Post and Telecom Administration in Iceland

Annual Report 2012

PÓST- OG FJARSKIPTASTOFNUN

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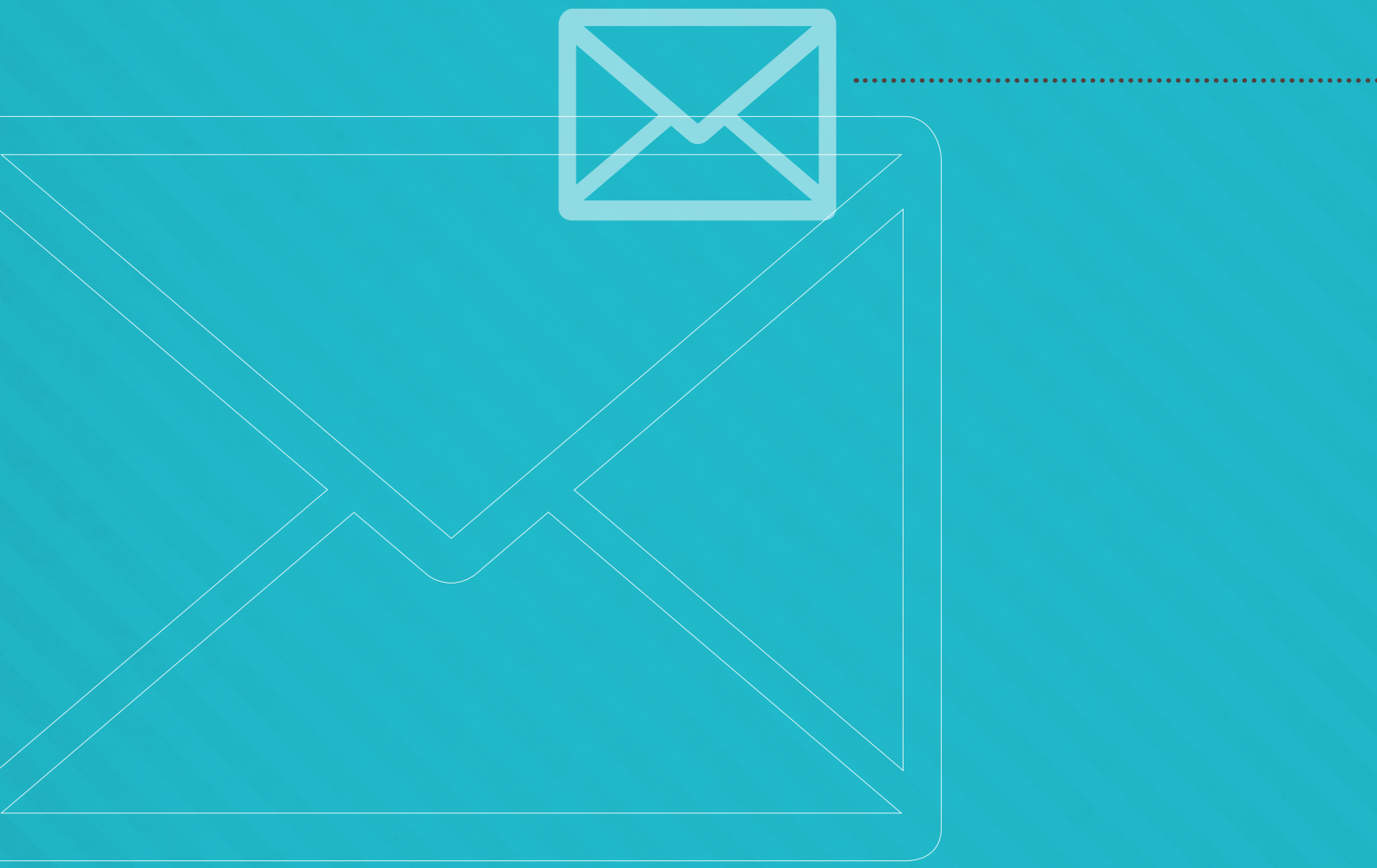


Address by the Managing Director

During the past years, operations of the Post and Telecom Administration have increased significantly because of new tasks and growing demands for monitoring the regulatory framework. The budget has however not kept in step. Since 2007 funding has shrunk by 20% in real terms while new and increased tasks have arrived. In the year 2012 there was thus an ISK 35 million loss on PTA operations. Income from the Administration's independent sources of revenue has increased but legal authorisation in the national budget is required before the funds collected can be disbursed. Financial restraint and cuts in government spending have meant that such authority has not been granted. The PTA considers that budget arrangements are not compatible with the regulatory framework within which the Administration should operate. The situation has led to a reduction in staffing and has made it difficult for the Administration to embrace innovation in its operations, contrary to all developments in the regulatory framework and on the market.

In 2012 the main emphasis in PTA operations was the development of a sustainable competition market in the field of telecommunications, among other things with market analyses and appropriate obligations on parties with market dominance. In addition to this the Administration's measures with respect to postal services have been substantial. Other tasks have among other things related to the development of CERT-ÍS cyber security teams during the year. The significance of network security has increased greatly in the work of the Administration and one can expect an even greater increase in the near future.

Major changes on the horizon in electronic communications services

The coming 10 years are likely to see enormous changes in electronic communications services. One can expect that at the end of this decade a common speed for Internet service will be at least 100 Mb/s. In addition to this there will be a mobile network with a similar maximum speed, widely distributed throughout the country. Fibre-optic connections will continue to increase and the traditional home telephone will probably have almost disappeared. Furthermore, it is fairly certain that access to television material will increasingly be provided through the Internet where the user can select a great variety of material from Icelandic and foreign providers to enjoy on demand. In order for it to be realistic for this future vision to be achieved, close attention has to be paid to the development of electronic communications infrastructure, whether this relates to the fibre-optic backbone, fibre-optic local loops or electronic communications stations for mobile network services.

At the end of November 2012 the Icelandic Parliament endorsed a new Electronic Communications Plan. The plan embodies ambitious objectives on quality, access, distribution and security of electronic communications services. The Administration will have the Plan´s objectives as a guiding light when it comes to elaborating specific branches of its operations.

Decrease in traditional postal services

Great changes have taken place in for additional postal services hand-in-hand with development of electronic communications. There has been a dramatic decline in the number of letters under 50 g. This has made it increasingly difficult and more expensive to maintain postal services at a high quality level. It is mandatory that post should be delivered 5 days a week.

Íslandspóstur has a monopoly on distribution of letters under 50 g. to assure this high level of quality in areas where delivery costs exceed revenue. The Administration has made various decisions during the past years to increase efficiency in the Íslandspóstur distribution system, but more needs to be done in this respect. The government is now planning further measures, which among other things could constitute a lower level of service and lower costs in distributing mail, as delivery is the most expensive element. This could mean delivering mail to a mailbox located at the entry point to a property rather than through a letterbox in the door. It is clear that these measures are not conducive to increasing popularity, but on the other hand is also clear that further measures will have to be taken and economies introduced, if the postal service is not to become excessively expensive.

Electronic Communications Plan 2011-2022

Last autumn, the Icelandic Parliament endorsed the Electronic Communications Plan 2011-2022 and also a plan for general electronic communications projects 2011-2014. The plan contains ambitious objectives on quality, access, distribution and security of electronic communications services.
The main objectives with respect to access to electronic communications services are:

- 90% of homes and places of work will have the option of a 30 Mb/s connection by 2014 and 100% by 2022.
- 70% of homes and places of work will have the option of a 100 Mb/s connection by 2014 and 99% by 2022.
- 98% of homes and places of work will have the option of high speed mobile networks by 2014 and 99.9% by 2022.
- 80% of the country and the coastal waters will have the option of a high-speed mobile network in 2018.

To achieve these objectives the Administration considers that a concerted effort is required by parties to the market, municipalities, utilities, government and other stakeholders. The role of the Post and Telecom Administration is to operate on the basis of the electronic communications regulatory framework and to support development based on market criteria. When the market fails, special measures need to be taken, for example by setting obligations for distribution when frequency bands are allocated, by supporting the sharing of utility construction in order to support electronic communications infrastructure, through the development of electronic communications based on security considerations and with the development of electronic communications based on universal service criteria or through direct state support where this is appropriate and where other methodologies have not returned results.

The Administration considers it necessary for the authorities to introduce management tools such as Geographical Information Systems which contain information on all electronic communications systems and their service areas in order to be able to define and assess the status of electronic communications in the country and to make realistic plans for their development and extension. Furthermore, the Administration considers it essential that sharing of infrastructure constructions be encouraged in such a manner that the development of electronic communications infrastructure be taken into account when planning utility projects. It is important to assist municipalities and utility companies that are interested in improving electronic communications infrastructure in their area.

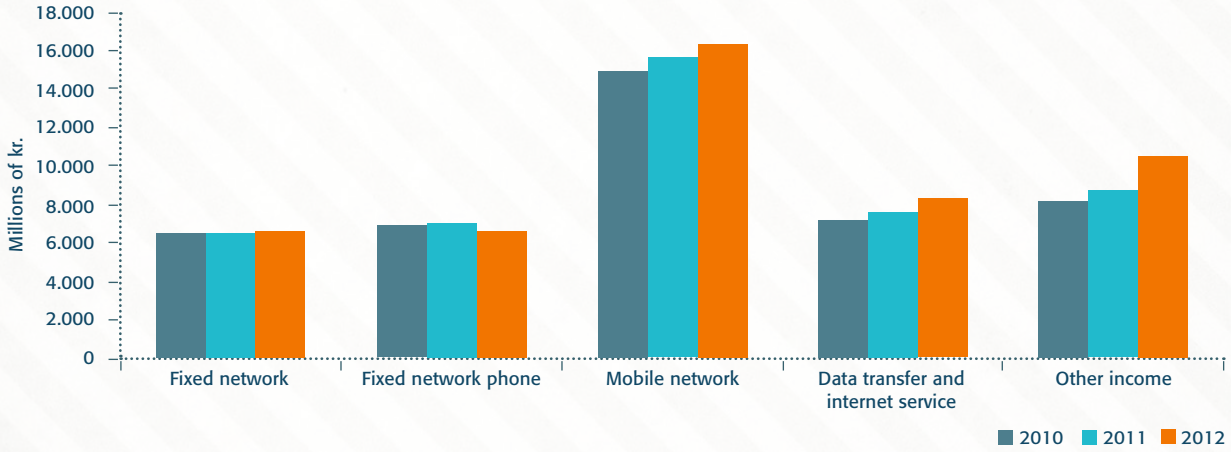
The Administration considers that in order to achieve the above specified objectives it is necessary to strengthen the country's fibre-optic backbone network. It is also necessary to support fibre-optic cable-laying in rural areas, where distances are such that other technology cannot provide 100 Mb/s on a fixed network. Major development in 4G mobile networks is planned. Such networks can offer great speed, over 30 Mb/s and it is foreseeable that they could offer speeds around or over 100 Mb/s before 2022. In order for such to be realistic, it is necessary to enhance backbone network connections to transmitters for 4G networks. Fewer than half of the transmitters in rural areas are currently connected to fibre-optic according to an analysis made by the Administration when preparing the auction of 4G bands.

The Electronic Communications Plan contains objectives for security of electronic communications. The objectives concern on the one hand, the protection of electronic communications infrastructure, against for example breakdown and on the other hand against the threat posed by cyber-crime and cyber-attacks. The Administration takes part in policy-making for the development of the government's national security policy with respect to Internet security and for the protection of critical electronic communication and information system infrastructure. In addition to this the Administration operates the CERT-ÍS cyber security team, which among other things, has the role of coordinating mitigation measures against possible cyber-attacks.

The electronic communications market in Iceland

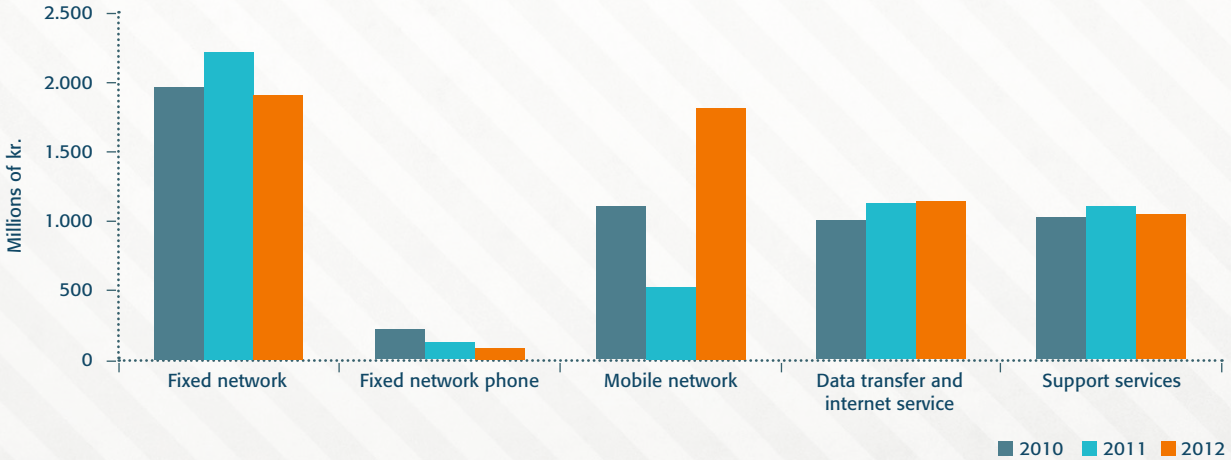
There were few changes in electronic communications markets in Iceland in 2012. As in the previous year there are 4 companies who are major players in this market, that is to say Síminn hf., Fjarskipti ehf. (Vodafone), Nova ehf. and IP-fjarskipti ehf. (Tal).

Total revenue on the electronic communications market increased by about ISK 3 billion between the years 2011 and 2012, increasing from something over ISK 45 billion in 2011 to in excess of ISK 48 billion in 2012. As can be seen on the chart below the biggest turnover is in the mobile phone market.



Total income from telecommunication – 2012
(Source: PTA statistics report on the Icelandic electronic communications market 2012)

Investments in the electronic communications market amounted to just under ISK 6 billion in 2012. As before this was mostly in the fixed line network, but this had decreased from the previous year. Most of the increase was in investments in mobile phone networks.

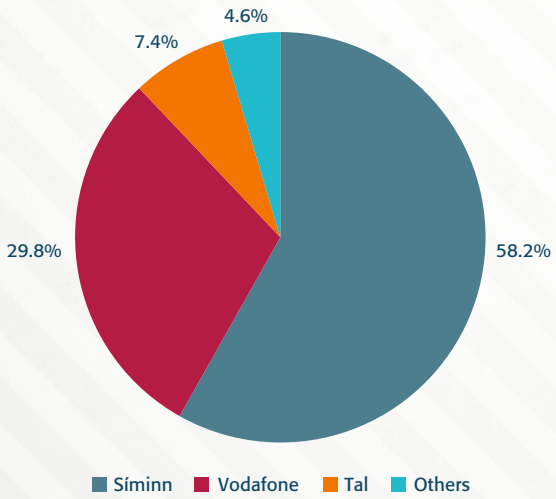


Investment in telecommunication – 2012
(Source: PTA statistics report on the Icelandic electronic communications market 2012)

Home phone use decreasing

In recent years subscriptions for fixed line telephones have declined steadily, though this development is much slower here than in the other Nordic countries. At the end of 2012 subscriptions for fixed line telephones were 147,400, of which residential subscriptions were 107,096. The reduction was about 3000 subscriptions between the years 2011 and 2012, which were almost all residential subscriptions, while companies retained their fixed line phones. The number of conversation minutes in fixed line telephones is decreasing and an even faster rate. In 2010, there were more than 618 million conversation minutes in fixed line telephones, while in 2012 the number of minutes had dropped to 547 million. At the same time minutes used in conversation in mobile phones increased.

As one can see on the chart below, two companies, Siminn and Vodafone, share the largest part of the fixed line telephone market where Siminn is still by far the largest with close to 60% of the minutes while Vodafone is approximately half that size with just over 30% of the minutes.

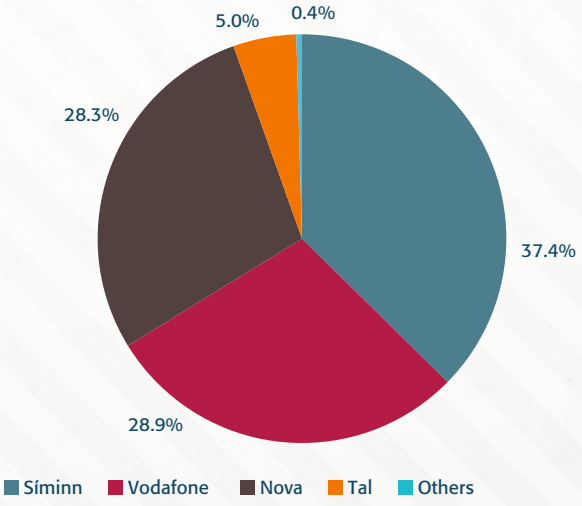


Minutes in the fixed network by companies
(Source: PTA)

Deceleration in growth of mobile phone subscriptions

After a rapid increase in mobile phone subscriptions in the nineties, this increase has gradually decelerated as distribution has now reached a growing proportion of the nation. The current situation is that although one can detect a small increase between the years 2011 and 2012, it is clear that equilibrium has almost been reached. At the same time, the total length of time used by Icelanders to speak over their mobile phones is increasing. In the year 2010 people spoke on their mobiles for just under 743 million minutes, in 2011 this was just under 765 million and more than 771 million in 2012.

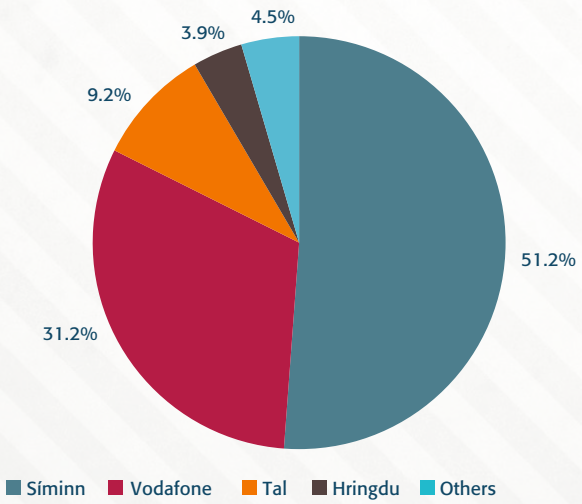
Three companies share the largest part of mobile phone subscriptions, that is to say Síminn, Vodafone and Nova where Síminn is the largest with 37.4%, while Vodafone and Nova are virtually equal, Vodafone with 28.9% and Nova with 28.3%.



Total subscriptions in the mobile network - market share by companies – 2012
(Source: PTA statistics report on the Icelandic electronic communications market 2012)

Fibre-optic connections increase

An increasing number now receive their Internet through fibre-optic as fibre-optic connections are increasing steadily at the cost of traditional PSTN lines (copper lines that are used for traditional xDSL (ADSL and the Siminn optical network from street to house (VDSL)). The majority of Internet connections are however still in xDSL form which was the case for 78.6% connections in 2012. As can be seen in the chart below, Siminn is by far the largest Internet service provider with more than half of the Internet subscriptions on the market. Next in line is Vodafone with just over one third. Others share the remainder. This position has remained almost unchanged between the years 2011 and 2012.



Internet subscriptions - market share by companies – 2012
(Source: PTA statistics report on the Icelandic electronic communications market 2012)

Comparison of electronic communications use between the Nordic countries

The PTA participated actively in cooperation between the electronic communications regulatory bodies in the Nordic countries for the collection and processing of statistical data on the countries' electronic communications markets. Since 2010 these institutions have regularly published a joint report in the middle of the year, where citizens' use of electronic communications is compared between the countries on the basis of the previous year. In the year 2012 two of the Baltic nations joined the group, that is to say, Estonia and Lithuania and it is expected that Latvia will take part in the cooperation for the year 2013.

This comparison shows that on the whole, the use of electronic communications by Nordic citizens is very similar and people in this region use the technology in a similar manner. Despite this fact, one can nevertheless see some difference in usage and in development of specific features.

Use of broadband with mobile phones, tablets and network keys is for example least widespread in Iceland of the five Nordic countries, but in this connection one should note that the distribution of third-generation mobile phone networks commenced 2 to 3 years earlier in the other four Nordic countries.

It is also interesting to note that Icelanders seem to use their mobile phones less to send messages than the comparison nations as we send much fewer SMS than is customary in the other countries. Only the Estonians use SMS messages less than the Icelanders.

It is also shown that the Icelanders are much more inclined to retain their home phones, despite the fact that use of such phones has declined in this country. The Finns have however fewest fixed line telephones per capita.

Electronic communications market dashboard - accessible statistics

The Post and Telecom Administration has added a new feature to its website; a dashboard where statistics on the telecommunications market in Iceland are put forward in an interactive and visual way, so that different elements can now be easily accessed and used.

The data being published is from the PTA's Statistics Report on the Telecommunications Market in Iceland for 2011. The Administration publishes such reports twice a year, for the whole year and a mid-year report. The dashboard is published in cooperation with DataMarket, Inc., an Icelandic company that specialises in such representation of data.

PLB - emergency transmitters for individuals in use in Iceland

PLB (Personal Location Beacons) are emergency transmitter is that individuals can carry for the purpose of sending emergency messages from any location they might be in. The Post and Telecom Administration, the Icelandic Coast Guard and Landsbjörg SAR and Civil Protection Association work jointly on implementing the use of Personal Location Beacons in Iceland.

One must apply for permission to operate PLB emergency transmitters to the Post and Telecom Administration which issues a licence and registers information about the transmitter in a dedicated Icelandic database for PLB. The Administration manages the database and sends an updated list to the Marine Traffic Service and to the Coast Guard management stations on each occasion when changes are made.

PLB emergency transmitters operate on 406 MHz band and are monitored by the Cospas/Sarsat satellite system. If an emergency signal is received from a PLB transmitter registered in Iceland, then information on such an event is sent to the Coast Guard and to the Marine Traffic Service from the Cospas/Sarsat satellite system.

The advent of these emergency transmitters has significantly strengthened the safety net that those travelling off the beaten track in Iceland can take advantage of.

Market analysis strengthens competition on electronic communications markets

Market analyses are large part of PTA operations. They are used to strengthen competition on the market by analysing the position of parties to the market and by imposing appropriate measures where competition is not considered adequate. In 2008 the first round of market analysis on the electronic communications market was completed. A year later, the second round was commenced, and this work was in full operation in 2012. It is planned that it will be mostly completed in the year 2013. Furthermore, continuing emphasis will be placed on following up the obligations that have been imposed subsequent to market analysis and particularly cost analysis of wholesale prices.

The Icelandic electronic communications market in a European context

In December 2012 a report Commissioned by the European Union was published on the position of telecommunications and information technology in those countries that are considered to be participants in the expansion process of the European Union, which included Iceland. The report contains an overview of the status of the various aspects of electronic communications and information technology in the countries under discussion and a comparison with countries within the European Union and in addition to this the arrangement for surveillance and the status of surveillance institutions are examined.

In general, the report presents a positive picture of the status in Iceland in this field. It is stated that Icelanders have made considerable progress in adapting their electronic communications environment to the laws and regulatory framework of the EU and in comparison to EU countries and other countries in the expansion process, Iceland performs well on almost all points.

In addition to publishing the comparison and discussing the status in the field of electronic communications and information technology, the report looks to the future and to where emphasis needs be placed with respect to the electronic communications market in the near future. With respect to Iceland, the main emphasis is placed on work on the second round of market analysis, which is now in full swing within the PTA. The reorganisation of frequency matters is also specifically discussed and the PTA put forward a new frequency policy in 2011 and preparation for allocation of frequencies at 800 MHz and 1800 MHz, or what is called 4G frequencies, is in full swing.

In the report emphasis is placed on the necessity for the surveillance authorities to have financial autonomy and authority to implement their surveillance role. With respect to Iceland it is particularly indicated that these two factors need to be strengthened with the surveillance authority, that is to say the Post and Telecom Administration.

The report was produced by the international research company Cullen International and as part of a three-year project (2011 – 2013) that the company is doing for the EU. This report is the second in a series of 4 that are intended to be published during the three year duration of the project, that is to say until 2013. Information presented in the Cullen report was collected in this country with the help of various parties, including the Post and Telecom Administration. The report can be accessed on the Cullen International website. There one can also find the previous report which was published in the autumn of 2011.

Delays in the transposition of the new EU electronic communications regulatory framework

Despite positive coverage in the Cullen report on the status in Iceland and on our success in aligning regulatory framework and legislation on telecommunications with the EU Directives, there have been certain delays in this respect in Iceland. A bill proposing amendments to electronic communications legislation for the purpose of transposing the European electronic communications regulatory framework from 2009 has remained in an almost complete form in the Ministry of the Interior since

the summer of 2011 when it was submitted to the open consultation process with stakeholders. This relates to Directives nos. 136/2009/EU and 140/2009/EU. There have however been delays in including the Directives in question in the EEA agreement at the level of what is called the EEA Joint Committee which has complicated the transposition of the content of the Directives into Icelandic national law.

The obstacle to the transposition of the two Directives is that they allow for the concurrent establishment of a European regulatory authority, the Body of European Regulators for Electronic Communications (BEREC), with a special Regulation to that effect no. 1211/2009/EU. The function of that authority is to conduct surveillance on harmonised implementation of the regulatory framework and it has various tasks to complete with respect to the process of market analyses which are made by the electronic communications regulatory authorities within member states of the union, and to provide guidelines on the application of obligations that can be imposed on dominant electronic communications companies subsequent to market analysis. To the best of the PTA's knowledge, the EU Commission will not countenance EEA/EFTA states being given full membership of the Body, without voting rights, as has been the custom up to this point in time with the participation of these states in the operations of many other analogous administrative bodies within the European Union. This position taken by the Commission seriously hinders the EEA/EFTA states' possibilities to adopt the joint regulatory framework, which among other things, allows for the involvement of BEREC in the administrative process of specific tasks that are the briefs of domestic electronic communications regulatory bodies.

Delay in transposition of the electronic communications regulatory framework in question is detrimental to the development of the Icelandic electronic communications market for many reasons. With the new EU electronic communications regulatory framework there has been a certain shift of emphasis. Instead of focusing on regulation and on adapting the market for the purposes of enabling competition, more attention is given to the role of government in encouraging and supporting the development of telecommunications infrastructure, particularly the next generation of access networks which are necessary to achieve the high data transfer speed offered by the newest technology. When one considers the objective set in the 12 year Electronic Communications Plan endorsed by the Icelandic Parliament for the years 2011-2022, that 99% of citizens would have access to 100 Mb/s connection in the year 2022, it is clear that very significant development and investment in electronic communications infrastructure need to be in place during the coming years.

The new EU electronic communications regulatory framework supports this development, and in this connection one can point out the following important issues:

Spectrum issues

Formality and state control over the treatment of frequency licences are relaxed. The aim is that bands should be open and accessible without specific frequency licences should this be technically feasible. The transfer of frequency licences will be authorised unless prescribed otherwise, and allowance will be made for markets where electronic communications companies buy and sell frequency licences to meet their needs in each instance for the development of networks and/or to share bands with other parties. One could assume that increased freedom in these matters could lead to greater economies in the development and distribution of high-speed mobile network services.

Next Generation networks - increased sharing and database on electronic communications infrastructure

To facilitate the development of fibre-optic and high-speed access networks, the regulatory authorities shall be careful to maintain competition but at the same time, place greater emphasis on incentives to invest in development in such a manner that network operators that are subject to price control can receive

fair recompense for their investment. In this connection emphasis is also placed on further sharing by electronic communications companies of networks and facilities by making information on such facilities accessible to parties to the market, for example by building a database on electronic communications infrastructure.

Universal service

It is expected that the state should support the introduction of high-speed data transfer service through universal service, where a specific data transfer speed is no longer specified, but rather the state can decide to link it to the dominant technology and the speed on offer to the majority of citizens, on market criteria. Obligations for the development of universal services in non-profitable areas that lead to unfair burdens for universal service providers will continue to be seen as criteria for subventions from the Universal Services Compensation Fund.

Rules on state aid

With increased emphasis on the involvement of government in the development of electronic communications infrastructure a need has been created to interpret the EU rules on state aid with respect to the electronic communications market. For this reason the EU Commission has issued guidelines on the implementation of state aid rules with respect to electronic communications which have furthermore been issued by the EFTA Surveillance Authority as guidance for EEA-EFTA states. According to these guidelines, allowance is among other things made for regulatory authorities playing an instructive and advisory role on various issues with respect to construction projects that are supported by official bodies, including municipalities.

From the above one can see that specific parts of the new electronic communications regulatory framework of the European Union are each on their own conducive to supporting the development of electronic communications infrastructure, but when all these parts come together one can say that a logical and unified foundation has been created for the development of electronic communications infrastructure in the coming years. For this reason the Post and Telecom Administration considers it important that the agreement is reached as soon as possible on introducing the new electronic communications regulatory framework into the EEA agreement and this having been done it should be transposed into Icelandic law at the first opportunity.

Consumers on the electronic communications market

The electronic communications market is complex and often lacks transparency for consumers. This lack of transparency can to a certain extent be attributed to rapid technological development and to varied and constantly changing offers and packages of electronic communications offers to the public. This is well reflected in the number of queries and complaints received by the Post and Telecom Administration from consumers concerning their dealings with electronic communications companies. Such complaints are in their hundreds every year though only some progress to the formal complaint process. Communications from consumers reach the Administration in a variety of ways, for example by email, telephone and by the electronic complaints form which can be sent directly from the PTA website. Complaints concern a wide range of issues with the most common being unsolicited telecommunications and various matters related to customer invoices.

Informing consumers and taking measures to enhance their interests are thus among the largest tasks of those working on administration and surveillance of the electronic communications market. On the PTA website www.pfs.is one can find a dedicated consumer section where a variety of information on the electronic communications market is targeted specifically at consumers.

The Administration also provides a calculator for consumers at www.reiknivél.is which calculates electronic communication costs. There, in a straightforward manner, one can compare differing service options from

electronic communications companies using one's own consumption and criteria.

Decreasing price of roaming service in the EEA

Since 2007, the European Union has imposed a steadily decreasing maximum on prices that electronic communications companies may demand from the customers for mobile phone usage and for the use of 3G Internet keys between countries in the EEA. These EU regulations have been adopted in this country through the EEA Agreement and the newest regulation was adopted in December 2012 with the Regulation from the Ministry of Interior number 1174/2012. The main objective of the Regulation is to continue the process of reduction of prices for roaming calls for European mobile phone users, both by reducing wholesale charges for call termination between mobile phone companies and by prescribing a maximum retail price to consumers. The reduction process commenced with the reduction of the prices in question on 1 July 2012 which subsequently decrease annually at the same point in time until 1 July 2014, and they shall remain unchanged until 2022, though taking into account the possible impact of a special review provision.

RAPID DEVELOPMENT OF ELECTRONIC COMMUNICATIONS TECHNOLOGY

Changes in spectrum arrangements

According to the Act on Electronic Communications no. 81/2003, the PTA has the role of managing the planning of the frequency spectrum such that its use for electronic communications is effective, efficient and without disruption.

At the end of 2011 the Administration published its conclusions on completion of consultation on spectrum organisation. It was decided that the largest part of the 790-862 MHz band would be used in the future for high-speed mobile phone service. This band was previously used for analogue TV transmission and in addition to this licences were granted for wireless microphones in this band, but always subordinated. After consultation with stakeholders on alterations to spectrum band for wireless microphones. It was decided that those parties that had had authorisation to use wireless microphones on this band needed to migrate to another band before 31 December 2012.

This change was made in accordance with developments in neighbouring countries where the use of the band in question is changing all over Europe from being used for television transmissions to high-speed mobile phone services.

Preparations for spectrum allocations for 4G technology

in December 2012 the Post and Telecom Administration published an advertisement for a spectrum auction for high-speed mobile phone service (4G service), which was to be held in February 2013. It was decided to use an electronic auction, a methodology widely used abroad in recent years.

The advertisement was published subsequent to consultation with stakeholders on draft conditions for the auction. A number of observations were received, with the most significant ones relating to requirements for distribution and development in the draft conditions. In addition to this observations were made relating to maximum spectrum rights that a party could be allocated on the basis of the auction, both on the 800 MHz and 1800 MHz bands. The Administration reviewed the draft in the light of the observations received and subsequently made a number of amendments to the conditions.

Network and information Security

Network and information Security is one of the main tasks of the Post and Telecom Administration and is becoming an increasingly larger part of operations. The most prominent part is the operation of the PTA cyber security team, CERT-ÍS, whose operations relate to information infrastructure that is critical to the country and to operators of electronic communications networks. Direct service from the PTA to the public with respect to cyber security is first and foremost in the provision of information, where the Administration supports increased awareness of network and information security, among other things by maintaining an advisory website www.netöryggi.is. There one can find practical information for the public and for smaller companies on how to enhance one's own security on the Internet. The PTA cooperates with other domestic parties that work on network and information security. A representative of the Administration has a seat on the steering committee of the SAFT project of Heimili og skóli (Home and School) and the Administration is involved in the advisory website www.netsvar.is along with SAFT/ Heimili og skóli (Home and School) and Barnaheill (Child Protection Association). On that website one can find and/or send in, questions and answers on safe use of networks and receive answers to the questions, not least for children and teenagers.

One of the PTA's most important roles is to support operational security of electronic communications networks, including connections to other countries and to ensure that security requirements are defined and active surveillance of access to electronic communications is always at least as good as specified minimum requirements. In 2012 work commenced on developing a database of electronic communications infrastructure

which will be used by the Administration to assure improved quality, security and access to electronic communications and future. Work was also commenced on mapping out the status of electronic communications with measurements in distribution systems across the country, for mobile phone, mobile network or radio services alike. Both of these tasks will be continued in the year 2013.

CERT-ÍS – PTA cyber security team

In June 2012 amendments were agreed To Electronic Communications Legislation and to The Act on the Post and Telecom Authority, where a statutory framework was introduced for the PTA cyber security team (CERT-ÍS) , with Act no. 62/2012. The objective with the setting up of (CERT-ÍS) is to prevent and mitigate the risk of cyber-attacks and other security events in the team's network jurisdiction and to impede and minimise damage from such sources to the community's critical information infrastructure.

CIIP – Critical Information Infrastructure refers to systems designed to guarantee state security, public well-being and a variety of channels for a variety of supplies necessary in modern society. The National Commissioner of Police further define those systems considered to be critical infrastructure.

The work of CERT-ÍS includes, among other things, coordination of measures taken by operators of the critical infrastructure belonging to what is called the teams network jurisdiction and the provision of support against imminent security events. CERT-ÍS provides these parties with consultancy on preparation and response. The team disseminates information on security events and responses to such events to the public where appropriate.

The cyber security team is intended to be a point of contact and coordinator in cooperation with foreign CERT cyber security teams. As cyber-attacks in the world become more extensive and widespread, international cooperation becomes more necessary to enable response to and to be able to protect against disruption and damage that can be caused by such attacks. The PTA CERT-ÍS cyber security team maintains its own website at www.cert.is.

Joint European cyber security team exercise

In October 2012 a joint European exercise was conducted in coordination of measures against serious and widespread cyber-attacks in Europe. The exercise was organised by the European Union Agency for Network and Information Security (ENISA) and was first and foremost intended to test communications and cooperation between response parties, between countries and within each country, in conditions that could arise in the event of serious and widespread cyber-attacks. The exercise set up scenarios for extensive and widespread cyber-attacks in the region.

All the countries of the European Union and the EFTA countries (Iceland, Norway, Lichtenstein and Switzerland) took part in the exercise in one way or another.
The PTA cyber security team, CERT-ÍS, organised the implementation of the exercise in this country and took part on behalf of Iceland, along with companies from the private sector. This is the first time that Icelanders play an active role in such an exercise. The first joint European exercise against cyber-attacks was held in 2010. This was also the first occasion when both public bodies and parties from the private sector jointly participated in an exercise of this kind.

POSTAL MATTERS

In the year 2012, the Post and Telecom Administration endorsed extensive changes to the Íslandspóstur tariff within monopoly. The amendments brought the tariff in line with the company's real costs for certain service categories.

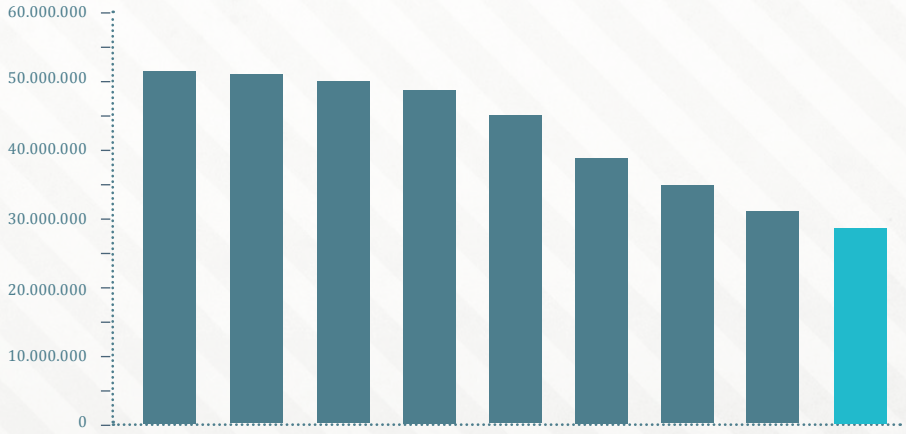
The main changes were that the public could now choose A-mail, which is delivered the day after it is posted or B-mail, which is delivered within 3 days from being posted. Arrangements like this, that is to say the option of purchasing varying service levels, have been practised in neighbouring countries for quite some time.
At the same time changes were made to the tariff for those parties that send large volumes of mail. Two base prices were set depending on the service being purchased in each instance, that is to say A-service and B-service. In addition to this the Íslandspóstur system of discounts was changed such that it was adjusted to savings made by the company in transactions of this kind in accordance with the relevant legislation.

In parallel to what was mentioned above, the Administration continued its work on separation of accountancy of Íslandspóstur and it is expected that the first phase of this task will be completed in the year 2013.

Decline in number of letters within monopoly

The decline in the number of letters within monopoly (0-50 g) being sent continued during the year. In the bar chart below one can see the reduction that has taken place over the last seven years, from just under 52 million letters in 2005 to a little over 32 million in 2012. The reduction is expected to continue and that the number of letters within monopoly being sent will have dropped to 31 million in 2013.

With the decline in number of traditional letters being sent, economies in the operations of Íslandspóstur with the reduction and merging of post offices has been a conspicuous characteristic in the development of postal matters in recent years. This development continued in the year 2012 where 6 of the 9 decisions made by the PTA on postal matters related to the closing or merging of Íslandspóstur post offices. Instead of traditional access points the arrangement is generally such that users can call the National Post Service and order the service they are seeking in each instance. It has, however, continued to be possible to deliver traditional letters that carry an indication that their delivery has been paid for. Access to a post box is part of the definition of the concept access point, according to the Postal Services Act.



Source: Íslandspóstur
(Note: 2013 is estimated)

Registered providers of electronic communications networks and service at year-end 2011

Licence holder	Issued/registered	Services
Advania hf.	17.4.2002	Data transmission service
Alterna Tel ehf.	8.1.2010	Voice telephony, mobile and data transmission
A.T.C. Avant Telecom Consulting AG	29.4.2010	Voice telephony and data transmission
Ábótinn ehf.	28.3.2003	Data transmission and service
Backbone ehf.	25.8.2010	Data transmission and service
Bloomberg Finance L.P.	19.7.2007	Leased line and network
Brimrún ehf.	3.4.2008	Data transmission via satellite
Colt Lux Group Holding S.a.r.l.	9.12.2011	Data transmission services
Datacell ehf.	25.8.2010	Data transmission services
Davíð og Golíat ehf.	3.5.2010	Voice telephony and data transmission
DCN Hub ehf.	10.12.2012	Mobile and data transmission services
DVD-Margmiðlun ehf.	6.2.2004	Broadcast caple network
Emarald Atlantis ehf.	29.6.2011	Submarine cable and data transmission service
Equant á Islandi ehf.	7.7.2004	Data transmission service
Farice ehf.	2.9.2003	Submarine cable
Fjarskipti ehf.	27.3.2007	Voice telephony, mobile, data transmission and network
Fjölnet ehf.	26.10.2001	Voice telephony, data transmission and network
Fónn ehf.	26.5.2009	Voice telephony, data transmission and network
Gagnaveitan ehf.	8.6.2011	Electronic communication services
Gagnaveita Reykjavíkur ehf.	23.3.2007	Data transmission and service
Gagnaveita Skagafjarðar ehf.	30.11.2006	Data transmission service
GlobalCall ehf.	4.9.2008	Voice telephony
Gullskógar ehf.	5.2.2010	Voice telephony
Hátíðni hf.	24.1.2001	Voice telephony, data transmission and network
Hringdu ehf.	9.11.2010	Voice telephony and data transmission service
Hringiðan ehf./Vortex Inc.	3.12.1998	Voice telephony, data transmission and network
Hringtorg ehf.	5.11.2012	Electronic communcation services
IceCell ehf.	28.6.2007	Mobile DSC 1800 and VOIP service
iCell ehf.	25.8.2010	Voice telephony, mobile, data transmission and network
IMC Ísland ehf.	27.6.2000	Mobile DSC 1800
Internet á Íslandi hf.	3.2.1998	Network, voice telephony and data transmisson
IP fjarskipti ehf. (TAL)	15.9.2004	Voice telephony, mobile and data transmission
Irja ehf.	3.5.2010	Data transmission
Isavia ohf.	30.12.2010	Voice transmission service for aircrafts
Já upplýsingaveitur ehf.	21.11.2007	Publication of directories, directory enquiry service
Kapalkerfi ehf.	14.5.2004	Cable network
Kukl ehf.	20.3.2009	Voice telephony, data transmission and network

Nafn	Útgefið / skráð	Tegund starfsemi
Kvíaholt ehf.	20.2.2012	Voice telephony and data transmission service
Lancelot BV	20.2.2012	Mobile network and services
Landhelgisgæsla Íslands	1.1.2011	Management and lease of NATO´s optical fibre network
Ljós og gagnaleiðari ehf.	10.8.2009	Data transmission network
Magnavík ehf.	1.4.2004	Data transmission service
Martölvan ehf.	26.11.2007	Voice telephony, data transmission and network
Material ehf.	6.10.2008	Data transmission service
Míla ehf.	4.4.2007	Network
Nepal hugbúnaður	21.2.2005	Data transmission service and wireless data transmission
Netsamskipti ehf.	4.12.2002	Voice telephony, data transmission and network
Neyðarlínan hf.	6.10.1999	Voice telephony - emergency service
Nova ehf.	12.7.2006	Voice telephony and data transmission
NyX ehf.	5.11.2010	Data transmission
Nýherji hf.	12.12.2011	Data transmission
OnAir S.A.R.L.	29.4.2008	Mobile communication services on aircraft (MCA)
Opin kerfi ehf.	25.2.2011	Data transmission service
Orkufjarskipti hf.	24.1.2001	Electronic communication network
Packet ehf.	11.2.2011	Data transmission and service
Radíó ehf. - Íslensk fjarskipti	22.8.2006	Telecommunication service
Ríkisútvarpið ohf.	29.7.1997	Transmission of radio and television signals
Símafélagið ehf.	15.10.2008	Voice telephony and network
Síminn hf.	30.7.1998	Voice telephony, mobile, data transmission and network
Sjónvarpsmiðstöðin ehf.	8.10.2009	Data transmission service
Snerpa ehf.	17.8.2000	Network, voice telephony and data transmisson
Softverk ehf.	20.3.2009	Voice telephony, data transmission and network
Stykkishólmsbær	2.5.2002	Data transmission network
Svar tækni ehf.	21.12.2007	Telecommunication service
TELE Greenland A/S	24.6.2008	Submarine cable
Tengir ehf.	20.9.2002	Fiber optical network
TSC ehf.	18.1.2002	Voice telephony, data transmission and network
Tæknimiðlun ehf.	27.8.2010	Data transmission service
Tölvu- og rafeindaþjónusta Suðurlands ehf.	29.3.2004	Data transmission service
Tölvun ehf.	25.4.2003	Data transmission and service
Tölvustoð ehf.	15.4.2009	Data transmission service
Þekking - Tristan hf.	16.1.2004	Data transmission and service
Örugga símafélagið ehf.	13.12.2010	Voice telephony and network
Öryggisfjarskipti ehf.	6.10.2008	Telecommunication service and network / TETRA