the requirement to coordinate the base stations which are closer than 10-20 km to the border. In addition, Estonia still faces the challenge of coordinating frequencies in this band with Latvia, which is still using the band for digital broadcasting. As noted by the Estonian authorities, serious interference problems in southern part of Estonia prevent to make the band fully usable for wireless broadband, and numerous attempts to address these problems with Latvian authorities have minimal positive results so far.

Spectrum trading is currently available in the 2.1 GHz and 2.6 GHz bands.

7. CONSUMER INTEREST

7.1. 116 - Harmonised numbers for services of social value

Two harmonised numbers for harmonised services of social value, 116 111 (Child helplines) and 116 000 (Hotline for missing children) were operational in Estonia in 2011.

As of January 2012, two harmonised numbers for harmonised services of social value, 116111 (Child helplines) and 116 000 (Hotline for missing children) were operational in Estonia. One number, 116117 (Non-emergency medical on-call services), which has been assigned to a service provider, was expected to be operational in 2011. However, it is not operational yet. While the 116006 (Helplines for victims of crime) and 116123 (Emotional support helplines) numbers are available for the provision of the service, no applications have been submitted so far.

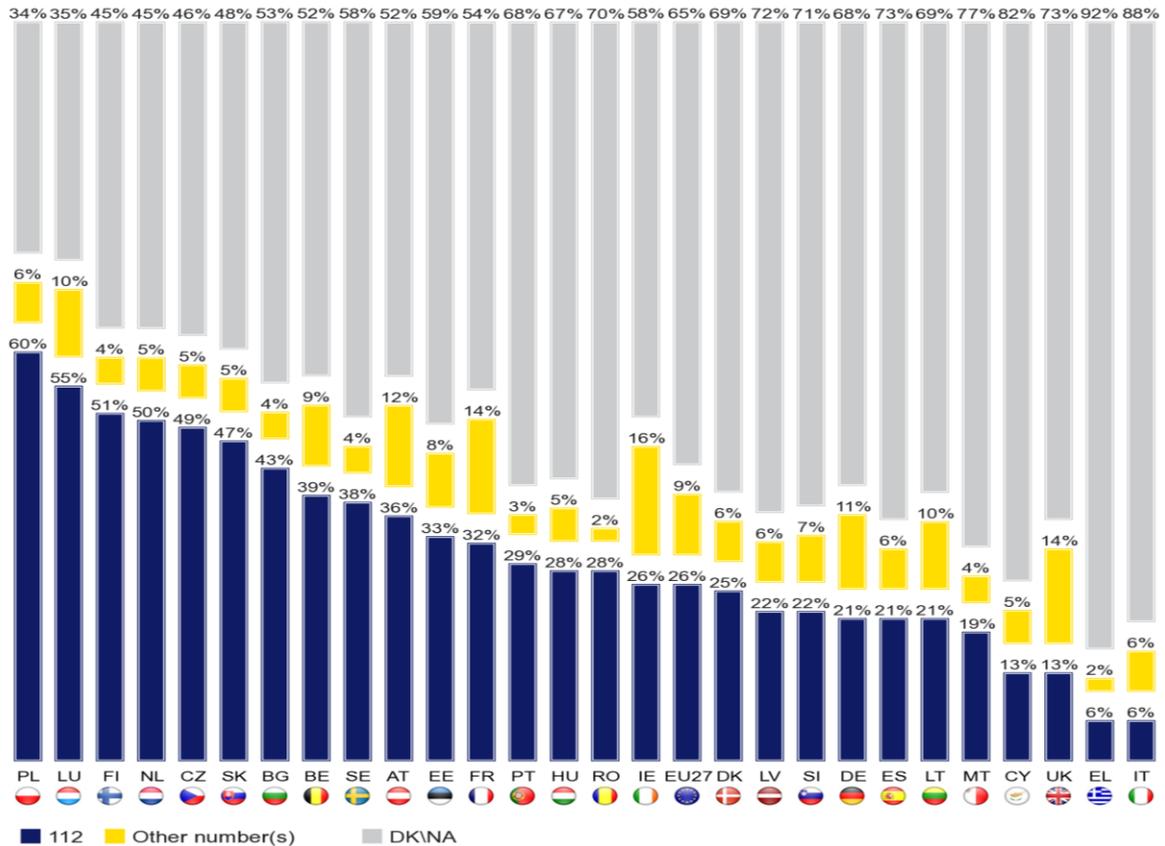
7.2. 112 – The European Emergency number

112 is operating well in Estonia and its awareness remains relatively high. In September 2011, an action plan for full transition to the single emergency number 112 by the end of 2014 was approved.

Awareness of 112 as the EU-wide emergency number:

Can you tell me what telephone number enables you to call emergency services anywhere in the European Union?

(Base: all respondents, % by country)



Source : Eurobarometer 2012

To reduce the time needed for an emergency service to reach the scene, the development project “GIS-112”, which is funded as part of framework cooperation between Estonia and Switzerland, has been launched in 2010. The project, aiming to establish an emergency management monitoring system on an electronic map, allowing, inter alia, to display the location of the emergency caller, is supposed to be fully operational before the end of 2012.

So far 112 works alongside with another national emergency number for police 110. However, according to the latest Eurobarometer survey, about 90% of Estonians would call the 112 number in the event of an emergency in their own country. In September 2011, the Minister of the Interior approved an action plan for full transition to the single emergency number 112 by the end of 2014. According to the same survey Estonians' awareness of 112 as the European-wide emergency number was 33%.

7.3. Net neutrality & quality of service

Net neutrality is not considered to be an issue at the moment in Estonia.

New net neutrality and quality of service requirements are transposed to the national legislation. The national regulatory authority has not set any minimum quality of service requirements on undertakings providing public communications networks so far.

Net neutrality is not considered to be an issue at the moment in Estonia. Mobile network operators have declared that they do not currently have a policy of blocking VoIP traffic.

7.4. Consumer complaints, tariff transparency

The majority of complaints concerned mobile and fixed voice services (62%), followed by complaints regarding Internet (19%) and TV (19%).

While in 2010, 3.7% out of all complaints submitted to the Consumer Protection Board (CPB) were in the field of electronic communications, the share of such complaints in the first half of 2011 was 4.9%. The majority of complaints concerned mobile and fixed voice services (62%), followed by complaints regarding Internet (19%) and TV (19%). In addition, the CPB responded to 280 written enquiries within this period. The main concerns of end-users were related to received bills, problems/disputes over the termination of the contract, contractual penalties provided by communication undertakings, the volume of the consumed mobile Internet and the low quality or lack of Internet communications. CPB holds meetings with the stakeholders on a regular basis to discuss issues of concern and, if necessary, issues guidelines for the market players (eg an Instruction for the provision of the periodical mobile content services).

The ECA continues to improve consumer awareness, including by continuously updating the website *Sideteenuste kalkulaator* which, on top of individual national tariffs, allows for a comparison of bundled offers and roaming packages.

7.5. Number portability

As regards number portability, it took on average, 10 working days to port a fixed number, and 8 days for a mobile number in October 2011.

Between January and October 2011, a total of 6 653 fixed numbers were ported in Estonia, compared with 11 593 a year ago, reflecting the overall decline in the fixed voice market. On the contrary, mobile number portability number has grown - between January and October 2011, a total of 51 020 mobile numbers were ported, compared to 47 726 a year ago. In Estonia it took on average, 10 working days to port a fixed number, and 8 days for a mobile number in October 2011, which are below the EU averages of 15 days for fixed numbers and 10 days for mobile numbers.

The secondary legislation is adopted in Estonia to regulate the wholesale porting process, including setting a time limit for loss of service to 15 minutes.

7.6. Universal service

The designation period of the alternative operator as regards the universal service connection to the PSTN, expired at the end of 2011, and the contract was not renewed.

While the alternative operator was designated as a Universal Service provider, and only as regards connection to the PSTN, the designation period expired at the end of 2011, and the contract was not renewed. There have not been any discussions in Estonia so far regarding the extension of the scope of the Universal Service to include broadband connections, since the

service is available to end-users throughout the country via wireless broadband with maximum 3.1 Mbps download/1.8 Mbps upload speeds at an affordable price. Moreover, taking into account the EstWin project, the Universal Service lost likely will not be of much relevance in the future, even if broadband would be included.

7.7. ePrivacy

<p>The Data Protection Inspectorate has lately published general guidelines regarding the use of electronic contact details for direct marketing, following a survey conducted on the same topic in the first half of 2011.</p>

The Data Protection Inspectorate is an independent supervisory body dealing with state supervision upon processing of personal data and is also authorised to issue guidelines for better protection of personal data and privacy. The Inspectorate was active in a number of areas regarding the e-safety of consumers. It has lately published general guidelines regarding the use of electronic contact details for direct marketing, following a survey conducted on the same topic in the first half of 2011. Given the high percentage of incidents related to misuse of electronic contact details for direct marketing and in order to introduce preventive measures to deal with spammers and so reduce the number of complaints with this regards, such guidelines were clearly necessary. A comprehensive legal framework against spam is in place: unsolicited commercial communications, as well as anti-spam rules in Estonia are regulated by the Information Society Service Act.