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Service innovation in
the Nordic countries:
Key Factors for
Policy Design

Service innovation policy measures in Iceland*

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Introduction

The vast amount of literature on innovation, economic growth and competitive capabilities that now exists is very much grounded on the following; the determinants of long run productivity growth and wealth creation are exclusively linked to technological innovation in the manufacturing process (Hauknes, 1998). The general view has been that the 'engine of growth' lies in product and process innovations in the manufacturing industries, and that the decisive factor for national competitiveness in a globalised economy is the ability to create and utilise industrial and commercial opportunities arising from the dynamic 'generic technologies'.

These views have been substantially reflected in innovation and technology policies in European countries. The SI4S project group argue, based on their research and literature review on services in European innovation systems that service related 'specific' innovation systems in general and only weakly integrated into wider innovation systems. Hauknes (1998) points out that although there is (almost) no such thing as a service dimension to innovation policies, it does not imply that innovation and technology policies are irrelevant for services. First of all, the participation of services in economic and technological networks implies a 'spill-over' effect to services. Secondly, considering the concept of innovation policies beyond the limited contest of direct innovation support policies, there are no doubt that these policies have significant effects on innovation performance involving services.

In this overview of the Icelandic service innovation policy measures, innovation in the service sector will be viewed upon as follows; Innovations are the implementation of decisions and actions taken by the firm that involve significant changes in the firm's products, production methods, internal organisation and external relations (Hauknes, 1998). Figure 1 was formulated based on the SI4S report to act as a guideline for the mapping of Icelandic service innovation policies. The figure shows (i) types of services that should be taken into consideration when analysing innovation policy measures; (ii) types of policies and programmes that exist elsewhere in Europe and have to do, at least to some extent, with services, and (iii) the two different emphasis in policy formulation; policies that are oriented towards specific *technological or economic objectives* (i.e. the focus of policies until now) and policies that are *open-ended and framework building* (i.e. what the policies should focus on in the future). The last point helps in identifying policies and analysing them from the service sector perspective; the latter type of policies lends more room to the world of innovation in the service sector.

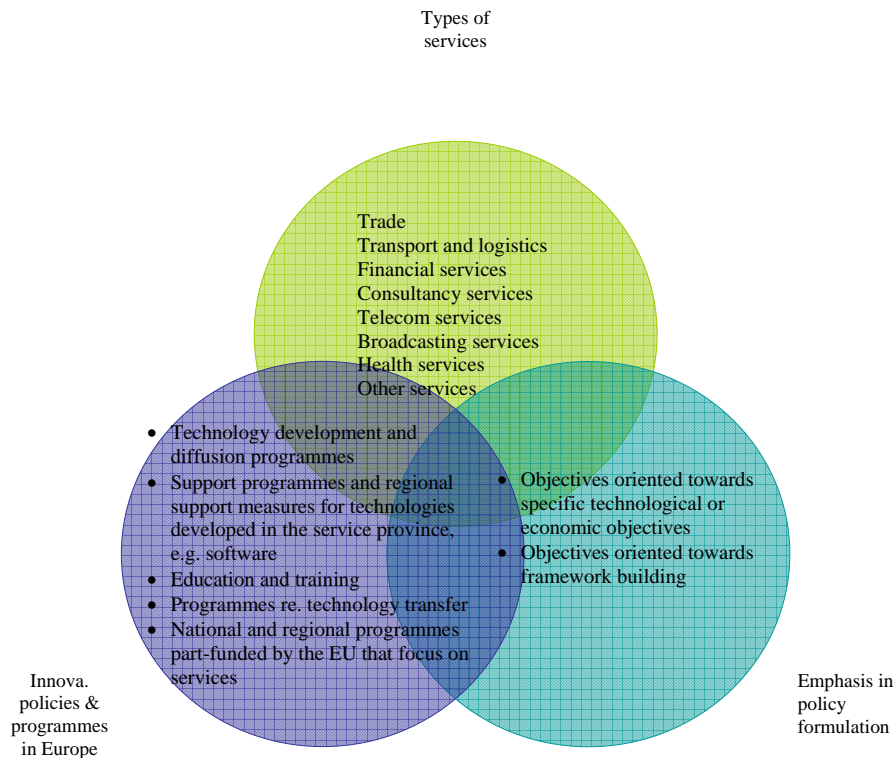


Figure 1. The focus of the mapping of Icelandic service innovation policy measures

I. The Icelandic Innovation System

Iceland's innovation policy framework and national innovation system were restructured at the beginning of the 1990s as a result of several external and internal developments, a process that continued in 2003 when the Science and Technology Policy Council (SPTC), based on new legislation on the organisation of science and technology policy and the funding of research and technological development in Iceland, was enacted. Until 1987 there was one research council in Iceland, the State Research Council which was mostly concerned with applied technological and scientific R&D. In 1987 the Council of Science was established. Its focus was on high quality research. At the same time, the State Research Council continued in existence. Eight years later (in 1994) the two councils were amalgamated into the Icelandic Centre for Research, RANNIS. The council was established following an OECD report on R&D policy. The idea was that RANNIS would have the responsibility for the management of two research funds, one for basic research (the Science Fund) and the other for applied research and development

(the Technology Fund). However, the funds were not intended to be totally separated. Instead RANNIS would try to achieve a goal-oriented cooperation between the two funds that would be the benefit of R&D as a whole. The intention was to remove the linear R&D approach. After a five year period, RANNIS introduced changes into the pattern of its R&D programme which led to the formal elimination of the linear approach.

In January 2003, Iceland took further steps towards a more systematic approach to innovation policy. New legislation was passed that, amongst other things, created a Science and Technology Policy Council (STPC) along Finnish lines. The 2003 legislation is composed of three separate laws:

- **Law on the Science and Technology Policy Council** under the Office of the Prime Minister
- **Law on Public Support to Scientific Research** under the Ministry of Education, Science and Culture
- **Law on Public Support to Technology Development and Innovation in the Economy** under the Ministry of Industry and Commerce

1.1 The Science and Technology Policy Council provide for the permanent seat of three other ministers, the Minister of Education and Science, the Minister of Industry and Commerce and the Minister of Finance. Two other ministers with research in their portfolio can be added to the council at the discretion of the Prime Minister. Fourteen other members are appointed to the Council through nominations as follows:

1. Four nominated by the coordinating committee of higher education institutions (representing eight higher education establishments)
2. Two nominated by the Icelandic Association of Labour
3. Two nominated by the Association of Icelandic Industries (Employers)
4. One nominated by the Minister of Education and Science
5. One nominated by the Minister of Industry and Commerce
6. One nominated by the Minister of Fisheries
7. One nominated by the Minister of Agriculture
8. One nominated by the Minister of Health and Social Security Affairs
9. One nominated by the Minister for the Environment

While not stipulated in the law it is the declared intention that the nominees to the Science and Technology Policy Council shall have scientific, technical and other relevant qualifications and connections to secure the effective implementation of the Councils missions.

The role of the Science and Technology Policy Council is to promote scientific research and research training in the sciences and encourage technological progress in Iceland, for the purpose of strengthening the foundations of the country's culture and boosting the competitive capacity of the employment sector. Operating under the direction of the

Prime Minister and consisting of ministers, scientists and business representatives, the Council formulates public policy on scientific research and technological development. From the group of non-ministerial members of the STPC the Minister of Education and Science appoints an unspecified number (appr. 9) of people to the Science Board and the Minister of Industry and Commerce also appoints an unspecified number of people to the Technology Board (see Figure 2). Some board members will take seats on both the boards; this will ensure coordination and continuity between science, technology and innovation in the policy making process.

In 2005, the STPC passed resolutions on six broad topics of general importance to science and technology policy:

- **Competitive funds:** The STPC supports the plan of the Minister on regular evaluations of universities where the results and performance in research at universities that enjoy public contributions will be assessed. The results of these evaluations will be an important factor when deciding basic appropriations to university research¹.
- **University research:** The STPC supports the government's general concept of university evaluation, agrees that doctoral studies in Iceland must meet international standards and demands and requests proposals for a strengthened Research Training Fund.
- **The link between public research institutions, universities and the business sector:** While stressing the opportunities arising from the merger of public research institutes and their co-location with universities and knowledge-based companies, it also calls for a new vision and for new policy documents for the future organisation of public research institutes. Decisions in this context must reflect economic as well as academic needs. The Council also welcomes the establishment of the first Regional Knowledge Centre in Iceland, which could become a model for more similar organisations in the country.
- **High-tech in Iceland:** The Science and Technology Policy Council underlines the importance of diversifying the national economy by strengthening high-tech activities in Iceland in cooperation with all stakeholders.
- **International cooperation:** The STPC particularly encourages Icelandic international cooperation with the EU (for example by participating in the 7th R&D Framework Programme), the Nordic Council and the Arctic region in order to strengthen Iceland's position in international research. Particular importance is attached to international cooperation in research regarding climate change.
- **New topics and current/ongoing affairs:** The Council underlines the importance of a programme granting nation-wide access to scientific journals to the public. Furthermore, it encourages the government to prepare for Icelandic participation in an OECD assessment in the EU's Community Innovation Survey. With regard

¹ In January 2007, the Ministry of Education, Science and Culture signed an agreement with the University of Iceland which entails funding to enhance the teaching and research capabilities of the university. The Government foresees that by doing this the University of Iceland will become one of the most highly rated universities in the world and in so doing, the competitive capabilities of Iceland, in an international context, will be enhanced.

to economically motivated research, the Council requests a report on the state of hydrogen research (an area in which Iceland intends to become an international centre) and encourages the development of the creative industries to promote the creative links between art and innovation interacting with scientific and technological know-how.

1.2 The Law on Support to Scientific Research established the Research Fund through fusion of the previous Science Fund and the Technology Fund of the Icelandic Research Council. The Research Fund is governed by a board, whose chairman is also the chairman of the Science Board. The Research Fund is the most powerful tool of the public sector for reinforcing the research community infrastructure through project grants based on applications from scientists, firms and institutes. The Fund for Research Equipment is linked to this same board. The Law on the Support for Technology Development and Innovation established a new Technology Development Fund which is governed by a board chaired by the chairman of the Technology Board. The fund is intended to support technological development and research that supports innovation in the economy in Iceland. The fund is intended to give support to spin-off ventures and innovative firms and can take the initiative to establish programmes in consultation with other parties. The link between policy and implementation through funding is achieved via these two forenamed channels.

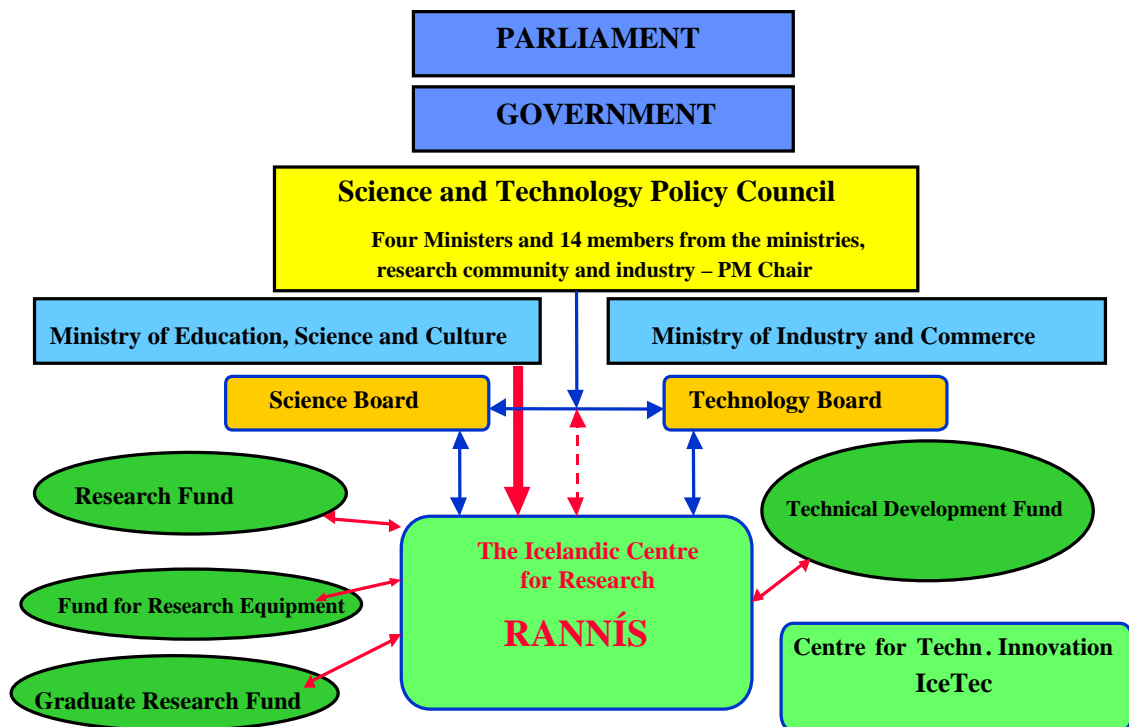


Figure 2. The new structure for science, technology and innovation policy in Iceland

The administrative services to the operational level of this forenamed structure are provided by the Icelandic Centre for Research (RANNIS). In other words, RANNIS is the executive, operative part of the new system. RANNIS runs the competitive funding system; supports the science policy system by gathering, analysing and providing information on research, development and innovation; evaluates the results and impact of research, development and innovation; is responsible for communication and information on research and development to the public and to the scientific community; oversees and promotes Icelandic cooperation in multinational research activities and participates in multinational cooperative programmes and structures.

1.1 Innovation policy in Iceland

The innovation policymaking process in Iceland is still under refinement; the new STPC is becoming increasingly active in developing and rolling out a long term innovation strategy.² The STPC sets out a long and middle term innovation policy in which the different priorities and ambitions are delineated. The policy process is to a large extent a combination of a ‘bottom-up’ and a ‘top-down’ approach. The resolutions of the STPC are the foundation of the innovation policy in Iceland.

The long-term goal of the science and technology strategy is to enhance the cultural and economic strength of Iceland in a comparative, international environment to ensure that the Icelandic economy and quality of life continue to rank at the forefront of nations. More precisely, the following objectives are currently supported by different measures:

- Establish strong research teams for working in an international environment by giving priority to the most competent individuals, institutions and firms.
- Increase the cooperation between research institutes, universities and business enterprises in forming knowledge clusters capable of attaining a strong position in international competition.
- Make R&D attractive to business enterprises, supporting the emergence of high-technology firms which to a large extent rely on research for their growth.
- Give increased weight to research training of young scientists in an international, competitive environment.
- Ensure open public access to the result of publicly financed research, databases and other scientific and scholarly information, promoting utilisation of these for added value of society.
- Pass laws that encourage scientists to protect their intellectual property rights through patents, and institutions and firms to introduce measures to properly manage the intellectual property of their employees.
- Regularly assess the quality of research conducted by universities and research institutes, by subject areas or fields of employment or knowledge clusters, and take the result of these into account when deciding an appropriation and priorities.

The STPC emphasises the priority of larger projects and encourages the formation of knowledge clusters from various sectors. Another priority is cooperation on

² Prime Minister’s Office, Iceland (2004). Science and Technology Policy Council (approved December 18th 2003).

interdisciplinary projects that seem promising for innovation that enterprises would normally not undertake otherwise.

In addition to these general innovation objectives, a number of policy statements have been issued in regard to specific fields of interest. The first one is 'Resources to Serve Everyone' which is related to the 'Information Society' initiative published by the Prime Minister's Office.³ It contains a vision on how information technology can provide individuals, industry and public service with opportunities to benefit from the resources contained in information, knowledge and innovation.

II. Policy actors: Who has recognised services and related innovations?

a. Government and legislative bodies

Prime Ministers Office <http://eng.forsaetisraduneyti.is>
Ministry of Education, Science and Culture <http://eng.menntamalaraduneyti.is>
The Ministry of Industry and Commerce <http://eng.idnadarraduneyti.is/>
Statistics Iceland <http://www.hagstofa.is/>
The Science and Technology Policy Council (STPC) <http://www.vt.is>

b. Entrepreneurship

The Institute of Regional Development <http://www.byggdastofnun.is/>
IMPRA - Service Centre for Entrepreneurs and SMEs <http://www.impra.is/>

c. Knowledge institutes (R&D and education bodies)

University of Akureyri <http://www.unak.is/>
University of Iceland <http://www.hi.is>
The Icelandic Tourism Research Centre <http://www.fmsi.is/>
University of Reykjavik <http://www.ru.is/>
Bifrost School of Business <http://www.bifrost.is>
Rannís (The Icelandic Centre for Research) <http://www.Rannís.is>
Technological Institute of Iceland (IceTec) <http://www.iti.is>

d. Industrial research centers and innovation intermediaries

Trade Council of Iceland <http://www.icetrade.is/en>
Icelandic Chamber of Commerce <http://www.chamber.is/>
The Federation of Icelandic Industries <http://www.si.is/english/>
The Confederation of Icelandic Employers <http://sa.is/english/>
The Federation of Trade & Services <http://svth.is/user/home>
The Icelandic Travel Industry Association <http://www.saf.is/saf/en/>
The Icelandic Tourist Board <http://www.ferdamalastofa.is/>

e. Financial system

New Business Venture Fund <http://www.nsa.is>

³ Prime Minister's Office, Iceland (2004). Resources to Serve Everyone – Policy of the Government of Iceland on the Information Society 2004-2007.

Landsbanki Íslands hf. <http://www.landsbanki.is>
Kaupthing Investment Bank <http://www.kaupthing.is/>
Íslandsbanki (Icelandic Investment Bank) <http://www.fba.is>
Invest in Iceland Agency <http://www.invest.is/>
The National Bank of Iceland <http://www.lais.is/>

III. How do policy actors address service related innovations?

While policies have not been designed specifically to benefit the service sector the priority given to ICT over the recent years⁴ has produced substantial changes in the public service sector interacting with similar developments in the private sector⁵. At the same time the private sector has shown strong initiative in providing IT based services and developing and adapting software to meet various needs in both the private sector economy and the public sector. Privatisation of the telecommunication sector interacting with strong consumer response has put Iceland internationally at the front as an IT user society.

The impact of IT in the retail, financial, trade and transport sectors is to a considerable extent the technological basis for the rapid growth of Icelandic firms in these sectors in the international arena through investments and buyouts. The software industry has expanded its export activity and several firms become globally active although the bursting of the IT bubble in 2001 caused considerable setback. The transport sector has grown explosively, especially in aviation where Icelandic firms have become relatively large players internationally.

The health sector has grown extensively in Iceland as elsewhere. The heavy investment in health related research by the private sector is interacting with very active clinical research in the public sector. Much of this research is now genomics based. The relatively advanced system of health data and bio-banks are a unique national resource providing the basis for a very active clinical research community, encouraged by the widespread public trust and strong interest in scientific research in this field. The National Hospital – University Hospital has been slowly adapting its policies and practices to facilitate closer interaction with the private sector interests in this field. However, there is a need for a stronger policy action in this field designed to seize the unique possibilities Iceland has in its health system to develop products and provide new and improved health services. A foresight study in this field is in preparation. There is increasing pressure for privatisation in the health sector that may release entrepreneurial and creative energies to seize global opportunities.

Iceland's economic growth over the past decade has been generated by an economy that is characterised by services, natural resources and low-technology manufacturing firms. In terms of employment, the service sector in Iceland is by far the most important,

⁴ Prime Minister's Office, Iceland (2004). Resources to Serve Everyone – Policy of the Government of Iceland on the Information Society 2004-2007.

⁵ European Trend Chart on Innovation (date missing). Trend Chart: Thematic Input Report on Innovation in Services.

covering 71.2% of the workforce in 2004. This figure is comparable to those in other OECD countries. The major individual sectors are health services (14.7%), trade (12.7%), real estate (9.3%), education (7.8%) and transport and communications (6.9%). Today, business services are the most innovative service sector.

IV. Identify and describe *supply-side measures* that are targeting services related innovation

Support for service related innovation has until now only been addressed indirectly by the policy actors.

Finance related measures: Although there are *no dedicated programmes*, the existing programmes do not seem to exclude the service industry, moreover, increasingly, the services are targeted (i.e. the R&D and innovation programmes are open for service firms). The Technology Development Fund and the improved financial standing of the New Business Venture Fund have improved the opportunities for financing innovation and related research, also in the services sector. Not only the ‘old’ sectors are eligible, but also the ‘new’ sectors.

The main objective of the Technological Development Fund is to strengthen development work and research in the field of technological development that aims at innovation in the Icelandic economy. The fund emphasizes that the work should result in ‘value added’ products or *services* that do have an impact on the relevant market. At this point in time, *very few project applications have been focused on services*. The Technology Development Fund finances innovation projects in accordance with the main emphasis of the Science and Technology Policy Council of Iceland. During the first years the main instrument of implementation is to give grants to technological development and related research supporting innovation in the Icelandic economy amongst others in co- operation with research institutes, universities and industry. Thus, the fund does provide financial support to both public and private sector research and place emphasis on the interaction between the sectors.

As has already been mentioned, the Technical Development Fund *can take the initiative to establish programs and specific actions* prepared in consultation with the business community, research institutes and universities, in areas which are likely to give economic returns and have a decisive impact on developments in a given economic sector or group of companies. The Fund is permitted to enter into partnership with venture capital investors for seed and early risk financing towards establishing firms which base their operations on technological development and research and which involves a novelty to the economy. The available resources of this Fund are to be ISK 500 million ISK in 2007.

Education and training: The Federation of Industries and other innovation intermediaries have emphasized the growing need for highly trained and skilled staff. Moreover, tailored schemes are necessary, that is training and skills support should be

specific and centred on the peculiar needs of the sector. In other words, education and training policies should be adapted to the requirements of the companies that highly innovative with regards to services.

At the opening of the Seed Forum Iceland Conference in 2007, the Minister of Industry and Commerce emphasized that education system has become the backbone of innovative activities; moreover, it has become the foundation for a competitive economy. Therefore it needs to be strengthened further. The Minister foresees the establishment of so-called 'technical colleges' which have great effects on innovation and the activities of seed companies. The Minister has also been incorporating the advice of a special working committee into its agenda to improve the financial position of seed companies.

Services: Refer to section VII, in it IMPRA is described which amongst other things provides information and guidance to innovative actors in the service sector.

V. Identify and describe *demand-side measures* that are targeting services relation innovation:

Systemic policies: Examples of programmes and current activities of policy actors:

- *Regional Growth Agreements:* Regional Growth Agreements are programs which entail collaborative projects between public and private parties at the Icelandic regional level. The first Growth Agreement i.e. the Akureyri's Regional Growth Agreement in 2004) focused on the Eyjafjörður fjord, which is in the north of Iceland. The program adheres to theories on company clusters, whereby business firms, institutions and municipalities join hands to stimulate the economy. Those branches of employment in the Eyjafjörður area that already stood strong were in the spotlight, and received added support in dealing with international competition. During the term of the Agreement so far, some 400 people have participated in cluster activities, with around 100 companies and institutions sending their representatives to workshops and introductory meetings. Akureyri's Regional Growth Agreement is to achieve the following: (i) Enhance the Eyjafjörður area as a popular place to live, (ii) in the period of 2003 to 2007, encourage an area population increase of 1,500, (iii) raise area competitiveness and nurture economic growth, (iv) develop and strengthen the area's growth sectors, (v) increase the number of competitive companies and jobs, augmenting the supply of products and *services*, (vi) exploit the possibilities created by joining in international projects, and (vii) attract international investment and knowledge. The following bodies are party to Akureyri's Regional Growth Agreement: the Ministry of Industry and Commerce, Akureyri municipality, Eyjafjörður Investment Promotion Agency, on behalf of municipalities around Eyjafjörður fjord, the Institute of Regional Development, the University of Akureyri, IceTec Technological Institute of Iceland - IMPRA Innovation Centre, KEA - Kaupfélag Eyfirðinga, the North Iceland Office of the Federation of Icelandic Industries, trade unions around Eyjafjörður fjord, and the Trade Council

of Iceland. The parties to the Agreement are obligated to contribute funds and/or expertise to Akureyri's Regional Growth Agreement. The following four clusters are operating in Akureyri's Regional Growth Agreement:

- Health Cluster
- Education and Research Cluster
- Tourism Cluster
- Food Industry Cluster

VI. Identify and describe measures promoting services internationalisation

Measures directly addressing the promotion of service internationalisation have not been formulated to this date, however international linkages are an important element of Iceland's national economy and innovation system.⁶ Iceland has a small internal market which poses restrictions to local expansion, but also forms a stimulus for many companies to internationalise. The economy is generally open to competition through international trade and foreign direct investment, except in energy, agriculture and fisheries. The Icelandic government has actively encouraged foreign direct investment (FDI) in power-intensive industries, and Iceland is well-known for its net outward FDI, especially in sectors like food processing, fishing, chemicals (mainly pharmaceuticals), banking, retail and property. The average value of inward and outward investments totalled 1.7% of GDP in 2003, compared to 1.2% for the EU25.

Trade has been another channel of internationalisation and offers clear signs of a knowledge based economy. The share of technology based exports (goods and services) has been rising rapidly as a share of total export value.

As a whole, the Icelandic economy is quite open to competitive forces and has been following the OECD-wide trend over recent years towards further liberalisation. Nevertheless OECD data indicates administrative burdens to starting a new business remain relatively high compared to other Nordic Countries and the United States, and have not diminished significantly in recent years. In contrast, barriers to trade, including tariffs and foreign ownership restrictions, are in general low by international standards, and have declined in recent years. The Icelandic government is focusing on further liberalizing its economy through amongst other things, further opening to foreign direct investment, public procurement and outsourcing for of publicly funded services.

Invest in Iceland (www.invest.is), which is run by the Trade Council of Iceland and the Ministry of Industry and Commerce provides the following information to possible foreign investors:

Regulatory Constraints and Reliefs: As a member of the 30-nation European Economic Area, Iceland implements the same basic liberal business philosophy as the European Union. Except in a few limited areas, all EU commercial legislation and

⁶ OECD (2006). Working Party on Innovation and Technology Policy. Policy Mix for Innovation in Iceland.

directives take effect in Iceland. Consequently, Iceland makes an ideal springboard for tariff-free access to the major EU market area, as well as a fully competitive location for EU companies to operate.

Exchange Controls: No restrictions are imposed in Iceland on buying or selling of foreign exchange.

Foreign Ownership of Business: In principle, foreign ownership of business is unrestricted. However, some limitations apply to specific sectors, namely fishing, primary fish processing, energy production and aviation. A wide range of portfolio investment options are available through licensed securities trading companies.

Official Attitude and Incentives: Iceland has systematically made its business environment increasingly attractive for investment and location, among other things with the series of tax cuts, which give Iceland one of the lowest levels of corporate income tax in Europe. Advantages offered by Iceland for industrial investors include competitively priced renewable energy. Industrial sites with good natural harbours, for small and large ventures, are available in many parts of the country, and many local authorities have designed development strategies and scenarios, which provide for new investments. Highly skilled labour is available, including experts in software and a wide range of research fields. Special incentives are granted for film and TV production in Iceland, whereby 14% of total costs are refundable. Production cost incurred in other EEA countries is also refundable within certain limits.

Tax System: The Icelandic tax system is relatively simple and effective. The emphasis has been to simplify it further, reduce tax rates, broaden the tax base and conclude more double taxation conventions, which will increase the competitiveness of Icelandic corporations and attract foreign investors. With corporate income tax of 18% Iceland ranks among the lowest tax rates within the OECD member countries.

Taxes on Businesses: Companies resident in Iceland, and Icelandic branches of foreign resident companies, are liable for corporate income tax (national income tax) on their net earnings. The corporate tax rate is 18% and no local corporate tax rate is applied. Net worth taxes on companies and individuals in Iceland have been abolished. Real estate taxes

VII. Identify and describe measures seeking to create favourable framework conditions for service relation innovation. To what extent horizontal policies are supporting service related innovation

The existing innovation promotion measures and programmes in Iceland are horizontal in nature meaning that they may include and cover both the manufacturing sector and the services sector.⁷ Like in many other countries however, there is a tendency to give

⁷ European Trend Chart on Innovation (date missing). Trend Chart: Thematic Input Report on Innovation in Services.

priority to tangible technical innovation. Measures that show a horizontal character are: IMPRA Innovation Centre, established in 2003 under new legislation on support for technological development and innovation and to replace IMPRA Incubator Centre, provide support services to entrepreneurs and SME's, as well as initiating and supporting regional development agencies and local business advisers. A central goal is to coordinate national actions and initiate cooperation between support agencies. Young people and women have been pointed out as special target groups. The overall budget is ISK 100 million (€1.25). The IMPRA innovation centre has also been assigned the task of establishing form cooperation between organisations that support for economic development in Iceland, and for linking them to the public support system for scientific research, technological development and innovation. Under the IMPRA innovation centre we find several initiatives aiming at stimulating innovation in Iceland. An example of such a program is the 'Innovation Competition', which is aiming at increasing knowledge about making business plans, and to bring out interesting ideas and projects. The measure includes seminars about how to make a business plan. Another action under the IMPRA umbrella is the 'Action for Innovation and Employment'. The objective of the action is to support SMEs and entrepreneurs in Iceland. The initiative is aimed at increasing initiative, employment and production, and at improving the competitiveness of Icelandic SMEs and entrepreneurs. The aim is also to obtain an effective use of public funds for support initiatives on behalf of the Ministry of Industry and Commerce. The intention of the 'Support to entrepreneurs and SMEs' programme' is to provide information and guidance on possibilities for international cooperation for investors. The project was launched in 1998 and ended in 2000. The Step Ahead project is intended to facilitate leaders of small firms (micro and spin-off) in seeking guidance on marketing, finance, environmental product management and organisational matters in order to increase profitability of companies.

VIII. Future policy measures – new policies being developed for services and related innovation

In the beginning of 2007, the Minister of Industry and Commerce discussed a bill in Althing that entails founding an Icelandic Innovation Centre (Nýsköpunarmiðstöð) in the north of Iceland. This means that the public support system for innovation and economic development will be dramatically changed. Three institutions (for example, Ice Tec) will be integrated into one and so-called Knowledge Centres will be situated in every region. They are supposed to integrate the universities in the areas, the research institutes, businesses and seed/innovative companies to create a synergy that should enhance regional economic development.

IX. Other relevant issues and comments related to the emerging service innovation policy.

Policy actors have identified various issues that need to be considered when formulating innovation policies; this is a short overview of some of the themes that have been highlighted:

- The definition of innovation needs to be reformulated so that it includes all of the factors that matter to innovation in service firms, and the definition should include factors that are *not only* related to high-tech companies.
- Financial resources need to be secured to aid the development of service innovation policies. Some actors have suggested that a fund should be created that *is independent* from the Technology Development Fund.
- Firms in the field of commerce and service need to be included in the whole process of developing policies, some firms will have to be targeted and informed specifically about what is taking place.
- The service sector needs to be researched and evaluated in light of its capabilities to innovate and its innovative strengths.
- Start-up (seed) companies need to be aided financially and assisted in their networking and management processes.