

## ESTONIA

### MAIN MARKET DEVELOPMENTS

The total turnover and investment figures for the Estonian telecommunications sector in 2009 showed a general decrease in comparison with a year earlier. Revenues in the telecommunications market sector in 2009 totalled €717 compared to €723 million from 2008. Revenues from fixed markets amounted to €310 million, while revenues from mobile markets totalled €407 million. Revenues acquired from the electronic communications sector, as a proportion of GDP, were about 5.2%, which was significantly above the EU average (2.8%).

The economic downturn has had its impact on investment in the telecoms sector in Estonia. With €66 million invested in 2009, the sector invested 31.4% less than the previous year. The incumbent invested €21 million, which is less than in 2008, while mobile operators and fixed alternative operators invested €34 million and €11 million respectively. The share of investment per GDP stood at 0.5% in 2009, while the investment over revenues ratio stood at 9.1%, which is below the EU average of 11.6%.

While just 17.7% of all mobile telephony, fixed telephony, and broadband and digital television subscriptions were bundled together with other subscriptions as of the second half of 2010, the share of bundled packages continues to grow. Some 4.5% of the population availed of double-play and 13.2% availed of triple-play offers prior to July 2010. The most common form of bundling is a combination of broadband, television and fixed telephony, followed by broadband and fixed telephony.

As of January 2010, the shares in the holding company of the Estonian incumbent are no longer traded on the Tallinn Stock Exchange. However, as it now belongs 100% to the leading telecommunications group in the Nordic-Baltic region, it therefore remains a public company, and its shares continue to be listed on the Stockholm and Helsinki stock exchanges.

### MAIN REGULATORY DEVELOPMENTS

The legislative framework has been relatively stable in Estonia throughout the first half of 2010, with some minor amendments having been implemented. The preparatory work required to transpose the new regulatory framework into national legislation began in the first half of 2010, and was sent to the Parliament in November 2010 on the completion of the national consultation period over the summer months. The legislation was adopted on 22 February 2011 with an entry into force on 25 May 2011.

ECA continued with the second round of market analyses with the adoption of new decisions on the markets for call origination on the public telephone network provided at a fixed location, call termination on individual public telephone networks provided at a fixed location, access to the public telephone network at a fixed location as well as the wholesale leased lines markets. In this regard, ECA choose to maintain regulatory measures for most wholesale markets. In addition, new remedies on the markets for physical network infrastructure access (LLU) and wholesale broadband access came into force in January 2010.

The first-round 'significant market power' decision on the wholesale mobile call termination market has been the subject of a lengthy appeals process since 2006, which came to an end in

September 2010. The Supreme Administrative Court finally upheld the NRA's decision. In addition, the court case regarding fixed call termination, which began in 2007, also came to an end in October 2010. The complainant withdrew its complaint after the court upheld the ECA's decision regarding the wholesale mobile call termination market.

The Commission, while assessing the regulatory decisions of ECA that were notified under Article 7 of the Framework Directive, has, on several occasions, expressed its view that cost oriented price caps, glide-paths or interconnection rates determined in any other way are considered to constitute a material change to the nature or scope of a remedy that has an appreciable impact on the market. Such measures should, therefore, be notified by the standard notification procedure.

## **Organisation of the NRA**

While most of the responsibilities under the regulatory framework are performed by the Estonian Competition Authority (Konkurentsiamet, ECA) responsible for economic regulation, and by the Estonian Technical Surveillance Authority (Tehnilise Järelevalve Amet, ETSA) responsible for technical regulation, the Ministry of Economic Affairs and Communications (the Ministry) also continues to possess certain regulatory functions. The Ministry is responsible for legal acts, including an approval of the Estonian Radio Frequency Allocation Plan and Numbering Plan, and is also involved in activities associated with the ownership and control of the public broadcaster which provides broadcasting transmission and wireless broadband services.

Both ECA and ETSA are financed from the State Budget and their budget is annually approved by the Ministry before adoption in the Parliament. The regulators seem to have sufficient legal powers for the performance of their duties, and are able to carry out their annual budget independently.

While the market players considered ETSA as an efficient and impartial regulator, some of them have expressed concerns as regards the efficiency and competence of the ECA.

## **ECONOMIC REGULATION**

### **Broadband**

#### *Broadband plans*

The Estonian broadband plan, the EstWin project, aims to eliminate the digital divide between the urban and rural areas, to increase social cohesion, and to contribute to economic growth. The Estonian Government and telecommunications companies plan to invest about €300 million 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. Of this figure, around €100 million will be provided from public funding, and €200 million from private operators' investments.

To carry out the EstWin project, a non-profit organisation called Estonian Broadband Development Foundation was created in August 2009. The project 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. In this regard, the European Commission confirmed that the said project helps to realise the goals of the Digital Agenda to deliver sustainable economic and social benefits from a Digital Single Market without unduly

distorting competition. Public funding will be granted only with regard to the non-built-up areas in which it is not economically viable for commercial operators to build high-speed networks. 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. This aid takes the form of grants. The first sub-project was launched in August 2010.

### *Market situation*

The fixed broadband penetration rate has not changed significantly since January 2010, and stood at 26.7% of the population in January 2011. In the European ranking for fixed broadband penetration, Estonia maintains its place above the EU average of 26.6%. While the number of fixed broadband active lines continues to grow, this pace has slowed down: 9393 new lines were added between January 2010 and January 2011 compared to 18 968 lines between January 2009 and 2010. DSL availability (coverage) is the same as the EU average (94% of the population). Despite high connectivity, however, only 58.9 % of broadband subscriptions have speeds of 2 Mbps and above (EU average: 86.7%). About 49% of all retail fixed broadband lines are in the range of 2-10 Mbps and 9.9% of all retail fixed broadband lines are above 10 Mbps.

The declining rate of growth in fixed broadband lines may be explained by the increasing popularity of mobile broadband services in Estonia. Mobile broadband subscriptions via dedicated data modems/cards/keys and other active 3G equivalent mobile terminals have tripled between January 2010 and 2011. This trend has mainly been due to the introduction of affordable flat-rate prices that are comparable to fixed broadband services, and the availability of unlimited data volumes in the packages. While the Estonian penetration rate for mobile broadband increased from 1.7% in January 2010 to 5.2% in January 2011, it is still below the EU average (7.2 %).

With regard to infrastructure-based competition, it is mainly based on alternative infrastructures rather than the use of the regulated wholesale products of the fixed incumbent. The reason for this is that operators claim that the margin available does not allow them to provide retail broadband services based on the incumbent's wholesale products.

DSL remains the leading technology for the provision of fixed broadband services, representing approximately 44% of all fixed broadband connections in January 2011. Alternative operators are more eager to offer fixed broadband services using technologies other than DSL. About 95% from all fixed broadband connections of alternative operators and about 22% from all fixed broadband connections of the incumbent operator were provided using technologies other than DSL in January 2011. The incumbent's market share in the DSL segment is remarkable, and stood at 94.5% in January 2011 compared with the EU average of 54.4%. The share of other technologies, such as cable modems that are used for fixed broadband connections, was 21%, and wireless local loop with 39 526 connections represents an 11% market share of all fixed broadband services in January 2011. The number of FTTx connections was 72 443 in January 2011, compared to 69 682 in January 2010, while the market share of FTTx lines in January 2011 stood at 20.2%, a figure which is similar to that of January 2010.

### *Regulatory issues*

As new price control remedies have been introduced on the wholesale market for physical network infrastructure access (LLU) since January 2010, the NRA initiated a supervisory

procedure in order to investigate compliance with the established requirements. In this regard, the NRA found that the incumbent applies a price which does not conform to the established methodology. However, the incumbent operator challenged the NRA injunction in November, and was granted legal protection by the Court.

## **Mobile**

### *Market situation*

In the area of mobile services, market players reported a decrease of revenues in 2009, in particular because business customers have cut back on their expenditure on mobile services. Operators nevertheless continued the development of their networks to expand 3.5G coverage, although they also reported a decrease in investment.

Competition in the mobile market is intense, with a relatively high proportion of mobile traffic from the total volume of voice traffic on mobile and fixed networks – 71.5% in 2009. Mobile penetration, at 120.3%, showed some increase when compared to October 2009 (116.1%), but is still below the EU average which stood at 124.2%. The market shares of the three MNOs dating from October 2010 has not shown a significant departure from the 2009 figures. The largest operator had a market share of 46.3% as of October 2010, while its main competitor held 28.4% of the market at this time. The third competitor had a share of 25.3%. The share of post-paid subscriptions slightly increased to 67.7% (compared to 67.1% in 2009).

Estonia is among the few countries in the EU where the prices for mobile phone calls have increased in 2009 in comparison to 2008. The average price per minute of mobile communications, excluding VAT, was €0.12, which is above the EU average of €0.10. In addition, the average annual revenue per user in 2009 was €247, which is €8 less than one year ago. Notwithstanding the above, this figure remains above the EU average for 2009, which stood at €244.

Following a change in ownership, the only Estonian MVNO also changed its strategic business goals in November 2010, and wound down its mobile services. Its customer-base was taken over by the hosting operator under the existing conditions, thus ensuring the smooth continuity of the service provision for customers at retail level. The operator still holds a UMTS frequency licence.

In February 2010 the biggest mobile operator in Estonia launched Estonia's first 4G test network. In addition, two other mobile operators opened their 4G test networks in June 2010. According to the operators, the commercial launch of 4G depends on the complete technical readiness to offer high quality 4G services, and on the allocation of 4G commercial licenses in the course of 2011. The easy availability of 4G consumer devices will also be an important factor in this regard.

### *Regulatory issues*

In accordance with the glide path established in 2009, mobile termination rates decreased as of 1 July 2010 to a symmetrical level of 7.8 €-cents. However, they are still substantially above the EU average of 5.46 €-cents as of October 2010.

In order to align the regulation of mobile termination rates with the recommended cost accounting principles as set out in the Termination Rates Recommendation, the NRA

indicated its intention to re-analyse the market in 2011, and to introduce a price method based on a benchmark in line with the Commission's comments, and supported by reference to cost-based termination rates which take efficiency considerations into account.

### *Roaming Regulation*

All three GSM operators in the Estonian market appear to have complied with the price caps on voice, short message service and data service, as well as with cut off limits as required by the Roaming Regulation. Operators noted that the most challenging was the latter requirement. The eurotariff offered by operators reflects the maximum price cap set in the Regulation. Furthermore, and with the exception of one case where one operator lowered the retail price for a short term, the prices for data service have remained at a high level in spite of the decrease in prices at wholesale level.

## **Fixed**

### *Market situation*

According to ECA, fixed line penetration continues to decrease gradually, and stood at 27% of the population in July 2010. Moreover, fixed voice traffic accounted for only 28.5% of total voice traffic in 2009, which is well below the EU average of 49.2%. The share of voice over IP (VoIP) communications increased from 9% in December 2008 to 12% in December 2009.

Overall, the fixed market is characterised by the dominance of the incumbent operator. While the market share of the incumbent operator by traffic volume stood at 76,8% at the end of 2009, the latter's market share dropped by 10 percentage points from 78% to 68% by retail revenues for the same period. The share of subscribers using alternative operators for national calls stood at 32.0% (31% at 2008), and at 39% (46% in 2008) for international calls.

### *Regulatory issues*

As regards the proposed remedies on the market for access to the public telephone network at a fixed location, the European Commission invited ECA to impose a wholesale line rental obligation as soon as possible in order to render CS/CPS obligations more effective.

While a similar set of obligations to those applied after the first round of market reviews was introduced in the call origination market, ECA continued with the asymmetric regulation of the call termination market, albeit with some substantial changes in price regulation. With regard to price control, the incumbent is obliged to set cost oriented interconnection charges, while its fixed termination rates (FTRs) must also comply with a price cap according to which it cannot change the weighted average prices of the first three minutes of call termination by more than  $\pm 10\%$  compared to the weighted average prices used during the previous calendar year. In comparison, alternative operators are obliged to set cost oriented interconnection charges, and their FTRs shall not exceed the incumbent's average national-level call termination price for the first three minutes during normal tariff time. The Commission urged ECA to reconsider its cost accounting methodology and to align it with the recommended cost accounting principles of the Termination Rates Recommendation in its next round market review.

Following the second round of market analyses, ECA withdrew regulation from the wholesale market for the trunk segments of leased lines. As regards the wholesale market for the terminating segments of leased lines, the Commission issued comments with respect to the market definition. In particular, the Commission was concerned by the lack of clear boundaries between the two markets. In addition, the Commission further underlined the need for monitoring the market with a view to its possible extension to Ethernet leased lines.

## **Broadcasting**

### *Market situation*

Only one operator provides services on the broadcasting transmission service market for digital terrestrial television (DTTV) in Estonia. Three terrestrial multiplexers (MUX) are in operation, one for free-to-air digital TV channels with 100% coverage of the territory, and two others with conditional access covering 90% of the territory. A fourth licence that was issued to the fixed incumbent operator was, however, revoked in 2010. Competition between platforms is intense, mainly thanks to the establishment of an IPTV platform which represents 20.3% of all TV households (15.5% on 1 July 2009). Following the digital switch-over, digital terrestrial TV penetration represents 34.1% of households, cable 37.4% of households (down from 40% last year), and satellite 8.2% of households (4.8% in 2009).

### *Regulatory issues*

Full transition to digital television and the complete switch off of all analogue TV transmitters was completed nationwide on 1 July 2010 in Estonia. Following the digital switchover, there are 4 national free-to-air channels in the terrestrial digital broadcasting network. The public contest, launched by the Ministry of Culture for one additional free-to-air channel, is currently pending.

The new analysis of the wholesale market for broadcasting transmission services is ongoing and subject to notification to the Commission at the beginning of 2011. While the market is no longer listed in the Recommendation on relevant markets, ECA intends to maintain its regulatory measures.

## **HORIZONTAL REGULATION**

### *Spectrum management*

ETSA announced two public competitions for the granting of frequency authorisations in the second half of 2010. In order to promote competition, and to ensure effective spectrum use, the first public competitions were held to grant the licenses for the 2500- 2690 MHz band, which is primarily reserved for wireless broadband. ETSA evaluated the results of the competition, which were announced in January 2011. The winning bids were submitted by three existing mobile market players and by the fixed incumbent operator. A total of six licenses have been issued: 3 licences (each 2x20 MHz) in FDD, 1 licence (2x10 MHz) in FDD and 2 licences (each 20 MHz) in TDD.

In order to implement the Digital Dividend Plan, a second public competition was organised for granting a right to transmit TV broadcasts and programmes by the means of three nationwide multiplexers in the 470-790 MHz frequency band, which became available following the transition to digital television on 1 July 2010. According to the Digital Dividend Plan, the

frequencies freed up should be used for the provision of mobile broadband services and broadcasting services. The 790 – 862 MHz frequency range is currently used by the TV broadcasting transmission service provider until 1 July 2012. Estonia, like other Member States located in the Eastern part of the EU, still faces the challenge of coordinating frequencies in this band with Russian Federation in order to make them fully usable for wireless broadband.

While the GSM Directive is transposed into Estonian legislation via the Estonian Radio Frequency Allocation Plan, it was expected that the re-farming of 900 MHz band will be completed in early 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.

## **THE CONSUMER INTEREST**

### **Consumer complaints**

The main subjects for consumer complaint in 2010, relating to the electronic communications services, concerned value added services, unfair advertising practice and the pricing of data services and quality of service issues (e.g. network coverage). The authority issued a guidance paper focused on various content services, aiming to draw attention to the risks for the consumers if they enter into contracts without getting introduced to the conditions.

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

The ECA continues to improve its consumer awareness, and, as such, has continuously updated the IT application of tariff comparison and optimal tariff selection available on different web pages, providing up to date information on national tariffs as well as on roaming tariffs.

### **Number portability/switching**

Between January and October 2010, a total of 11 593 fixed numbers were ported in Estonia. Regarding mobile number portability, between January and October 2010, a total of 47 726 mobile numbers were ported. In Estonia, it takes, on average, 10 working days to port a fixed or a mobile number in October 2010, which is below the EU average of 7.7 days for fixed numbers, but above the EU average of 4.2 days for mobile numbers.

### **Net neutrality**

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. However, these operators also expressed that in view of the future developments of VoIP, operators may need to reflect on alternative policies for VoIP access.

### **Universal service**

There have been no discussions in Estonia so far regarding the extension of the scope of the universal service to include broadband connections. An alternative operator has been

designated as universal service operator until 2012. The operator with the universal service obligation is designated only for provision of access to the public telephone network.

The fixed incumbent operator, taking into account the high maintenance costs and very low use of payphones, has decided to terminate its payphone service as from 1 December 2010. According to this operator, the volume of use of payphone service had fallen to one minute of calls per day per payphone.

### **European emergency number 112**

As indicated in previous reports, 112 has already been operational in Estonia for many years. Emergency calls to the emergency number 112 are handled by the Emergency Response Centre (ERC). For the successful realisation of its tasks, the ERC has four regional centres to ensure the technical capacities of overflow calls in a situation where one or more of the regional centres become overloaded. Dispatchers handle about 1.55 million calls a year. In 2010, the rescue team was sent out to 267 546 cases, which is 2.6% more than a year earlier.

However, in 2009, the Commission services were seeking further clarification regarding the availability of caller location information to the authorities handling emergencies, in particular for calls made by users of international roaming services. The Estonian authorities confirmed that the users of international roaming services can be located in a mobile telephone network in the same way as the network's own clients. A pull system is used in order to receive the caller location information.

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 is supposed to last for 2 years, and aims at establishing an emergency management monitoring system on an electronic map, enabling, among other things, the display of information about the location of the emergency caller.

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

As of January 2011, two harmonised numbers for harmonised services of social value, 116111 (Child helplines) and 116000 (Hotline for missing children), were functioning in Estonia, and one number, 116117 (Non-emergency medical on-call services), has been assigned to service provider. The latter number is expected to be operational in 2011. While the 116006 numbers (Helplines for victims of crime) and 116123 (Emotional support helplines) are available for the provision of the service, no applications have been submitted so far.