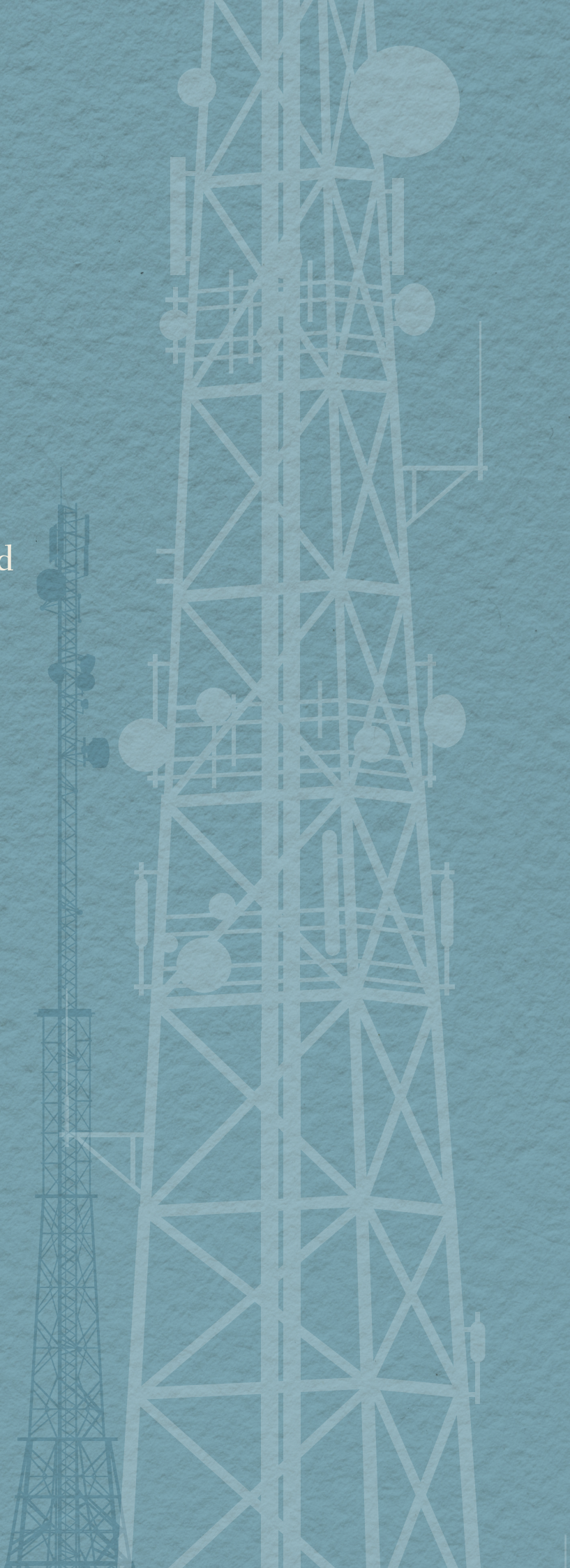
Post and Telecom Administration in Iceland
Annual report 2011



POST- AND TELECOM ADMINISTRATION

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Address by the Managing Director

Increased operations in times of recession

The main role of the Post and Telecom Administration is to ensure economic, secure and accessible telecommunications and postal services for consumers in a modern information society. In order to fulfil this role the Administration supports the development of markets and electronic communications networks with a view to the future. This is manifested among other things in the development of rules of procedure for parties to the market and in facilitating the entry of new parties or services into the market. At the same time increased variety and competition call for more active surveillance, policy-making and cooperation.

Continuously increasing demands are made on state operations. State institutions have had their budgets cut, tasks have been increased and greater demands are made for professionalism. The PTA has not been exempted from this trend. In recent years the Administration has not been authorised to fully enjoy its statutory sources of funding and can thus not fulfil all of its statutory duties to the extent that it considers necessary. Work has nevertheless progressed on strengthening the Administration's operations, not least with improved organisation and increased emphasis on quality.

Improved surveillance culture - lack of remedial measures

The electronic communications market has developed significantly in recent years, and in an environment of stiffer competition a number of instances have arisen where companies have evaded the laws and rules that apply to their operations. Subsequent to the economic crash and the report of The Special Investigation Commission of the Althingi, there has been a debate on an improved culture of surveillance in this country. Such an improvement would mean that the surveillance authorities would operate in a robust manner, and would rigorously enforce the regulatory framework. The PTA has formed a policy with the emphasis on improved surveillance culture, while at the same time it has lacked measures, for example the authority to impose fines that could be employed when offences had taken place. The Administration has recommended to the Minister for the Interior that such provisions should be included in the legislation governing electronic communications.

Reduction in letter post and increased efficiency in postal services

The number of letters sent has dropped considerably in recent years and since 2005 letters covered by state monopoly, that is to say within 50g, have dropped by about 32%. This has required increased efficiency in postal services while at the same time requirements for universal services, to which all citizens have a right regardless of domicile, must be met. Íslandspóstur has reacted to this development among other things, by reducing the number of post offices, both in the provinces and in the capital city area. The PTA emphasis is to assure consumer interests on the postal market to the extent possible in the face of current developments. The Administration has been working on a decision on the structure of tariffs and discount categories. Work is also in progress on a review of the price base for Íslandspostur. In the coming months a position has to be taken on the organisation of universal services and on whether the monopoly will be lifted.

The Electronic Communications Market

Rapid development and increased competition

The electronic communications market has developed significantly in recent years. The main aspect that one could mention is increased competition in providing electronic communications at the wholesale level. This development can be explained, among other things, by the increased building of electronic communications networks in recent years and the increase in more powerful network operators. For example, there are two electronic communications companies, that is to say Siminn hf. and Fjarskipti ehf., that operate mobile phone networks with national coverage that compete with each other on providing other electronic communications companies with access to their networks. Mobile phone companies like Tal and Alterna, that do not operate their own electronic communications networks, except to a limited degree, thus have a choice of companies from whom to buy mobile phone services at wholesale level. This development has, among other things, led to the Administration lifting the obligation that had been imposed on Siminn to provide access to its mobile phone network.

In addition, the development by Gagnaveita Reykjavíkur of a fibre-optic network in Reykjavík has created increased competition in network operations that offer the consumer the option of choosing a type of high-speed data transmission service. In the same manner as on the mobile phone network, electronic communications companies that operate on the data transmission and voice telephony markets, like Símafélagið and Hringdu, that only to a very small extent control electronic communications infrastructure, now have a choice of wholesale parties to do business with.

This position on the market is however sensitive and the Administration will closely monitor developments in the coming years. For example, it seems to be clear that the basis for the existence of smaller electronic communications companies on the data transmission market will mostly be decided by the possibilities they have to offer resale television services.

Competition in the operations of electronic communications networks has also been positive in the provinces during the past years. For example, Vodafone´s access to the NATO fibre-optic cable has strengthened the company´s position as a network operator at wholesale level across the country, in competition with Mila. One can expect that competition in network operations will continue in the coming years, as one can detect interest among water and electricity utility companies, that is to say the distributors, in utilising their excavation work to lay fibre-optic cables parallel to their distribution conduits. Work of this nature can considerably improve the electronic communications backbone network in the country´s more remote regions and can introduce competition in regions that previously had to live with a monopoly. The government has played its part in facilitating this nationally beneficial development by introducing a bill that specifies a rule for division of costs in such joint operations for the benefit of electronic communications.

European comparison

Strong position of electronic communications and information technology in Iceland

In December 2011 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 was produced by the international research company Cullen International and as part of a three-year project (2011 – 2013) that the company is carrying out for the EU.

In addition to this, the organisation and status of surveillance by the surveillance authorities is examined in the report.

In general the report gives a positive view of telecommunications and information technology in Iceland. Icelanders have made considerable progress in adapting their electronic communications environment to the laws and regulatory framework of the EU and in comparison with EU countries and other countries in the expansion process Iceland performs well on almost all points.

The report looks to the future and to where emphasis must be placed with respect to the electronic communications market in the near future. With respect to Iceland the main emphasis is placed on adoption of the reviewed electronic communications regulatory framework for Europe and on work on the second round of market analysis, which is now in full swing within the PTA.

There is particular discussion on the surveillance authorities in the report and the necessity for them to have financial independence and authority to enforce their surveillance role. Some concerns about the financial independence of the Post and Telecom Administration are voiced and it is pointed out that subsequent to the economic crash in 2008, the Administration has each year suffered cuts in the funds it receives for its annual operations.

The Cullen report can be accessed on the company´s website: http://www.cullen-international.com/other-services/studies.htm

PTA control and the resolution of disputes

Increased competition on the electronic communications market does not necessarily lead to fewer disputes. On the other hand one can say that the nature of the disputes has to some extent changed. In this respect one could note that there has been a reduction in initiatives taken by the Administration against electronic communication companies with significant market power where the aim was to impose ex-ante obligations on them to encourage competition. Instead there has been an increase in cases where competitors are in dispute with parties with significant market power on the interpretation and content of the ex-ante obligations imposed on the latter. One can in this respect refer to the fact that the Administration has on two occasions needed to settle a dispute between Vodafone and Mila on the former's access to facilities and leased lines with Mila, with respect to the Vodafone leasing of the NATO fibre-optic cable. (PTA´s decisions no. 34/2010 and no. 28/2011). The Administration also resolved a dispute arising out of a virtual network agreement that Siminn made with Tal and that Vodafone considered not to be in accordance with the obligations on Siminn for such wholesale access. (PTA´s decision no. 13/2012). In the opinion of the PTA these disputes indicate increased competition on the wholesale market where network operators compete for a share of wholesale trade on the electronic communications market.

In the Administration's work it is sometimes necessary to apply ex-ante measures in order to keep a tight rein on the market. The PTA has adopted a policy that it should operate in a robust manner and should rigorously implement legal provisions and decisions. It can also be necessary to take the initiative with preventative surveillance and to regularly monitor status, among other things by making on-site investigations, should this be considered necessary. This applied for example to the PTA investigation of what is called the Siminn CDR database, which among other things registers information on electronic communications traffic in the company's systems. On completion of a review of written data on security arrangements concerning the database and of an on-site investigation on this matter, the PTA considered that there was need for improvement on 18 specific points. (PTA´s decision no. 2/2012).

In some cases when parties to the market have committed a breach, it appears to have been intentional and the question arises as to whether parties are operating honestly and ethically. For this reason, the PTA considers there to be a need to focus on the surveillance culture in this country and it challenges companies to take real and effective measures to operate in accordance with the law. This is particularly directed at those electronic communications companies that the Competition Authority and/or the PTA, have had reason to impose fines on for infringements, or to seriously caution in their decisions.

The Administration has among other things for the above specified reasons, found itself compelled to propose to the Minister of the Interior that provisions on authorisation to impose fines be included in the electronic communications legislation. Such provisions are now been processed by the Althingi. The purpose is to force parties to the market to seriously consider the consequences of breaching the law and to avoid such infringements. It is necessary to strengthen targeted monitoring of compliance with laws and regulations while at the same time there need to be appropriate measures available, for example authorisation to impose fines that can be implemented in the event of infringement.

TECHNICAL DEVELOPMENT AND FREQUENCY PLANNING

New regulation on the planning and allocation of frequencies

In November 2011 a new regulation was published on the planning and allocation of frequencies for electronic communications number 1047/2011. The introduction of the regulation is to support efficient planning of registration and allocation of frequencies with the aim of making the use of frequencies both efficient and sensible. At the same time, the regulation strengthens the decision process of the Post and Telecom Administration with respect to planning and allocation of frequency rights, particularly by using tender and auction methods. Among other things it deals with considerations that can be the basis for evaluation when allocating frequency rights and with the conditions one can impose on such rights. One can expect the regulation to support transparency in public administration of frequency matters and in addition that it will increase predictability of the regulatory environment with respect to stakeholders.

Collaboration on frequency policy

The Post and Telecom Administration has the role, according to the Act on Electronic Communications no. 81/2003, of managing the planning of the frequency spectrum such that its use for electronic communications is effective, efficient and without disruption. In its work the PTA also keeps in mind one of the main objectives of the Act on Electronic Communications, which is that the Icelandic state shall assure, to the extent possible, that all citizens be offered access to electronic communications services as prescribed in the Act. In the summer of 2011 the Administration published a draft of its frequency policy for consultation.

The main conclusions of the PTA on completion of the consultation are the following

Frequency rights on the 800 MHz frequency range, among other things for use for 4G mobile phone service, will be auctioned when circumstances permit in the year 2012. It is planned that the 800 MHz frequency range will be technically neutral.

Frequency allocations on the 900 MHz frequency range will be reallocated to existing frequency rights holders according to applications received, up to the year 2022. Part of the frequency range allocated to Siminn and Vodafone will however be for a shorter duration, that is to say for five years. That frequency range will be limited to GSM/UMTS mobile phone services.

Frequency allocations on the 900 MHz frequency range will be reallocated to existing frequency rights holders according to applications received, up to the year 2022. Nova will be given the opportunity to add an additional frequency range so that it will be 2x15 MHz in size, matching the frequency allocations of Siminn and Vodafone. A reservation will be made with respect to amendments to the conditions of the frequency allocations, for example, in connection with obligations for distribution that will be made in connection with the auctioning of the remainder of the frequency range. The auction of the remainder, a total of up to 2x25 MHz (given that Nova decides to take an additional frequency), will take place at the same time as the option of the 800 MHz frequency rights, see the above. It is planned that the 1800 MHz frequency range will be technically neutral.

Given the anticipated increased demand for frequency ranges for 4G mobile networks it is expected that the 2600 MHz frequency range which is now mostly used for MMDS television services, will be allocated for use for 4G mobile phone network services at the end of the duration of the Vodafone frequency rights in June 2014.

Development of electronic communications networks in the coming years

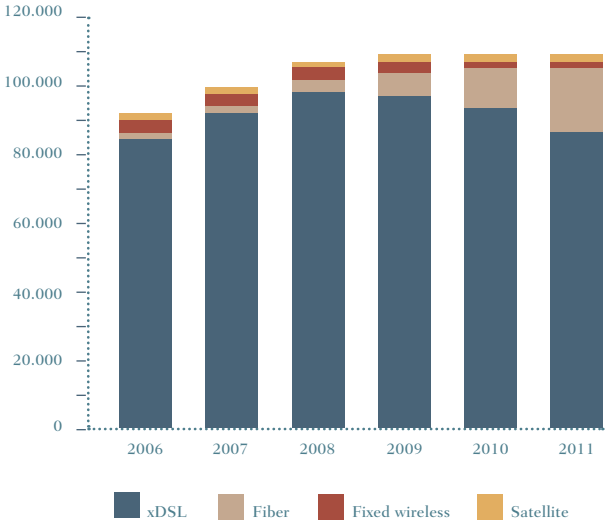
In the coming years there will be a need for significant development of electronic communications networks and the need to increase capacity and to develop the internal operations of electronic communications networks to meet the requirements that will be made for access, quality and security.

With the introduction of 4G electronic communications networks, the speed and volume of data transmission in mobile networks will multiply. One can expect that within a few years a normal mobile network connection will be 30 Mb/s. Today about a third of electronic communications transmitters are connected to fibre-optic. With increased speed of mobile networks it will become necessary to connect most of these transmitters to a fibre-optic network.

The country's fibre-optic network needs to be strengthened considerably, both because of the demand for increased speed of high speed connections and to strengthen security of the network as a whole. Increased interest in data centres could also be a factor here. A large part of the country's electronic communications network is now based on fibre-optic connections and in almost all new developments in electronic communications today, fibre-optic is installed. It is therefore normal that the long-term objective should be that telecommunications services through fixed networks will be provided eventually through fibre-optic, despite the fact that copper local loops can still provide a totally competitive service. In urban areas, parties to the market offer faster connections, both with new technology on existing copper local loops and through fibre-optic where it has been installed. In rural areas there is less competition and the interest of the parties to the market for development is unclear, particularly in sparsely populated regions. This means that at many locations fibre-optic cables will need to be laid on a community basis. If matters are properly handled, there is no reason that electronic communications companies should not be able to compete with their services at all locations in the country on such networks. In the electronic communications plan presented to the Althingi in the autumn of 2011 the objective is set to reach 100 Mb/s in almost all of the country's households by the year 2022. The development of electronic communications networks will thus be one of the main community projects for the state, municipalities and the electronic communications companies for the next decade.

Number of Internet connections in Iceland by type 2006–2011

Source: Post and Telecom Administration, 2012



Registered Providers of Electronic Communications Networks and Service at year-end 2011

Licence holder	Issued / registered	Services
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
Davið og Golíat ehf.	3.5.2010	Voice telephony and data transmission
DVD-Margmiðlun ehf.	6.2.2004	Broadcast cable network
Emarald Atlant.is Ltd.	29.6.2011	Submarine cable and data transmission service
Emerald Network Computing Inc. Útibú	8.6.2011	Submarine cable and data transmission service
Equant á Islandi ehf.	7.7.2004	Data transmission service
Farice ehf.	2.9.2003	Submarine cable
Fjarski ehf.	24.1.2001	Leased line and network
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	Telecommunication service
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
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 ehf.	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

Licence holder	Issued / registered	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
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 singals
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
Skýrr hf.	17.4.2002	Resale data transmission
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
TAS Tækniþjónusta ehf.	14.10.2010	Data transmission 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

NETWORK AND INFORMATION SECURITY

Network and information security is one of the main concerns of PTA. The Administration promotes better public awareness of network and information security. Among other things it does that by maintaining an advisory website, **www.netöryggi.is**, where one can find practical information for the public and for SMEs on how to enhance one's own security on the Internet. The Administration also cooperates with others that work on network and information security such as the SAFT project of Heimili og skóli (Home and School) and Barnaheill (Child Protection). The advisory website www.netsvar.is is a cooperative project of these three parties. There one can find, 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. To ensure that security requirements are defined and active surveillance of access to electronic communications being always at least as good as specified minimum requirements. One of the ways in which the Administration fulfils this role is with an annual survey on the quality of network services provided in this country. In December 2011 a survey was made on the quality of network services in urban areas, that is to say in built-up areas with 2000 or more inhabitants. In the preceding year the Administration made a similar survey of network providers in rural areas.

CERT-ÍS: National network security team

Electronic communications networks, the Internet and many general information systems connected through them are nationally important infrastructure and it is necessary to assure their operation and security. The Post and Telecom Administration has collaborated with parties to the market on strengthening the security of electronic indications networks and on defining more precisely the requirements made for network security. There is an increasing threat to telecommunications and information systems from computer hackers and criminals. In 2011 work was done on establishing a network security team within the PTA, which has the role of reacting to network attacks and to viruses in network systems of important information infrastructure. This is what is called a CERT team, Computer Emergency Response Team. In the Bill for amendments to the Act on Electronic Communications submitted to the Althingi in the autumn of 2011, the authority and the scope of activities the team will have are defined.

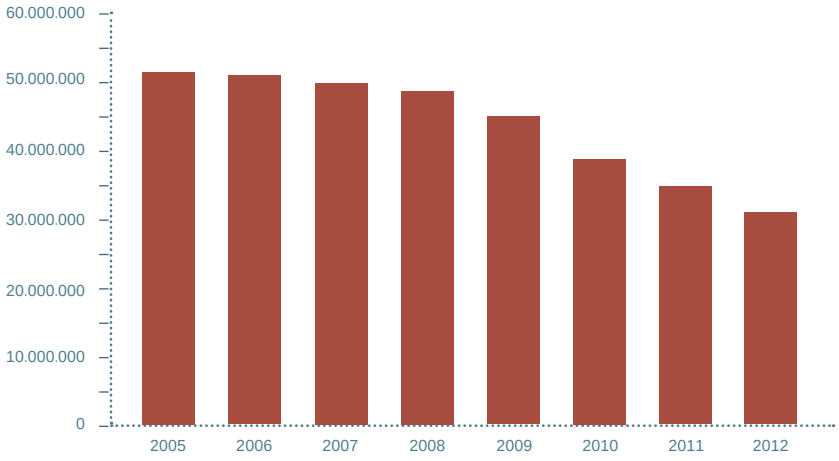
It is also clear that in the near future the quality of Internet service on offer to the public will be defined more precisely than it is at present. Among other things it will deal with what is meant by specific speeds and how the electronic communications companies will be allowed to advertise their products with respect to quality.

POSTAL MARKET

The working environment of the postal service in Iceland has been under review at the Post and Telecom Administration in recent months. Post is delivered to almost all citizens five days a week and the Íslandspóstur service network covers the whole country. With the diminishing volume of post it is becoming steadily more difficult to provide high-quality service at a manageable price. The Administration´s objective is to react to the great changes that diminishing volume of post is causing so that all citizens will continue to enjoy efficient and good postal services. The Administration has processed the request by Íslandspóstur for simplification of the distribution and major changes are under discussion on the structure of tariffs and discount categories. Work is also in progress on a review of the price base for Íslandspóstur. In the coming months a position has to be taken on the organisation of universal services and on whether and/or how the monopoly will be lifted.

Drop in number of letter within monopoly

There has been a great reduction in the number of letters being sent in recent years. 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 35 million in 2011. The reduction is expected to continue and that the number of letters within monopoly being sent will have dropped to 32.5 million in 2012, that is to say that the reduction between the years will be 7.5%.



Source: Íslandspóstur
N.B.: 2012 is an estimate.

Price of electronic communications services- OECD comparison

The aim of the PTA is that the prices of electronic communications services for Icelandic consumers are always as good as the best in our neighbouring countries. This objective is measured among other things by comparing the prices of electronic communications services with prices in OECD countries. If data for the items in question is not available for OECD countries then the objective is that Iceland be ahead of at least two of the five Nordic countries.

The comparison is made by the research company Teligen. In the table here below one can see Iceland's position in the group for the years 2003 - 2011 using the prices of various items in electronic communications services where the other 34 member countries of the OECD are divided into four groups. Group 1 has the least expensive services and Group 4 has the most expensive.

	Position within OECD								
Service / Year	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**
Broadband	3	3	4	4	4				
Home telephone	1	1	1	1	1	1	1	1	1
Company telephone	1	1	1	1	1	1	1	1	1
GSM - post payment	2	1	2	1	2	2	2	1	1
GSM – prepayment	1	1	1	2	2	2	1	1	1

Source: Teligen, cost adjusted with purchasing power parity (PPP) and the exchange rate in November each year

The position in 2011 is very similar to 2010 with the exception of post-paid GSM services where Iceland drops into Group 2. This is explained by falling prices abroad and by decreasing purchasing power here in this country.

Whether Iceland has achieved its objectives with respect to the price of electronic communications services for the years 2005 - 2011 can be seen in the table here below.

Was Iceland in the group of countries with the least expensive services in 2005 - 2011?

Advantage	Year	Fixed network telephone	Mobile phone network		High-speed connections
			Subscriptions	Card	
Price	2011	Yes	No	Yes	No
Price	2010	Yes	Yes	Yes	No
Price	2009	Yes	No	Yes	No
Price	2008	Yes	Yes	No	No
Price	2007	Yes	No	No	No
Price	2006	Yes	No	No	No
Price	2005	Yes	No	Yes	No

Source: Post and Telecom Administration.