

14 March 2011

Screening report

Iceland

Chapter 25 – Science and Research

Date of screening meetings:

Explanatory meeting: 25 November 2010

Bilateral meeting: 14 January 2011

I. CHAPTER CONTENT

The *acquis* in Chapter 25 – Science and Research – requires Member States to ensure the necessary implementing capacities to pursue the EU objectives and activities in the field of research and technological development, including adequate staffing. Implementation capacity relates to the existence of conditions necessary for the effective participation in the EU's Framework Programmes (FP) and the contribution to the Lisbon strategy with the 3% GDP target set at the Barcelona European Council in 2002 and the European Research Area.

Member States need to adhere to and implement specific Science and Research objectives and activities as developed by the open method of coordination. The *acquis* in this chapter does not require transposition of EU rules into the national legal order.

With respect to both EU Research and EURATOM/Nuclear Research, the EU has concluded a number of bilateral and multilateral agreements on respectively science and technology and nuclear research.

The 7th Framework Programme (FP7) committees assisting the Commission in implementing the FP specific programmes, the European Research Area Committee (ERAC), as well as the Standing Committee for Agricultural Research, are the key bodies in this area. Countries party to the EEA Agreement are associated to the EU framework programmes through Protocol 31 of the EEA Agreement.

Finally, a number of ad hoc decisions concerning research in specific areas exist, such as the creation of Article 185¹ and Article 187² undertakings.

II. COUNTRY ALIGNMENT AND IMPLEMENTATION CAPACITY

This part summarises the information provided by Iceland and the discussion at the screening meeting.

Iceland stated that it can accept the *acquis* regarding Science and Research and indicated that it does not expect any difficulties to implement the *acquis* by accession.

II.a. Research Policy

The Department of Science and Higher Education (4 staff), within the Ministry of Education, Science and Culture, supervises the Science and Technology Policy Council (STPC) which is the main body responsible for developing and adopting the general policy for science and research in Iceland. Four government ministers have permanent seats on the Council and the Prime Minister, who chairs the Council, can call upon four additional ministers. Another 16 persons have permanent seats in the Council, including some appointed by the Confederation of Icelandic Employers and other private sector bodies. Between formal meetings of the STPC, Council members divide up into the Science Committee - the advisory body for research policy - and the Technology Committee which is the advisory body on technological development and innovation.

¹ Article 185 of the Treaty on the functioning of the European Union (ex Article 169 TEC) allows the EU to participate in RTD programmes undertaken by several Member States.

² Article 187 of the Treaty on the functioning of the European Union (ex Article 171 TEC) allows the EU to set up any structure necessary for the efficient execution of research, technological development and demonstration programmes. It allows a wide range of possible implementation structures for EU research and development programmes, of which the most prominent is a 'joint undertaking'.

The priority areas of Iceland's Science and Technology Policy 2010-2012 are:

- cooperation, collaboration and sharing between universities, research institutions and industry,
- strengthening research quality and innovation by applying international quality standards and achievement indicators,
- strengthening participation and cooperation in international research and innovation by encouraging multinational joint science and technology actions.

II.b. Framework Programmes

EU Framework Programme

Iceland, as a party to the EEA Agreement, is associated to the EU framework programmes. Iceland participates in the activities of the FP7 including its management committees and working groups. The responsibility of promoting, supporting and monitoring Icelandic participation in the FP is with the Icelandic Centre for Research (Rannis), a governmental institute which reports to the Ministry of Education, Science and Culture, with the purpose of providing professional assistance in the preparation and implementation of science and technology policy in Iceland. At present 23 people are working in Rannis. For each research theme within the FP, Rannis has appointed a national contact point that is responsible for promoting individual themes. The Ministry of Education, Science and Culture has appointed a science counsellor to the Icelandic Mission to the EU in Brussels who works closely with the Icelandic national contact points and the Programme committee members.

EURATOM Framework Programme

Iceland stated that it is not engaged in nuclear research and that it has not participated so far in research projects under the Euratom FP. Nuclear energy is not utilised in Iceland for electricity production and no nuclear reactor has ever been operated in the country. However, Iceland stated that Icelandic scientists and experts are aware of the thematic areas of the nuclear research on fission and fusion. The Radiation Protection Act No 44/2002 which aims at harmonizing Icelandic legislation in radiation protection with the corresponding EU legislation, includes a provision on nuclear research. Iceland stated that it is aware of the content and funding mechanisms of the Euratom FP. No decisions have been taken regarding a possible joint participation in ITER, the international body responsible for researching the production of energy from the fusion of light atomic nuclei.

In order to better define priorities and future activities under the Euratom Framework Programme, Iceland stated that it is committed to holding a discussion with the scientific community, national nuclear experts and authorities.

II.c. European Research Area

Iceland stated that it is fully committed to the objectives of the European Research Area (ERA) and that it has actively participated in a number of programmes and activities aimed at ERA's realisation. The national science and technology policy is regularly updated and takes into account European developments. Recently, the government issued a policy paper called "Iceland 2020 – Action plan for industry and society; knowledge, sustainability and

welfare". This policy paper takes into account objectives of both the Innovation Union and of ERA.

European Research Fund for Coal and Steel

Iceland has no domestic coal or steel production, nor does it have research programmes and funding on coal and steel.

Agricultural research

There is a strong tradition for industry related research institutions in Iceland and in particular in Marine, Health & Medicine and Agriculture research. Iceland is participating in the EU's Standing Committee for Agricultural Research as an observer.

International scientific and technological cooperation

Apart from Iceland's participation in EU Research Programmes and Institutions, it also has 10 scientific and technological agreements, as well as Memoranda of Understanding (MoU) on science cooperation, with EU and third states such as China and the USA. Iceland participates in a number of multilateral organisations, including UNESCO and various Arctic research organisations. On a Nordic level, Iceland is a member of both the Nordic Council and the Nordic Council of Ministers, which sets the Nordic agenda for research and innovation. Iceland fully participates in NordForsk (the Nordic Research Board), NICE (the Nordic Innovation Centre) and NER (the Nordic Energy Research) and other Nordic research and innovation organisations. Iceland also participates in the recently established Nordic Top-level Research Initiative on Energy, Environment and Climate.

To further strengthen international research cooperation, the current Science and Technology Policy for Iceland (2010-2012) focuses on 4 actions:

- assessing the scope, commitment and opportunities in international research and innovation cooperation, particularly programmes that require co-funding and membership fees;
- strengthening the Icelandic Centre for Research - Rannis - as the main supporting and analysing body in research and innovation;
- mapping the existing support services for applicants in international cooperation, programmes and collaborative efforts made towards combining support services to existing programmes;
- active cooperation between the Science committee and the Technology committee to shape and implement the research and innovation policy in the Nordic countries, Europe, and additional international programmes and use this experience in policy making in Iceland.

Actions relating to 3% GDP objective

The R&D share of Iceland's GDP reached 3% in 2001 and since then expenditure has been in the range of 2,7 to 3,0% until 2009. In 2009 the Icelandic parliament passed a law in support of innovation, research and development which grants companies a tax concession of 20% for R&D expenditure from 2010.

Article 185 and Article 187 Initiatives

Rannis participates in a number of ERA-Net projects some of which have the objective of becoming established Article 185 initiatives in the future. *Eurostars* has been running as an Article 185 initiative since 2008, with Icelandic participation from the start. Iceland has not had an official policy towards participation in Article 187 initiatives. However, Icelandic organisations participate in Innovative Medicines and Hydrogen and Fuel Cells initiatives.

Actions relating to the mobility of researchers

Icelandic research establishments and funding rules are traditionally open to researchers' mobility, although financial resources have been scarce since the beginning of the economic crisis in 2008. The Icelandic Research Fund, managed by the Icelandic Centre for Research (Rannis), is currently establishing the first programme dedicated to researchers' mobility with co-funding from the FP7 People Programme. The programme will offer incoming, outgoing and reintegration grants, irrespective of the applicant's nationality. Rannis has also actively participated in the EURAXESS service network that provides practical assistance to mobile researchers and their families. All Icelandic universities have signed the European Charter for Researchers and the code of conducts for their recruitment.

Actions relating to science and society

A number of specific actions are in place in Iceland to raise public awareness and improve understanding of the importance which science plays in society. These are mainly carried out by Rannis and the University of Iceland. Rannis organises a series of Science Cafés every autumn where selected scientists give talks aimed at the wider public. Rannis also organises the annual Researchers Night as part of a European action within the FP7 People Programme. In addition, Rannis has given financial awards for science communication, and the Science and Technology Policy Council (STPC) gives motivational awards each year for young and outstanding researchers. The University of Iceland is responsible for the Icelandic Web of Science for the citizen, which aims at raising the interest in science by the public at large, and especially young people. The University of Iceland also offers a youth programme during the summer providing young people aged 13 to 16 with an insight into the world of science.

Regarding the ethical dimension of science, scientific research in life sciences, in particular health research involving human beings, is subject to approval by the National Bioethics Committee or to a local institutional review board, respectively. This applies to research carried out at all types of organisations, including nanotechnologies, where no specific rules have been set. The handling of sensitive personal information is regulated by the Data Protection Act 77/2000 and supervised by the Data Protection Authority. Publicly-funded research in Iceland is largely in line with the ethical principles under the 7th Framework Programme.

Iceland informed that the Science and Technology Policy Board (STPC) initiated some work on research ethics in early 2011. Draft rules on research integrity have been formulated and presented to the STPC and are foreseen to be in force by the end of 2011. Iceland has plans to establish a National Advisory Board on Research ethics and integrity to promote discussions on, and disseminate information on, research ethics. This board, in collaboration with the STPC and the research community, will devise guidelines for good scientific practice and procedures for handling misconduct and fraud in science. At present the University Act provides for mechanisms at universities in the form of special committees to deal with cases of scientific fraud or plagiarism.

Regarding gender balance in research, close to 40% of the people working in science are women. An on-going study focuses *inter alia* on gender balance in all research and innovation funds. Iceland has participated in the Helsinki group on Women and Science from the beginning and has been working together with other European countries in establishing comparative statistical information on women in science in Europe.

III. ASSESSMENT OF THE DEGREE OF ALIGNMENT AND IMPLEMENTING CAPACITY

Overall, Iceland has reached a good level of alignment with and capacity to implement the *acquis* in the fields covered by this chapter due to its association to the EU Framework programmes through the EEA Agreement. Iceland will need to ensure continuous and adequate budgetary resources to achieve full application of the *acquis*. It will also need to continue encouraging the participation of industry in research projects, undertake actions to increase research facilities and ensure coordinated and coherent actions in the different areas towards a European Research Area.

III.a. Research Policy

Overall Iceland's framework for preparing and implementing research policy is in line with and comparable to those of EU Member States. Iceland has the necessary administrative capacity to implement its research policy.

III.b. Framework Programmes

EU Framework Programme

As far as FP7 is concerned, all actions already undertaken should contribute to even further participation by Iceland, which is already very good and spread over all the research thematic areas covered by the FP7. The administrative capacity has proven satisfactory to efficiently cover the participation in FP management committees, and inform and advise potential applicants on available FP7 funding opportunities.

EURATOM Framework Programme

Iceland is encouraged to further promote participation of its research entities in activities funded under the EURATOM Framework Programme, notably in areas which concern safety and health. Upon accession, Iceland will need to be part of the EURATOM treaty even if it does not have any nuclear related research.

III.c. European Research Area

European Research Fund for Coal and Steel

As an EU policy instrument, participation in the European Research Fund for Coal and Steel is mandatory for all new Member States. Since Iceland has no coal or steel industry, no financial contribution from Iceland to the Fund will be required.

Agricultural research

Iceland is already participating as an observer in the Standing Committee for Agricultural Research. However, participation of Icelandic research entities in research actions funded under the Framework Programme could be further improved.

International scientific and technological cooperation

The recommendations by the Science and Technology Policy for Iceland are welcomed since they will assist international cooperation and participation in international programmes with the intention of increasing scientific and technological excellence. This will contribute to improving Iceland's already satisfactory track record in this area.

Actions relating to 3% GDP objective

In line with the Europe 2020 strategy, Iceland is encouraged to set an explicit national target for investment in research and innovation. The target should reflect Iceland's economic and research situation and contribute towards the EU goal of 3% of GDP being invested in research and innovation.

Article 185 and 187 Initiatives

Iceland's intention to participate in future Article 185 and 187 initiatives will allow it to fully benefit from all the opportunities available at EU level to fund research and innovation.

Actions relating to mobility of researchers

Iceland's actions in this particular field and its participation in the relevant activities are very satisfactory.

Actions relating to science and society

Icelandic targets to promote science in society comply with EU policies. As concerns ethical and legal aspects of science, Iceland's legislation and control systems are comparable to those in the EU.