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Services of General Interest and Territorial Cohesion

European Perspectives and National Insights

With 23 figures

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Chapter 7: Provision and Development of SGI at the Edge: The Case of Iceland

1. Introduction

Iceland is one of the outposts of Europe and conditions are in many ways extreme. Although the country is very sparsely populated, it is at the same time highly urbanised which creates challenges for infrastructure and service provision. Both geographical and geological conditions have an impact, for example, on energy provision and transportation issues. The country has a welfare regime different to its Scandinavian counterparts and has had close ties to the US during last century. This chapter is based on a case study in the ESPON project SeGI and most of the data collection took place in 2012. The discussion here is on how conditions in the Icelandic setting shape or impact provision of services. This concerns geographical and geological conditions as well as issues relating to the settlement pattern and political and historical issues. SGI provision can, as is discussed in the introductory chapter of this book, be seen from three different perspectives: policy, law and context. This chapter will focus on the contextual and policy perspective. The legal aspects of changes in context and policy will also be addressed.

2. The case study setting and its context

The case study in this chapter is based on research carried out as part of a project named *SeGI – Indicators and Perspectives for Services of General Interest in Territorial Cohesion and Development* which was funded by the EU-programme ESPON (Rauhut and Borges, 2013). Data collection for the case study took place in 2011 and 2012 and was partly published in a special case study report as part of the project (Jóhannesson and Sigurbjarnarson, 2013).

Iceland and its settlement characteristics have a rather unique position in the European context in several ways. The total population size is around 325,000, of which over 63 % live in the capital city Reykjavík and its surrounding municipi-

palities in the southwest corner of the country, constituting the capital region. Most of the remaining population lives in towns or small villages along the coast. Therefore the country can be considered very urbanised, despite a population density of just 3.2 persons per km².

Due to the relative size of Iceland (approximately one third of the size of Poland) and the settlement pattern, service provision, especially in the more sparsely populated parts of the country, is challenging. As more remote regions have become ever more sparsely populated through out-migration, service provision has become more expensive. Due to similar reasons and issues such as increasing specialisation, recruiting healthcare specialists for those areas has become more difficult. On the other side of the coin is Reykjavík where services have concentrated. Its service role for the whole country seems to have become gradually stronger. The privatisation and liberalisation of the economy has accelerated the process. An example of this is the state telephone company, which has closed many of its offices and service centres. Finally, the credit crisis has to some degree limited the ability of the state to maintain services.

The case study region is northeast Iceland and has 29,000 inhabitants. Its size is more than half the size of Denmark or the Netherlands. Having a sizable regional centre, Akureyri with 18,000 inhabitants, the largest town outside the capital region makes it an exception among the rural areas. The region is divided into 13 municipalities, ranging from 55 to 18,000 inhabitants. Akureyri with its 18,000 inhabitants makes the service base relatively strong and the inhabitants are more privileged regarding access to services of general interest than other sparsely populated regions of Iceland with neither a strong regional centre nor easy access to the strong service base of the capital region. The distance from Akureyri to Reykjavík is around 400 km by road (roughly 5 hours) and 45 minutes by air which is extensively used. Air transport makes services in Reykjavík more accessible for other regions, but is at the same time expensive.

The population in the case study region has increasingly concentrated on Akureyri and neighbouring municipalities. Rural areas and smaller towns, especially in the far northeast part of the region, have been losing population and young adults are under-represented due to out-migration, the gender ratio is however very even.

Iceland belongs to the Nordic countries and is a member of the Nordic Council, along with the countries of Scandinavia. Iceland gained sovereignty in 1918 and declared independence from the Kingdom of Denmark in 1944. The country joined NATO in 1949 and the US have had a naval base and airport there until 2006. Links to the US were therefore very important during the second half of the century. An inclination towards Europe has increased gradually, with participation in EFTA 1970 and the EEA-agreement in 1994. A leftist government applied for EC membership in 2009, but with the election of a new right-wing

government in 2013, the negotiations were adjourned. The issue of which welfare regime Iceland belongs to has been debated in recent years and may be looked at in the above context. Public spending on social welfare has been relatively low compared to the other Nordic states but instead there was importance on maintaining high labour force participation. “Although included within the Nordic family of nations, propinquity to social democratic welfare regimes has not determined the development of welfare arrangements in Iceland” (Irving, 2011: p. 235) but instead there has been “affinity towards other more liberal ‘settler’ states (such as New Zealand), and to strong US relations” (ibid, p. 236). Iceland was one of the first victims of the credit crisis in 2008 and after the crisis, a leftist government gained a majority in the period 2009–2013. That government represented a turn towards a more Scandinavian welfare regime. It aimed at “creating a Nordic welfare society in Iceland, where collective interests take precedence over particular interests” (Prime Minister’s Office, 2009). A right-wing government took over in 2013 and more a liberal emphasis was presented again. According to the analysis of Humer and Palma (2013), public spending on certain subdivisions of SGI in 2009 in Iceland was among the highest in the Europe.

3. Data and methodology

A survey was carried out among the 13 municipalities of the case study region in February 2013 and answers were received from all of them. This was considered important by the Icelandic team due to the low number of municipalities and a wish to gather as much relevant information as possible. The survey used a standardised questionnaire prepared by the research group (Świątek et al., 2013). This questionnaire was sent by mail to the municipal offices and in the days following, municipal offices were contacted by a researcher by phone. The questionnaire was answered by someone who has a good overview of the services in the municipalities, usually the director or mayor. A few SGI in this joint questionnaire did not apply to Icelandic conditions and were omitted.

4. General characteristics of service provision in Iceland

In many respects, Icelandic conditions are specific and the polarised development of the country with high urbanisation level and yet low population number can be seen in the case study region (Jóhannesson and Sigurbjarnarson, 2013). For the purpose of this chapter, these specific conditions and findings have been highlighted.

Services of General Economic Interest (SGEI)

Specific characteristics in provision services of general economic interest relate to the energy sector. Iceland is volcanic as a part of the Mid-Atlantic ridge and an abundance of geothermal water is found in most regions. This provides heating for approximately 95 % of homes as well other uses, such as swimming pools, industrial use and even for melting snow from paved surfaces. Most heating grids are owned and operated by municipalities. The case study region is on and near the main geothermal zone that crosses Iceland diagonally SW-NE. However, geothermal water is not accessible in some rural areas due to distances and the cost of building the geothermal grid. Constantin et al. (2013) in a SWOT analysis pointed out that geothermal energy is an example of SGI that provides strength for global competitiveness of the respective regions.

Water for consumption is abundant and usually considered of good quality but interestingly only sporadic information is available on the issue. Water is generally distributed by municipalities and for homes it is usually paid for by a water tax, however firms pay according to consumption. In farming communities most farms have their own water sources but in other cases water is provided by municipalities.

Waste management is the responsibility of municipalities who have regional collaboration due to strict regulatory framework and economies of scale. In 2008, 91 % of households recycled waste in one way or the other (Umhverfisraduneytid, 2009) and in 2007, 41 % of waste went to landfills. An example of recent progress is a large composting station for Akureyri and neighbouring municipalities, built in 2009. Landfills are continuously becoming fewer and further apart and municipalities and landowners have not been willing to locate these in their vicinity. Transportation costs are therefore increasing and increased recycling and less going to landfills leads to savings in transport.

Another responsibility and challenge for municipalities is the sewage system which is in need of upgrading, both for health and safety reasons as well as to fulfil European regulations adapted through the EEA agreement in 1994 (Umhverfisraduneytid, 2009). Slower upgrading in recent years has been linked to the worsening economic conditions. Estimate suggest that 70 % of inhabitants in Iceland live where sewage is treated. The situation is best in the capital area. One of the interviewees in the case study, a manager for the Public Health Authority of the region informed that smaller and more remote municipalities have troubles fulfilling these duties. However, in some larger urban municipalities there is greater need to take action and improve these systems. An interesting finding of the survey carried out amongst the municipalities is that both the quality of sewage systems and accessibility were graded high by the respondents, contradictory to the interview cited above.

Nearly all electricity is renewable energy produced by either hydropower or geothermal power stations. Future possibilities for sourcing electricity from environmentally friendly sources are considerable compared to the size of the population. Electricity is distributed to homes by companies that are usually owned by the state or municipalities. The main distribution network of electricity, connecting all regions and regional power grids is owned by the state and was, until 2005, a part of the national power company Landsvirkjun which produces most of Iceland's electricity. To distribute enough energy to meet the different needs of all regions is becoming a challenge due to opposition from municipalities, who hold the planning competence, and landowners relating to the renewal of the major power transmission lines circling the island on environmental grounds. High volume ground cables are spoken for instead, but that is considered a too expensive solution by the government energy company Landsnet.

Domestic transportation of goods is, for the most part, provided by two private companies, a market situation that is very common in the small Icelandic market. Domestic collective passenger transport is by plane, bus and ferry. For regions located more than three hours driving distance from Reykjavík, air transportation is very important. In remote areas where air transport is not economically feasible, the state provides subsidies for the service. Bus services are provided to most of Iceland and are managed by regional associations of municipalities with financial support from the state (*Þingsályktun um samgönguáætlun fyrir árin 2011–2022*). Five ferries for transporting goods and people operate in Iceland, connecting islands to the mainland, two of which are in the case study region. Ferries are organised by the Public Roads Administration but operated by private companies and subsidised by the state. Low population numbers and density has contributed to a lack of public transport in many rural areas and there has been discussion whether it would be possible for the general public to share existing transport, such as the school bus system or even postal services. The integration of school buses and public transport has been experimented with in one municipality in the case study region since 2013 and according to a recent survey, the majority of homes are satisfied with the service (Halapi and Jóhannesson, 2014). However, due to regulations and complexity, integration of public transport with the postal service has not been possible yet.

An example service closures due to privatisation, changes in technology and out-migration from rural areas is the post offices, but in a regional development plan 1994–1997 these were among the services with the lowest threshold level (*Byggðastofnun*, 1993). These have also merged with small bank branches or shops to maintain service in smaller settlements.

International transport was not a focus of the SeGI project, but due to dis-

tances, international transport of passengers is primarily by air and there is a variety of destinations both in Europe and North America served by many airlines. This is both because the airport in Keflavik SW-Iceland is hub for air traffic between the continents and the high number of foreign tourists that keep up the service level (Ferðamálastofa, 2014). A Faroese-owned ferry provides a connection to Denmark via the Faroe Islands from Seyðisfjörður in eastern Iceland. These are the two primary points of entry into the country.

ICT, including the telephone network, has been entirely provided by private companies since 2005 when the largest telephone company in Iceland was privatised. Unlike many economic sectors in Iceland, there appears to be considerable competition and the number of internet connections per capita in Iceland is among the highest in the world with 93 % of households having an internet connection in 2011 (Státice, 2014).

The Global Information Technology Report 2010–2011 by the World Economic Forum (2011) ranked Iceland:

- 1st out of 138 in terms of internet users
- 1st out of 138 in the use of virtual social networks
- 1st out of 138 in terms of internet access in schools
- 1st out of 138 in accessibility of digital content
- 1st out of 137 in the number of secure internet servers

As in many other respects, Iceland shows a polarised development. Conditions are excellent in most urban areas whilst in rural communities, high speed connections are lacking. There are limitations to the optical fibre network in rural areas; long distances and high mountains. This represents an obvious obstacle for providing SGI to a small population in a large and geographically “difficult” country, but it is not the only reason. When the state telephone company was sold in 2005 the infrastructure was sold as well. Due to market reasons, these private companies have not invested in extending their networks in rural areas where return on investment is little. To compensate for this, an ICT fund was established in 2005 (*Lög um fjarskiptasjóð*) with the purpose of funding ICT infrastructure in disadvantaged areas. The fund was amongst the victims of the economic crisis as in 2012 it was used to financially assist the Farice company when it fell into financial trouble but the company operates one of two undersea cables providing internet connections to the outside world (Ríkisendurskoðun, 2012). The increasing importance of ICT will make poor internet and mobile network in rural areas an increasing problem; high-speed broadband can be considered just as important as high-speed trains (Cole and Cole 1998).

Humer and Palma (2013) created an index of SGI based on data from the ESPON SeGI project and in this analysis Iceland was among the countries where the index of SGEI turned out to be higher than the index of SSGI. The values of

the SGEI index turned also out to be higher in the UK and the “Pentagon” region of North-West Europe as well as some capital regions; while the SSGI index was relatively higher in peripheral regions. In their analysis, regions with a high share of rural population correlate negatively to SGI provision, especially SGEI considered to require a higher critical mass. Interestingly, Iceland had a positive index for both SGEI and SSGI, despite its extremely low population density of 3.2 per km². What is probably more important here is the fact that urbanisation level is very high; 94 %, with almost two thirds of the population lives in the capital region.

Social services of general interest (SSGI)

Important for the provision and use of certain SSGI is the fact that Iceland has a relatively high birth rate and population increase, putting more pressure on services for the younger section of the population, contrary to many other countries. In 2013, the fertility rate was 2.08 and children under 18 years of age were 24.8 % of the population. Those older than 65 years of age made up 11.2 % of the population (Statistics Iceland, 2013).

The education system is divided between municipalities that provide pre-primary education and compulsory education and the state is responsible for upper secondary schools (gymnasiums) and most of the university education.

Children usually enter the school system at 1.5–2 years of age in preschools with parents paying for around 20 % of the total cost. Compulsory school age is 6–15 years old. In rural areas, challenges arise due to fewer children and the closure of many schools. The merging of municipalities has stimulated this and an improved road network makes it possible to serve larger areas.

Upper secondary schools is four years after compulsory school (16–20 years) and thus older than in most countries. The location of upper secondary schools has been considered important for decreasing out-migration, thus new schools have been established in rural areas but distance learning and evening courses are available in many of these schools.

Seven tertiary education institutes serve the Icelandic population which may be considered abundant for a country of 320,000 inhabitants, but pressure is increasing to merge institutes. Three are run by private bodies and four by the state. Interestingly, all of the institutions receive the same basic funding from the state based on a specific financing model. A students’ loans fund offers subsidised student loans for subsistence and tuition. Doctoral studies were previously pursued primarily at universities abroad, however in recent years the number has increased at the University of Iceland. The University of Akureyri is located in the case study area and has around 1,500 students. When established

in 1987 one of the justifications for the decision was regional development (Guðmundsson, 2013).

Public administration is to a large degree concentrated in Reykjavík where the parliament, the ministries and most institutes are located. Access to these institutes from other parts of the country has been considered important and having a domestic airport in the city vital in that sense.

The location of cultural and recreational services is noteworthy, as all institutes of national interest are located in Reykjavík or its immediate surroundings as seen in the table below (The ministry of culture and education, 2014).

Table 1. Major cultural institutes of national interest

Cultural institutes of national interest	Location
Fornleifavernd ríkisins (the archaeological heritage agency of Iceland)	Reykjavík
Gljúfrasteinn (museum)	Mosfellsbær
Húsafríðunarnefnd (the national architectural heritage board)	Reykjavík
Íslenski dansflokkurinn (the Icelandic dance company)	Reykjavík
Kvikmyndamiðstöð Íslands (the Icelandic film centre)	Reykjavík
Kvikmyndasafn Íslands (national film archive of Iceland)	Hafnarfjörður
Landsbókasafn Íslands – Háskólabókasafn (the national library)	Reykjavík
Listasafn Einars Jónssonar (art museum)	Reykjavík
Listasafn Íslands (national art museum)	Reykjavík
Náttúruminjasafn Íslands (museum of natural history)	Reykjavík
Ríkisútvarpið ohf. (the Icelandic national broadcasting service)	Reykjavík
Sinfóníuhljómsveit Íslands (the national symphony orchestra)	Reykjavík
Stofnun Árna Magnússonar í íslenskum fræðum	Reykjavík
Þjóðleikhúsið (the national theatre)	Reykjavík
Þjóðmenningarhúsið (national theatre, the national centre for cultural heritage)	Reykjavík
Þjóðminjasafn Íslands (the national museum)	Reykjavík
Þjóðskjalasafn Íslands (the national archives)	Reykjavík

Cultural centres have been established according to contracts between the state and municipalities in eight regions of the country, something which has been method of compensation for this obvious unbalance.

Healthcare is primarily the responsibility of the state and there are two hospitals (classified as such); in Reykjavík and Akureyri and 12 other smaller hospitals/health institutes. The merging of healthcare institutes and enlargement of service areas have been advocated by the state. In the case study area there is a regional hospital in Akureyri with close to 500 full-time positions, this

serves as a 'backup' hospital for the main hospital in Reykjavík. A smaller hospital is located in Húsavík, 100 km east of Akureyri and one in Siglufjörður 75 km north of Akureyri. Healthcare centres are located in most towns and villages, but opening hours are longer in the larger centres. According to an expert interview with the director of the hospital in Akureyri, the special status of the hospital is its relative size which contributes to more diverse of services and more advanced equipment than in smaller healthcare institutes in the region. Specialists from the regional hospital visit healthcare centres in other parts of the case study region and thus compensate for a lack of local services and distance health services are also offered. According to the director, one of the main challenges is attracting people with the right skills to meet demand. A relatively small hospital like this is less attractive to specialised staff than larger ones and this is both a challenge and a threat to services in small places. Since the crisis of 2008, the departments providing care for outpatients have been strengthened, a measure that is less expensive than in-patient care. Specialist fields have become more and more specialised and the same applies to equipment and knowledge to use it. The director mentioned that possible hindrances to the access of services are primarily finance-related. Distance from the hospital and social circumstances could also have an impact, but emergency services are usually provided regardless of financial status, social status or geographical location. According to an interviewee who works for the consumer association in the region, complaints concerning increases to the cost of health services are very common but these have been increasing in the past years, especially after the financial crisis.

Social care is a service primarily carried out by the municipalities. In some cases, several municipalities collaborate on these services over larger areas. After the credit crisis of 2008 – and the resulting increase in unemployment and worsening economic conditions in general – pressure on the social services provided by municipalities has increased. In the case study region, the main town of Akureyri has a larger role than other municipalities since it has integrated its healthcare centre, service for disabled persons and elderly homes according to a special contract with the state in 1997. This was a part of an experimental project in which a number of municipalities took over some of the service tasks of the state in order to rearrange the services, improve access and make better use of resources. Due to the positive outcome of this arrangement, the experiment continued and a similar arrangement was undertaken by more municipalities and collaborations of municipalities. Services for the disabled were made the responsibility of all municipalities in 2011. Compulsory social security is primarily provided by the state. Social insurance administration in Iceland is financed by the state treasury, with employers paying premiums for

individuals' social insurance to the state treasury on all paid wages. The funds collected in this way are used, amongst other things, to finance social insurance.

In the field of social housing municipalities provide information and counselling, manage housing benefits and process applications for service apartments and nursing accommodation. Social housing is however very limited in Iceland as private ownership has for long time been important amongst Icelanders. Social housing is provided primarily by the municipalities and those who need such solutions can apply for assistance at the social care offices and are provided with housing according to certain rules. Rent became very expensive after the credit crisis and at the same time the situation worsened for young people and first-time buyers. As a result, pressure has increased on social housing and the house rental market in general.

5. Survey among municipalities in Northeast Iceland 2012.

In the following section, the main findings of the survey among 13 municipalities in the case study region in northeast Iceland will be outlined under the themes of *accessibility*, *status of services* and *quality*. The survey was carried out as part of ESPON SeGI project in February 2012 and the questions were the same in all study regions of the project. Two service functions did not apply to the Icelandic part of the research, namely railways and gas supply.

Accessibility of SGI in their municipalities was generally considered good by respondents. Most services functions received an average grade between 4 and 5 on the scale 1–5 (with 1 as the lowest score and 5 the highest and most desirable). The lowest score was given to services that are primarily only found in urban areas due to their nature i.e. large scale and/or specialised, such as large shops and tertiary education. When carrying out a SWOT analysis of SGI, based on data from the ESPON SeGI project, Constantin et al. (2013) listed increased concentration of SGI in urban areas as one of the weaknesses in the context of territorial capital development. This creates imbalances in SGI provision, especially in remote, sparsely populated, mountainous, insular and outmost regions. Accessibility and availability of these SGI relates both to central place theory and Maslow's "hierarchy of needs" as described by Milbert et al. (2013). SGI that constitute greater needs and frequent use tend to be located in smaller places than those which may be accessed more seldom and need more customers to thrive. Respondents from smaller municipalities and in more remote locations obviously had more impact here. Internet services got the lowest score of 3.8; the service where accessibility is most noticeable between urban and rural locations. In rural locations respondents complained about both accessibility and the price for the service and this was supported by interviews. IT services are

amongst the services which have been privatised in Iceland, as was described above, and in the wake of that the market forces have increased differences in their service provision to urban and rural locations. At the same time, technology has progressed much and dependence on IT in most aspects of society has increased. Thus access to the internet is probably becoming increasingly important according to the Maslow's "hierarchy of needs" and at the same time centrality of the service. Table 2 shows these results.

Table 2. Question on the accessibility to SGI

Researched Services of General Interest	"Please evaluate accessibility to basic services of general interest within your locality." (on a scale 1-5, where 5 is the highest score)
Local public administration	4.8
Health centre	4.7
Pharmacy	4.7
Hospital	4.3
Social Care	4.7
Kindergarten/ pre-school	4.8
Primary school	4.9
Secondary school	4.5
Tertiary school/ university	4.1
Bank/ basic financial services	4.9
Postal services	4.6
Personal and household services	4.6
Cultural centre	4.3
Library	4.8
Large shops	4.0
Local roads	4.7
Main roads	4.3
Railways	-
Electricity network	4.7
Water supply network	4.6
Sewage system	4.5
Waste disposal	4.8
Gas supply	-
Telephone network	4.9
Mobile phone network	4.3
Internet	3.8

When asked about *status of services* it is clear that according to respondents several types of infrastructure need to be renovated or refurbished in municipalities. The single most important service function in this regard is the road network and it is also the *only* case where the option is used that an infrastructure/service function needs to be built up from scratch. As cited by Littke et al. (2013), the Fifth Cohesion Report of the European Commission states that many of the problems faced by lagging regions stem from inadequate transport links. This is relevant in the case of Iceland as examples have shown that considerable upgrades to the road network have led to positive regional development, see e.g. Bjarnason and Kjartansson (2014). This refers to both the external and internal transport links. The telephone system appears to be in best shape of all technical infrastructure as most respondents answered that there is no need for new investment. This is quite interesting because this is related to the IT network, used partly to provide xDSL connections to homes. This network can provide internet connections of sufficient quality in urban areas and close to telephone stations, but as the distance from them grows (over ca. 4–8 km) so diminish the opportunities for using copper lines in rural areas and other solutions are needed such as optical fibre cable or G3/G4 wireless connections. Waste disposal is another service where most respondents answer that the current situation is good; nine municipalities stated that there is no need for further investment but in four municipalities it is indicated that this needs either to be expanded or refurbished. In fact, much progress has been made in re-organising the waste disposal in most municipalities in recent years so that this does not come as a surprise. An interesting finding is that just less than half of respondents/municipalities answer that there is no need for further investment in sewage systems, something which is not quite in line with an expert interview with the director of the Public Health Authority of the region. Judging by that interview, much improvement has to be done in many municipalities. These improvements are in many cases very costly and several municipalities should already have made improvements to fulfil regulations. The internet is according to respondents in the aspect most in need of infrastructure expansion and this has to be considered against what has been discussed above regarding how the telephone network and the internet connections relate to each other. The electricity network is also a service considered in need of expansion according to the survey. This relates to an ongoing discussion in Iceland on the main electricity network which circles the country. Its oldest parts date from the 1970s and are in need of renovation, due both to age and the fact that their capacity is considered too low compared to today's standards. Secondly, in rural areas single-phase electricity is still common which hampers, for example, the use of large electric motors. Thirdly, smaller overhead lines are vulnerable to ice and

these have been replaced in some rural areas by power cables that are at the same time providing three-phase electricity.

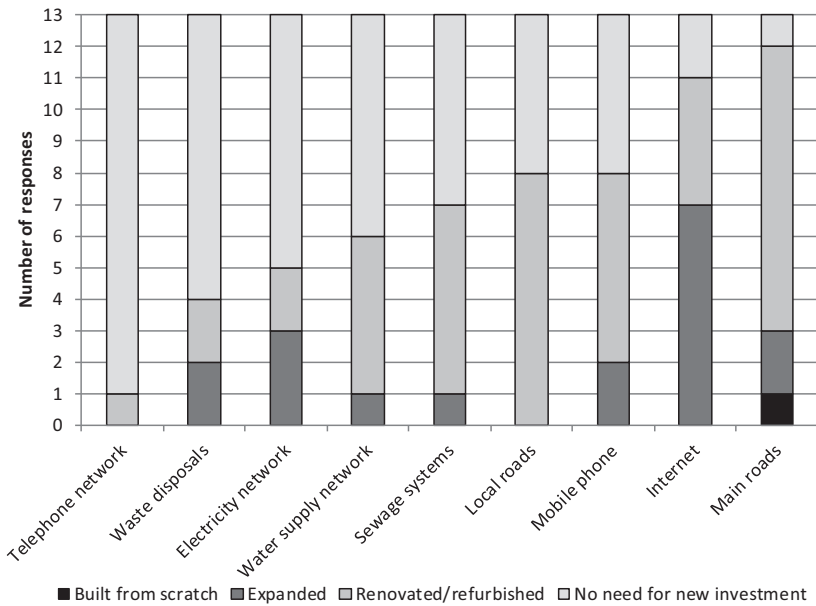


Figure 1. “Which of the types of infrastructure identified below in your locality should be provided, expanded or renovated?”

Four types of technical infrastructure were primarily considered in need of refurbishment or renovation. These are the main roads, the electricity network and the internet. Consensus is highest regarding the main roads, as 10 out of 13 municipalities consider it being in need of renovation or refurbishment.

Quality of services, as indicated in Table 3, is on average considered to be in good condition by respondents. However, the internet got the lowest value of quality of technical infrastructure or services along with the main roads. These two infrastructure types are commonly criticised parts of the infrastructure in Iceland, especially in rural areas.

Table 3. Question on the quality of SGI

Researched Services of General Economic Interest	“Please assess the quality (like durability, reliability, functionality) of the technical infrastructure or services provided in your locality.” (on a scale 1–5, where 5 is the highest score)
Local roads	4.1
Main roads	3.8
Railways	-
Electricity network	4.5
Water supply network	4.2
Sewage system	4.4
Waste disposal	4.5
Gas supply	-
Telephone network	4.8
Mobile phone network	4.3
Internet	3.8

6. Discussion

Information collected and analysed in the SeGI case study in Iceland shows that the economic crisis that hit the country in 2008 impacted services negatively. This varied according to the type of services and geographically between urban and rural settings. Even if it was the aim of government to protect basic services, it was forced to cut costs in service provision and infrastructure to finance the huge loss of the state caused by the bankruptcy of the banks and devaluation of the national currency of Icelandic Crowns.

“The impact on solidarity of the current recession is potentially injurious. The IMF reports that Iceland’s progress is ‘broadly in line’ with the recovery plan (IMF, 2009) but the unemployment rate, which peaked at 5 per cent in 1995, rose from 2.5 to 7.1 per cent between 2008 and 2009. In addition, spending on social security and welfare increased from 4.4 per cent of treasury expenditure in 2008 to 46.5 per cent in 2009”. (Irving, 2011, p. 237)

Impacts according to geographical differences between regions and the low population density can be seen. Rationalisation and austerity means that maintaining services in rural areas became increasingly challenging and this is supported by interviews and our survey. This is in line with Milbert et al. (2013, p. 61) who found in their analysis of data in the ESPON SeGI project that “var-

iation of accessibility across case study regions increases on services of medium and high centrality”.

The internet is in need of special attention by the Icelandic authorities because of the strong polarisation of quality and access between urban and rural areas. When Iceland telecom was privatised in 2005 it was the intention of the government to improve infrastructure and various services, e.g. the mobile network and high-speed internet connections in rural areas and along the main roads¹. With the collapse of the banking system during the crisis, and the resulting loss to the Icelandic state, this intention was cancelled and these and other infrastructure projects were postponed or altogether removed from planning and policy documents. Another major finding of the survey is that the road network is of concern for many respondents. The prioritisation of new road projects is very much debated between rural and urban areas since the needs and objectives are different. Rural regions need basic connections which can be relied on for year-round traffic, but Reykjavík needs improved roads to allow for an increasing volume of traffic.

Privatisation of services and subsequent demand for increased efficiency and economy has had diverse impacts. Emphasis by the private companies has been placed on areas where business is lucrative, i.e. a relatively large clientele is accessible and the costs to provide the services are less. This impact is clearly seen in the case of IT services. This concentration can also be seen in public services as Światek et al. (2013) in their comparison of case studies in the SeGI project pointed out that in Iceland, centralisation is physical and mostly focused on the high-level services, such as specialised medical services in the capital region, making use of agglomeration effect.

Pressure to improve services can come from different directions, such as from the EU (through the EEA agreement), food producers and competing land uses, e.g. recreation. This is noticeable in certain types of services such as waste management and sewage treatment. It was pointed out by an interviewee that the influence of European laws and traditions can be observed in consumer services, even down to this small case study region in Iceland. The EU runs seminars in how consumer associations can have an impact and there is, for example, an importance on trans-European consumer protection so that if faulty product is bought in one country you can seek solutions in another country. According to the same interviewee, the EEA agreement improved the position of consumers as many regulations on consumer affairs were adopted into Icelandic laws and regulations and that generally European regulatory framework was viewed as being more consumer friendly than the Icelandic one.

Parliament decisions have much impact on development of services. An ex-

1 Act no. 133/2005, abolished with Act. 173/2008.

pert interviewee mentioned that this regulatory framework has a tendency to promote centralisation as demands of various kinds can primarily be met in the capital region.

Lack of planning by the government on matters such as how to provide hospital services in times of austerity is an issue which needs attention. Due to necessary cutbacks during economic recession, service will become more limited and in some cases certain service types will cease to exist in some places. An example of this is small hospitals that may not be able to provide as many services as before and patients will have to seek services elsewhere. An expert interviewee pointed out that simply planning would come primarily through the state budget, i. e. how much should be spent each year and the management of each institute would then have to adjust their service capacity accordingly. The state did not put forward a definite policy about which hospital services should be offered in each place in north Iceland following the credit crisis. Planning proposals were set forward in many reports, but usually each institute gets certain money from the state without clearly stating which services it shall offer. Similarly, another interviewee discussed the lack of robust planning as regards public transport as an example. The goals may be ambitious, but funding is too limited for the planned system to function properly.

Even if some respondents in the survey and interviewees agree that there are services and infrastructure that might be more accessible and/or in a better condition (and the latter applies especially to certain types of infrastructure), the quality of the services appears to be satisfactory for the majority of respondents.

One of the main challenges for the region is development of infrastructure a common concern for many regions of Iceland. Network infrastructure such as the roads and the internet network are the most challenging according to our data. However, a consensus is lacking between regions as conditions vary considerably and so do opinions on how to prioritise projects. The prioritisation has to take into account different purposes of road projects; whether it is to open for year-round access between places, increase the capacity of roads, increase road safety, or facilitate regional development policy statements (Jóhannesson and Ólafsson, 2003). This appears to become increasingly challenging in times of austerity when people from different locations are competing for limited funding.

Some of the objectives of the new transportation policy of Iceland (2011–2022) have much relevance in the context of the SeGI project (*Þingsályktun um samgönguáætlun fyrir árin 2011–2022*):

- Accessibility and mobility in the transportation system for movement of people and goods within and between regions shall be improved. Conditions will be created for most citizens to access centres of employment and services within one hour.

- Centres of employment and services in the country will be defined in regional planning policies and Iceland's national plan.
- Transportation should support structure and development of service areas in all regions.
- Harbours and airports that shall ensure easy access to and from the country will be defined.

Some of these objectives appear to support concerns brought up in the case study, such as accessibility to urban functions, the state of the road network and generally to “unify” the region with the use of better roads. Today, however, it appears somewhat fragmented due to the long distances and inadequate road network preventing reliable connections during winter.

Many municipality mergers have taken place in the case study region since the late 20th century². However, according to an interview, SGI would have been more economical and effective with municipalities merging into larger units. Municipalities with very few inhabitants may stretch over considerable distances³ and have little service capacity unless collaborating extensively with larger municipalities. This is amongst the challenges associated with providing services, territorially speaking, at the edge.

The impacts of privatisation are considerable according to interviewees, the process being always the same and the impacts disproportionately felt in rural areas more than in urban locations, leading to complaints about poor service and high prices where market conditions are not at hand. To maintain service levels different services, post offices and banks – for example – have been combined in rural areas.

7. Conclusions

Among its Nordic counterparts, Iceland is considered to have a specific welfare regime. “Although included within the Nordic family of nations, propinquity to social democratic welfare regimes has not determined the development of welfare arrangements in Iceland” (Irving, 2011, p. 235). Instead there has been “affinity towards other more liberal ‘settler’ states (such as New Zealand), and to strong US relations” (ibid, 236). However after the credit crisis (2009–2013), the first leftist government in Iceland took over; a coalition of social democrats and the left green party. It placed welfare issues high on its agenda and referred to

2 From 28 municipalities in 1993 down to 13 in 2012.

3 In January 2014 seven out of 74 municipalities had fewer than 100 inhabitants, there of two in the case study region.

Nordic welfare regimes. However, in 2013 a right-wing government took over again with more liberal agenda.

The settlement characteristics obviously provide an extra element to the question of provision and accessibility of SGI since almost two thirds of the population live in Reykjavík and surrounding municipalities. In that region and its immediate hinterland the level of and accessibility of services is usually very good while remote regions face more challenges. Despite this, SGI appear to be of a relatively high level in the case study region, even if accessibility depends very much on the municipality in which you are located. Roads and the internet are services in need of particular attention in order to even out matters of access in rural and urban areas. Different access to services can also be noted within the case study region. The Akureyri municipality has the majority of inhabitants or 62 % of a total of 13 municipalities. A challenge is to make services with a higher “threshold level” accessible to those living in smaller localities where these services do not generally exist. The region is over one-fifth the size of Iceland, very mountainous and there is heavy snow during winter. Upgrading the road infrastructure, amongst other things, to ease access to services is considered important, such as replacing mountain roads with road tunnels. In fact, much has been achieved in this regard. In 2017, a new road tunnel will open which improves year-round access to Akureyri. Previous tunnels were opened in 1967, 1990 and 2010. Compared to regions in northwest and east Iceland, inhabitants in the case study region in northeast region have better potential access to SGI due to the existence of the strong regional centre that is gradually made more accessible for its hinterland. The challenges for the next years include prioritising road projects so that accessibility to services amongst other things will be high on the agenda.

Services of general interest in Iceland and the case study region appear to be in a relatively good condition, even if there are definitely challenges in the form of financial conditions, the state budget, the budget of municipalities and individuals, distances, low population density and the transport and communications network in certain areas. This general finding can be observed both from collection of diverse data from public sources as well as from the questionnaire and the six interviews conducted.

Privatisation and the demand for economisation have the tendency to centralise services in urban areas. The financial crisis has had a strong impact on SGI as it has limited the ability of the state to finance services. The boom period prior to the crisis on the other hand fuelled general growth in the capital region of Iceland. Subsequent cutbacks in public expenditure were worse in the rural regions.

Future challenges include the question of consensus on how to provide SGI and where. A declining population in rural areas creates uncertainty about

maintaining services such as schools and healthcare. With limited funding the provision of services will be increasingly challenging. In many ways, Iceland is considered to be in a relatively good position to provide an economic basis for welfare society with natural resources such as renewable energy, fisheries and good conditions for development tourism. However, the country is still struggling with the aftermath of the financial crisis, which continues to have an impact on the economic conditions, SGI and society in general. Providing services at the edge is thus both a challenging task due to involvement of the global economy and the specific geographical conditions.

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