

ESTONIA

INTRODUCTION

Broadband penetration rose steadily and infrastructure-based competition increased in Estonia in 2008. Take-up of mobile broadband services and innovative services such as IPTV (Internet Protocol Television) has increased. Although the number of fully unbundled local loops has increased, it is still very low, and ineffective take-up of broadband access services on the incumbent's network remains to be addressed.

In 2008 the national regulator initiated a new round of market analyses in the most significant markets, such as the physical network infrastructure access market (LLU), the wholesale broadband access market and the market for voice call termination on mobile networks. The regulator has focused on the implementation of remedies, which could promote competition and result in more choice and lower prices if well implemented.

REGULATORY ENVIRONMENT

Main regulatory developments

Overall, there were no major changes in the legislative environment in 2008 in Estonia. An amendment of the Broadcasting Act has advanced the date for digital switch-over to 1 July 2010 instead of 2012.

The Estonian Competition Authority initiated the second round of market analyses, and focused on improving the implementation of remedies in order to address competition issues.

Organisation of the NRA

A new organisational model was introduced in Estonia on 1 January 2008. The regulatory tasks of the electronic communications sector are now divided between two authorities: the Estonian Competition Authority (*Konkurentsiamet*, ECA) and the Estonian Technical Surveillance Authority (*Tehnilise Järelevalve Amet*, ETSA), both acting as multi-industry regulators. ECA is responsible for economic regulatory issues of non-competitive markets, and ETSA is responsible for issues of technical safety, use of radio frequencies, numbering and electronic communications networks. They replace the previous five governmental authorities, namely the Estonian Energy Market Inspectorate, the Estonian Competition Board, the Estonian Railway Inspectorate, the Estonian National Communications Board and the Technical Inspectorate, acted in the administrative area of the Ministry of Economic Affairs and Communications.

The Estonian NRA (ECA) carries out the main regulatory functions for the electronic communications sector. It has a small operating budget and the staff dealing with electronic communications issues is limited to 13 persons. There are 47 staff members dealing with electronic communications issues in ETSA. It remains to be seen whether ECA will use its limited resources in a more efficient manner and put in place an effective monitoring mechanism, while still carrying out the new round of market analyses. According to market players, the intervention of the NRA is not as effective as it could be and self-initiative is limited.

A positive effect of the reorganisation is that since the competition body and the electronic communications regulatory body have joined forces, the consistency between competition and sector-specific regulation seems to have been improving. As an example, both units have been involved in the settlement of disputes regarding access to ducts.

Enforcement powers of the NRA regarding sector-specific regulation, which are governed by administrative law, continue to restrict the maximum penalty threshold to the considerably low level of about €3 000. However, in some cases it might be possible to use the Competition Act as an enforcement tool, which provides for stronger enforcement powers, as the maximum penalty threshold is restricted to about €30 000.

Dispute-settlement procedures are used by market players and the legal time frame of four months is generally respected. However, operators doubt whether ECA has sufficient expertise and staff to deal with specific communications issues fast enough.

Monitoring market developments has been a challenge for a number of years in Estonia. The NRA has been faced with a failure by numerous market players to provide market data or has received them in confidence only, which prevents their publication. Discussions are ongoing between the NRA and the industry representatives on this issue, including proposals to define a certain set of market data that will be considered public, but without success so far.

Decision-making

Effective competition was declared in eight out of 18 markets during the first round of market analyses. Three of the SMP decisions adopted by the authority have been contested in court by the operators affected, two of them regarding mobile termination rate (MTR) and one regarding fixed termination rate (FTR) regulation, although the remedies are in place. One application for appeal was dismissed by the Supreme Court in December 2008.

In March 2008 ECA initiated the second round of market analyses of the markets listed in the Commission Recommendation 2007/879/EC, in particular as regards the markets for voice call termination on mobile networks, physical network infrastructure access market (LLU) and wholesale broadband access. The regulator has continued to address the level of competition by improving the remedies imposed on the market players over the years. This is due to the fact that on several occasions, the SMP operators were allowed to further specify the remedies, such as cost-based pricing and the choice of an appropriate cost-accounting model, thereby creating regulatory uncertainty for market players.

Market players tended to lodge complaints under general competition law in 2008. One investigation, launched in 2006 on the basis of several complaints regarding access to ducts and the high prices charged by the incumbent when granting access to ducts to alternative operators, resulted in May 2008 in lower prices and better access conditions in specific areas for the complainants. Several cases are still under examination by the competition unit of the ECA (almost all relating to access to the incumbent's ducts).

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Estonian electronic communications sector has grown by 4.8 percentage points and was about €741 million as at 31 December 2007 compared to €707 million one year before. The revenues have increased for both fixed and mobile markets. The revenue from fixed services has increased by 18% compared to 2006 and was about €294 million (€250 million in 2006). The revenue for mobile services has increased by 23%

compared to 2006 and was about €446 million (€360.5 million in 2006). Electronic communications sector revenue as a proportion of GDP was about 4.8%, significantly above the EU average (2.9%).

The total value of tangible investments grew by 23% and was €95 million in 2007 (€77.1 million in 2006), with €35 million being invested by the incumbent operator (€31.7 million in 2006). Investments in mobile networks rose by 36% compared to 2006 (from €33.6 to €45.6 billion). The ratio of investments over GDP was about 0.6%, which is above the EU average (0.38%).

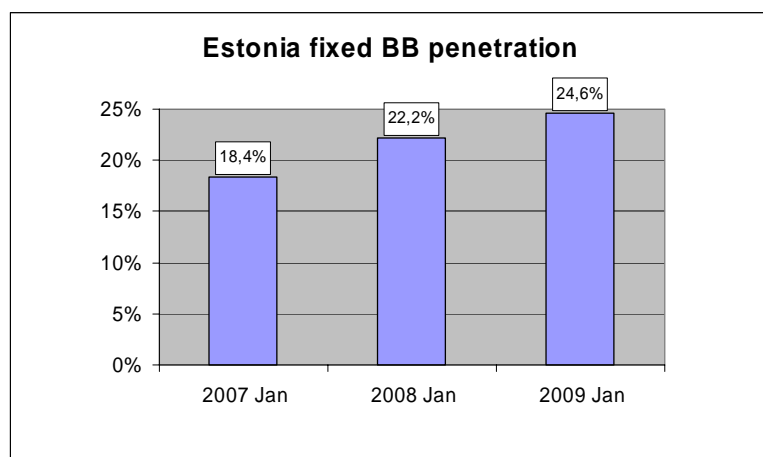
The structure of the market did not change significantly during 2008. The demand for bundled products is increasing and, as a consequence, it is becoming more important for operators to be able to offer a full communications package including both fixed and mobile services.

The consolidation that started in 2007 with the creation of a new telecom group in Estonia was eventually authorised in April 2008. As a result, five separate legal entities – an MVNO, two alternative fixed telephony operators, one country-wide WiMAX service provider and a legal entity holding the fourth UMTS licence in the 2100 MHz band – were merged into one telecom group.

Promoting competition in recently regulated wholesale markets appears to be complicated, due to a number of unresolved complaints and pending court cases. Low take-up of wholesale broadband services by operators and access to the incumbent's local loop unbundling (LLU) products constitute the key regulatory challenges for the year ahead.

Broadband

Market situation



The steadily growing Estonian broadband market is characterised by strong infrastructure competition in urban areas. Competition is also growing in rural areas, mainly based on wireless solutions. The broadband penetration rate is 24.6% (January 2009), placing Estonia tenth in the EU, above the EU average (22.9%), and has grown 2.4 percentage points since last year. Consumers are

availing themselves of bundles offered by several service providers and IP-TV (IP-TV penetration rate is 5% of the population).

The number of fixed broadband lines in total has grown by 10%, from 298 291 in January 2008 to 329 436 in January 2009. The market share of the new entrants' fixed broadband lines has grown from 45.4% in January 2008 to 47% in January 2009.

DSL is not the predominant technology in Estonia and its market share has even dropped from 45.6% to 41% in the last twelve months. The share of technology other than DSL has grown to 59% in January 2009. Cable and FTTx hold market shares of 23% and 21%

respectively. A minority of all broadband service end-users access the Internet via wireless networks (11%), although this figure has grown by 5 percentage points over a year. The increase in the use of wireless technology (5% per annum) is mainly due to the fact that one operator launched CDMA-based services in the 450 MHz frequency band in summer 2007 and currently provides nationwide coverage. Moreover, coverage of the WiMAX technology expanded to 80% in October 2008, and will be 100% according to the plans of the network operator, which is offering services on the wholesale level.

The number of 3G users using the Internet is growing (3G penetration is 6% of the population), as operators expand the coverage of 3G networks. While the prices for mobile broadband services are comparable with fixed broadband services, the usage of 3G services is so far restrained by limited geographical coverage.

As regards the LLU market (physical network infrastructure access market), the prices for unbundling have dropped, mainly due to the change of cost accounting methodology, applied with regulation. However, the take-up of LLU services is still limited and only 4% of all connections are based on local loop unbundling in the DSL segment.

Similarly, take-up of the incumbent's wholesale broadband products remains very limited and they are mainly used to provide services to corporate customers. According to alternative operators, one of the reasons why the take-up of broadband products is slow is a low margin for operators using these services when providing retail services to their customers.

Regulatory issues

Promotion of competition in the LLU market, and the provision of wholesale broadband services on the DSL market, seems to be one of ECA's key challenges in 2008. In spite of the remedies imposed by ECA on the fixed incumbent in the market for LLU (the physical network infrastructure access market) and the market for wholesale broadband access in 2007, the NRA has admitted that the market structure of these markets is not conducive to effective competition, and the take-up of the incumbent's wholesale broadband products remains very limited. The NRA is considering addressing primarily the pricing issues in the ongoing second round of market analyses.

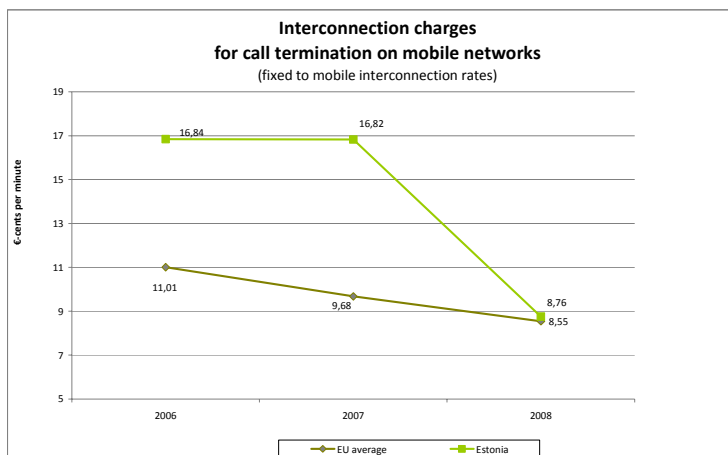
While the prices of LLU have dropped, access to ducts appears to be the biggest problem in this market since existing ducts are full or have limited capacity and the building of double or new ducts is complicated (especially in the cities) due to restrictions imposed by local administrative rules.

As a result, there are some areas where the incumbent still holds a large market share because of lack of competing products in the DSL market. The incumbent is obliged to grant access to ducts only if necessary for the provision of LLU access services defined as a part of the LLU market. The NRA received a lot of complaints on this issue in 2008 and has been involved in the settlement of disputes. While the incumbent was forced to grant access in some cases, the process is considered to be time-consuming and costly. The NRA is considering the introduction of regulation with regard to ducts and fibre networks in the new round of market analyses.

Mobile markets

Market situation

The Estonian mobile market is characterised by keen competition at the retail level. Mobile penetration growth, having slowed down slightly, now stands at about 134% (with an increase of 2.5 percentage points compared to last year), which is significantly above the EU average of 119%. While fixed calls have continued to decrease, the volume of mobile minutes and the turnover of mobile retail services continued to grow also in 2008.



Three main providers are operating their own GSM and UMTS networks, whereas the fourth operator offers its GSM services as a mobile virtual network operator (MVNO), although it has started to operate commercially its own UMTS network. The market shares of the three main mobile network operators (MNOs) have experienced no significant changes since last year. The average price-per-minute of mobile communications in Estonia in 2007 was relatively low (€0.11), whereas the EU average is €0.14.

UMTS services have continued to grow, thanks to improved network coverage, enhanced terminals and the launch of mobile broadband and mobile TV by the main market players. UMTS is available in all county towns and also in several smaller cities.

The MVNO, which entered the market in 2007 and which benefited from a non-SMP operator status, applied until July 2008 a mobile termination rate of €0.22, which considerably exceeded the regulated level. The competition situation forced the operator to reduce the mobile termination rate by up to 53% (to the level of €0.11) from August 2008.

Regulatory issues

Following a downward glide path to reduce MTR prices, introduced by the NRA in 2006 and subject to review every year, the settled price for 2008 is €0.876 (which corresponds to the EU average of €0.855 in October 2008). Two smaller operators launched appeals to the national court regarding the market for voice call termination on mobile networks. While the Supreme Court dismissed one application for appeal in December 2008, the other appeal is still pending since April 2006.

In March 2008 ECA initiated the process for the second round of market analyses based on the Commission Recommendation 2007/879/EC in the market for voice call termination on mobile networks. The NRA launched the national consultation period in December 2008.

Roaming

All operators in the market have implemented the Roaming Regulation requirements. However, from August 2007, when the Regulation entered into force, the effect on roaming tariffs in Estonia was twofold: in most cases operators had to reduce the high prices that had so far been applied for roaming calls, but in some cases they were able to raise low roaming prices up to the ceiling provided for by the Regulation. According to the data provided by the ERG, the roaming prices for receiving and making voice calls and for SMS services are below the EU average, except the price for data services, which is above the EU average (over €3 per MB, while the EU average is around €1.3). All operators apply the voice call charging interval of one minute.

Fixed

Market situation

The traditional fixed market volumes have continued to shrink, mainly to the benefit of mobile and broadband services. As reported by the NRA, fixed telephone penetration is low, at 30%, and has remained at this level for several years, while fixed line penetration stands at 37.3% and is slightly increasing, since connections are used for broadband services.

Regulation has not significantly improved competition in the fixed markets so far. While alternative operators have slightly gained market share, the incumbent continues to hold a very significant position in the market with a market share above 70% for all types of voice calls, except for international calls. The largest alternative competitor on the fixed market uses a combination of carrier pre-selection (CPS), full LLU (lower bandwidth) and own network elements. Sixteen market players provide national calls services, (six of them using CS/CPS), with the average price for national calls being below the EU average. There are nine managed VoIP operators. In 2008, despite the fact that the fixed voice call market is decreasing, the trend to replace single services with bundled offers was growing fast. Alternative operators claim that it is difficult to compete with the aggressive offers of the incumbent operator.

In rural areas the incumbent is considering moving some fixed network customers into wireless solutions, either GSM/UMTS or other wireless solutions, due to the removal of landlines.

Regulatory issues

The first round of market analyses had revealed effective competition on fixed retail call markets, but applied remedies to the incumbent on fixed retail access markets and on the market for fixed wholesale call termination. A court case concerning the latter market initiated by one alternative operator in 2007, and suspended until the final decision of the Supreme Court regarding the market for voice call termination on mobile networks, is still pending.

While mobile termination rates have decreased significantly as a result of the applied regulation, the fixed incumbent operator has not dropped the retail prices for fixed to mobile calls.

While the incumbent is required to apply interconnection prices calculated on the basis of historical costs, alternative operators are applying asymmetrical rates based on a price cap calculated on the EU weighted average (unless a different termination rate is substantiated by

underlying costs). As a result the fixed termination rate (FTR) of the incumbent operator has decreased, but two alternative operators managed to raise the termination rate above the EU average, whilst others apply a rate which is the same as the EU average level. Following the regulation of the market for call termination on fixed networks, four price supervision procedures were completed by ECA in the course of 2008. They related in particular to the application of fixed termination rates by operators applying the FTR, based on their underlying costs.

Broadcasting

Market situation

About 45% of all customers use the terrestrial broadcasting transmission platform in Estonia, whereas the number was 52% a year ago. The decrease could be explained by a significant increase in IP-TV take-up over the last year, which has grown from 5% as of 2007 to 11% as of July 2008. Cable and satellite usage has not changed significantly, and the percentages are respectively 39% and 5% of customers.

Spectrum for digital TV would include nine multiplexers in total, according to the GE-06 plan (Regional Agreement GE-06, adopted by Regional Radiocommunication Conference 2006, for planning of the digital terrestrial service in parts of Regions 1 and 3 in the frequency bands 174-230 MHz and 470-862 MHz). The Estonian authorities have so far granted licences for three multiplexers to the broadcast network operator (51% State-owned). Two of them broadcast twenty pay-TV channels covering over 80% of the population, while the third multiplexer delivers free-to-air public broadcasting services, and has increased its coverage to 95% of the population. The procedure for assigning the fourth licence to the incumbent operator is ongoing. After the analogue switch-off, the NRA will probably issue one or two licences for additional multiplexers, while for others it will wait for the digital switch-over in Russia (2015) and in Latvia (expected in December 2011) before doing so.

As regards mobile TV, the broadcast network operator and one electronic communications operator launched a DVB-H (Digital Video Broadcasting: Handheld) pilot trial in the capital in May 2008. Several free-of-charge channels were on offer. The trial ran until the end of 2008. Full DVB-H service could be deployed after the Estonian Digital Dividend strategy has been worked out.

Regulatory issues

An amendment to the Broadcasting Act on 13 July 2008 advanced the date for analogue switch-off to 1 July 2010 (previously it was 2012). In order to manage the digital switch-over, an expert committee has been formed by the government and a detailed action plan is being developed annually. The first digital switch-over operation has already taken place in one island.

To make the transition to digital broadcasting more attractive, the government offered, by amending the Broadcasting Act, to waive next year's licence fees (of €1.6 million), if broadcasters in Estonia start digital transmission by 1 July 2008. Two leading commercial broadcasters that fulfilled these conditions were freed from the licence fees and also had their licences, which were up for renewal in 2009, extended automatically until 2015.

Horizontal regulation

Spectrum management

There are so far no reported plans for the use of the digital dividend to be generated by the switch-over of analogue broadcasting for services other than high definition broadcasting and mobile TV. However, the Estonian Digital Dividend strategy is currently under preparation.

Following statutory amendment of the procedure for approval of conditions of frequency authorisation, as of 1 June 2008 ETSA must, before issuing the frequency authorisation, coordinate the conditions of the frequency use with the Health Protection Inspectorate in order to minimise possible health risks in relation to electromagnetic radiation.

It should be noted that Estonia has bilateral concerns regarding spectrum coordination arising from its border with Russia. Several attempts to conclude a spectrum coordination agreement to avoid interference with Russian mobile operators in the remote areas near Estonia's eastern border have failed.

The implementation of Commission Decision 2007/344/EC on the harmonised availability of information regarding spectrum use is under way, while other spectrum harmonisation decisions are already implemented.

THE CONSUMER INTEREST

Tariff transparency

Consumer usage of the online tool to compare customer tariffs is rising, not least since it is accessible through different websites. Information is updated once a month and new functionalities, aiming at improving transparency, are added regularly, like an interface with a Numbering Management Database allowing individual comparisons.

Universal service

In Estonia an alternative operator continues to be bound by a universal service obligation.

However, universal service as currently offered is not a relevant service for the large majority of users in Estonia, and only a few new lines are granted under the universal service obligation. The ECA has noted that there is a growing demand for high-capacity broadband data services when installing new fixed lines.

Number portability

In general, number portability is not used much in Estonia compared with other EU countries. In absolute figures there has even been a decrease in fixed number portability from 12 536 as at October 2007 to 8 586 as at October 2008, most likely due to overall shrinking of the fixed voice market. However, the number of ported mobile numbers has increased from 29 734 as at October 2007 to 39 577 as at October 2008, but the rate of ported mobile numbers over total mobile subscribers is still one of the lowest in Europe (2.2%). Estonia is one of the countries in Europe where no price is charged for number portability.

While the maximum period for porting fixed numbers settled by the Electronic Communications Act is 30 days, on average it takes 8 to 13 days to port fixed numbers, while the porting of mobile numbers takes 5 to 11 days.

European emergency number 112

Emergency call handling centres receiving 112 calls can, where necessary, put the call through to the emergency call handling centre of another emergency service which is competent to deal with the call concerned. Certain measures, like the possibility to contact emergency services by fax, are in place for people with disabilities. As regards reform plans, Estonia has indicated its intention to revise the system of emergency numbers, as there is one additional national emergency number for one of the main emergency services.

Consumer complaints

The authority dealing with consumer complaints is the Consumer Protection Board (*Tarbijakaitseamet*). Many complaints still concern disputes about bills, and contract termination. A new issue is bills related to mobile Internet, for which pricing conditions are unclear according to consumers. The majority of complaints are solved by written procedure. Bilateral meetings with undertakings are arranged for large-scale cases.

Data protection

The Data Retention Directive is transposed in the Electronic Communications Act, which entered into force on 1 January 2008.