



PÓST- OG FJARSKIPTASTOFNUN

# ÁRSSKÝRSLA 2018





# Table of contents

<b>A word from the Managing Director</b> . . . . .	<b>5</b>
Net neutrality . . . . .	5
Universal service. . . . .	5
Cyber security . . . . .	5
Ruling on the Síminn case. . . . .	6
Postal services . . . . .	6
The new Icelandic Electronic Communications Act. . . . .	7
Budgetary allocations to the Post and Telecom Administration . . . . .	7
5G rollout . . . . .	8
Disruptive technologies . . . . .	8
<b>Telecoms</b> . . . . .	<b>9</b>
Post and Telecom Administration guidelines on the proper installation and safety of fibre optic cables . . . . .	9
Registration of satellite frequencies . . . . .	9
Síminn's violation of the Icelandic Media Act . . . . .	10
A new European regulatory framework for telecoms . . . . .	12
Coordination of groundworks . . . . .	13
Changes to rules regarding indoor telecoms installations . . . . .	14
Monitoring of the status of and developments on the telecoms market . . . . .	15
Comparative statistics on use of electronic communications in eight countries. . . . .	15
PTA market analyses . . . . .	15
Primary focuses of 2018 market analyses . . . . .	16
Main obligation enforcement cases in 2018 . . . . .	17
Access to telecoms services. . . . .	17
Ísland ljóstengt – Continually improving access to next generation fixed-line networks . . . . .	18
Development of a database for general telecoms systems . . . . .	19
Build-out of mobile networks . . . . .	19
Measurements of mobile network quality . . . . .	20
The PTA's spectrum policy for 2019–2025 . . . . .	20
Radiation measurements at transmitter sites. . . . .	20
<b>Security in telecoms</b> . . . . .	<b>23</b>
Security of telecoms infrastructure . . . . .	23
Monitoring the airwaves – PTA interference monitoring . . . . .	23
Telecoms security audit . . . . .	24
<b>Cyber security</b> . . . . .	<b>27</b>
The CERT-IS cyber security incident response team . . . . .	27
<b>Postal affairs</b> . . . . .	<b>29</b>
List of tariffs and total number of letters delivered under the monopoly . . . . .	29
Change in the number of delivery days . . . . .	30
Accounting separation and cost of universal service . . . . .	30
Íslandspóstur's application for a contribution from the universal service compensation fund. . . . .	31
<b>Consumer affairs</b> . . . . .	<b>33</b>
Written or electronic consent for number and service porting . . . . .	33
Preparations for satellite spectrum registration . . . . .	34
<b>The Post and Telecom Administration 2018</b> . . . . .	<b>35</b>
Case handling time and case workload . . . . .	37
The PTA's administrative rulings and their outcome . . . . .	37
Post and Telecom Administration publications in 2018 . . . . .	38
Summary of verdicts . . . . .	38
PTA rulings . . . . .	38
Verdicts by the Rulings Committee for Electronic Communications and Postal Affairs. . . . .	45
<b>Registered telecoms companies at year-end 2018</b> . . . . .	<b>48</b>



# A word from the Managing Director | Hrafnkell V. Gíslason

## Net neutrality

Earlier this year, a new law on net neutrality came into force. The purpose of the law is to safeguard the right of consumers to access to an open and free internet. The law also addresses the quality of online services. The legislation originates in the EU. There has been substantial political debate taking place within the EU and further afield on this legislation and other internet-related issues. However, there has been little discussion of these issues in Iceland to date. The reason for this is unclear, however it is likely that the healthy state of communications in Iceland – for example in terms of connection speed – creates fewer conflicts between the service provided by telecoms companies and the regulatory system. The Administration plans to introduce a new system for grading the quality of online services in Iceland. This is expected to increase transparency and for instance clarify whether there is a difference between urban and rural areas as regards the quality of high-speed connections. There is still some uncertainty about the implementation of the law as no budgetary allocation has been provided for its implementation, despite a cost estimate being submitted along with the parliamentary bill.

## Universal service

A new law regarding universal service came into effect this year. The law stipulates that everyone in Iceland should have access to what is called “functional internet service”. The

definition of this is still being developed, but the term includes standard internet services that should be accessible to users. The definition will specify the minimum service that must be provided to everyone, irrespective of their place of residence. In most cases, such service is or will be made accessible through high-speed connections, such as fibre broadband. In a handful of cases, special arrangements will be required to ensure that the service is provided.

Telecoms company Síminn has announced its intention to shut down the fixed-line telephone system (also known as the PSTN system) in around 2020. The system is antiquated and indeed obsolete in many ways. The transition process away from this system has been ongoing for some time. In most cases, telephone users can access general telephone service with VoIP via digital high-speed connections, which is more or less equivalent to the older service in terms of user experience. In exceptional cases where no high-speed connection is in use or available, the option of mobile telephone service may now be considered to satisfy requirements of the law on access to telephone services.

## Cyber security

A parliamentary bill on cyber and data security was laid before the Icelandic parliament this year. This bill addresses the measures required to promote increased online and offline security for infrastructure that is consid-

red essential to society. It is important that this legislation is implemented as soon as possible, as Iceland is significantly behind neighbouring countries in terms of government preparedness to respond to cyber threats. According to the cost estimate enclosed in the bill, the cost to Icelandic society of cyber terrorism and cyber crimes is estimated at least ISK 7 billion per year. For comparison, Natural Catastrophe Insurance of Iceland's expenditure on natural disaster response over the past 30 years was about ISK 1 billion per year. Two events (earthquakes in the south of Iceland) accounted for about 80% of that amount. If these events are excluded, average expenditure is about ISK 200 million per year. Failure to respond to cyber threats may prove costly if this results in damage and losses that could have been prevented with proper working procedures. It is important that the actions described in the parliamentary bill are financed in full in order to enable preparedness measures equivalent to those in neighbouring countries to be implemented.

## Ruling on the Síminn case

The year saw the conclusion of one of the most wide-ranging administrative cases the Administration has faced since its foundation. The ruling concluded that telecoms company Síminn was in violation of the Icelandic Media Act by directing customers of its television service to an affiliated telecoms company. The case reflected the rifts in competition on the telecoms market today: both in terms of which access network/local loops users use to access fixed-line network services and in terms of how bundles of telephone, internet and television services, and sometimes mobile telephone services, are an increasingly important part of telecoms companies' offerings. The ruling marked a milestone in the competition between telecoms companies to offer compelling television content that is attractive to consumers, in the hope of selling them comprehensive telecoms service packages. The installation and pooling of optical fibre local loops will also have a considerable impact on the development of the telecoms market in the near future. The repercussions of the ruling are still unclear and a number of court cases are ongoing.

## Postal services

The annual report's section on postal services contains a fairly comprehensive discussion of how the Administration monitors the financial aspects of Íslandspóstur's operations. In brief, the Administration regulates the pricing of services that the company has an exclusive right to provide (delivery of letters weighing 50 grams, also called "monopoly services"), along with universal service performance, as defined at any given time. A ruling on the pricing of other Íslandspóstur services has been delivered to the company. The Administration does not monitor the competitive side of Íslandspóstur's operations, nor is it involved in decisions of its board of directors or management regarding investments or administrative matters.

There was a great deal of turbulence on the postal services market over the year. At the beginning of the year, urban postal deliveries every other day instead of every day were authorised. The savings from this change were estimated to be ISK 200 million per annum, but it was also observed that there could be a risk of the volume of post dropping due to the lower level of service provision. The predicted savings appear to have been realised. However, major producers of post have also significantly reduced their volumes during the year. The reduction in the volume of post delivered under the monopoly was around 14.3% during the year, resulting in a corresponding drop in revenue. This is a greater reduction than seen before, and there was a large drop in revenue on the postal market during the year of around 11%. The performance of monopoly services in previous years had been reasonable, but dropped towards zero for this reason. The volume of postal items received from abroad increased by around 7% during the year, which was a continuation of a significant increase during the previous year. Recently, a large share of postal items arriving from abroad has originated in China, and due to the provisions of international agreements the income from items like these from abroad is nowhere nearly sufficient to cover costs. In October 2018, Íslandspóstur submitted a request to the Post and Telecom Administration for the cost of postal items from abroad to be included in the cost of universal service. A verdict will be made on this matter in 2019.

A new Postal Services Bill was laid before Parliament in autumn 2018. The bill will introduce a new EU general regulatory system for postal services. The goal is to enable competition on the market by abolishing the government monopoly on the delivery of 50-gram letters while maintaining universal service. There are still a number of unclear aspects regarding the exact implementation of the parliamentary bill and what steps the government will take to safeguard postal services, including universal service. It is clear that exciting yet challenging times lie ahead as regards changes to postal services. They will test whether market conditions enable competition to be leveraged to deliver improved, more efficient postal services everywhere across the country.

## The new Icelandic Electronic Communications Act

In October 2018, the EU approved two new pieces of general telecoms legislation. The first is the regulation establishing the Body of European Regulators for Electronic Communications (BEREC), along with provisions on equal pricing of calls abroad within the EEA, and the second is the directive establishing the European Electronic Communications Code. The new general regulatory framework is quite substantial, with a total of 126 articles. The regulatory framework introduces many innovations, e.g. regarding access to and pooling of networks, allocation of frequencies, transfer of frequency authorisations, network security and various consumer issues. Preparations are being made for its introduction and it is hoped that the new Icelandic Electronic Communications Act can enter into force in early 2021. It is the opinion of the Administration that issues pertaining to the installation and pooling of infrastructure will require the most attention during the implementation of the regulatory framework, as extensive projects in this regard are planned, such as the build-out of 5G networks and the provision of high-speed networks to urban areas outside of Greater Reykjavík and Akureyri. The new Icelandic Electronic Communications Act is expected to enter into force in 2021.

## Budgetary allocations to the Post and Telecom Administration

During its spring session, the Icelandic parliament passed Act no. 47/2018 on Ringfenced Funding. Article 31 of the Act states that “the Post and Telecom Administration is responsible for collecting fees in accordance with this Article. Revenues from these fees shall accrue to the Treasury ... The Minister shall, on the basis of budgetary allocations, determine the funding required for the operation of the Post and Telecom Administration, which shall be at a minimum the estimated amount in the budget for revenues from the fees in accordance with this Article.” With the passing of this Act, the Post and Telecom Administration understands that there is an acknowledgement that the Administration will enjoy full revenues from its ringfenced funding. There have been significant challenges in this regard which have resulted in underfinancing of the Administration’s operations and a reduction in its capacity to operate effectively.

A notable example concerns mobile network operators’ payment of annual frequency fees for their allocated mobile network frequencies. In 2017, a large number of new frequencies were allocated, with a corresponding increase in annual frequency fees paid by market players in the tens of millions. Frequency interference has more than trebled as a result of the use of a wider frequency range. However, no additional budgetary allocations are planned for the Administration to deal with frequency interference, which requires additional manpower and equipment. This negatively impacts the ability of market players to supply the public with disruption-free service, as the Post and Telecom Administration, which is required by law to support disruption-free connections for communication devices, does not have the capacity to address increased interference since the Administration has not received budgetary allocations proportionate to the frequency fees collected. This situation jeopardises the current operation and future development of mobile networks in Iceland, as an increase in frequency interference may result in mobile network service in specific areas being deemed inadequate.

## 5G rollout

5G services are set to be launched in Iceland in the near future. The build-out of 5G mobile networks is an area of special focus in the EU's new telecoms regulatory framework, as well as in the draft of the new Electronic Communications Plan for Iceland, which states that Iceland will be a leading nation for the rollout of 5G. The long-term impact of these networks is believed to be immense. This is due in part to the fact that 5G networks will be used bring all manner of tools and devices online. Some of these devices will use AI and have the potential to significantly impact their environment. The technical capacity of these networks is very high and is comparable to that of powerful fixed-line networks in many regards. Society will increasingly rely on 5G-enabled devices. A nation's ability to compete will be determined in part by how they react to this transformation and utilise new technology for the benefit of society.

Everything indicates that the importance of considering the impact on society will be greater than ever before during the rollout of 5G. This applies in particular to the construction of network infrastructure, the pooling of that infrastructure and the role of public bodies, such as highway maintenance, in the development and operation of this infrastructure. Communication between market players and the public sector in this regard needs to be enhanced.

## Disruptive technologies

The fourth industrial revolution is well underway and telecoms is playing a fundamental role in it. Technological progress across society is the primary forebear to the fourth industrial revolution. A key point of debate has been disruptive technologies. 5G is one of these disruptive technologies. The government's 5G policy can be found in its Electronic Communications Plan. However, there is a need for further policy development. There has been much discussion of blockchains and AI, both of which are disruptive technologies. Most of Iceland's neighbouring countries have formulated policies on how to deal with and leverage these new technologies. There has been some discussion in Iceland on forming such a policy, and the Post and Telecom Administration believes that it is important that Icelandic authorities have a policy and vision for how society should prepare for the changes to come, both in terms of boosting society's knowledge and ability to deal with disruptive technologies and tackling the challenges that result from leveraging these technologies.



# Telecoms

## Post and Telecom Administration guidelines on the proper installation and safety of fibre optic cables

Part of the remit of the Post and Telecom Administration is to ensure that the integrity and security of public telecoms networks is maintained. The Post and Telecom Administration has tackled this obligation in various ways in recent years, e.g. by issuing statutes on the protection of personal data on public telecoms networks and the protection and functioning of these networks, in addition to auditing compliance with these rules. According to the rules, telecoms companies are required to document their security arrangements, e.g. by establishing a security policy, carrying out risk assessments and implementing appropriate security measures in response to these risk assessments.

As the security and integrity of public telecoms networks is the responsibility of the telecoms companies, a case could be made for the government to act with caution when issuing binding security statutes on companies. However, the need for such caution does not preclude the Post and Telecom Administration from doing its part by issuing guidelines that promote the increased security of public telecoms networks and as a result further the objectives the Administration is intended to realise.

In autumn 2018, the Post and Telecom Administration initiated an open consultation with stakeholders regarding the content of these guidelines. The Administration received no remarks on the draft guidelines.

In November 2018, non-binding guidelines were subsequently issued for the proper in-

stallation and security of fibre optic cables. These are intended to regulate the installation of fibre broadband cables in rural areas and on trunk routes. They cover work procedures and security standards from the planning stage of optical fibre installation, during installation and for the proper completion and delivery of such projects. These include issues relating to best practice and working procedures on such projects.

## Registration of satellite frequencies

Last year, the Post and Telecom Administration initiated an exploratory investigation into the feasibility of introducing a process for registering satellite frequencies (satellite filing). This project was a cooperative effort that also involved the company Mansat, which is in charge of such registrations in the Isle of Man.

The investigation concluded with a decision to open up applications for registration at the beginning of this year.

The space industry is a rapidly growing industry around the world. It involves more than exploration, research and future ideas. A large part of the space industry revolves around services that are already in daily use by a large number of people on Earth. This includes telecoms services, television broadcasting, meteorological observations, land surveys and navigation systems. Advances in the space sector generally lead to increased knowledge and technical ability in other fields. It is the opinion of the Post and Telecom Administration that the registration of satellite frequencies is a potentially important factor in the mission to boost Iceland's involvement in the space industry.

Opening applications for satellite frequency registration in Iceland will potentially increase the country's attractiveness to foreign satellite companies. In addition, the Post and Telecom Administration will be ready to accept applications for frequency registration from Icelandic parties when the time comes. Against this backdrop, it is important to note that satellite technology is getting cheaper and cheaper and more accessible to smaller countries.

The application process essentially consists of the Post and Telecom Administration receiving registration requests from satellite companies and submitting them to the International Telecommunication Union (ITU). Once submitted, the ITU's own process takes over, which seeks to coordinate the frequencies used by the relevant satellites and those of other satellites and other telecoms systems to prevent any harmful interference. The ITU process takes several years to complete and concludes with the frequency being added to the ITU's register and the frequency being taken into use.

## Síminn's violation of the Icelandic Media Act

In recent years, there has been a growing trend for telecoms companies and content providers to merge. Prominent examples of such mergers can be found in both the United States and Europe. This trend has also reached Iceland. Examples include the merger of Skjárinn ehf. with its parent company Síminn hf. (at present Sjóntvarp Símans Premium) and Sýn hf.'s (Vodafone) purchase of 365 miðlar ehf. Television content has therefore become a much more important part of the goods and services offered by telecoms companies and has created new revenue streams for them. This development introduces the risk of specific television content potentially affecting consumers' decisions as to which telecoms company they wish to give their custom to. In this regard, the potential negative effects of vertical integration of content and the underlying distribution network should be borne in mind, and according to the provision of paragraph 5, article 45 of the Icelandic Media Act no. 38/2011, content providers are prohibited from directing the business of their customers to an affiliated telecoms company.

During the year, a substantial dispute regarding Síminn's violation of the aforementioned legal provision was resolved, cf. the Administration's ruling no. 10/2018. The circumstances of this case were that on 1 October 2015, Síminn stopped distributing non-linear video content from the Sjóntvarp Símans service through Vodafone's systems. Non-linear video content refers to what is commonly known as video on-demand (VOD) services, such as scroll-back, free catch-up services and digital video rental. This meant that customers of Vodafone's television service no longer had access to Síminn's non-linear video content as they had previously. Consumers who chose to purchase access to Síminn's non-linear video content (Sjóntvarp Símans Premium) were thus required to use a Síminn set-top box, as the relevant material was at that time only distributed via Síminn's IPTV system and set-top boxes. After the announcement of ruling no. 10/2018, Síminn introduced the OTT (over-the-top) solution, i.e. an unscrambler for the television service that allows access irrespective of the network used. The Post and Telecom Administration is currently examining whether this absolves Síminn of the aforementioned violation of the Icelandic Media Act.

There were four parties to the case, namely: Sýn hf. (Vodafone) and Gagnaveita Reykjavíkur ehf. (GR), who complained to the PTA about Síminn's alleged violation, and Síminn and its subsidiary, Míla ehf. (Míla), who have objected that any violation occurred.

The Post and Telecom Administration came to the conclusion that Síminn had not shown genuine will to reach an agreement with Vodafone for distribution of the television material during the period that had passed since the changes to Síminn's television services were announced on 1 October 2015.

It was the opinion of the Post and Telecom Administration that Síminn could have partially limited the harmful effects that the situation had on GR's ability to compete with Míla on the telecoms services market by entering into an agreement for access to GR's fibre broadband network before Síminn made the aforementioned changes. As regards this aspect of the case, it is the opinion of the Post and Telecom Administration that Síminn did not offer a reasonable

and proper request for access to GR's network during the period that has passed since the violation occurred.

Even if Síminn had provided its IPTV service via GR's network, it was the opinion of the PTA that this alone would not have prevented the violation, because the non-linear video content (Sjónvarp Símans Premium) would still have been distributed exclusively via Síminn's IPTV system and set-top boxes. This would have meant that Síminn's violation would have been partially shifted onto GR'S network.

The notes accompanying the bill that eventually became the Icelandic Media Act stated that the provision in paragraph 5, article 45 was intended to enable users to choose both video content providers and telecoms service companies, without binding themselves to a single telecoms company, by preventing companies that offer video content and telecoms services from abusing their position. The objective was thus to break up vertical ownership of content and distribution networks, as there could be an incentive for individual telecoms service providers to try and direct their customers towards an affiliated related telecoms provider.

This provision was added to the Icelandic Media Act in 2011, among other reasons due to the strong position of IPTV distributors in Iceland – as demonstrated by the fact that at the beginning of this year, approximately 80% of Icelandic households were using such technology to access video content. This is a much higher percentage than in other countries in Europe. The percentage in Iceland has been increasing steadily in recent years, despite the rise of OTT technologies for distributing video content, such as that used by Netflix, and which is generally independent of the underlying telecoms networks. In Iceland, Síminn and Sýn (formerly Vodafone) operate IPTV television distribution systems.

Síminn operates a media distribution system that consists of, among other things, Sjónvarp Símans, which broadcasts television programmes (linear distribution of visual content), and the content provider Sjónvarp Símans Premium (non-linear distribution of visual content). The only matter of dispute in the case was the non-

linear distribution of visual content, as there is no dispute as to whether linear distribution of visual content by Sjónvarp Símans is available via all television distribution systems and the networks of all the telecoms companies in Iceland that operate underlying telecoms networks. Early on in the case, Síminn maintained that the aforementioned prohibitive provision applied only to linear distribution of visual content, but the Post and Telecom Administration did not accept this in its ruling no. 3/2016. The Rulings Committee for Electronic Communications and Postal Affairs upheld this decision of the Administration with its verdict no. 3/2016.

The dispute is primarily centred on the fact that customers of Vodafone's television services, due to Síminn's decision, have not had the option of non-linear viewing of Síminn's visual content since 1 October 2015 as they previously had. Users who opted to purchase access to such services have therefore been required to deal with Síminn. Furthermore, Síminn has not offered distribution of the visual content concerned via GR's fibre broadband network, but rather only via the underlying telecoms network of its subsidiary Míla and a number of other local telecoms networks in rural areas. It is therefore clear that for almost three years, the tens of thousands of users who use GR's fibre broadband connections for basic services and who are customers of Vodafone, Hringdu, Nova and other companies have not had the option to access this visual content.

Síminn categorically denied having violated the relevant provision of the Icelandic Media Act and was of the opinion that it had shown willingness to negotiate, both with Vodafone and GR, but no agreements were reached due to the unwavering demands of the parties concerned. For example, GR denied Síminn the passive (black fibre-optic cable) access that it had requested to GR's fibre broadband network and instead only offered Síminn bitstream access.

The case established that from 1 October 2015, customers of telecoms companies other than Síminn had been facing restricted access to certain visual content or an inability to access such content without changing telecoms providers or connecting to more than one telecoms network.

In the opinion of the Post and Telecom Administration, this was precisely the kind of situation which the provision in paragraph 5, article 45 of the Icelandic Media Act was intended to prevent. Before Síminn restructured its television broadcasting services and made the company's linear television channel free-to-air without any option of non-linear services, this situation did not exist, as Síminn's non-linear programming was available outside of Síminn's systems. Síminn subsequently set up a non-linear content provider that was only offered via the company's systems. This situation arose due to Síminn's vertical ownership of a media distribution system and telecoms company.

The Post and Telecom Administration came to the conclusion that in autumn 2015, Síminn made deliberate decisions that caused this situation to arise and that it had, at the time the decision was taken, been an active participant on the Icelandic television and telecoms market for nearly three years.

## A new European regulatory framework for telecoms

Over the past few years, an overall revision of the European Union's telecoms regulatory framework, on which the Icelandic Electronic Communications Act is based, has been underway. Last year, the creation of the new regulatory framework was finally completed after extensive consultation with stakeholders and negotiations between various legislative powers within the EU. The new framework is known simply as the European Electronic Communications Code (EECC). The rules are key to the EU and EEA meeting set targets for residents' access to the internet to ensure that everyone is able to participate in the digital economy.

### **The European Commission believes that the new rules will:**

Accelerate the introduction of 5G mobile communications networks so that they are available by the end of 2020, and give service providers predictability regarding the allocation of frequencies for a minimum of 20 years, and promote improved organisation of the frequency range.

Facilitate the introduction of high-speed networks by easing joint investment and diversifying the risk involved with the proliferation of such networks, and promoting increased competition between network operators to the benefit of consumers. The new rules will also ensure increased cooperation between the European Commission and BEREC to enforce measures affecting joint investments and mutual restrictions.

Increase consumer protection, regardless of whether the consumer uses traditional telephone services and SMS or apps such as Skype and WhatsApp by:

- ensuring access to telecoms services for all residents at affordable prices,
- ensuring that per-minute rates for international telephone calls within the EU do not exceed EUR 0.19 (approx. ISK 24) while at the same time promoting competition, innovation and investment,
- ensuring those with disabilities have access to these services,
- promoting transparent pricing and comparable tariffs,
- ensuring better protection against security breaches, such as viruses and hacking,
- improving protection for consumers who subscribe to service bundles,
- making it easier for users to switch service providers and keep their existing number, and establishing rules regarding compensation if this is not possible,
- increasing personal safety, for instance by improving geolocation services for calls to the emergency services, adding emergency services via SMS and video calls and establishing a system to broadcast warnings from civil protection services to mobile devices.

It is the opinion of the European Commission that Europeans expect to have access to secure high-speed internet connections irrespective of whether they are at home, at work or on the move. Promoting greater investment in high-speed networks is increasingly important for the education and health sectors, manufacturers and logistics.

In March 2018, both the European Parliament and the Council of Europe agreed to a timeline of targets for the rollout of 5G within the EEA. From the approval and publication of the new EEC regulatory framework in December of last year, EEA member states have two years to introduce it in their respective jurisdictions. The EEC directive is currently pending introduction in Iceland.

## Coordination of groundworks

It is well known that partnership and coordination on infrastructure development projects can considerably reduce the cost of such projects and therefore deliver more economical investments. This particularly applies in the case of projects involving extensive groundworks, such as the laying of telecoms cables and other utilities infrastructure.

Within the telecoms regulatory framework, it is assumed that companies that have been designated as having significant market power have an obligation to give other parties in the market an opportunity to pool resources on such projects. In Iceland, Míla has such an obligation. Under the access obligation Míla is subject to, the company is required to publish a list of planned groundworks and infrastructure projects six months in advance so that other parties are able to participate in and leverage these projects to build up their own infrastructure.

Last year, the Post and Telecom Administration resolved a dispute between Gagnaveita Reykjavíkur (GR) and Míla regarding the coordination of groundworks projects completed by Míla. The case was based on a complaint from GR which stated that Míla had initiated a groundworks and infrastructure project at Setberg in Hafnarfjörður in summer 2017 without the involvement of GR, despite the company's desire to participate. Míla published a list of planned groundworks and infrastructure projects in specific streets in Setberg in Hafnarfjörður on its website on 11 January 2017. The memos included street maps with trenches that the company intended to dig in Lækjarberg, Móberg, Skálaberg and Sólberg, and in Úthlíð, Steinahlíð, Brekkuhlíð and Steinaberg, highlighted in colo-

ur. GR requested to participate in the projects concerned and furthermore requested information regarding Míla's existing infrastructure (local loop conduits) in the area, to which GR could be granted access.

The PTA's investigation revealed that Míla's groundworks and installation projects also involved extensive hole digging, as the company's trunk lines were interconnected with local-loop conduits, and not just digging the trenches set out in the memos. In the opinion of the PTA, the lack of information on hole digging was a violation of the access obligation the company is subject to, as the information that was published in the company's memos did not give a true and fair view of the projects that Míla intended to initiate in six months' time. The investigation also revealed that Míla had initiated ground and infrastructure works in Lindarberg in Hafnarfjörður without issuing notification of its intent to do so.

The investigation also revealed that Míla did not provide further information to GR regarding the true extent of the works in Lækjarberg, Móberg, Skálaberg and Sólberg, nor did it provide information regarding the company's potential access to the Míla's local loops in the relevant streets. In the opinion of the PTA, this constituted a violation of Míla's access and equality obligation.

In its findings, the PTA came to the conclusion that Míla had breached its obligations of both access and equality by:

- not issuing notification of the company's groundworks and infrastructure projects in Lindarberg in Hafnarfjörður,
- only issuing notification of the company's trenches in the planned groundworks and infrastructure projects in Lækjarberg, Móberg, Skálaberg and Sólberg, and also in Úthlíð, Steinahlíð, Brekkuhlíð and Steinaberg in Hafnarfjörður,
- not providing GR with more detailed information on the company's planned groundworks and infrastructure projects in Lækjarberg, Móberg, Skálaberg and Sólberg, such as information about digging of holes,
- not providing GR with information on the company's potential access to Míla's local

loop conduits in Lækjarberg, Móberg, Skála-berg and Sólberg, and thereby not ensuring equality between the parties.

During the case, GR also requested the PTA to issue guidelines to municipalities and local authorities regarding the rights and authorisations of telecoms companies with regard to the installation of telecoms infrastructure above and below ground on land in their ownership and control, in accordance with paragraph 1, article 69 of the Icelandic Electronic Communications Act no. 81/2003, and regarding what duties parties subject to obligations imposed by the Administration have towards other telecoms companies in accordance with articles 28 and 34 of the same Act. This request was based on the fact that certain municipalities and local authorities had made the issuing of a works permit contingent upon market players coordinating such works. The PTA rejected GR's demand on the grounds that local authorities have a legal role under the Planning Act which authorises them to set certain requirements for works permits. Such uncontested requirements attached to works permits by municipalities and local authorities could not automatically be considered violations of the provision, as there is no direct refusal of access to land.

## Changes to rules regarding indoor telecoms installations

In recent years, the PTA has resolved many matters of dispute between Gagnaveita Reykjavíkur (GR) and Míla regarding the completion of installation of connection points in buildings, i.e. where local loops are connected to indoor telecoms installations. These disputes are normally rooted in the fact that the two companies use different connection methods. Whereas Míla connects the local loop to an indoor telecoms installation on a connection strip, GR connects the local loop directly to the indoor telecoms installation with fusion welding.

In Iceland, specific rules regarding indoor telecoms installations have been in effect for decades. The purpose of these rules is twofold: namely to promote the safety of telecoms connection points and to simultaneously ensure adequate access to connection points for tele-

coms companies on an equal footing. The rules on indoor telecoms installations in their present form can be traced to article 60 of the Icelandic Electronic Communications Act.

When implementing changes that have been made to the rules, the PTA has kept this dual goal in mind, i.e. safety and accessibility. The PTA acknowledges that fusion welding may be used to connect local loops to indoor telecoms installations at connection points on the grounds of safety. However, it is the opinion of the PTA that this form of installation does not offer an accessible network connection point. In cases where fusion welding is used, the PTA has recommended the countermeasure of installing an extra line to each dwelling if the building in question is a multi-dwelling building, and also installing a connection strip for the extra line.

Last year, an alteration was made to PTA Statute no. 1111/2015 on indoor telecoms installations, cf. no. 421/2018, as this dual goal was borne in mind when drawing up the new statute. The main change was that a "connection strip" should be installed at connection points irrespective of the type or age of building when connecting residential and commercial properties to the general telecoms network. The use of fusion welding was permissible, but in such cases, if the building is a multi-dwelling building or a commercial property divided into units, an extra line should be installed from the connection point to each dwelling or unit. The free extra line should be installed on the connection strip. This amendment to the rules took effect on 1 July 2018.

Recently, rules on indoor telecoms installations took effect at EU level, cf. Directive no. 2014/61/EB on measures to reduce the cost of deploying high-speed electronic communications networks. The Directive contains requirements for the access point to indoor telecoms installations to be accessible to telecoms companies. The Directive is now pending introduction in Iceland. The bill is currently being discussed in parliament. It is evident from reading the provisions of the bill on indoor telecoms installations that the current regulatory system in Iceland, with the exception of certain changes in phrasing, is fully compatible with the European

regulatory system in this area, especially as regards the accessibility of access points to indoor telecoms installations. The PTA is of the opinion that this requirement is satisfied by requiring the installation of a connection strip in the connection point.

## Monitoring of the status of and developments on the telecoms market

### PTA statistical reports

Twice a year, the PTA gathers data from telecoms companies registered in Iceland on various metrics relating to telecoms operations and services. The Administration processes this data into statistical reports that summarise the main metrics and companies operating on the Icelandic telecoms market. The reports are published twice a year: in the second quarter for the whole preceding year and in the fourth quarter a mid-year status update. The aim is to improve information provision and increase transparency on this market. The PTA's reports are equivalent to those published by sister institutions in neighbouring countries. The reports can be found on the PTA's website at: <https://www.pfs.is/fjarskipti/gagnatorg-pfs-og-tolfraedi/tolfraediskyrslur-pfs/>.

The statistical report for the first half of 2018 saw a slight drop in the number of landline subscribers, as well as a continued rapid drop in the number of minutes spoken of around 19%. Subscribers to voice over internet protocol (VoIP) services have grown in number with the

continued rollout of fibre broadband and the phase-out of Síminn's landline (PSTN) system. Síminn and Vodafone are the biggest companies on the landline market, with a combined share of around 94%. Mobile phone subscriptions have increased slightly. Three companies – Nova, Síminn and Vodafone – have a more or less equal share of the mobile phone market.

## Comparative statistics on use of electronic communications in eight countries

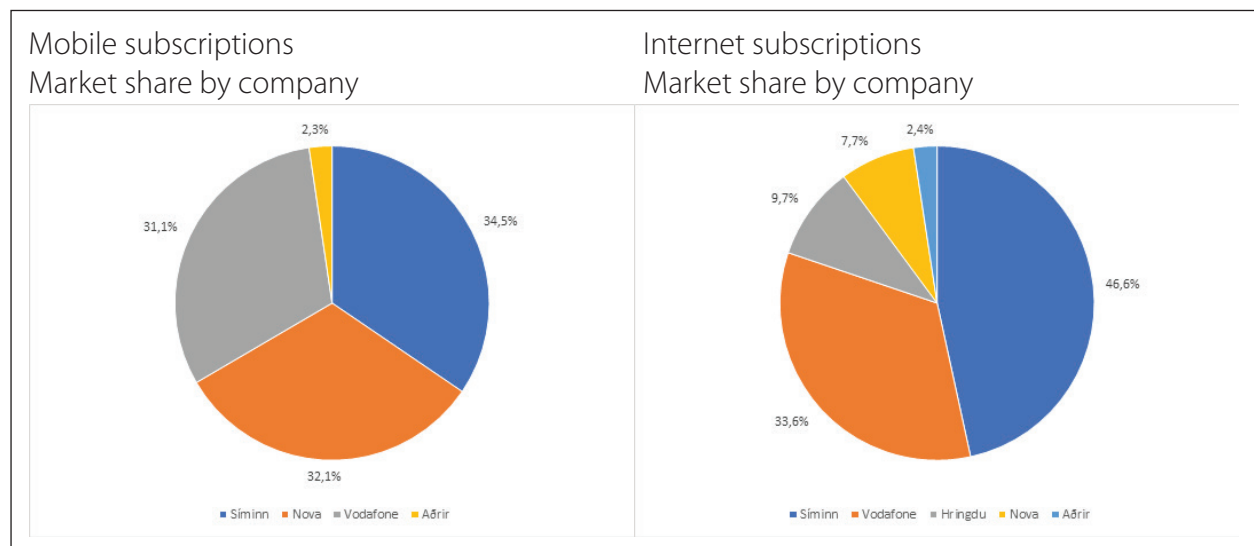
A statistical report is published annually in co-operation with the PTA and its sister institutions in the Nordic countries and in the Baltics. The report gathers comparative data on the use of the main electronic communications services and on developments over recent years in the eight countries.

On the whole, the use of electronic communications is very similar in these countries and their citizens use comparable technologies in a similar way. Despite this, there are nonetheless variations in the usage and development of specific services.

The report can be accessed on the PTA website at: <https://www.pfs.is/fjarskipti/gagnatorg-pfs-og-tolfraedi/norraenn-samanburdur-a-fjarskiptanotkun/>.

## PTA market analyses

Market analyses of the electronic communications market form a significant part of the PTA's



operations. They constitute the most important policy instrument for the PTA to safeguard competition and support fair pricing, innovation and improved access to services across the country. They are used to strengthen competition by analysing the position of players on the market and by applying appropriate measures where competition is not considered adequate. This market analysis is the basis for decisions on whether to impose, maintain, change or lift specific regulatory obligations on electronic communications companies that have been designated as having significant market power.

### **The production of a market analysis report can be divided into three phases:**

1. Defining the relevant service markets and geographical markets.
2. Analysing all markets, determining whether there is active competition on these markets and making a decision as to whether there are one or more companies with significant market power.
3. Making a decision as to whether restrictions should be imposed, amended or withdrawn with regard to companies with significant market power.

The PTA produces analyses of markets specified a Recommendation from the EFTA Surveillance Authority (ESA) in accordance with the Icelandic Electronic Communications Act and with Iceland's obligations under the EEA Agreement. Furthermore, the Icelandic Electronic Communications Act requires the PTA to define these markets in accordance with circumstances specific to Iceland. The PTA's market definitions may therefore be expected to vary from those in the Recommendation. In addition, the PTA is permitted to review additional telecoms markets over and above those specified in the Recommendation. The ESA Recommendation currently in force was issued on 11 May 2016 and lists fewer markets than in previous ESA recommendations on the same subject, published in 2004 and 2008 respectively. Few markets in the Recommendation from 2008 were considered to still satisfy the requirements for imposing advance restrictions. The markets that must be reviewed under the current ESA Recommendation from 2016 are the following wholesale markets:

Market 1: Call termination on individual public telephone networks provided at a fixed location

Market 2: Voice call termination on individual mobile networks

Market 3: a) Local access provided at a fixed location

b) Central access provided at a fixed location for mass-market products

Market 4: High-quality access provided at a fixed location

The PTA's analyses of the following wholesale markets based on the ESA Recommendation from 2008 remain in effect:

Market 4: Network infrastructure access (including shared or fully unbundled access) at a fixed location (PTA ruling no. 21/2014)

Market 5: Broadband access (PTA ruling no. 21/2014)

Market 6: Terminating segments of leased lines (PTA ruling no. 8/2014)

Market 7: Voice call termination on individual mobile networks (PTA ruling no. 20/2015)

In addition to this, the analysis of the following wholesale market based on the ESA Recommendation from 2004 remains in effect:

Trunk line segments of leased lines, previously market 14 (PTA ruling no. 21/2015)

## **Primary focuses of 2018 market analyses**

During the year, work was done on analysing the following wholesale markets in accordance with the Administration's annual plan and the analyses on these markets are scheduled to be completed in 2019.

Market 3: a) Wholesale local access provided at a fixed location (previously market 4/2008)

b) Central access provided at a fixed location for mass-market products (previously market 5/2008)

Market 4: High-quality access provided at a fixed location (previously market 6/2008)

Furthermore, continued emphasis will be placed on enforcing the obligations that have been imposed as a result of market analyses,



Atriði	2023	2019	2018
Aðgengi lögheimila og fyrirtækja að 100Mb/s	<b>99,9%</b>	<b>90%</b>	<b>78-90%</b>
Aðgengi lögheimila og fyrirtækja að 1Gb/s	90%	60%	<b>73%</b>
Aðgengi lögheimila og fyrirtækja að ljósleiðaratengingu	95%	78%	<b>76%</b>
Aðgengi lögheimila að farsíma og/eða farneti	99,95%	99,95%	<b>99,99%</b>
Talsamband/háhraðanet á vegum utan þéttbýlis	97/90%	<b>95,8/85%</b>	<b>89%/80%</b>
Talsamband/háhraðanet á vegum í yfir 200 m yfir sjávarmáli	93/70%	90,1/66,5%	<b>87%/68%</b>

and particularly on cost analyses of wholesale prices and reviews of reference offers.

## Main obligation enforcement cases in 2018

### Cost analyses and price rulings

The principal projects concerning price rulings and cost analyses in 2018 were as follows:

- 19/2018 – Wholesale price for the termination of telephone calls on individual mobile communications networks – 25 October 2018,
- 18/2018 – Wholesale price for the termination of telephone calls on fixed-line public telephone networks – 24 October 2018,
- 8/2018 – Review of Míla's wholesale tariff for trunk sections of leased lines – 29 May 2018.

Work was also done with regard to the revision of Míla's tariffs for copper local loops, bitstreams and the terminating section of leased lines and fibre-optic cables. Drafts of the PTA's rulings regarding these schedules of tariffs were submitted for domestic consultation in December 2018. No feedback was received from stakeholders in the domestic consultation.

### Access to telecoms services

The government emphasises the fact that access to telecoms services is among the best available in the world. This is reflected in the goals of the government that are stated in both the budget for 2020–2024 and in the proposed parliamentary resolution for a Electronic Communications Plan for 2019–2023. The following goals are primarily drawn from the Electronic Communications Plan:

The table shows that work to improve access to high-speed connections has gone well. Three in four Icelanders now have the option of a fibre

broadband connection. Nearly the entire population of Greater Reykjavík, Greater Akureyri and residents in various rural areas have access to fibre broadband connections and up to 90% of Icelanders have access to a 100 Mb/s connection. According to the revised Electronic Communications Plan, which is currently working its way through parliament, the goal is for almost every single household in Iceland to have access to much faster connection by the middle of the next decade. The Electronic Communications Fund aims to complete the fibre broadband rollout in rural areas of Iceland shortly after 2020. What stands out is rural population centres. Today, nearly all of these places have high-speed connections based on xDSL technology. The government considers that evidence of market failure has not been demonstrated with regard to the rollout of fibre broadband in rural population centres. Pressure from local authorities and residents is likely to result in market-driven efforts to improve high-speed connections in these areas over the next years, either through the installation of fibre broadband cables, the development of powerful 5G services or a combination of these solutions.

Nearly all homes and workplaces in Iceland have access to mobile network services with voice communications and high-speed internet. High-speed internet can certainly vary in quality, and it is likely that quality will be different in urban and rural areas. This difference in quality will be assessed through planned quality measurements that are intended to take place once net neutrality laws are on the statute book.

The situation is somewhat different when it comes to access to mobile network services along Iceland's highways. Accessibility goals have not been fully realised there. It is clear that market participants and the government face the challenge of improving mobile network access on

Iceland's along highways. This is also of particular importance in connection with the development of 5G mobile network services in the long term.

## Ísland ljóstengt – Continually improving access to next generation fixed-line networks

In Iceland as elsewhere in the world, rapid rollout of the next generation of fixed-line networks, i.e. optical fibre, is taking place. This rollout is most rapid in the urban area in the south-west corner of the country, where it is market-driven. There are also substantial rollouts taking place in less populated parts of the country where the government initiative Ísland ljóstengt is the driving force. In the coming years, consideration must also be given to the situation in very remote areas that are not included in municipal projects under Ísland ljóstengt, and to smaller rural population centres density that currently have access to xDSL services. At present, the government has no plans to subsidise the rollout of fibre broadband in urban areas, as it is assumed that where such rollouts takes place, they will be market-driven.

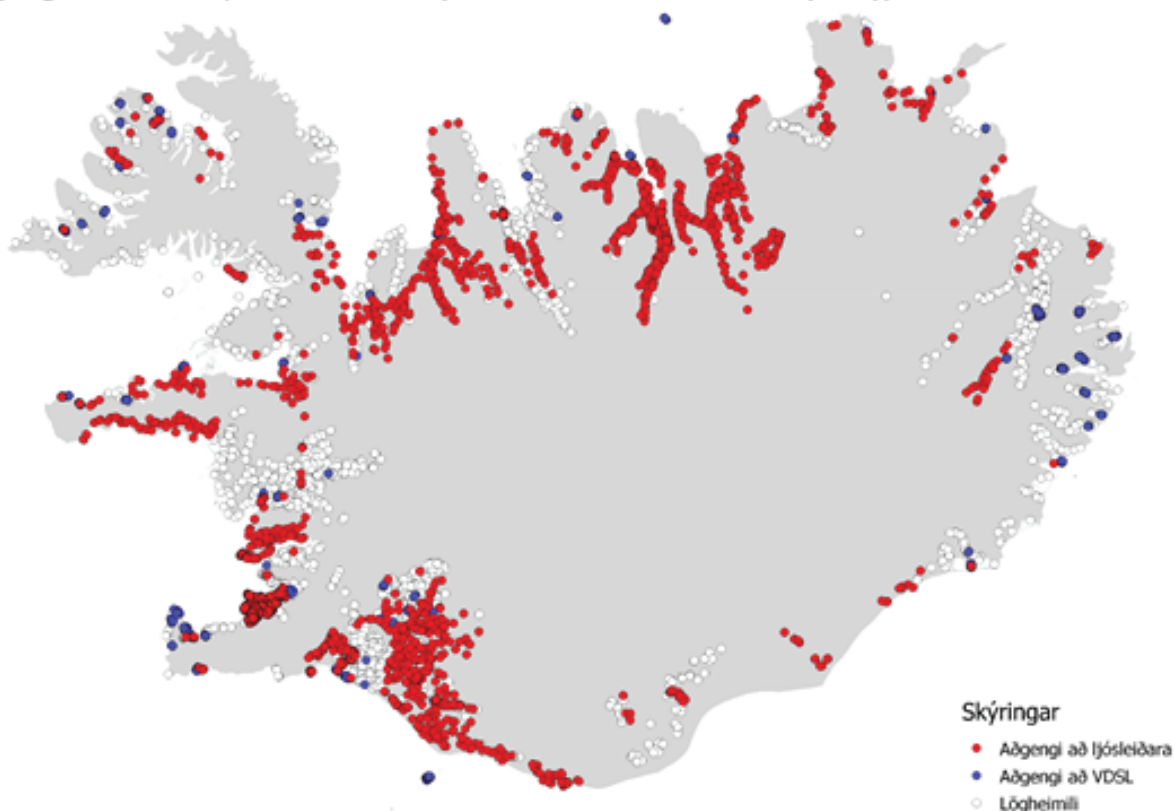
2018 was the third year of the government's fibre broadband rollout initiative for homes and workplaces in rural areas of Iceland.

The Post and Telecom Administration has been responsible for various duties related to the rollout, and public bodies, such as municipalities that plan to roll out fibre broadband in their areas can receive assistance from the Administration and access information and instructions on the Administration's website.

In 2018, competitive grants were allocated to 24 municipalities by the Electronic Communications Fund for fibre broadband rollouts, which was the same number as the year before. Furthermore, the Ministry of Transport and Local Government awarded a special regional development grant to 15 of the more sparsely populated municipalities in the year 2018. Awards of grants for the final places in the project are planned for 2020. The following chart shows the estimated coverage level at year-end 2018.

The Ísland ljóstengt project will continue in the years to come. It is assumed that most rural areas in Iceland will be connected to fibre broadband in the next few years. It is worth mentioning that most rural population centres do not have fibre

Aðgengi að næstu kynslóðar netum (e. Next Generation Access (NGA))



broadband connections, but they are not part of the project.

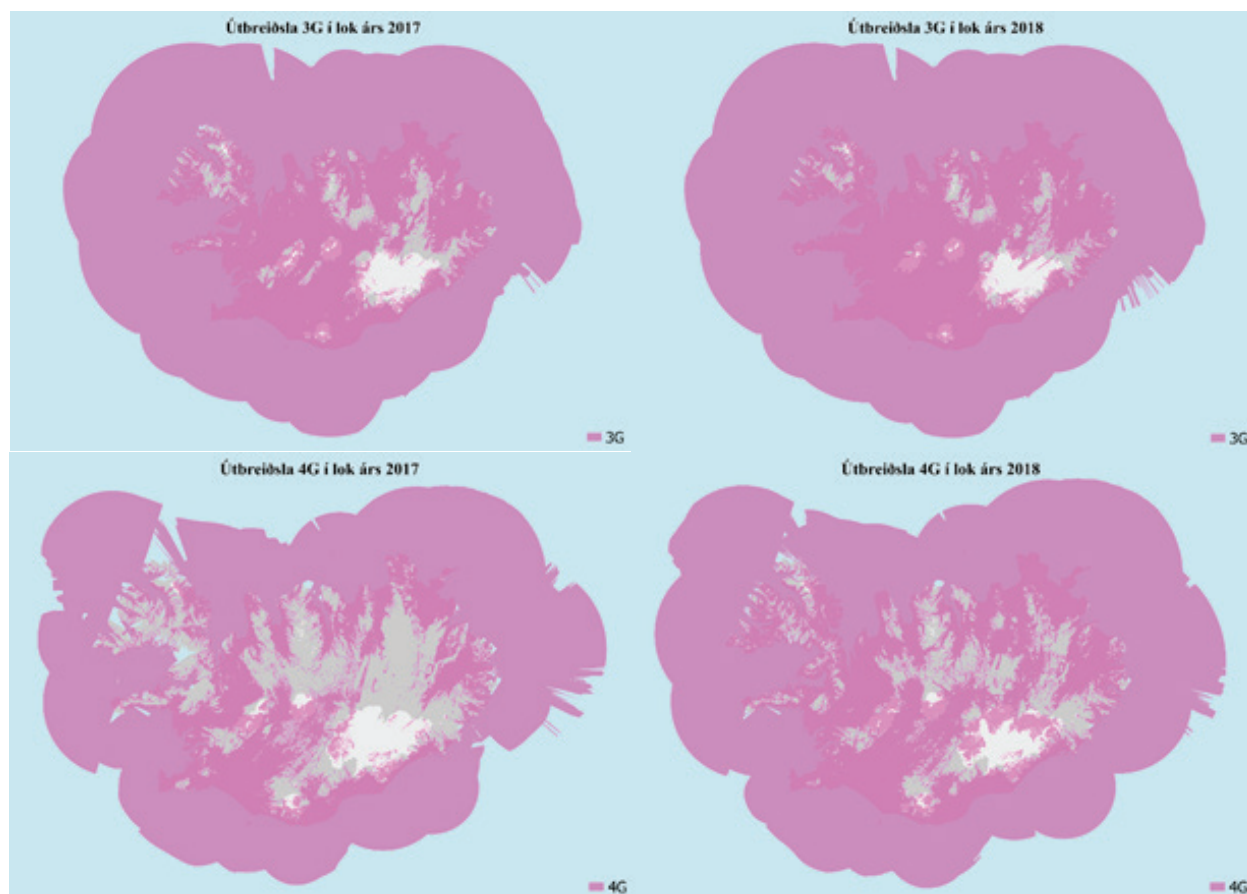
## Development of a database for general telecoms systems

Work on the development of a database for general telecoms systems is well underway. Open standards have been used, ensuring greater flexibility for integration with other systems and services that the PTA will be able to provide to various stakeholders in the future. A new web coverage server connected to the database is being developed. The first version is scheduled to launch in late 2019.

## Build-out of mobile networks

The build-out of mobile networks<sup>1</sup> continued

this year, and mostly focused on the development of the 4G mobile network system. Overall 4G coverage increased by 14%. This year, even more homes should be able to receive a 4G connection<sup>2</sup> than the year before (about 0.5% more based on data) and 99.9% of homes should now have this coverage. Overall 3G coverage increased by 2%. There was little increase in residential 3G coverage during the year, although there should be few homes remaining that are unable to obtain a 3G connection according to the coverage data available to the PTA. Overall 2G (GSM) coverage increased slightly (less than 0.5%) and no more homes should have received 2G coverage than in the previous year. It should be noted that voice and data services can be accessed via 3G.



<sup>1</sup> This discussion is based on forecasts on the coverage of mobile networks operated by Síminn, Vodafone and Nova. Coverage for each network provider is not specifically indicated here, but it may be assumed that coverage can be obtained to the relevant mobile network via any of the network providers. Data on 3G at year-end 2018 is based on forecasts made from May to November 2018. Data on 3G at year-end 2017 is based on forecasts made from May to November 2018. Data on 4G at year-end 2018 is based on forecasts made from October to November 2018. Data on 4G at year-end 2017 is based on forecasts made from October to November 2018. Data from Registers Iceland on homes with registered coordinates has also been used. The telecoms companies have noted that the basis for forecasts changes regularly. The number and location of the set of homes is not a constant. It can also be assumed that there are errors in some of the data. This means that estimations of increases from one year to the next can be unreliable, especially when the difference is in fractions of a per cent as in part of this discussion for the purpose of comparing numbers as a percentage.

<sup>2</sup> Outdoors or with an antenna outdoors.

Increase in GSM, 3G and 4G coverage in 2018			
Technology	GSM	3G	4G
Coverage on land and at sea	<0,5%	<b>2%</b>	<b>14%</b>
Residential coverage	<0,5%	<0,5%	0,5%

## Measurements of mobile network quality

This year, measurements of the quality of mobile networks were taken in certain locations in Iceland. Among the reasons for these measurements was to verify that the quality standards indicated in frequency authorisations for 4G services were being met.

The following table of minimum quality standards for services will remain in effect until the EU's stipulated minimum requirements for the quality of high-speed mobile network services are introduced in Iceland. The holder of rights to a frequency on the 800 MHz frequency range undertakes to ensure that 93.5% of homes and workplaces that operate all year round are offered a data transmission speed of 2 Mb/s by 31 December 2014, a data transmission speed of 10 by 31 December 2016 and a data transmission speed of 30 Mb/s by 31 December 2020. Measurements were taken at the beginning of the year for standards that are shown in the middle column of the table.

Lágmarks gæðaviðmið þjónustu			
	2 Mb/s	10 Mb/s	30 Mb/s
Hraði einhvern tíma sólarhrings	2 Mb/s	10 Mb/s	30 Mb/s
Meðalhraði á ári	750 Kb/s	3,85 Mb/s	11,3 Mb/s
Meðalhraði samfellt í 3 kls.	500 Kb/s	2,5 Mb/s	7,5 Mb/s

When measuring the average speed over three consecutive hours, measurements are first taken from 09:00–12:00 and then from 19:00–22:00. The stipulated average speed for three consecutive hours must be reached within both periods.

With reference to the measurements mentioned above, it can be assumed that users generally obtain speeds higher than the minimum quality required by frequency permits for the 800 MHz frequency range.

Examples of measured maximum and average speed		
	Maximum speed Mbit/s	Average speed Mbit/s
Síminn	34,14 Mbit/s	18,86 Mbit/s
Vodafone	49,15 Mbit/s	16,39 Mbit/s
Nova	81,42 Mbit/s	29,64 Mbit/s

The PTA also requested measurements from the systems of the telecoms companies that also confirm that the quality standards are well above the requirements the companies were subject to when frequency permits were issued.

## The PTA's spectrum policy for 2019–2025

In 2018, a new spectrum policy for the PTA for the next six years was developed. The development process took into account stakeholders' spectrum needs in the years to come, particularly the context of the introduction of the fifth generation of mobile networks, 5G. The plan is for the draft of the spectrum policy to be submitted to public consultation in January 2019 and the policy to be published that same year.

## Radiation measurements at transmitter sites

The PTA conducted radiation measurements at sites where mobile phone transmitters are located in cooperation with the Icelandic Radiation Safety Authority this year. By law, the Icelandic Radiation Safety Authority is responsible for matters concerning the effects of radiation on the human body. Endeavours were made to take measurements at sites where the strength of the electromagnetic field from mobile network transmitters was expected to be at its highest. 51 measurements were taken at 16 sites. Measured levels were compared with the reference limits for the public exposure that were established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP, 1998), which are issued based on an analysis of the results of the scientific literature available on the possible harmful effects of electromagnetic fields.

The results of the measurements indicated that the strength of mobile network transmitter electromagnetic fields was in every instance well within the ICNIRP public exposure reference limits. With these results in mind, it is the opinion of the Icelandic Radiation Safety Authority that there is no reason at the present time to take further action or take additional measurements of the electromagnetic field of mobile network transmitters in Iceland.



# Security in telecoms

## Security of telecoms infrastructure

Security of telecoms infrastructure is an important part of the PTA's remit. Despite public telecoms systems not being defined as secure communications systems, the usage trend today is such that they are used to seek assistance from e.g. the health service, the police and fire brigade and to announce evacuations during natural disasters. According to the provisions of the telecoms regulatory framework on the functioning of public telecoms systems, telecoms companies are obliged to take appropriate measures to safeguard the secure operation of their systems. Increased emphasis has recently been placed on the PTA's enforcement activities with regard to the security of telecoms systems, particularly against the backdrop of the constant threat to Iceland's residents of natural disaster.

Technological developments in recent years have introduced new devices that are connected to national telecoms infrastructure, in addition to smartphones and computers. This trend will continue at an even more rapid pace in the foreseeable future, and includes various connected devices, i.e. devices that either communicate directly with each other or with a computer. Examples of such devices include various monitoring and sensory equipment (weather stations, seismic activity monitors, etc.), light sensors, security systems and remote

patient monitoring systems. This trend imposes even greater demands on the functional security of telecoms infrastructure and quality of service, especially with regards to healthcare and security services.

The excellent partnership on physical security that the PTA has enjoyed with its sister institutions in the Nordic countries in connection continued in 2018.

## Monitoring the airwaves – PTA interference monitoring

The frequency spectrum is a limited natural resource and it must be used efficiently so that a telecoms network can function without disruptions. Technologically, communications devices are rapidly advancing and it is therefore necessary to manage the frequency spectrum effectively. This is a key point in ensuring the interoperation of various radio systems without them interfering with each other. Spectrum monitoring serves as the eyes and ears when it comes to the organisation and allocation of frequencies. Permission to use a frequency under a frequency authorisation is not a guarantee that the frequency will be used as described in the PTA's authorisation. Frequencies are used 24 hours a day, seven days a week, all year round. Most telecoms companies that provide services on an allocated frequency range maintain 24-hour monitoring of the services.

It has proven to be the case that disruptions are more complex and time-consuming to resolve than before. There are no indications that the number of disruptions will fall – rather the opposite. It is likely that the large increase in the number of connected devices that is expected in the coming years will result in an increase in interference events and that they will become both more complex and more difficult to resolve. A substantial share of the increase in 2018 can be traced to disruptions occurring due to the use of frequencies that were allocated in 2017. The fourth industrial revolution, the rollout of 5G communications technology and new types of services that follow in its wake will further increase the need for a wider frequency range.

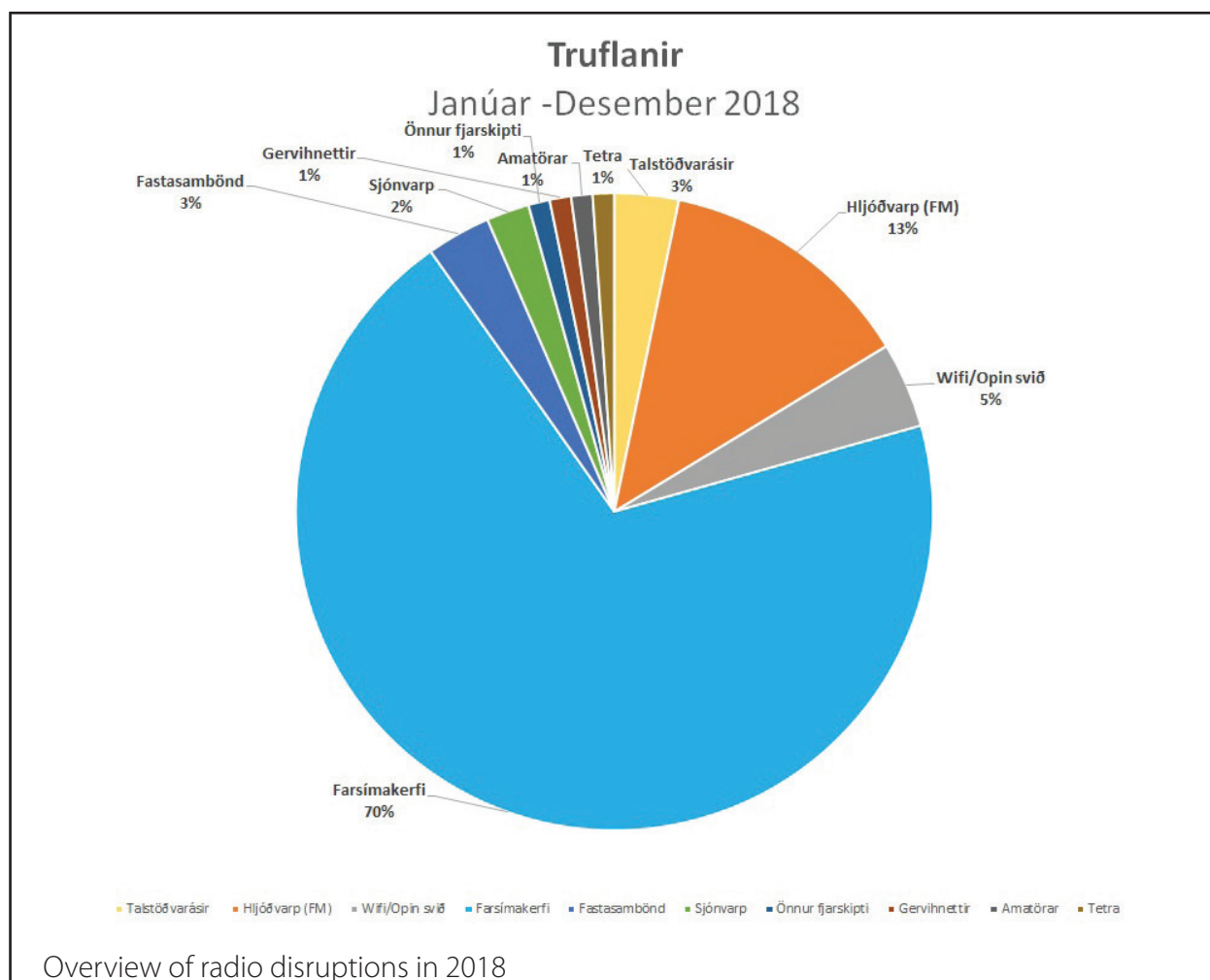
In 2017, the overall bandwidth of mobile network frequencies in Iceland doubled. Over the next three years, a further doubling can be expected, following by a trebling over the next decade. In other words, the overall bandwidth of mobile networks will increase tenfold in 10

years. This will further increase the importance of the PTA's interference monitoring and response work, as experience shows that the greater the number of frequency bands in use, the greater the number of expected interference events and the greater their level of complexity.

## Telecoms security audit

One of the supervisory functions of the PTA is to ensure that telecoms companies implement measures to safeguard the integrity and security of public telecoms networks. To this end, the Administration has conducted audits of the physical security of hosting spaces. For example, the Administration audited a number of Míla's plant rooms in 2015 and investigated a security incident involving Vodafone's website in 2016. In 2018, the Administration performed a two-pronged audit of Farice ehf.

Farice ehf. was founded in 2002. The company currently owns and operates two submarine cables (fibre optic cables) that connect Iceland





to Europe. The first is FARICE-1, which became operational in 2003 and runs from Seyðisfjörður in eastern Iceland to Scotland. The second is DANICE, which became operational in 2009 and runs from Hallgeirsey at Landeyjasandur in southern Iceland to Denmark. Farice ehf's services are built upon access to these cables. The company's clients include telecoms companies, data centres, cloud computing services and major businesses in Iceland. It is therefore clear that the services offered by Farice ehf. play an important part in the provision of general telecoms services in Iceland via the company's international connections. The functionality and security of the cables and the services which the company provides are therefore immensely important to the interests of Iceland and the country's entire population.

Data transmission services are growing rapidly in Iceland and the sectors/service categories that depend entirely on services of this kind functioning properly are rapidly growing in number. The proper functioning of these general telecoms services makes them a fundamental service in an socioeconomic context. Physical protection of the cables themselves is an important part of ensuring the proper functioning of service they provide. The PTA's audit was two-pronged. Firstly, Farice ehf's security arrangements were audited. Secondly, an audit was conducted of the physical security of the hosting facilities where the company's submarine cables come ashore.

The first audit was administrative and concerned whether the company has documented security arrangements in place that comply with the Icelandic Electronic Communications Act and regulations derived from it. The audit was conducted in spring 2018. The PTA concluded that the company had endeavoured to satisfy the requirements of the Icelandic Electronic Communications Act regulations derived from it.

The second audit consisted of the PTA performing an inspection of the hosting facilities at the sites where the FARICE-1 and DANICE cables come ashore. The hosting facilities comprise buildings where the cables are connected to Míla ehf's domestic network. The hosting facilities for FARICE-1 are located in a building owned by Míla ehf. in Seyðisfjörður, whereas the hosting facilities for DANICE are located in a building owned by Farice ehf. in Hallgeirsey on Landeyjasandur.

The findings of the audits indicate that proper arrangements are in place to safeguard physical security at locations where Farice ehf's submarine cables come ashore, and that measures comply in the vast majority of cases with the chosen security arrangements for the sites and the minimum standards set out in the Icelandic Electronic Communications Act and legislation derived from it.



# Cyber security

Cyber and data security are becoming an increasingly important part of offensive and defensive issues for society as a whole, and the PTA plays a key role in this regard. The Administration operates the Computer Security Incident Response Team (CERT-ÍS), monitors physical security of electronic communications networks and is a party to the Cyber Security Council, which is the platform for cooperation with the official body and has the role of implementing government policy on cyber and data security. The Administration also maintains a website with information for the public on cyber security, [www.netöryggi.is](http://www.netöryggi.is), and cooperates with parties who work on cyber security issues.

Last year, the PTA worked in close cooperation with the Ministry of Transport and Local Government and other parties to prepare for the introduction of legislation on the cyber and data security of critical infrastructure. This legislation is based on the so-called NIS Directive<sup>3</sup> that is intended to establish effective offensive cyber security measures for all infrastructure that is critical to society. The first draft of the parliamentary bill was submitted for review in June and debated in parliament in December.

## The CERT-IS cyber security incident response team

The CERT-IS cyber security incident response team operates under the Post and Telecom Administration pursuant to the Icelandic Electronic Communications Act and to Regulation no. 475/2013. The team maintains the website [www.cert.is](http://www.cert.is). The role of the team is to prevent and mitigate the risk of cyber terrorism and other security incidents within its online jurisdiction and to counteract and minimise damage

from such events to the community's critical information infrastructure. The response team's jurisdiction includes electronic communications companies that operate public electronic communications networks and/or provide access to the internet and internet services, but not to general public users. CERT-ÍS also has the role of national point-of-contact with regard to cyber security incidents within Iceland's online jurisdiction. The team is also party to the Nordic cooperation group of CERT teams, known as the NCC group, and its staff regularly attend meetings and courses in the Nordic countries and elsewhere. The representative of CERT-IS in the NCC group will assume presidency of the group next year.

Until now, CERT-ÍS services have mostly been limited to the operations of registered telecoms companies and matters that fall under the scope of the national point-of-contact. This year, as in the previous year, various preparations were made for the expansion of the team's role, as it is legally required to assist companies that operate critical communications infrastructure through service agreements. The first such agreement entered into effect at the beginning of the year and was made with the Ministry of Finance and Economic Affairs for assistance with cyber security issues at the offices of the Government of Iceland and the Ministry for Foreign Affairs. These parties are thus currently part of the team's service group. CERT-ÍS also contributed to extensive preparations for the introduction of the NIS Directive, both by working with the Ministry of Transport and Local Government and by making internal preparations within the team. Extensive revision and strengthening of the team's processes and facilities was also undertaken as part of an application for full membership of FIRST<sup>4</sup>, an international organisation

<sup>3</sup> <https://www.stjornarradid.is/verkefni/samgongur-og-fjarskipti/netoryggi/innleiding-nis-tilskipunar/>

<sup>4</sup> <https://www.first.org/>

of incident response teams in the field of cyber security. An audit was carried out by FIRST's international representatives in December and the results were positive.

CERT-ÍS, along with the Ministry of Transport and Local Government, the Icelandic Data Protection Authority and the police in the Greater Reykjavík Area, participated in preparatory work to set up an online portal for reporting security incidents. The purpose of the portal is to make it easier for legal persons to report security incidents as is already mandatory under the new Icelandic Data Protection Act and will also be required once the content of the NIS Directive has been enacted into law. CERT-ÍS also took part in the PTA's work to review the website [www.net-öryggi.is](http://www.net-öryggi.is).

Most of the incident responses CERT-ÍS is involved are confidential and therefore cannot be discussed here. Among the more visible of the team's missions is the issuing of warnings to the service group and the public, such as regarding the Meltdown and Spectre CPU vulnerabilities at the start of the year. CERT-ÍS was also involved in the handling of a phishing case under the auspices of the police in the Greater Reykjavík Area.

# Postal affairs

## List of tariffs and total number of letters delivered under the monopoly

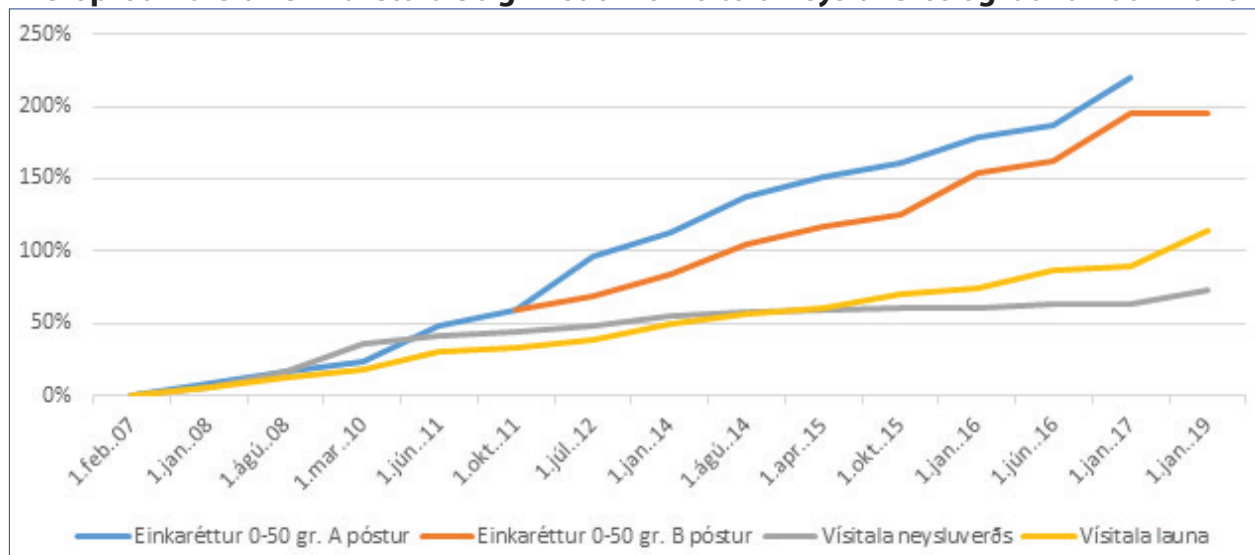
Íslandspóstur's list of tariffs (ÍSP) for monopoly services remained unchanged in the year 2018, and with its ruling no. 21/2018 in November 2018, the Administration rejected a demand for an increase of 8% by Íslandspóstur. The PTA's ruling states among other things that the company's request for an increase is greater than the equivalent of the company's loss of income as a result of the fall in volume which the company cites as the grounds for its request.

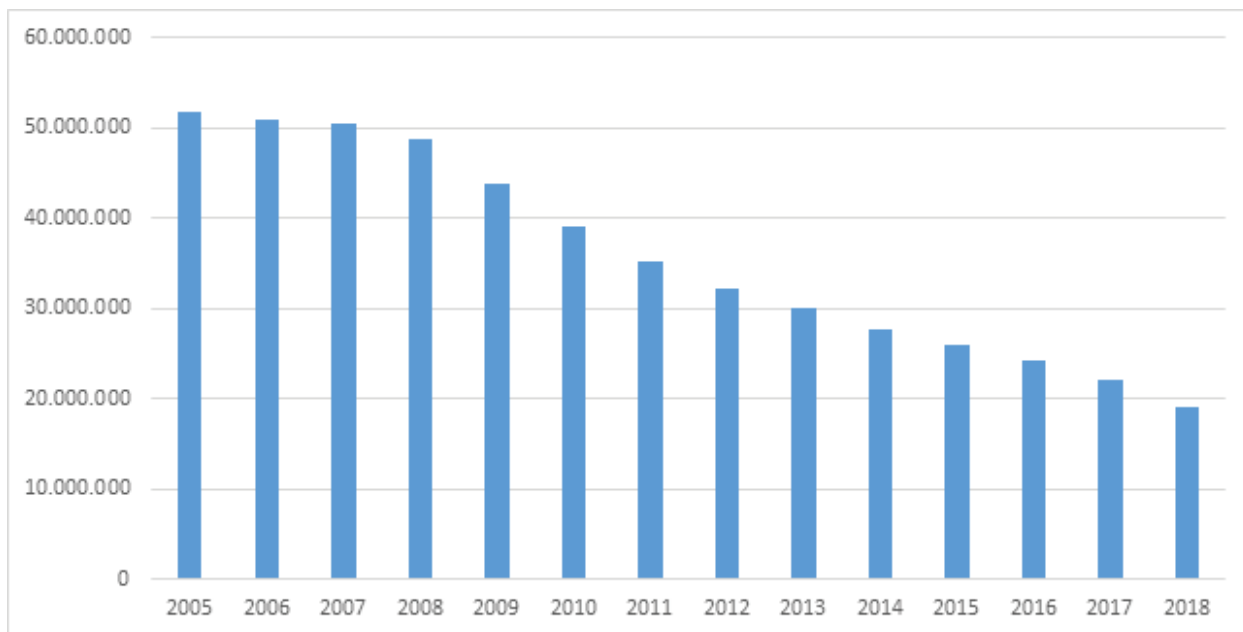
The estimated loss of income due to greater than forecast fall in volume for the year was also less than the forecast performance of the monopoly during the year, based on the unchanged list of tariffs. The Administration was also of the opinion that the summary of Íslandspóstur's operating segments for 2017 indicated good performance of monopoly services, which

strengthened the foundation for its performance in 2018. The preconditions for streamlining the processing and distribution of letters that were discussed in PTA ruling no. 2/2018 have mostly been realised and so the need for an increase was reduced.

The PTA can only approve or reject Íslandspóstur's requests regarding changes to the list of tariffs, cf. Rulings Committee verdict no. 4/2014. The PTA therefore came to the conclusion that Íslandspóstur's request as submitted, i.e. regarding the decrease in volume, performance of monopoly services and the streamlining achieved by changes to its services on 1 February 2018, did not support the case that the Administration should approve the request. As previously, the PTA emphasised that it was important for Íslandspóstur to act with caution when requesting to increase its tariffs for letters falling under the monopoly in Iceland, as this could accelerate the decrease in paper mail.

## Verðþróun bréfa í einkarétti 0-50 g miðað við vísitölu neysluverðs og launa 2007-2018





However, the Administration stated that due to the fall in volume, a situation with the monopoly could soon arise whereby unit rates need to be increased if the cost model and assumptions that have been applied up to this point continue to be used. It is for Íslandspóstur to decide whether it is best to react to this situation by increasing the price of its monopoly services as volume falls, as the PTA remains bound by the provisions of paragraphs 4–6, article 16 of the Icelandic Postal Services Act no. 19/2002 when deciding whether to approve changes to lists of tariffs for monopoly services.

It also important to consider that the rates for 50g letters are among the highest in Europe, a fact which primarily explained by the significant fall in letter volume.

### Price changes for letters under monopoly services (0–50g) relative to consumer price index and salaries 2007–2018

The volume of letters delivered under monopoly services continued to fall during the year

### Total volume of letters delivered under monopoly services

### Change in the number of delivery days

A fundamental change was made this year with regard to postal services in Iceland, in that Íslandspóstur stopped delivering post in urban areas on every weekday. This change was based on amended requirements set by the Ministry

of Transport and Local Government in Icelandic Regulation no. 595/2017, where authorisation was granted for decreasing the number of delivery days to as few as two weekdays, if certain conditions were met. After this change, the same requirements apply to the number of delivery days in urban areas as have applied in rural areas since 2015. For further information, see PTA ruling no. 2/2018.

### Accounting separation and cost of universal service

The Post and Telecom Administration completed its review of accounting separation at Íslandspóstur for the operational year 2017 with a statement published on 8 February 2019 on the Administration’s website. Íslandspóstur is obliged to provide the PTA with a breakdown of its accounting and financial information in accordance with the provisions of article 18 of Icelandic Act no. 19/2002 on Postal Services and Icelandic Regulation no. 313/2005 on Accounting and Financial Separation of Postal Service Providers’ Operations.

After examining the data, the conclusion of the Administration was that Íslandspóstur’s cost accounting and accounting separation complied with recognised practice and the provisions of the Icelandic Postal Services Act and of the Regulation on Accounting and Financial Separation of Postal Service Providers’ Operations.

The summary of operating segments showed that the performance of monopoly operations was positive by around ISK 414 million, whereas competitive universal services showed a loss of around ISK 737 million and non-monopoly competitive services showed a profit of around ISK 203 million.

The negative performance shown in the company's summary of operating segments for competitive universal services can be mostly explained by the distribution of international post, which accounted for ISK 731 million. The loss can be primarily attributed to the international endpoint agreements Íslandspóstur is bound by. The large increase in international post has also had an impact on cost transfer within the Íslandspóstur cost model, from monopoly services to competitive universal services. This means that products classified as competitive universal services place proportionately higher operating costs on the distribution system than previously.

With the changes to distribution that were made in 2018 described above, the universal service burden borne by the company it is expected to diminish further if it is calculated using the same assumptions as used previously.

However, it is clear that in the long run, Íslandspóstur cannot absorb such losses without compensation for the obligations the company is bound by due international commitments made by the government. It is therefore important for the government to try to reduce in any way possible Íslandspóstur's losses from such deliveries in future, as it should be clear that with the current state of operations, such losses are unlikely to be sustainable the long term.

## Íslandspóstur's application for a contribution from the universal service compensation fund

Via a letter dated 30 October 2018, Íslandspóstur requested a contribution for the payment of the unfunded costs of universal service, with reference to article 27 of the Icelandic Postal Services Act. The company's application covers 2013 to 2017. The application concerns the traditional costs of universal service, which Íslandspóstur has defined as follows:

- Delivery speed and frequency
- Delivery in rural areas
- Deliveries for blind people

The company has also applied for a contribution for delivering letters from overseas which the company is obliged to deliver under its operating licence and the international obligations which Iceland has made.

The application refers to a report and calculations carried out by consulting company Copenhagen Economics for Íslandspóstur, which was published in March. It is not clear at present when the PTA will conclude the handling of this case.





# Consumer affairs

One of the Post and Telecom Administration's primary missions is to safeguard consumer interests on the telecoms and postal markets and to support the protection of consumers in their dealings with telecoms companies and postal service operators. Consumers are faced with diverse and complex options on the telecoms market, both in terms of the choice and configuration of devices and connections, but also in terms of their choice of service provider. The Administration publishes information for consumers, participates in measures to protect personal data and privacy and works on safeguarding maintenance and security in public electronic communications networks.

The Administration's most extensive information provision takes place through its website, [www.pfs.is](http://www.pfs.is), where there is a special section dedicated to consumers. There consumers can submit enquiries and complaints to the Administration if they believe that a telecoms or postal company is in violation of its legal obligations or its obligations under general authorisations and operating licences. These complaints number in the hundreds every year, although only some end up in the formal complaints procedure.

## Written or electronic consent for number and service porting

In 2018, the PTA processed almost fifty consumer cases through the formal complaints procedure, and a total of 57 consumer cases excluding

cases concerning unsolicited communication. The majority of these cases concerned the telecoms market, whereas just over a quarter of the cases concerned the postal service market. As in previous years, the most common causes for complaint related quality of service, terms and conditions and billing. However, this year an unexpectedly high number of cases was received from consumers regarding number and service porting without the owner's consent.

According to the Statute for Number and Services Portability no. 617/2010, telecoms companies have an obligation not to initiate the process of porting a number except with the written or electronic consent of the owner of the number/connection. Consent can be given by email or text message from the telephone number of the owner requesting the porting. Telecoms companies must keep a record of this consent for a minimum of two months. Verbal consent therefore does not constitute valid consent to port a number or service.

Communications between telecoms companies regarding the transfer of customers between them are based on the premise that consent has been given. Paragraph 2, article 37 of the Icelandic Electronic Communications Act stipulates that if a subscriber elects to move their business to another telecoms company, the services porting process must be conducted smoothly. Therefore, no demand is made for the telecoms company that is losing business

to verify that the receiving telecoms company's request is valid and made with adequate consent, as this is the responsibility of the receiving company. It is therefore the responsibility of the receiving telecoms company to obtain adequate consent, whether in written or electronic form.

There can be no exceptions to this fundamental rule. Consumers must be able to trust that a

company providing telecoms services satisfies the requirements applicable to the service and will change or transfer the service in question without the unequivocal consent of the owner. This should be considered the basis for a stable and secure commercial relationship in which the interests of both parties are given equal consideration.

## Preparations for satellite spectrum registration

In 2018, PTA partnered with the company Mansat to acquire knowledge on satellite spectrum registration (filing), with the objective of implementing a similar filing service in Iceland.

Mansat was founded in 1998 and is headquartered in the Isle of Man. It also has offices in the United Kingdom and United States. The company specialises in satellite spectrum registration, has experienced specialists at its disposal and is known as a leader in its field.

Frequencies for telecoms transmissions via satellite are registered with the International Telecommunication Union (ITU). Member states of the Union can submit registration applications. The registration procedure is complex, and each registration takes a number of years.

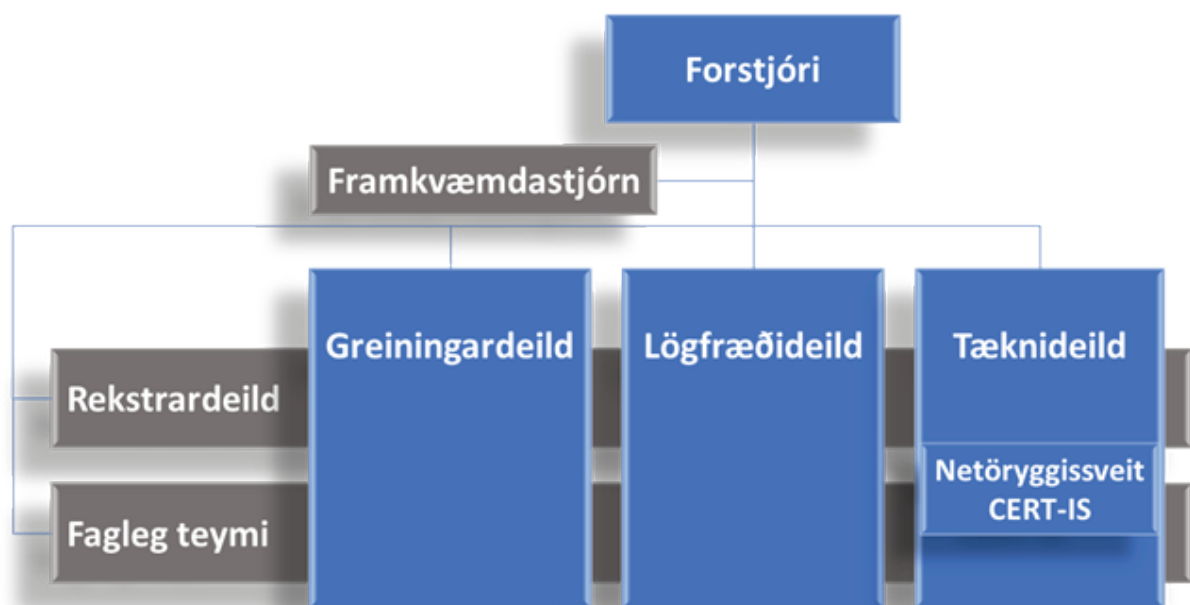
In November 2018, the PTA issued a report on satellite spectrum registration which set out the Administration's proposals and plans in this area. In the wake of the report, preparations were started for the establishment of a regulation on satellite spectrum registration by the Minister of Transport and Local Government, which is expected to be published in the first quarter of 2019.

The PTA also participated in a workgroup assembled by the Ministry for Foreign Affairs to commence accession negotiations to the European Space Agency. This project is not directly connected to satellite spectrum registration, but both projects are related to the space industry.

The modern space industry involves more than exploration, research and future ideas. A large part of the space industry revolves around services that are already in daily use by a large number of people on Earth. They include telecoms services, television broadcasting, meteorological observations, earth satellite remote sensing and navigation systems.

According to the Space Foundation Report 2018, overall turnover in the space industry worldwide for 2017 was USD 383.5 billion. Business in the space industry has grown by an average of 4% per annum since 2005. There is therefore good reason to explore the ways in which Iceland can participate in this rapidly growing industry.

# The Post and Telecom Administration 2018



The Managing Director of the Post and Telecom Administration is Hrafnkell V. Gíslason. The Management Board is comprised of the Managing Director and heads of divisions. The Administration employs 27 full-time equivalents.

**The analytical division** is responsible for market analyses, as well as imposing and enforcing financial obligations on telecoms companies that have been designated as having significant market power in market analyses, including cost analysis and accounting separation.

This division collects information on pricing and statistics and is responsible for processing and publishing this information. The analytical divi-

sion also conducts various financial analyses of the postal and telecoms service market. In 2018, the head of this division was Óskar Þórðarson. The specialists Guðmann Bragi Birgisson, Hulda Ástþórsdóttir and Snorri Þór Daðason also worked in this division.

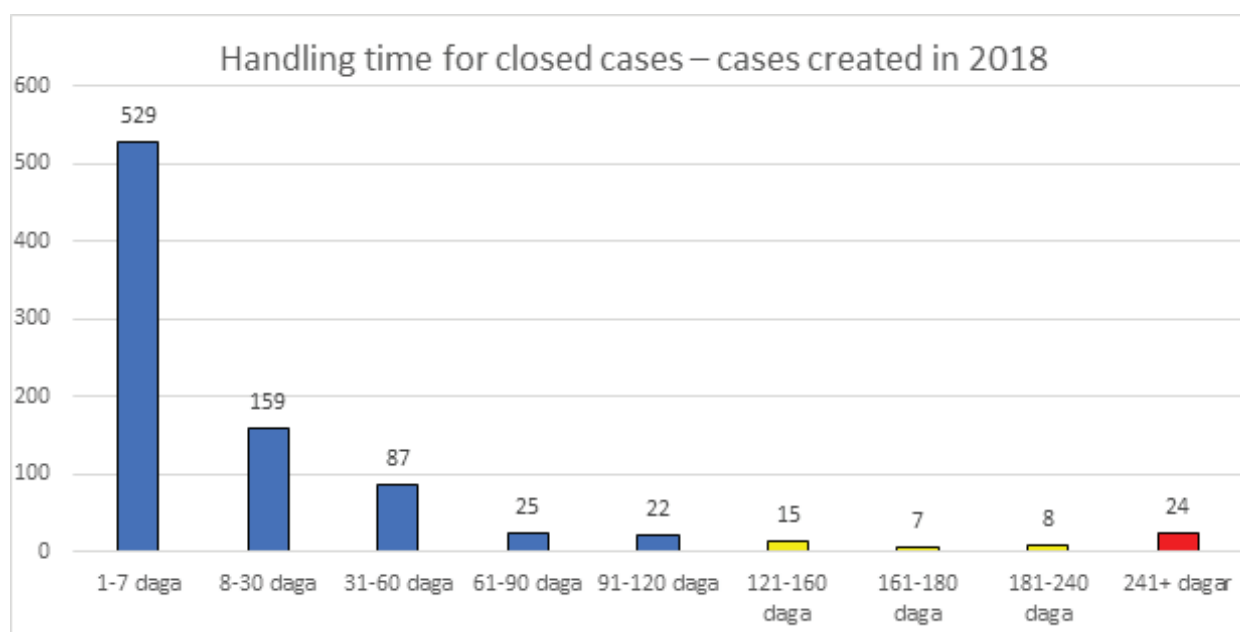
**The legal division** is responsible for processing administrative cases, settling disputes, imposing and enforcing non-financial obligations, universal service and consumer issues. The division also deals with formal international communications. In 2018, the head of this division was Björn Geirsson, who also assumes the duties of deputy head when needed. The lawyers Friðrik Pétursson, Maríjon Ósk Nóadóttir, Unnur Kristín

Sveinbjarnardóttir and Óskar Hafliði Ragnarsson, who is also the leader of the professional market analysis team, also worked in this division. In addition, the lawyer Sigurjón Ingvason became a permanent employee after being employed temporarily. A new employee, Arnar Stefánsson, also began working for the division.

**The technical division** is responsible for organising and managing spectrum allocation issues and monitoring how the spectrum is used. This division monitors the electronic communications device market, is responsible for collecting and recording data on telecoms infrastructure, as well as processing land-related data and inspecting radio equipment on board ships. The technical division also advises other divisions on technical issues that may affect the Administration's surveillance role. In 2018, the head of the division was Þorleifur Jónasson. Bjarni Sigurðsson, a specialist in numbering, frequencies and infrastructure, as well as the measurement of telecoms network coverage, Hörður R. Harðarson, frequencies expert, Jósef Kristjánsson and Óskar Sæmundsson, ship inspectors and roadside communications network coverage specialists, Lilja Bjargey Pétursdóttir, cartography and land surveys specialist, also worked in the division. Hjalti Pálmason, a specialist in the functioning and security of communications networks, frequencies and quality measurements, began working for the Administration this year. There were changes to the staff of the cyber security response team CERT-ÍS, which is part

of the technical division. The response team now consists of three experts in addition to the director of the technical division. This year, the team comprised Kristján Valur Jónsson and Soffía Jónsdóttir, as well as Stefán Fróðason who joined the team this year.

**The administrative division** is responsible for operational issues, information systems, human resources, quality and documentation issues and public relations, and provides support for all of the Administration's internal work. In 2018, this division's special projects included rolling out an update to GoPro, the Administration's case handling and documentation system. Anna Margrét Sigurðardóttir, public relations officer, left the Administration and Birna G. Magnadóttir took on the role of communications officer. This is part of the effort to bolster relations between the PTA and stakeholders in its operations. The head of the division is Hrefna Ingólfssdóttir. The division's other employees are Hanna Guðríður Daníelsdóttir, secretary and Sigrún Davíðs, archive manager.



**Two specialist teams** were operational at the PTA during the year: a market analysis team and the cyber security response team, CERT-IS.

## Case handling time and case workload

In 2018, a total of 1,117 cases were added to the PTA's case list, which is a similar number of cases as in recent years, as can be seen on the bar graph below. Cases added to the list vary widely in nature, and included consumer complaints, disruption complaints, complaints regarding the basic running of the Administration itself, as well as cases concerning employees' day-to-day duties, such as market and cost analyses, frequency allocations, the issuing of permits and inspections of radio equipment in marine vessels, to give but a few examples.

Pursuant to article 12 of the Act on the Post and Telecom Administration no. 69/2003, the Administration is required resolve complaints as soon as possible, and within four months at the latest, unless there are exceptional circumstances. In an ever-changing and fast-paced competitive market, it is important that disputes are resolved quickly and conclusively, without compromising quality standards.

Subsequently, the time it takes to process complaints lodged with the Administration is monitored closely. Unresolved cases added to the list more than four months ago are designated yellow, whereas cases older than eight months are designated red.

Of the 1,117 cases created in 2018, 938 fall into these two categories. When these numbers are added up for the beginning of 2019, a total of 876 cases were closed with the processing times indicated on the following bar graph.

The total number of cases lodged with the Administration in 2018 that remained unresolved at the beginning of 2019 was 62, of 938 cases created that year. The vast majority of these cases were lodged with the Administration in the final weeks and months of the year and are therefore still within the defined case handling time. The graph shows that the majority of cases lodged with the Administration were resolved within the timeframe required by law, i.e. within

120 days.

## The PTA's administrative rulings and their outcome

In November 2017, the Icelandic National Audit Office submitted its report on the Post and Telecom Administration's case handling and administrative procedures to the Icelandic parliament. The Ministry of the Interior (currently the Ministry of Transport and Local Government) under whose authority the PTA operates requested a report of this kind from the Icelandic National Audit Office in November 2016.

In the report, the Administration was encouraged to set itself clearer rules on case handling and administrative procedures, and to improve its communications with regulated entities. The Ministry of Transport and Local Government was also encouraged to provide the Administration with the support and supervision required, promote the functioning of Electronic Communications Professional Committee, complete work on the Electronic Communications Plan and establish a regulation on the Administration's enforcement work. The report stated that during from 2013 to 2016, the PTA issued a total of 136 administrative rulings. Of these, 25 were appealed to the Rulings Committee for Electronic Communications and Postal Affairs, who rescinded four of the rulings. This means that of the 136 rulings made by the Administration, 132 (or 97%) were upheld. This is well within the defined performance criteria for the Administration. The Icelandic National Audit Office was of the opinion that this demonstrated that the Administration conducts its business in a generally good manner and in accordance with the law. It was however noted that PTA case handling rules need to be improved and trust with the parties regulated by the Administration needs to be promoted.

The PTA has maintained statistics on the outcome of administrative rulings since 2007, when the current organisation of the Administration was adopted. This table shows the rulings made up to and including 2018:

### Administrative rulings by the PTA, 2007–2018

Year	PTA rulings	Appealed rulings	Appeal rate	Verdicts total	Withdrawn rulings	Upheld rulings	Upheld–appealed ratio
2007	27	9	33%	9	1	8	89%
2008	33	7	21%	7	1	6	86%
2009	23	5	22%	5	0	5	100%
2010	41	10	24%	10	3	7	70%
2011	35	5	14%	5	2	3	60%
2012	40	7	18%	7	1	6	86%
2013	33	4	12%	4	0	4	100%
2014	42	5	12%	5	2	3	60%
2015	37	10	27%	10	2	8	80%
2016	24	6	25%	6	0	6	100%
2017	32	13	41%	13	1	12	92%
2018	28	4	14%	2	0	2	100%
Samtals	395	83	21%	81	13	68	84%

Of the total 100%

3,3%

Average percentage upheld\*

84,0%

*\*Using weighted mean*

## Post and Telecom Administration publications in 2018

- Guidelines on the Proper Installation and Safety of Fibre Optic Cables [PFS(18)-01]
- Satellite Frequencies Report [PFS(18)-02]
- Post and Telecom Administration 2017 Annual Report [PFS(18)-03]
- Statistical Report on the Icelandic Telecoms Market, 2018
- Comparative Report on Telecoms Use in the Nordic and Baltic Countries, 2018
- Statistical Report on the Icelandic Telecoms Market, First Half of 2018 [PFS(18)-04]

## Summary of verdicts

In 2018, the Post and Telecom Administration made 27 formal administrative rulings. The Rulings Committee for Electronic Communications and Postal Affairs made verdicts on three cases where the PTA's rulings had been referred to the Committee.

## PTA rulings

### Ruling 1/2018

#### Dismissal of Nova complaint – 12 January 2018

Nova submitted a complaint that Vodafone had contacted Nova's customers via unsolicited messages in violation of article 46 of the Icelandic Electronic Communications Act. The PTA concluded that Nova had no right to be involved in the case as it concerned provisions of the Icelandic Electronic Communications Act on the privacy of individuals. Nova's complaint was therefore dismissed due to insufficient involvement.

### Ruling 2/2018

#### Reduction in the number of post delivery days – 23 January 2018

With this ruling, the Administration concluded that there were no grounds to amend Íslandspóstur's decision to reduce the number of delivery days in urban areas due to take effect on 1 February 2018.

## The PTA's activities in 2018 in figures

### Frequencies allocated

Radio and television stations . . . . .	10
Backbone links (number of links) . . . . .	105
Mobile station systems on VHF and UHF 50 . . . . .	60
MF and HF . . . . .	3
Short-term radio broadcasting . . . . .	70
Other temporary licences for Icelandic parties . . . . .	30
Temporary licences for foreign parties . . . . .	200

### Codes allocated

Number of allocated codes . . . . .	2,853,440
-------------------------------------	-----------

### Disruption complaints

Disruption complaints . . . . .	92
---------------------------------	----

### Issues of radio equipment permits

Aircraft . . . . .	86
Marine vessels. . . . .	444
VHF mobile surface stations . . . . .	128
UHF mobile surface stations. . . . .	10
MF Medium-frequency mobile surface stations . . . . .	3
VHF handheld stations . . . . .	350
UHF handheld stations . . . . .	221
VHF land-based master stations . . . . .	0
VHF land-based master stations . . . . .	2
Personal locator beacons. . . . .	7
Paging devices . . . . .	5

### Issues of user licences

Radiocommunications licences, marine vessels (GOC) . . . . .	76
Radiocommunications licences, marine vessels (ROC) . . . . .	27
Amateurs, Icelandic . . . . .	25
Amateurs, international. . . . .	2
Amateurs, miscellaneous. . . . .	25

### Allocations of registration numbers

Numbers for marine vessels . . . . .	300
--------------------------------------	-----

### Inspections of boats and ships – by region

Reykjavik . . . . .	40
North West. . . . .	38
North East . . . . .	32
South . . . . .	35
South West . . . . .	17
Ships registered abroad. . . . .	27
Ships inspected abroad. . . . .	3

### Inspections of radio equipment on ships and open motorboats

Boats shorter than 24 m inspected by inspection agencies and the Icelandic Transport Authority. . . . .	1,195
Boats longer than 24 m and ships . . . . .	189
Pleasure craft inspected by owners . . . . .	72

### Registered land stations

Fixed stations	
VHF stations . . . . .	344
UHF stations . . . . .	53
MF-SSB stations . . . . .	23
Paging devices . . . . .	17

### Vehicle-mounted mobile stations

MF-SSB stations . . . . .	457
VHF stations . . . . .	6,603
UHF stations . . . . .	123

### Handheld stations and beacons

VHF stations . . . . .	6,981
UHF stations . . . . .	1,684
Markers (beacons) . . . . .	44
PLB emergency buoys (406 MHz) . . . . .	86
Miscellaneous equipment . . . . .	157

### Ship stations

MF-SSB stations . . . . .	12
MF/HF-SSB stations (Combined MF/HF) . . . . .	179
VHF stations . . . . .	3,061
Emergency radios . . . . .	596
Transponders (X-band) . . . . .	185
Transponders AIS (VHF). . . . .	47
Navtex . . . . .	208
Emergency buoys, free-floating (406 MHz) . . . . .	343
Emergency buoys in lifeboats and inside (406 MHz) . . . . .	2,474
Inmarsat B . . . . .	0
Inmarsat C . . . . .	227
Inmarsat M. . . . .	5
Automatic identification systems (AIS) . . . . .	1,835

Íslandspóstur notified the PTA by letter dated 28 September 2017 that the decision had been taken within the company to reduce the number of delivery days in urban areas so that addressees would receive letters every other weekday, with the service level D+3.

With regard to authorisation for these changes, the company referred to amendments that had been made to the Icelandic Regulation on Universal Service no. 595/2017, which stipulates that the number of delivery days may be reduced to as few as two days a week if certain circumstances or geographical conditions preclude cost-efficient delivery. The following circumstances under the Regulation were cited:

4. That public and commercial demand for monopoly services has diminished significantly and is not commensurate with the service offered.
5. That there is a risk, if the service level is unchanged, that the service will become unaffordable to the public as defined in paragraph 4, article 16 of the Icelandic Postal Services Act.

After receiving the notification from Íslandspóstur, the Administration invited comments from stakeholders. One company on the market submitted comments and demanded that the changes be stopped. In the Administration's ruling, the PTA concluded that there were no grounds to amend Íslandspóstur's decision to reduce the number of delivery days, cf. paragraph 1, article 16 of the Icelandic Postal Services Act no. 19/2002 and article 10 of the Icelandic Regulation on Universal Service no. 264/2003, as amended by Icelandic Regulation no. 595/2017.

### **Ruling 3/2018** **Rejection of demand to remove the obligation to issue notification of groundworks and infrastructure projects – 16 February 2018**

The Rulings Committee for Electronic Communications and Postal Affairs confirmed PTA ruling no. 13/2018.

### **Ruling 4/2018** **Universal service contribution to Neyðarlínan ohf. for 2018 – 23 March 2018**

The PTA approved a contribution to Neyðarlínan ohf. from the universal service compensa-

tion fund in 2018 for emergency service call response services. However, the allocated contribution to Neyðarlínan ohf. was subject to a reduction due to the status of the fund, authorisations for budgetary allocations in the general budget and planned changes to regulations on the financing of emergency service call response services.

### **Ruling 5/2018**

#### **Míla ehf.'s groundworks projects at Setberg in Hafnarfjörður – 26 April 2018**

The case was founded on a complaint from GR that Míla had initiated a groundworks and infrastructure project at Setberg in Hafnarfjörður in summer 2017 without the involvement of GR, despite the company's desire to participate. Míla published a list of planned groundworks and infrastructure projects in specific streets in Setberg in Hafnarfjörður on its website on 11 January 2017.

### **Ruling 6/2018**

#### **Míla ehf.'s terms for IPTV broadcasting on access point 3 – 2 May 2018**

The PTA approved Míla ehf.'s terms its new service: IPTV broadcasting on access point 3. Míla currently offers IPTV broadcasting on access point 1, but this service has not been available on access point 3.

### **Ruling 7/2018**

#### **Rejection of application for an exception to the ban on unsolicited communications – 8 May 2018**

The City of Reykjavík sent a communication to the PTA, dated 27 April 2018, written jointly with the University of Iceland, which requested that the Administration authorise an exception to allow SMS messages to be sent to a particular group of voters in connection with the municipal elections on 26 May 2018. The PTA rejected the application on the grounds that there could be no exceptions to the provisions of article 46 of the Icelandic Electronic Communications Act.

### **Ruling 8/2018**

#### **Review of Míla's wholesale tariff for trunk sections of leased lines – 29 May 2018**

The PTA approved Míla's cost analysis of the wholesale market for the trunk sections of leased lines.



### **Ruling 9/2018** **Unsolicited communications from the Independence Party – 12 June 2018**

The PTA received a complaint about unsolicited communications from the Independence Party, in the form of a telephone call just before parliamentary elections took place in 2017, despite the complainant having registered as ex-directory. The substance of the complaint was based on paragraph 5, article 46 of the Icelandic Electronic Communications Act no. 81/2003. In its defence, the Independence Party stated that the complainant had been a member of the Party and therefore it had been lawful to communicate information to him, despite the complainant's ex-directory status.

### **Ruling 10/2018** **Síminn's violation of the prohibitive provision of paragraph 5, article 45 of the Icelandic Media Act – 3 July 2018**

In PTA ruling no. 10/2018, the Administration concluded that Síminn hf. (Síminn) was in violation of the prohibitive provision of paragraph 5, article 45 of the Icelandic Media Act no. 38/2011, which states that it is prohibited for a media distribution system to direct their customers' business to an affiliated telecoms company.

### **Ruling 11/2018** **Location of letterboxes in rural areas – 5 July 2018**

The PTA received a communication from Íslandspóstur regarding the location of letterboxes in rural areas. Íslandspóstur demanded letterboxes to be located at the junction of the main roads and farmhouse driveways, as this was in accordance with the principle of article 16 of Regulation no. 364/2003 on Universal Service and Implementation of Postal Services, which states that if the driveway (local road) is up to 500 metres long, the letterbox must be located at the junction of the connecting road or main road. The letterbox should not generally be located more than 500 metres from the building served.

In this case, the length of the driveway, as measured from the road junction to the front of the house, was known to be approximately 630 metres. The residents were therefore of the opinion that the present location of the letterbox in front of the house was permissible, as the let-

terboxes would have been more than 500 metres away from the building if they were located at the road junction. According to Íslandspóstur, exceptions from the distance requirement could be granted under certain circumstances.

The PTA considered that the term "generally" in article 16 of Regulation no. 364/2003 indicated that exceptions could be made to the requirement. In the opinion of the Administration, cf. PTA ruling no. 4/2009, such an exception could only be granted if the length of the local road from the junction to the building was close to the established 500-metre reference limit and that circumstances dictated that it would be impractical or especially costly to adhere to the limit. The Administration thus took into account the comments submitted by the parties concerned on the driveway, the interests of the recipient of postal services and the practical and economic considerations of the postal service provider. The PTA ruled that under the circumstances, it would be more reasonable for the letterbox to be located at the road junction and that this location was in accordance with article 16 of Regulation no. 364/2003.

The PTA received a communication from Íslandspóstur regarding the location of letterboxes in rural areas.

### **Ruling 12/2018** **Delivery of first-class post – 14 August 2018**

The complainant claimed that Íslandspóstur had not delivered the complainant's magazines as first-class post and therefore demanded that the company's fee should be proportionate to the service that was actually provided, i.e. second-class post. Íslandspóstur's response to the PTA regarding the submitted complaint included the statement that nothing untoward had been found about the postal delivery and that the service had been in line with the relevant quality standards. The PTA therefore found that Íslandspóstur's method of delivering the postal consignments had been in accordance with the Icelandic Postal Services Act no. 19/2002 and article 13 of Icelandic Regulation no. 364/2003 on Universal Service and the Implementation of Postal Services. The PTA also found that complainant had no right to a refund of the difference

between the tariffs for first- and second-class post, in view of, among other things, article 38 of the Icelandic Postal Services Act no. 19/2002, which states that there is no obligation to pay compensation if the delivery of postal consignments is delayed.

#### **Ruling 13/2018** **Letters damaged by Íslandspóstur's sorting machine – 27 August 2018**

The PTA made a ruling in a complainant's case regarding damage to mail that occurred in Íslandspóstur's sorting machine by email dated 13 February 2018. The Administration concluded that there was no dispute regarding the facts of the case, that mail confidentiality had not been breached and that the relevant party had no right to compensation under the law. The complainant brought the case before the Rulings Committee for Electronic Communications and Postal Affairs, which then decided to consider the case.

#### **Ruling 14/2018** **Increase in Síminn hf.'s line rental fees – 10 September 2018**

Gagnaveita Reykjavíkur ehf. (GR) submitted a complaint to PTA regarding Síminn's increase in its fibre broadband line rental fee in November 2017.

#### **Ruling 15/2018** **Unsolicited communications from E-Content ehf. – 24 October 2018**

In its ruling, the PTA concluded that E-content ehf. was in violation of paragraph 1, article 46 of the Icelandic Electronic Communications Act by sending SMS messages with promotional material to two complainants who had previously opted out of such communications.

#### **Ruling 16/2018** **Completion of connections in telecoms connection points – 24 October 2018**

The point of dispute in this case was whether Gagnaveita Reykjavíkur (GR) was required to install a connection strip in the connection point for telecoms installations in a particular building. The dispute centred on whether the requirement to install connection strips applied when a connection had already been installed and whether it was the responsibility of GR or the housebuilder to install the connection strips.

There was no dispute as to whether the building owner was responsible for connections in the telecoms connection points, cf. article 4 of PTA Statute no. 1111/2015 on Indoor Telecoms Installations.

#### **Ruling 17/2018** **Change of telephone number owner – 24 October 2018**

The PTA received a complaint about a change to the owner of a telephone number without the consent of the complainant, even though Nova had reverted its records back to their original state some eight months earlier. In the opinion of the PTA, the complainant's complaint focused on Nova's admission to having reverted its records at the time and the company's obligation to supply the complainant with documents regarding traffic from the number over a certain period.

#### **Ruling 18/2018** **Wholesale price for the termination of telephone calls on fixed public telephone networks – 24 October 2018**

This ruling is based on PTA ruling no. 22/2016, dated 23 December 2016, regarding the designation of companies with considerable market power and the imposition of restrictions on wholesale markets for the termination of telephone calls on fixed public telephone networks.

#### **Ruling 19/2018** **Wholesale price for the termination of telephone calls on individual mobile communication networks – 25 October 2018**

This ruling is based on PTA ruling no. 20/2015, dated 31 July 2015, regarding the designation of companies with considerable market power and the imposition of obligations on wholesale markets for the termination of telephone calls on individual mobile telephone networks.

#### **Ruling 20/2018** **Rejection of demand for amendment or revocation – 2 November 2018**

Síminn demanded the amendment or revocation of PTA ruling no. 10/2018. The company was of the opinion that the PTA had not conducted its investigation with due diligence as was its obligation. In the opinion of the company, the PTA based its findings in this case regarding Síminn's unwillingness to reach an agree-

ment with Vodafone, which was considered to be one aspect of Síminn's violation of paragraph 5, article 45 of the Icelandic Media Act no. 38/2011, on the fact that the methodology that the company wished to apply to determine the price for Vodafone's access to Sjóntvarp Símans Premium, i.e. that it should be based on fixed minimum fees, was not the one generally applied in such business transactions. After the ruling, Síminn was granted access to Vodafone's distribution agreements with 365 miðlar ehf. and Skjárinn ehf., which applied this methodology. Síminn was of the opinion that this constituted proof that this methodology was generally applied and therefore the PTA's ruling was based on false grounds.

### **Ruling 21/2018** **Íslandspóstur's request to increase prices for monopoly services – 8 November 2018**

With this ruling, the Administration rejected Íslandspóstur ohf.'s request to increase the company's prices for its monopoly services by 8%. In its ruling, the Administration stated that the company's request for an increase of 8% based on a reduction in volume was greater than the company's loss of income from the decrease in volume that formed the grounds for the request.

The estimated loss of income due to greater than forecast fall in volume for the year was also less than the forecast performance of the monopoly during the year, based on the unchanged list of tariffs. Consideration also had to be given to the fact that the summary of Íslandspóstur's operating segments for 2017 indicated good performance within monopoly, which strengthened the foundation for its performance in 2018. Furthermore, the preconditions for streamlining the processing and distribution of letters that were discussed in PTA ruling no. 2/2018 have mostly been realised and so the need for an increase was reduced.

The PTA also stated that it can only approve or reject Íslandspóstur's requests regarding changes to the list of tariffs, cf. Rulings Committee verdict no. 4/2014. The PTA therefore came to the conclusion that Íslandspóstur's request as submitted, i.e. regarding the decrease in volume, performance of the monopoly and the

streamlining achieved by changes to its services on 1 February 2018, did not support the case that the Administration should approve the request. As previously, the PTA emphasised that it was important for Íslandspóstur to act with caution when requesting to increase its tariffs for letters delivered under the monopoly in Iceland, as this could accelerate the decrease in paper mail.

However, the Administration stated that due to the fall in volume, a situation with the monopoly could soon arise whereby unit rates need to be increased if the cost model and assumptions that have been applied up to this point continue to be used. It is for Íslandspóstur to decide whether it is best to react to this situation by increasing the price of its monopoly services as volume falls, as the PTA remains bound by the provisions of paragraphs 4–6, article 16 of the Icelandic Postal Services Act no. 19/2002 when deciding whether to approve changes to lists of tariffs for monopoly services.

### **Ruling 22/2018** **Involvement of GR in Síminn's alleged violation of the Icelandic Media Act – 13 November 2018**

This ruling concerns the question of whether Gagnaveita Reykjavíkur ehf. (GR) is involved in a case that is under consideration by the PTA concerning Síminn's alleged repeated violation of the prohibitive provision of paragraph 5, article 45 of the Icelandic Media Act no. 38/2011 (case number 18-07-20). Pursuant to this provision, it is prohibited for a content provider to direct its customers to an affiliated telecoms company. Síminn made a comment regarding GR's involvement in this case, but did not comment on the involvement of Sýn hf. (formerly Vodafone) and Nova hf. in this case.

### **Ruling 23/2018** **Unlawful use of and damage to GR's public telecoms network – 3 December 2018**

This case concerned complaints from Gagnaveita Reykjavíkur (GR) about Míla's unlawful access to GR's public telecoms network and damage thereto. The principal focus of these complaints was telecoms installations located within the walls of the communal area of a multi-dwelling building that link connection

points in more than one unit or stairwell in a building. According to paragraph 2, article 6 of the PTA Statute no. 1111/2015 on Indoor Telecoms Installations, such installations are considered part of the public telecoms network, under the control of telecoms companies rather than part of indoor telecoms installations that are the responsibility of the owner of the building.

#### **Ruling 24/2018** **Audit of security arrangements at sites where Farice cables come ashore – 7 December 2018**

The PTA published its ruling on an audit of Farice ehf's security arrangements and the physical security of hosting sites where the company's submarine cables, DANICE and FARICE-1, come ashore.

Farice ehf's services are based on access to these cables. The company's clients include telecoms companies, data centres, cloud computing services and major businesses in Iceland. The service offered by Farice ehf. plays an important part in the provision of general telecoms services in Iceland. The functionality and security of the fibre optic cables is therefore immensely important to the interests of Iceland and the country's entire population.

The PTA's audit was two-pronged. Firstly, Farice ehf's security arrangements were audited. Secondly, an audit was conducted of the physical security of the hosting facilities where the company's submarine cables come ashore. Farice ehf. leases facilities in a building owned by Míla ehf. in Seyðisfjörður and therefore Míla ehf's physical security arrangements also included in the audit.

#### **Ruling 25/2018** **Application from Míla ehf. for a contribution from the universal service compensation fund**

With PTA ruling no. 8/2017, the PTA rejected Míla's application dated 14 October 2016 for a contribution from the universal service compensation fund. Míla's application was for a contribution of nearly ISK 292 million from the fund. The application was rejected, as the Administration was of the opinion that with its ruling no. 29/2013, it had formally and materially concluded that Míla and Síminn should be regarded as

one economic unit for the purposes of applications for a contribution from the universal service compensation fund.

#### **Ruling 26/2018** **Refusal to declassify confidential information – 17 December 2018**

In this case, Sýn requested the declassification of certain statistical information in chapter 5.9.4.5 of PTA ruling no. 10/2018. Sýn referred to the principle of article 15 of Icelandic Administrative Procedures Act, which is that a party to a case has the right to examine any documents and other data relating to the case, whereas Síminn referred to article 17 of the same Act which states that a party's access to certain documents may be limited if the relevant party's interests from using the information from such documents are deemed to be less important than more compelling public or private interests. The conclusion of the case was to deny the request for declassification.

#### **Ruling 27/2018** **Nova's offer of Apple TV 4K with fibre broadband – 27 December 2018**

This ruling concerns a complaint from Síminn hf. to the PTA regarding Nova hf's special offer of Apple TV devices with fibre broadband from the latter company. Nova customers were given the option to purchase an Apple TV 4K for ISK 9,990 instead of ISK 24,990, an offer that included 12 months of fibre broadband from the company. If subscribers cancelled the service within that time, they were required to pay the difference between the offer price and the list price. Síminn considered Nova's terms and conditions for its special offer to be in violation of paragraph 2, article 37 of the Icelandic Electronic Communications Act, which stipulates that a contract may not enforce a binding subscription period of longer than six months. Síminn demanded that the PTA ban the special offer.

#### **Ruling 28/2018** **Undeclared recording of a telephone call – 27 December 2018**

This decision concerns a complaint from a consumer regarding a telephone conversation between the consumer and the company Islandus ehf. (Islandus) that was recorded without the consumer's knowledge. Pursuant to paragraph

1, article 48 of the Icelandic Electronic Communications Act, telephone calls may not be recorded without notifying the interlocutor at the start of the call, except in such circumstances that are described in paragraphs 2 and 3 of the same provision.

## Verdicts by the Rulings Committee for Electronic Communications and Postal Affairs

### Verdict on case no. 12/2017 – Íslandspóstur's complaint regarding PTA decision no. 23/2017 – 5 November 2018

The Rulings Committee for Electronic Communications and Postal Affairs confirmed PTA ruling no. 23/2017.

The Rulings Committee for Electronic Communications and Postal Affairs upheld PTA ruling no. 23/2017 that Íslandspóstur was not permitted to withdraw so-called "additional discounts" for repeat business.

Íslandspóstur had informed its customers that these additional discounts would be withdrawn as of 1 September 2017.

Following a complaint from Burðargjöld, the PTA issued preliminary ruling no. 9/2017, which meant that Íslandspóstur's notification dated 7 April 2017 to withdraw additional discounts for bulk mail would not enter into effect until an adequate justification had been approved by the PTA.

The PTA's preliminary ruling was reported to the Rulings Committee, which upheld it with verdict no. 3/2017, stating that the PTA had been authorised to comment on amendments to terms and to initiate an investigation of whether such amendments were lawful.

The findings of PTA ruling no. 23/2017, upheld by the Rulings Committee, were twofold. Firstly, the PTA was of the opinion that Íslandspóstur had not demonstrated that the amendments to its discount scheme, i.e. the withdrawal of "additional discounts", meant that the company was passing on in the form of discounts all the savings of its business with mail collectors and/or senders of bulk mail, as required by paragraph 5, article 16 of the Icelandic Postal Services Act.

Secondly, the Administration concluded that, with reference to the above, that the complainant should be required to withdraw its notification to its customers dated 7 April 2017, or that it make other amendments to its discount scheme that would ensure that parties sending mail and/or parties making collections would receive the discount they were entitled to by law.

The basis of the Rulings Committee's verdict included the fact that since 2012, Íslandspóstur has issued discounts for repeat business on a monthly basis as part of the bulk discounts pursuant to paragraph 5, article 16 of the Act, but now intended to withdraw them completely.

By law, the PTA has the role of approving changes to Íslandspóstur's lists of tariffs or, as the case may be, demand changes to the company's terms and conditions if they violate laws, regulations or the provisions of operating licences as applicable. The terms and conditions issued by Íslandspóstur fall under lists of tariffs for monopoly services, meaning competition-related issues also need to be borne in mind, as all parties of the case have pointed out.

The basis for the appealed ruling states that the PTA thought it necessary to view an assessment of streamlining and related discounts in the overall context. This stance of the Administration has been known since the list of tariffs was published in 2012. The Rulings Committee has agreed with this stance in previous verdicts regarding these discount terms and continues to do so. Requiring Íslandspóstur to reasonably justify the operational reasons for withdrawing discounts for monthly bulk transactions is therefore considered a legitimate stance that fully complies with paragraph 5, article 16 of the Icelandic Postal Services Act no. 19/2002.

The PTA's request for justification for Íslandspóstur's assertion that the bulk discounts that remained unchanged would fully meet the appellant's legal obligations based on paragraph 5, article 16 of the Icelandic Postal Services Act no. 19/2002 is also a legitimate stance.

The evidence of the case did not demonstrate that Íslandspóstur had adequately supported

its assertion with documentation, e.g. from its external auditors or other specialists that have assessed Íslandspóstur's various methodologies and those used by PTA. It has been stated that the calculation methods were based on Íslandspóstur's cost analysis, which the Administration had reviewed and approved as amended. For the purpose of determining savings attributable to bulk transactions, the PTA believed that Íslandspóstur's cost calculation, based on actual cost plus a reasonable profit, should be used. It was the opinion of the Committee that in light of all the facts of the case, there was sufficient justification to require Íslandspóstur to submit further reasoning to support its case. The PTA would not be required to submit reasoning for changes to the complainant's list of tariffs based on article 10 of the Icelandic Administrative Procedures Act. Íslandspóstur bears the burden of proof in this regard. The PTA was therefore not deemed to have violated investigative procedure. Rather, the Administration had followed it by repeatedly requesting adequate evidence from Íslandspóstur. Íslandspóstur was required to have the relevant data in its possession and there was therefore no violation of the principle of proportionality to demand further reasoning from Íslandspóstur. It was deemed necessary for the PTA to do this so that the Administration could verify that the decision to withdraw the discount complied with the provision of paragraph 5, article 16 of the Icelandic Postal Services Act no. 19/2002.

The Rulings Committee thus did not agree with Íslandspóstur's view that the appealed ruling should be withdrawn on the grounds that it was in contradiction with the law, severely limited with regard to form and content, contrary to rules of procedure that apply to administrative law or constituted inappropriate application of administrative authority. Íslandspóstur's demand was therefore rejected and the appealed ruling was upheld.

#### **Verdict on case no. 1/2018 – Complaint regarding PTA ruling no. 32/2017 – 12 April 2018**

This case concerned a complaint from an individual about an unsolicited email message from a specific company. The complainant believed that their email address had been used in direct

marketing without their prior consent, which constituted a violation of paragraph 1, article 46 of the Icelandic Electronic Communications Act. During the handling of the case, an admission was received from the relevant company that the email message had been sent to the complainant in error and therefore constituted a violation of the cited provision. In light of the fact that there was no material dispute as to whether the email message constituted a violation, the PTA found that the case should be concluded through a notification to the complainant to this effect. The complainant did not find this a satisfactory conclusion of the matter and sought a formal ruling from the Administration regarding the violation committed by the company in question. After receiving written a from the PTA in support of the conclusion of the case without a formal decision, the complainant referred this to the Rulings Committee for Electronic Communications and Postal Affairs. The Rulings Committee confirmed that the PTA's decision had been in accordance with case handling procedure according to the Icelandic Administrative Procedures Act. The Rulings Committee agreed with the PTA that the case had been adequately addressed and observed that the complainant had been given the opportunity to submit their objection and present their views, and had also received reasoning for the PTA's decision regarding the conclusion of the case in accordance with article 21 of the Icelandic Administrative Procedures Act.

#### **Verdict on case no. 3/2018 – Complaint regarding PTA ruling no. 13/2018 regarding the dismissal of a case – 12 April 2018**

The circumstances of the case were that letters had been damaged by one of Íslandspóstur's sorting machines, and the company reported this to the complainant as well as the reasons for it. Subsequently the complainant lodged a complaint with the Administration regarding Íslandspóstur's handling of the complaint.

The Administration notified Íslandspóstur about the lodged complaint and also informed the complainant that the Administration did not consider it normal for deliveries to be damaged, although accidents could occur. The complainant was also informed that there was no obligation to pay compensation for incidents such as

this, cf. article 39 of the Icelandic Postal Services Act.

The complainant appealed the Administration's handling of the complaint to the Rulings Committee for Electronic Communications and Postal Affairs. The Committee's verdict included no comments regarding the PTA's view that the case was considered to have been adequately addressed when the complainant was informed that the Administration intended to close the case, as it was clear that there was no dispute regarding the fact that the letters in question had been damaged in the course of their handling by Íslandspóstur. The Committee also referred to the fact that Íslandspóstur had informed the complainant of the damage to the letters in question and the reasons for it. The PTA's course of action with regard to the appealed ruling was therefore in accordance with case handling procedure according to the Icelandic Administrative Procedures Act.

**Verdicts on cases no. 4/2018-5/2018 and 7/2018-11/2018  
Complaints from Íslandspóstur regarding PTA decisions no. 13/2016 and 14/2017 and 16/2017-20/2017**

In these cases, the dispute centred on whether Íslandspóstur had the authority to demand that residents' associations in specific multi-dwelling buildings in Hafnarfjörður should install communal letterboxes by the communal entrance or in the main lobby of the multi-dwelling buildings. If this was not done, postal deliveries to the residents in question would be discontinued, in accordance with paragraph 4, article 31 of the Icelandic Postal Services Act no. 19/2002. Letterboxes were located at the entrance of each individual apartment.

During the handling of this case, the PTA had sought the advice of the Municipality of Hafnarfjörður building inspector regarding the interpretation of the relevant provision of building regulations. The response from the building inspector stated that there was no communal entrance or main lobby in the multi-dwelling buildings in question. Consequently, the current arrangement within the multi-dwelling buildings, i.e. a letterbox at every entrance, was compliant with building regulations.

In its findings, the Rulings Committee notes that it is part of the PTA's due diligence process for investigations of this kind to seek the opinion of the Municipality of Hafnarfjörður building inspector as to whether letter slots and letterboxes in the multi-dwelling buildings in question complied with building regulations. Furthermore, it noted that it is part of good administrative procedure for an authority to seek an expert to give their opinion about issues concerning the relevant field of expertise. Citing the conclusions of the Municipality of Hafnarfjörður building inspector as grounds for its ruling, the PTA did not delegate its authority, as was maintained by Íslandspóstur in the course of this case. The PTA made an independent decision to submit the building inspector's findings as grounds for its ruling and thereby acted with due diligence with respect to its investigative obligations, cf. article 10 of the Icelandic Administrative Procedures Act no. 37/1993. The Committee therefore concluded that the PTA had acted correctly in citing the findings of the Municipality of Hafnarfjörður building inspector as grounds for the rulings that were upheld by the Committee, as the findings of the building inspector were in those cases consistent with the letter of the building regulations.

Íslandspóstur was therefore not authorised to discontinue postal deliveries to residents as it had notified.

**Verdict in case no. 6/2018 –  
Íslandspóstur's complaint regarding PTA decision no. 15/2017 – 27 September 2018**

PTA decision no. 15/2017 was withdrawn, partially due to the fact that the Municipality of Hafnarfjörður building inspector's findings were not consistent with the letter of the building regulations, as the building had a communal lobby and elevator and consisted of five storeys.

# Registered telecoms companies at year-end 2018

Licence	Issued/ registered	Services
1819 - Nýr valkostur ehf.	20.6.2014	Upplýsingaþjónusta um símanúmer
Ábótinn ehf.	28.3.2003	Gagnaflutningsnet og -þjónusta
Advania Ísland ehf.	17.4.2002	Gagnaflutningsþjónusta
Alþingi	23.3.2015	Hljóðvarps- og/eða sjónvarpsdreifing
Alza ehf.	1.9.2017	Gagnaflutningsþjónusta um þráðlaus- og fastanet
Árvakur hf.	26.1.2015	Upplýsingaþjónusta um símanúmer
Ásaljós	18.8.2015	Rekstur fastlínu fjarskiptanets
Austurljós ehf.	5.3.2015	Gagnaflutningsnet og -þjónusta
Backbone ehf.	25.8.2010	Gagnaflutningsnet og -þjónusta
Bloomberg Finance L.P.	19.7.2007	Leigulínubjónusta og almennt fjarskiptanet
Boðleið þjónusta ehf.	1.12.2015	Talsímaþjónusta, farsímaþjónusta og rekstur fastlínu fjarskiptanets
Brimrún ehf.	3.4.2008	Gagnaflutningsþjónusta um gervitugl
BT Solutions Limited, útibú á Íslandi	28.7.2014	Gagnaflutningsþjónusta
CenturyLink Iceland ehf.	1.12.2015	Rekstur fjarskiptanets og gagnaflutningsþjónustu
Colt Technology Services AB	29.9.2015	Gagnaflutningsþjónusta
Comprehensive Nuclear Test Ban Organisation (CTBTO)	19.7.2017	Gagnaflutningsþjónusta um gervihnött
Cubic Telecom Ltd.	9,8,2018	Rekstur fastlínu- og þráðlauss fjarskiptanets og gagnaflutningsþjónusta um þráðlaus net
Dalaveitur ehf.	14.2.2017	Rekstur fastlínu fjarskiptanets
DataBox ehf.	13.12.2010	Talsímaþjónusta og fjarskiptanet
Datacell ehf.	25.8.2010	Gagnaflutningsþjónusta
Davið og Góliat ehf.	3.5.2010	Talsíma- og gagnaflutningsþjónusta
DCN Hub ehf.	10.12.2012	Farsíma- og gagnaflutningsþjónusta
DIDWW Ireland Limited	19.12.2012	Gagnaflutnings- og talsímaþjónusta
DVD-Margmiðlun ehf.	6.2.2004	Rekstur breiðbandskerfis fyrir útvarpsdreifingu
Eyja- og Miklaholtshreppur	29.9.2015	Rekstur fastlínu fjarskiptanets
Factor ehf.	30.5.2013	Gagnaflutningsnet- og gagnaflutningsþjónusta
Farice ehf.	2.9.2003	Sæstrengur
Ferðaþjónustan Húsafelli ehf.	23.4.2018	Rekstur fastlínu fjarskiptanets
Feris ehf.	6.1.2014	Gagnaflutningsþjónusta
Fjarskiptafélag Mývatnssveitar ehf.	10.4.2017	Gagnaflutningsþjónusta um fastanet
Fjarskiptafélag Reykhólshrepps	9.8.2018	Rekstur fastlínu fjarskiptanets
Fjarskiptafélag Skagabyggðar	8.6.2016	Gagnaflutningsnet
Fjarskiptafélag Skeiða- og Gnúpverjahrepps ehf.	8.3.2013	Gagnaflutningsnet
Fjarskiptafélag Svalbarðshrepps ehf.	14.2.2017	Rekstur fastlínu fjarskiptanets



Fjölnet ehf.	26.10.2001	Talsíma-, gagnaflutningsþjónusta og fjarskiptanet
Gagnaveita Helgafellssveitar ehf.	18.8.2015	Rekstur fastlínu fjarskiptanets
Gagnaveita Hornafjarðar ehf.	13.2.2013	Fjarskiptanet
Gagnaveita Reykjavíkur ehf.	23.3.2007	Gagnaflutningsnet og -þjónusta
Gagnaveita Suðurlands ehf.	9.12.2013	Gagnaflutningsþjónusta
Gagnaveitan ehf.	8.6.2011	Fjarskiptaþjónusta
GlobalCall ehf.	4.9.2008	Talsímaþjónusta
Halló ehf.	23.5.2014	Upplýsingaþjónusta um símanúmer
Hátíðni hf.	24.1.2001	Talsíma-, gagnaflutningsþjónusta og fjarskiptanet
Hitaveita Egilsstaða/Fella ehf.	11.9.2018	Rekstur fastlínu- og þráðlauss fjarskiptanets, gagnaflutningsþjónusta um þráðlaus og fastanet og hljóðvarps og/eða sjónvarpsdreifing
Hitaveita Tálknafjarðarhrepps	24.6.2015	Gagnaflutningsþjónusta um fastanet
Hljóðsmárin ehf.	24.10.2017	Hljóðvarps- og/eða sjónvarpsdreifing
Hópkaup ehf.	28.4.2015	Upplýsingaþjónusta um símanúmer
Hótel Laki ehf.	10.4.2017	Rekstur fastlínu fjarskiptanets
Hrafshóll ehf.	30.01.2019	Rekstur fastlínu fjarskiptanets
Hringdu ehf.	9.11.2010	Talsíma- og gagnaflutningsþjónusta
Hringiðan ehf. /Vortex Inc.	3.12.1998	Talsíma-, gagnaflutningsþjónusta og fjarskiptanet
Húnanet ehf.	23.10.2017	Rekstur fastlínu fjarskiptanets
Hvalfjarðarsveit	31.3.2014	Fjarskiptanet
Icelandair ehf.	14.2.2014	Fjarskiptanet
IMC Ísland ehf.	27.6.2000	DCS 1800 farsímaþjónusta
Internet á Íslandi hf.	3.2.1998	Fjarskiptanet, talsíma- og gagnaflutningsþjónusta
Isavia ohf.	30.12.2010	Talþjónusta við flugvélar og rekstur fastlínu fjarskiptakerfis
Já hf.	21.11.2007	Útgáfa síma- og vistfangaskrár. Símaupplýsingaþjónusta
Kópavogsbær	11.12.2017	Rekstur fastlínu- og þráðlauss fjarskiptanets, gagnaflutningsþjónusta um þráðlaus og fastanet og hljóðvarps og/eða sjónvarpsdreifing
Kukl ehf.	20.3.2009	Talsíma-, gagnaflutningsþjónusta og fjarskiptanet
Landhelgisgæsla Íslands	1.1.2011	Rekstur og útleiga NATO ljósleiðarastrengs
Leiðarljós ehf.	14.2.2017	Rekstur fastlínu fjarskiptanets
LÍF í Mýrdal ehf.	15.9.2014	Rekstur fastlínu fjarskiptanets
Lindin, kristið útvarp	26.1.2015	Hljóðvarps- og/eða sjónvarpsdreifing
Ljós og gagnaleiðari ehf.	10.8.2009	Gagnaflutningsnet
Ljósfesti ehf.	19.12.2016	Rekstur fastlínu fjarskiptanets
Ljóspunktur ehf.	24.10.2017	Rekstur fastlínu fjarskiptanets
Loki Telecom ehf.	4.5.2015	Rekstur fastlínu og þráðlauss fjarskiptanets, gagnaflutningsþjónusta um þráðlaus og fastanet og hljóðvarps- og/eða sjónvarpsdreifing
Magnavík ehf.	1.4.2004	Gagnaflutningsþjónusta
Martólvan ehf.	26.11.2007	Talsíma, gagnaflutningsþjónusta og fjarskiptanet
MessageBird B.V.	1.9.2017	Talsíma- og farsímaþjónusta
Míla ehf.	4.4.2007	Fjarskiptanet
Mobiweb Telecom Limited	19.12.2016	Farsímaþjónusta
Nepal hugbúnaður ehf.	21.2.2005	Gagnaflutningsþjónusta og þráðlaust fjarskiptanet
Netvarp og Sport ehf.	18.7.2017	Hljóðvarps- og/eða sjónvarpsdreifing
Netvöktun ehf.	9.8.2018	Talsímaþjónusta, rekstur fastlínu og þráðlauss fjarskiptanets og gagnaflutningsþjónusta um fasta- og þráðlaus net

Neyðarlínan ehf.	6.10.1999	Talsímaþjónusta/neyðarsímsvörun
Nordic Networks ehf.	24.11.2016	Sæstrengur og gagnaflutningsþjónusta
Nova hf.	12.7.2006	Talsíma- og gagnaflutningsþjónusta
OnAir S.A.R.L.	29.4.2008	Farsímaþjónusta um borð í flugvélum (MCA)
Opex upplýsingatækni ehf.	13.3.2017	Talsímaþjónusta, rekstur þráðlauss fjarskiptanets og gagnaflutningsþjónusta um fastanet og þráðlaus net
Opin kerfi hf.	25.2.2011	Gagnaflutningsþjónusta
Origo hf.	12.12.2011	Gagnaflutningsþjónusta
Orkufjarskipti hf.	26.10.2001	Fjarskiptanet
Öryggisfjarskipti ehf.	6.10.2008	Fjarskiptaþjónusta og fjarskiptanet/TETRA
Premis ehf.	24.10.2017	Tal- og farsímaþjónusta, rekstur þráðlauss og fastlínu fjarskiptanets og gagnaflutningsþjónusta um fastanet og þráðlaus net
Protecion ehf.	5.3.2018	Rekstur fastlínu fjarskiptanets
Rafey ehf.	18.8.2015	Rekstur fastlínu fjarskiptanets
Rangárljós	29.8.2016	Rekstur fastlínu fjarskiptanets
Ríkisútvarpið ehf.	29.7.1997	Fjarskiptaþjónusta: Hljóðvarp og sjónvarp
Sensa ehf.	19.12.2016	Gagnaflutningsþjónusta um fastanet
Símaþjónustan ehf.	28.6.2013	Talsímaþjónusta
Síminn hf.	30.7.1998	Talsímaþjónusta, GSM, gagnaflutningsnet o.fl.
Sjónvarpsmiðstöðin ehf.	8.10.2009	Gagnaflutningsþjónusta
Snerpa ehf.	17.8.2000	Fjarskiptanet/ tal- og gagnaflutningsþjónusta
Streaming Media ehf.	10.10.2014	Rekstur þráðlauss fjarskiptanets, gagnaflutningsþjónusta um fastanet og þráðlaus net og hljóðvarps- og/eða sjónvarpsdreifing
Stykkishólmsbær	2.5.2002	Gagnaflutningsnet
Sumarsól ehf.	1.12.2015	Upplýsingaþjónusta um símanúmer
Sýn hf.	27.3.2007	Talsímaþjónusta, farsímaþjónusta, gagnaflutningsþjónusta og fjarskiptanet
Tech Support á Íslandi	3.3.2017	Talsímaþjónusta, gagnaflutningsþjónusta um fastanet og þráðlaus net
TELE Greenland A/S	24.6.2008	Sæstrengur
Tengir hf.	20.9.2002	Ljósleiðaranet
Þekking - Tristan hf.	16.1.2004	Gagnaflutningsnet og -þjónusta
Thomson Reuters (Market) Norge AS	1.9.2017	Gagnaflutningsþjónusta um fastanet
Thor Telecom Ísland ehf.	15.10.2014	Gagnaflutningsþjónusta um fastanet og þráðlaus net og hljóðvarps- og/eða sjónvarpsdreifing
Þorvaldur Stefánsson	14.10.2014	Flutningur skipaþjónustugagna
Tismi BV	5.3.2015	Tal- og farsímaþjónusta
Tölvun ehf.	25.4.2003	Gagnaflutningsnet og -þjónusta
Tölvustofa ehf.	15.4.2009	Gagnaflutningsþjónusta
TRS ehf	29.3.2004	Gagnaflutningsþjónusta
Truphone Limited	22.11.2017	Farsímaþjónusta og gagnaflutningsþjónusta um þráðlaus net
TSC ehf.	18.1.2002	Talsíma-, gagnaflutningsþjónusta og fjarskiptanet
Veðurstofa Íslands	18.7.2017	Rekstur fastlínu og þráðlauss fjarskiptanets og gagnaflutningsþjónusta um fastanet og þráðlaus net
Vegagerðin	7.1.2016	Rekstur fastlínu fjarskiptanets
Yellow Mobile B.V	18.7.2017	Talsíma- og farsímaþjónusta, rekstur fastlínu- og þráðlauss fjarskiptanets og gagnaflutningsþjónusta um fastanet og þráðlaus net
Zendesk International Limited	9.8.2018	SMS og VoIP þjónusta í gegnum ský





PÓST- OG FJARSKIPTASTOFNUN

# ÁRSSKÝRSLA 2018

