



EUROPEAN
STATISTICAL
SYSTEM

PEER REVIEW REPORT

ON COMPLIANCE WITH THE EUROPEAN STATISTICS CODE OF
PRACTICE AND FURTHER IMPROVEMENT AND DEVELOPMENT OF
THE NATIONAL STATISTICAL SYSTEM

Iceland

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1. EXECUTIVE SUMMARY

Statistics Iceland is a valued supplier of statistics to Icelandic society, as indicated by its ranking among the most trusted institutions in national surveys, also scoring highly on reliability and reaching a historically high user satisfaction in the latest (2022) survey of users. It is also a dominant player in the national statistical system, with only four Other National Authorities developing, producing and disseminating European statistics, only two of which are sizeable. A fifth authority has been unwilling to take on the role as an Other National Authority. In addition, an expanding range of producers provide national statistics.

The Statistics Law has strong provisions concerning professional independence, puts Statistics Iceland at the core of the national statistical system and provides it with a strong coordination mandate. The mandate has met with limited follow-up in practice, however, partly for resource reasons, so that there is no coherent national statistical system and no coordination in place. The provisions on confidentiality are also very strong, in some cases hampering information flows across the national statistical system – needed to produce European statistics - and impairing the coherence of statistics.

Since Iceland is a small country by population, Statistics Iceland is a small national statistical institute by European standards, with just over 100 full-time staff. Nonetheless, it is a rather significant public sector organisation by Icelandic standards. Statistical operations in Other National Authorities are much smaller than those in Statistics Iceland. In this small-scale environment, compliance with the ES CoP is therefore challenging, and this is reflected in the present report.

Moreover, Statistics Iceland's budget is being compensated only partially and sporadically when new or revised European regulations place additional demands on its resources.

Helping Statistics Iceland to deal with resource pressures, extensive administrative datasets are the basis for a large part of its statistics, and it can therefore rely less on survey-based information with well-known costs and challenges. Nonetheless, the supply of administrative data has not always been smooth, particularly around changes in administrative routines.

The workforce at Statistics Iceland is very highly educated, with the vast majority having qualifications at university level or even PhDs, and they appear highly motivated. High education levels are supplemented with schemes for continued education and training adapted to the small-scale environment.

Statistics Iceland introduced a sizeable body of experimental statistics during the Covid-19 pandemic, demonstrating considerable agility. Nonetheless, and likely related to the resource situation, it can sometimes take a long time for Statistics Iceland to respond to user requests.

Overall, there is a high level of compliance with the European Statistics Code of Practice (ES CoP) throughout the national statistical system. However, the peer review team identified seventeen recommendations, of which two are compliance-relevant and fifteen are improvement-related recommendations. They are grouped under four main headings and listed below with their related explanations.

RECOMMENDATIONS

I. Strengthening national statistical system governance and data flows

It is important that the various actors that influence and participate in the national statistical system share a common vision of how the national statistical system should evolve. This could be set out by an advisory Statistical Council that is seen as authoritative and impartial, and representative of the members of the national statistical system, users and the national interest. Such a Statistical Council could also help provide advice on and transparency regarding the prioritisation inherent in Statistics Iceland's internal resource allocation.

To improve beyond compliance with the ES CoP, the peer review team recommends:

1. With support from Statistics Iceland, the relevant authorities should establish an advisory Statistical Council to provide strategic guidance and vision to the national statistical system and input to Statistics Iceland's prioritisation of resources. (Improvement-related: ES CoP, Indicators 1bis.1 and 11.1)

The Statistics Law provides strong protection of confidentiality in official statistics, including a provision that prohibits Statistics Iceland from transferring information gathered for statistical purposes to other public authorities, including other producers of official statistics. While well intentioned, this provision is interpreted as barring the transfer of necessary information, such as Statistics Iceland's business register, to other producers of official statistics, resulting in incoherences in the statistics produced by different institutions.

To comply with the ES CoP, the peer review team recommends:

2. The Prime Minister's Office should support Statistics Iceland in initiating and implementing legal or other changes to remove hindrances to the exchange of data and information within the national statistical system while ensuring that statistical data remain confidential and for statistical use only. (Compliance-relevant: ES CoP, Indicators 9.5 and 14.3)

While previously the National Energy Authority was the official Icelandic producer of European energy statistics, it has not taken on the role of an Other National Authority and therefore, the provision of official statistics by the National Energy Authority has stagnated.

The 2017 revision of the European energy regulation has left Iceland's provision of European energy statistics in a state of uncertainty, with the revision not yet integrated into the EEA agreement as Iceland has not yet issued an opinion. The concrete case has raised some general issues that need to be clarified, given the potential for similar cases to arise concerning the scope and coverage of the national statistical system, coordination within it and the responsibilities of the Other National Authorities.

To improve beyond compliance with the ES CoP, the peer review team recommends:

3. Statistics Iceland, supported by the Prime Minister's Office, should define the scope and coverage of the national statistical system and agree on the responsibilities of Other National Authorities and data providers, respectively, with the relevant enforcement mechanisms. (Improvement-related: ES CoP, Indicator 1bis.1)

Statistics Iceland's heavy reliance on administrative data is consistent with the government's emphasis on limiting the burden on households and enterprises to provide information. Nonetheless, insufficient knowledge of the content of administrative data sources may sometimes mean that statistical opportunities are missed. By contrast, full knowledge of what information is available in administrative data sources might allow Statistics Iceland to go further. Establishing full transparency would also be a necessary step towards any later attempts to better manage aspects of government datasets, including their quality, and could potentially be a precursor to establishing a national data steward function.

To improve beyond compliance with the ES CoP, the peer review team recommends:

4. Statistics Iceland, with the support of the relevant authorities, should establish and maintain an inventory of information available in administrative data sources. (Improvement-related: ES CoP, Indicator 9.4)

Statistics Iceland bases a number of its statistics on privately held data which, in some cases, represent a low-cost - and sometimes the only - source of information on important societal phenomena. This takes place through mutual consent with providers, possibly helped by Statistics Iceland having a legal mandate in the area. The strength of the mandate has been questioned, however, by some data holders. At the same time, increased use of privately held data is important as they can deliver statistics at high speed and in new areas, as already illustrated by current use, including for experimental statistics. Hence, questions about its legal mandate should not hold Statistics Iceland back from seeking further agreements by mutual consent.

To improve beyond compliance with the ES CoP, the peer review team recommends:

5. With the backing of its legal mandate, Statistics Iceland should continue to seek agreements by mutual consent with data holders to increase the use of privately held data. (Improvement-related: ES CoP, Indicators 2.4 and 10.3)

With such heavy reliance on administrative data, it is important for data deliveries to be predictable, timely and with agreed content and coverage that helps statistics production as much as possible. Statistics Iceland has therefore concluded a number of Memoranda of Understanding. It is also important for agreements to be signed and maintained with the Other National Authorities. Working-level cooperation is crucial, but communication and cooperation at a more strategic and forward-looking level are equally crucial and can help smooth operations and avoid unnecessary problems.

To improve beyond compliance with the ES CoP, the peer review team recommends:

6. Statistics Iceland should continue to formalise and standardise agreements with administrative data providers and Other National Authorities through Memoranda of Understanding, with regular follow-up discussions at strategic level. In the case of administrative data providers, Statistics Iceland should establish clear timetables for revisions as well as specifications on quality, design, changes in data delivery and follow-up. (Improvement-related: ES CoP, Indicators 8.6, 2.2, 8.7 and 1bis.1)

II. Strengthening the quality of statistics and statistical processes

While Statistics Iceland has a strong legal mandate for the coordination of the national statistical system, little coordination effectively takes place, partly reflecting resource constraints but partly also reflecting a feeling on Statistics Iceland's part that it lacks the necessary tools for coordination.

However, there are many ways to coordinate, and Statistics Iceland has an explicit legal mandate to coordinate the tasks and methods applied, corresponding to the quality concept used in the ES CoP principle on coordination, on which basis it could launch guidelines to the Other National Authorities developing, producing and disseminating official statistics.

To comply with the ES CoP, the peer review team recommends:

7. Statistics Iceland should perform the coordinating role inscribed in the Statistics Law vis-a-vis the Other National Authorities developing, producing and disseminating official statistics and other producers of official national statistics, including the development and enforcement of quality guidelines. (Compliance-relevant: ES CoP, Indicator 1bis.2)

Statistics Iceland has very recently launched a comprehensive reform programme, which will likely stretch over several years, with the aim of achieving greater professionalisation through a clearer division of labour, reaping cost reductions through specialisation and the use of standard solutions, making statistical processes less fragile, more transparent and less costly through the application of standardised IT solutions, etc. As a first step towards reaping these benefits, a thorough re-organisation along functional lines has just taken place, but Statistics Iceland needs to press on with the comprehensive reform programme to fully benefit from its results.

To improve beyond compliance with the ES CoP, the peer review team recommends:

8. Statistics Iceland should implement its recently launched comprehensive reform programme including, inter alia, organisational change along functional and business process lines, as well as increased standardisation and automation of data collection and internal processes such as data editing. (Improvement-related: ES CoP, Indicators 10.2, 10.4 and 4.2)

Activities such as monitoring and auditing the quality of statistics are important to ensure their quality and to correct any observed deficiencies. However, monitoring and audits at Statistics Iceland are currently undertaken sporadically and infrequently, and with inadequate prioritisation. Hence, Statistics Iceland needs to improve its quality monitoring process. Ideally, quality reviews should be both frequent and extensive. Realistically, different processes may need to be undertaken at different levels of depth, with more shallow exercises undertaken more frequently and examinations in greater depth undertaken more sparingly and with prioritisation across statistics as they are more costly.

To improve beyond compliance with the ES CoP, the peer review team recommends:

9. Statistics Iceland should undertake systematic quality monitoring and audits of its statistical products. (Improvement-related: ES CoP, Indicators 4.2, 4.4 and 8.3)

Statistics Iceland does not have a process metadata system, which is unfortunate as having metadata on both processes and products readily at hand on an electronic platform would increase the value of statistical data. However, the work continues at the same time as external users also press for better access to metadata, which should be based on the internal metadata and be available on an electronic platform, albeit with less need for detail.

To improve beyond compliance with the ES CoP, the peer review team recommends:

10. Statistics Iceland should finalise its process metadata system and use this as the basis for creating metadata for users based on the Single Integrated Metadata Structure. (Improvement-related: ES CoP, Indicators 8.4, 6.4, 15.5 and 15.6)

Given the small size of the economy and its enterprise sector, the statistical survey response burden inevitably becomes relatively high. This is particularly true for larger enterprises, whose absence from samples could seriously skew results, but who also generally accept the response burden as necessary. However, there is less understanding among smaller enterprises and, at the same time, there may be more leeway to reduce the response burden (or at least its perception) by intelligent processes, such as using rotational (and coordinated) frames for surveys, which could help increase response rates. Statistics Iceland therefore needs to move forward on its methodology for surveys.

To improve beyond compliance with the ES CoP, the peer review team recommends:

11. Statistics Iceland should, where possible, undertake methodological and technological improvements to spread the response burden and hence increase the response rate. (Improvement-related: ES CoP, Indicator 9.2)

III. Strengthening the resource base for responding to statistical demands and its allocation

The changes needed in the national statistical system will come with added costs. While the comprehensive reform programme may produce savings in some areas, these gains will only accrue slowly and, in any case, better services need to be provided to users. For example, the tools available for data submission and waiting times for research data access are the subject of (justified) criticism. Furthermore, new EU statistical regulations and updates of the requirements under existing regulations tend to boost overall demands on resources. Statistics Iceland has occasionally received compensation for such increased demands on resources via its budget allocation, but this mechanism is neither transparent nor general, which means that demands from EU legislation over the longer term may pre-empt resources for other activities with a less mandatory character and, hence, hamper quality at Statistics Iceland and its capacity to undertake innovations.

To improve beyond compliance with the ES CoP, the peer review team recommends:

12. The relevant authorities should consider augmenting Statistics Iceland's budget, while more systematically allocating resources to Statistics Iceland for additional EU-driven demands. (Improvement-related: ES CoP Indicator 3.1).

Within its overall tight budget constraint, Statistics Iceland obviously needs to prioritise such resources that are allocated where there are mandatory demands on official statistics and where statistics provide the most value. Statistics Iceland is helped in making these decisions by the input from user groups, whose structure was reformed in the wake of the previous peer review. However, the process linking user inputs to the final outcomes in terms of resource allocation could be made more transparent.

To improve beyond compliance with the ES CoP, the peer review team recommends:

13. Statistics Iceland should increase the transparency of its internal prioritisation mechanism. (Improvement-related: ES CoP, Indicator 11.2)

The Statistics Law opens up the opportunity for Statistics Iceland to raise revenue by selling statistical services. It does this to a limited extent and the customers are typically ministries, public institutions and organisations. However, the potential demand is large and, provided that fulfilling such demand is not detrimental to Statistics Iceland's other activities, it should be welfare-enhancing. Statistics Iceland should therefore strengthen and refine its policies in this area, with clear guidelines on when

such funding is legitimate, for what internal purposes revenue can be used, what pricing policies are reasonable and in conformity with competition guidelines, etc.

To improve beyond compliance with the ES CoP, the peer review team recommends:

14. Statistics Iceland should strengthen and refine its policy of requesting users to pay for statistical outputs and analyses that cannot reasonably be argued to be public goods. (Improvement-related: ES CoP, Indicator 15.3)

IV. Strengthening communication and user contact

Statistics Iceland has the practice of publishing preliminary statistical findings on an ad hoc basis at short notice (2 days). While the objective of getting statistical outputs into the public domain as soon as they are available is laudable, it comes at the price of adding an element of unpredictability to the publication schedule. There is a potential risk that in certain circumstances the decision to either go ahead or not go ahead with a release on this basis could be seen as inconsistent with Statistics Iceland's impartiality. At the same time, the perceived need and scope for publishing such preliminary statistical findings may be eliminated or diminished by more precise scheduling of published outputs on the basis of the expected availability of input data.

To improve beyond compliance with the ES CoP, the peer review team recommends:

15. Statistics Iceland should reconsider the unplanned, ad hoc publication of preliminary statistical results, possibly in the context of refining its scheduling of published outputs. (Improvement-related: ES CoP, Indicators 6.5 and 13.5)

Both Statistics Iceland and the Central Bank of Iceland are rather cautious in their presentation of new releases, providing little analytical reasoning on why numbers look the way they do or the significance and implications of the numbers. In the case of the Central Bank of Iceland, some of this is seen in its quarterly reports. This reticence leaves much of the interpretation to others even though in some respects those that have produced the numbers may be better placed to interpret them.

To improve beyond compliance with the ES CoP, the peer review team recommends:

16. Statistics Iceland and the Central Bank of Iceland should enhance the analytical content of their communication on new data releases. (Improvement-related: ES CoP, Indicator 15.1)

Statistics Iceland's cautious approach to communication also extends to providing information to a wider audience on the uncertainty surrounding statistics in general, the specific challenges of statistics at given moments, plans for reshaping statistics, etc. Yet, there is clearly a demand for such information among users.

To improve beyond compliance with the ES CoP, the peer review team recommends:

17. Statistics Iceland should further engage and communicate with users in a structured, transparent and forward-looking way, including on uncertainty, data weaknesses and changes in statistics. (Improvement-related: ES CoP, Indicator 15.7)

In the spirit of continuous improvement integral to the European Statistical System (ESS), the NSI will interpret the recommendations, formulated in this report, into improvement actions for implementation within the national statistical system (NSS).

2. INTRODUCTION

It is recognised that quality is one of the European Statistical System's (ESS) comparative advantages in a world experiencing a growing trend of instant information and new challenges, driven by exceptional circumstances or the continuous need for faster but quality-assured data. The European Statistics Code of Practice (ES CoP) is the cornerstone of the ESS common quality framework, and the ESS statistical authorities have committed themselves to adhere to it.

In this context, it is crucial for the ESS to be equipped with a review mechanism, the peer reviews, supporting with credible evidence this self-commitment to adhere to the ES CoP. The objective of this review mechanism is to enhance the integrity, professional independence and accountability of the ESS statistical authorities. The first round of peer reviews was carried out in 2006-2008, followed by a second round in 2013-2015.

In 2017, the ES CoP was reviewed and extended and now encompasses 16 principles. This revised version of the ES CoP triggered a third round of peer reviews, being carried out in the Member States of the European Union and of the European Free Trade Association (EFTA), and Eurostat from 2021 to mid-2023. This round of peer reviews aims at improving the quality and trust in European statistics by assessing the compliance of the ESS with the principles of the revised ES CoP. The peer reviews cover the ESS statistical authorities (Eurostat, the National Statistical Institutes (NSIs) and selected Other National Authorities (ONAs)) developing, producing and disseminating European statistics. The peer reviews will be followed by a period of annual monitoring of the implementation of the improvement actions developed by the NSIs to address the recommendations laid down in the peer review reports.

The third round of peer reviews has the following two objectives:

- To review the compliance/alignment of the ESS with the ES CoP, in order to demonstrate to the ESS and to external stakeholders that the ESS is a system based on the principles of the ES CoP;
- To help NSIs, ONAs and Eurostat in their further improvement and development by indicating future-oriented recommendations; at the same time, they should stimulate government authorities to support the implementation of these recommendations.

Each peer review is conducted by a team of four statistical experts (both from inside and outside the ESS). The peer review has four phases: completion of the Self-Assessment Questionnaires (SAQs) by a country; analysis of these SAQs by the peer review team; a country visit by the peer review team; and the preparation of the final report and ensuing recommendations by the peer review team. These recommendations are of two types:

- Compliance-relevant (ensuring compliance/alignment with the ES CoP);
- Improvement-related (less critical/technical supporting improvements).

A combination of an audit-like and a peer review approach is used when assessing the national statistical systems (NSS) in the countries to benefit from the positive aspects of both approaches. The audit-like approach requires the provision of documents as evidence, the ownership of the recommendations by the peer review expert team, and the right for the NSIs to express diverging views on the recommendations and to formulate the corresponding improvement actions. Whereas the peer review approach allows for common agreement within the ESS on the methodology, the

objectives, scope and implementation arrangements, the focus on improvements and a peer learning process.

Although all principles of the ES CoP will be reviewed for all countries through the SAQ, the peer review experts are free to customise the country visit to concentrate on those principles where more clarification/explanation is needed. However, certain principles such as those concerning professional independence and coordination and cooperation, as well as principles including elements of modernisation, will be assessed during the peer review visit for every member of the ESS.

In addition to these common principles to be addressed for every member of the ESS, the peer review team placed particular emphasis on coordination, given the observed tension between the high aspirations of the Statistics Law and limited progress in practice. More generally, reflecting the challenges faced by Statistics Iceland and its ambitions in many fields, including the launch of a comprehensive reform programme, all principles of the ES CoP were touched on during the visit. A particular challenge for Statistics Iceland is how to combine the feature of small size in a European context – reflecting country size – with an ambition to deliver on an annual work programme which is as broad as that of many much larger national statistical institutions in other countries. The associated budgetary pressures have a pervasive influence on most principles of the ES CoP (Principle 3).

Access to administrative data, and in some cases privately held data, helps Statistics Iceland to produce a reasonable amount of statistics on a small budget, but it is clearly imperative that data flows are smooth and adapted to needs. This also applies to the ONAs, which in some cases face legal constraints on accessing data from Statistics Iceland. Hence, data flows received considerable attention (Principle 2). Moreover, while generally focused on user needs, Statistics Iceland wishes to respond better to user demands in areas such as metadata and communication, which made it natural for the peer review team to cover the relevant principles (Principles 11 and 15).

Also, although the reports should not be used to compare one country to another, much effort has been made to ensure the harmonisation of the reports and the ensuing recommendations across the countries so that all countries are treated equitably.

The peer review of Eurostat was conducted by the European Statistical Governance Advisory Board (ESGAB).

3. BRIEF DESCRIPTION OF THE NATIONAL STATISTICAL SYSTEM

Legislation

The production of official statistics is highly centralised in Iceland, with Statistics Iceland as the dominant player in the national statistical system (NSS). Alongside Statistics Iceland, the Central Bank of Iceland and the Directorate of Health are sizeable Other National Authorities (ONAs) developing, producing and disseminating European statistics. The two remaining ONAs and some 17 producers of national statistics are all rather small, albeit increasing in number, with limited functions in the NSS. The data collection and production of ONAs and other producers of national statistics are seen as a side product of their core business, being governed by their own special laws.

Statistics Iceland (Hagstofa Íslands) was founded in 1914 and was formerly a government ministry until the end of 2007. During that time, the main legal basis for Statistics Iceland and its work was the Statistics Iceland Act of 1913, as well as other acts on official statistics, the Government Administration Act and other applicable regulations. On 1 January 2008, a new Act on Statistics Iceland and Official Statistics, No. 163/2007 (the Statistics Law), took effect, replacing most of the older legislation. Under this Statistics Law, Statistics Iceland ceased to be a separate ministry and is now an independent government institution. Article 1 of the Statistics Law states that Statistics Iceland is the centre for official statistics in Iceland and has the leading role in their organisation, coordination and conduct, and has the leading role in international cooperation with international organisations concerning statistics.

As stated in the Statistics Law, “coordination involves the tasks and methods applied, including the application of standards and classifications, requirements for quality, dissemination and the treatment of data collected for statistical purposes”. Statistics Iceland’s mandate is to institute and maintain a process of regular consultation with institutions engaged in official statistics or collect data which is relevant to them. Administrative issues, such as operating registers, were devolved from Statistics Iceland to other institutions and the institution is to focus on the production and dissemination of official statistics.

In addition to the Statistics Law and special laws on price and wage indices, Statistics Iceland operates in accordance with the United Nations Fundamental Principles of Official Statistics, the European Statistics Code of Practice and the General Data Protection Regulation No. 90/2018.

Organisation

Statistics Iceland is a professionally independent institution currently under the aegis of the Prime Minister’s Office.

The office has a new organisational chart implemented since the beginning of June 2023. Statistics Iceland, which used to comprise four Directorates following a stove pipe organisational structure, is now organised along functional lines as follows: 4 departments (Data management; Statistical analyses, comprising Social Statistics, Economic Statistics and Forecasts; Communication; Financial Resources) and 3 supporting units (Innovation, IT and Human Resources).

Worthy of mention is the Methodological Advisory Committee, whose main goal is to ensure an independent and professional review by an external party of Statistics Iceland's methodological

procedures and issues in statistical reporting. Its membership comprises representatives from Statistics Iceland, academia and the Central Bank of Iceland.

Appointment procedures for the head of the NSI

Statistics Iceland is managed by a Director General, who bears professional responsibility for Statistics Iceland's statistical activities as stated in Article 4 of the Statistics Law.

The selection process for the recruitment of the Director General is governed by the Statistics Law and the Government Employees Act (No. 70/1996).

The position is publicly announced as open for application with the job requirements and other process-related requirements laid down in the Government Employees Act. The Statistics Law states the professional requirements for the position of the Director General.

Once the application deadline has passed, Information Act No. 140/2012 gives the public access to information on the identity of the applicants. After interviews, the final decision is made by the minister responsible, currently the Prime Minister as Statistics Iceland is subordinate to the Prime Minister's office. Once the selection procedure has been decided, all applicants can request an overview of the selected applicant's qualifications. The selection process furthermore allows the other applicants to ask for justification of the decision and grants them access to the selection process data if they so request.

Once appointed, the Director General abides by the rules set out in the Government Employees Act for civil servants. The Director General's term is for 5 years and is automatically renewed unless the ministry to which Statistics Iceland is subordinate decides to advertise the position at the end of the term. The reasons for which the incumbency can be terminated are specified in the legal framework of the Government Employee Act.

Statistical Programmes

Statistics Iceland's current strategy is for the period 2020-2025. Its main focus areas are: Accessible information and knowledge, Harmonised configuration of information and processes, and Knowledge-based work environment.

Furthermore, Statistics Iceland produces annual work programmes which are prepared in accordance with the financial plan and the 2020-2025 strategy, in broad cooperation between the subject matter units of Statistics Iceland and which are approved by the Board of Directors. Projects are developed to meet new national or European requirements or specific user needs e.g., for added breakdown or new indicators. Statistics Iceland makes the annual work programmes publicly available, aiming to provide clarity on the main priorities and innovation projects to users and government bodies.

Reports on progress, looking at the implementation of the annual work programme, are published on Statistics Iceland's website. The reports cover major innovations and changes over the previous year, as well as all aspects of the management of the organisation.

Two other important policies governing Statistics Iceland's activity and driving changes are worthy of mention. An IT policy is in place for 2021-2023, with plans for an update to transform Statistics Iceland into a progressive institution using technical advances to provide users with digital services in an excellent technical environment. A Human Resources policy is also available with the aim of ensuring the availability of adequate and highly skilled staff.

Resources

Statistics Iceland has 119 permanent staff (117 FTE) (2022) in its Reykjavik offices and 6.8 FTE part-time interviewers. Reflecting the rising demand for its services – not least in the context of European engagements – the number of permanent staff has increased by some 45 per cent since 2008. This rise in part reflects additional funding to meet European requirements. More recently, additional funds were allocated for environmental statistics, tourism statistics, the census and national accounts.

In financial terms, Statistics Iceland's budget is a little less than 2 billion ISK (12.8 million Euro), of which approximately 83% are wage costs.

Coordination of the National Statistical System

Statistics Iceland has a clear legal mandate for the coordination of the NSS, but the procedures for implementing the coordination are not described in the Statistics Law and, in practice, little coordination takes place.

There is a high – and increasing – number of governmental organisations producing national statistics as a side product of their core business, and this has been identified by Statistics Iceland as potentially problematic for coordination, as in reality there is no coordination of national statistics.

Nevertheless, good collaboration between Statistics Iceland and the two main ONAs is in place; Statistics Iceland has an agreement with the Central Bank of Iceland and has recently concluded an agreement, assessed as very successful by Statistics Iceland, with the Directorate of Health, defining communication channels and division of labour as regards official statistics on public health and health services.

Other National Authorities participating in the peer review

The Central Bank of Iceland is responsible for all monetary and banking statistics as well as foreign direct investments and capital transfers. The Central Bank compiles the financial balance when estimating the overall current account, but Statistics Iceland is responsible for trade in goods and services. Statistics Iceland and the Central Bank have an agreement on the production of financial accounts and Statistics Iceland has regular meetings on statistical issues with experts from the Central Bank. To perform its duties, the Central Bank, which is also a financial supervisor, has extensive authorisation to collect data, as specified in Article 32 in the Act on the Central Bank of Iceland, No. 92/2019. The Act includes a clause on data collection for statistical purposes, where non-compliance to provide the Central Bank with the required data can result in repercussions as laid out in Articles 42 and 45 of said Act. The Act on the Central Bank includes articles on confidentiality and the Central Bank issues its own advance release calendar.

The Directorate of Health - Embætti landlæknis - is responsible for several European health care statistics as laid down in a cooperation agreement between the Directorate and Statistics Iceland. The Directorate of Health produces European statistics on health status and health determinants as well as non-economic health care statistics as stipulated in EU Regulation No. 1338/2008. Furthermore, the Directorate produces several other health- and healthcare-related statistics for national purposes and reports to various international bodies such as the WHO and OECD. The institution is highly competent in the field of statistics, as demonstrated during the recent Covid-19 pandemic.

Data access

The Statistics Law contains necessary provisions on data collection and access to data. It includes provisions on the use of administrative data, when possible, to minimise the response burden. In this context, the holders of administrative data are obliged to provide Statistics Iceland with data for statistical purposes free of charge and there are agreements to this end concluded between Statistics Iceland and the holders of the main administrative data. The Statistics Law also provides Statistics Iceland with the right to be informed and heard on changes to administrative registers and to demand, within reasonable limits, additional information relevant for statistics to be collected and inserted into administrative registers. The practical follow-through of these stipulations is, however, uneven.

Having the legal authorisation to compel responses from businesses and the self-employed, and being authorised to collect personal data directly from individuals, Statistics Iceland conducts more than 50 data collections and surveys every year.

Acknowledging that success lies in good interaction between Statistics Iceland and data providers, Statistics Iceland has a long tradition of collecting privately held data through mutual consent (with wage payers and providers of accommodation, for example).

Relations with users/dissemination of statistical products and services

Statistics Iceland disseminates all published content via its web pages. Recent improvements in the presentation of publications and statistics on the website have included a new graphic tool for publications (Datawrapper) and an update of the statistics databank.

All Statistics Iceland's releases are scheduled in an advance release calendar: news releases, statistics and publications. The advance release calendar with scheduled releases for the forthcoming calendar year (1 January to 31 December) is published in November each year. It is felt that this procedure is understood by and useful to users and therefore a move towards a rolling 12-month calendar has not been considered. Release dates are generally confirmed at least 8 days ahead, but the following releases have fixed dates: indices for indexation, wage indices, national accounts, labour force statistics and external trade.

If there are changes in the release dates within the eight-day period, the changes will be announced in a press release.

Statistics Iceland publishes certain preliminary statistical results on a monthly basis. These are excluded from the eight-day rule and can be put into the advance release calendar up to two working days ahead of the scheduled release.

Statistics Iceland's releases are published for everyone at the same time. All releases are published at 9:00 AM Greenwich Mean Time. There is no summer daylight-saving time in Iceland, so GMT is used all year round. Information regarding the releases is provided by the information services and the contact person for the release.

Statistics Iceland is also responsible for preparing national economic forecasts. Because of the use of the economic forecast in the preparation of the budget and fiscal policy, the Ministry of Finance and Economic Affairs receives a draft of the economic forecast up to two weeks before its public release. However, forecasts and release calendars are managed so that this does not conflict with the principle of equal access to new statistics by all users at the same time.

When incorrect findings are published in a news release, they are corrected immediately, or a new release is published as soon as the correct findings have been confirmed, with a notification that the item has been corrected. When errors are detected, this is immediately stated in a news item, even if corrections have not yet been made.

Technical errors in derived figures, graphs and tables are not reported but are specified in the news item if figures have been amended.

Releases and other relevant content published on Statistics Iceland's website have also been shared on social media since 2017.

Statistics Iceland's website is a live project that is in constant development. This means, among other things, that links and content are maintained and updated according to the latest information. Furthermore, the website is accessible on all major devices, including smartphones and tablets.

In terms of user consultation, the structure of user groups has recently been modernised to make them more reflective of specific constituencies. In addition to input from user groups, Statistics Iceland collects user opinions, suggestions and complaints through user surveys or through a link on the web page ("contact us"). The collection of ideas of users from different sources is then used to prioritise improvement projects.

4. PROGRESS/ADVANCEMENT IN THE LAST FIVE YEARS

Modernising governance to become more outward-facing

User groups established by Statistics Iceland were reviewed and users categorised according to similar needs and expectations. Instead of focusing narrowly on a specific product, as had previously been the case, a more general approach was chosen to allow groups to represent the views of a particular constituency (e.g., public sector users, local government users, academia users, macroeconomic analysts). Nonetheless, the practice of having user groups for specific statistics was in some cases applied to reflect new developments and needs (e.g., the recently established user group for tourism statistics) or the particular importance of certain statistics (e.g., the consumer price index in Iceland's widely indexed economy). The user groups have become an integral part of the quality management system, enabling user needs to be better considered. This has alleviated the need to extend membership of Statistics Iceland's Quality Committee to external users, as had been recommended in the previous peer review, keeping the Committee focused on internal quality developments.

Cooperating with holders of administrative data

Administrative data are used substantially by Statistics Iceland for statistical production, including in combination with other data sources. Agreements with most major data owners have been formalised, while negotiations with others, especially new ones, are gradually taking place. When acquiring new administrative data sources, intensive communication takes place between Statistics Iceland and administrative data holders on various aspects of data quality (accuracy, timeliness, etc.).

Cooperation with the scientific community

A Methodological Advisory Committee was established in 2015 as an advisory body to the Director General of Statistics Iceland. Its role is to encourage the use of sound methodology in Statistics Iceland's statistical processes, and to give advice on methodological research and development within Statistics Iceland. It is composed of representatives from Statistics Iceland, universities and the wider research community, and the Central Bank of Iceland. The tasks of the committee and its membership are made public.

Microdata access management has been expanded to include external members representing users. Roles, responsibilities and operating procedures have been reviewed and several changes made in line with perceived needs.

The above-mentioned developments have significantly strengthened Statistics Iceland's partnerships with the scientific community. Closer cooperation comprises the involvement of students in Statistics Iceland's work for limited time periods, including as part of thesis work, teaching provided by Statistics Iceland staff in universities, common projects on statistical literacy, etc.

Clarifying the role and organisational setting of the Research Unit

The role and functions of the independent Research Unit within Statistics Iceland are described on Statistics Iceland's website and specified in internal documents. The Research Unit is organisationally separate from statistical production and was subordinated directly to the Director General until the recently announced re-organisation, when it became part of the Statistical Analysis Department. It makes economic forecasts including research projects for this purpose. Its tasks related to national

accounts and public finance statistics have been specified in an internal formal agreement. Indeed, it is seen as useful to have an in-house user providing early feedback on these statistics.

Enhancing efficiency and process

Statistics Iceland implemented a national version of the Generic Statistical Business Process Model (GSBPM) based on the original model. Preparations involved benchmarking with other national statistical institutes sharing somewhat similar characteristics (Norway, Luxembourg). Subsequently, Statistics Iceland's approach and experience with the implementation of the GSBPM has been presented to other national statistical institutes on a number of occasions.

Statistics Iceland has produced internal methodological guidelines in some fields, and guidelines on statistical disclosure control and on seasonal adjustments were published on its website. In some cases (validation, imputation, estimation), processes have relied on the Eurostat guidelines which are available for this purpose.

Statistics Iceland has revised its training plan and processes to improve competencies for new developments and modernisation of statistical production. The training plan is continuously being specified.

Statistics Iceland has also examined the possibility of taking over responsibility for the production of European statistics currently carried out by small producers of official national statistics. The assessment led to the relocation of research and developments statistics to Statistics Iceland, while other potential possibilities for transfer were not agreed.

Stronger international cooperation

Statistics Iceland has pursued closer collaboration with other national statistical institutes in the field of complex methodological and quality issues. Internal quality audits, quality indicators and non-response issues are some of the topics discussed with other national statistical institutes. Certain subject-matter statistics such as statistics on research and development, agriculture and business registers have also been part of the mutual learning and exchange of experience. For the preparation of new statistical production, consultations with other countries are considered a very valuable source of information and skills. There has been formal cooperation with national statistical institutes in the Nordic countries for decades, and contacts have also been developed with others.

Enhancing the value of official statistics to users

Statistics Iceland launched a new website in 2015, including redesigned navigation, automated graphs and charts, as well as the monitoring of website use in order to better understand users' needs. All publications are posted on Statistics Iceland's website and the presentation of statistics has been enhanced by using a new graphic tool for publications (Datawrapper) installed in 2021, while the databank was updated in 2023.

To improve the analytical content of news releases and bulletins, training of Statistics Iceland experts has been undertaken with the aim of encouraging experts to take a more analytical approach while maintaining the objectivity of the texts.

Statistics Iceland has begun to cooperate more pro-actively with the media; a user group for media representatives has been created to better understand their needs and expectations. A press conference was held on the occasion of the dissemination of the census data, otherwise the cooperation is primarily based on direct contacts with journalists on specific topics.

Statistics Iceland has elaborated a revision policy by taking into account general guidelines on revision policy, the European Statistics Code of Practice and experience of other national statistical institutes. The revision policy was published on Statistics Iceland's website. It represents a starting point for the preparation of more specific revision rules for the subject-matter statistics to be formulated in coming years.

5. COMPLIANCE WITH THE CODE OF PRACTICE AND FUTURE ORIENTATION

5.1 STRENGTHS OF THE NSI AND THE PARTICIPATING ONAs IN RELATION TO THEIR COMPLIANCE WITH THE CODE OF PRACTICE

A statistical law that provides a strong legal framework

The Act on Statistics Iceland and Official Statistics. No 163/2007 was very progressive and forward-looking for its time, and continues to provide Statistics Iceland with a clear and strong mandate for the compilation and dissemination of official statistics. It incorporates, *inter alia*, strong provisions as regards professional independence, mandates for coordination of the national statistical system and for data collection, statistical confidentiality, data protection and, together with the Government Employees Act, a transparent recruitment process for the Director General.

Generally strong confidentiality provisions notwithstanding, the Statistics Law grants access to microdata for research purposes conditional on de-identification and other measures to eliminate traceability.

Statistics Iceland is appreciated by users for its objectivity and expertise, most likely attributable in part to the Statistics Law. It is generally perceived (e.g., in public debates) as professionally independent, with the Public Sector Service Survey showing high (and rising) scores for reliability, and the survey of trust in institutions ranking Statistics Iceland among the most trusted.

Good access to administrative data

Administrative registers are used extensively as data sources for official statistics in Iceland, with some ¾ of statistical products based fully or partly on administrative data, according to estimates by the peer review team based on more detailed information from Statistics Iceland. This enables the cost-effective production of highly granular statistics without putting additional burden on households and enterprises. Together with other actions by Statistics Iceland, the reduction in the response burden associated with the use of administrative data may have limited the slide in household survey response rates, which may even have stabilised recently. The extensive use of administrative data has been possible even in the absence of a comprehensive inventory of information available in administrative data sources reflecting knowledge gained by staff, such as through direct contacts.

It is generally believed that the quality of administrative data in Iceland is high. The administrative data holder and the household/enterprise concerned usually have strong incentives to ensure the correctness of information, as otherwise they could suffer administrative consequences for wrong data and, in the case of data such as tax data, penalties for providing inaccurate data.

The need for information for administrative purposes leads to better timeliness of information, allowing in consequence, more timely statistics to be produced. Even when there are challenges in matching administrative data with statistical concepts, statistics based on information in administrative data may provide timely indications of the development in the appropriate statistical concept. For example, administrative data-based information on the receipt of unemployment benefits may be a guidance for statistics on unemployment from labour force surveys and directly provide a picture of developments in an important public spending component.

One of Statistics Iceland's mandates is to grant access to microdata for research, and administrative data for such purposes are typically in demand given their coverage of relevant populations and longitudinal character.

All administrative and survey data collected by Statistics Iceland are documented and made available for additional statistical purposes in order to ensure that the same data are not collected multiple times. The documentation is checked to see if the relevant data is already being collected before starting a new data collection.

A highly skilled workforce

The workforce at Statistics Iceland is very highly educated, with the vast majority having university degrees (86%), including in some cases PhDs. Staff members are not only well trained but also seem highly dedicated. The human resources policy is aimed at ensuring the availability of sufficient and highly skilled staff. The policy includes procedures to recruit staff, career development and staff motivation. Statistics Iceland has a human resources strategy aiming at a working environment based on knowledge and professionalism, solidarity, trust and mutual respect, while keeping staff and management motivated, inspired and supportive.

Procedures for continued education and training seem well adapted to a small-scale environment and offers are available for all employees (e.g., training for regular internal quality audits; training for new employees in official statistics, security and HR matters; regular presentations in Statistics Iceland on new methods and tools, etc.). An educational website, Eloomi, contains *inter alia* all internal guidelines relevant for all employees, and the documentation must be studied by newly hired personnel. Statistics Iceland's internal website (Workplace platform) has an online library with "shelves" for important topics such as Statistical Disclosure Control or Machine Learning, populated by eBooks and useful links to international manuals, handbooks and guidelines. The experts at Statistics Iceland systematically attend European courses and participate in international/Nordic/national conferences for both feedback about their own projects and to learn from their peers.

Good conditions for continued education and training, together with features such as flexible working arrangements, may help compensate for wage levels at Statistics Iceland, which are substantially lower than in government ministries, albeit less so *vis-à-vis* a range of comparable institutions. Even so, staff turnover recorded a recent high of 16% in 2022.

Agility in responding to crises and turbulent IT developments

While resource constraints demanding sharp prioritisation have sometimes made Statistics Iceland less responsive to user requests, it reacted in an agile, adaptive and innovative manner to the statistical challenges created by the Covid-19 pandemic. Besides dealing with internal challenges such as remote working, staff well-being and internal communications, Statistics Iceland made a concerted effort to not only maintain service to its users but also increase service levels where necessary.

The number of publications by Statistics Iceland, most of which are published both in Icelandic and English, significantly increased over the course of the Covid-19 pandemic. Statistics Iceland managed to keep up all its usual production while adding several experimental statistics to deliver on the high demand for timely and high-frequency statistics relevant to the demanding societal situation created by the Covid-19 pandemic. Some examples of these statistics include government economic measures in response to the Covid-19 pandemic, overnight stays in hotels, company insolvencies and activity, consumption and share of foreign tourists, fuel sales from pumps, monthly wages, weekly death rates,

etc. Some of these experimental statistics have since made the transition to regular official statistics, whereas others may be phased out.

Agility has also been demonstrated in the rapid adoption of new software and computer languages as well as experimentation with tools such as machine learning. An example is the transition from proprietary software to open-source programming (e.g., use of R and Python) and the fast formation of several groups of experts around specific subjects (e.g., R, machine learning algorithms) aimed at greater automation of production. Indeed, greater automation of process components and workflows is generally seen in Statistics Iceland as a way of reducing manual/routine work and increasing the amount of time dedicated to creative work. Its small size, informal culture and limited hierarchy, which in some respects may also present handicaps, may be among the factors that, together with the highly skilled workforce, allow Statistics Iceland to quickly seize new opportunities and respond to challenges.

Innovative Practices

The peer review team identified innovative activities that are noteworthy and possibly applicable in some way to other national settings, and would like to highlight the following initiatives:

- In the new organisation chart, a support unit dedicated to innovation has been put in place within Statistics Iceland (comprising some 14% of the total staff number). The unit provides the design and monitoring/implementation of new/updated methods according to a list of priorities which is based on statistical production modernisation needs and on the impact of the statistical products.
- Statistics Iceland has put machine learning into practical use in statistical classifications. The national classifications are consistent with the European ones. When updating the classifications, besides the standard methods (database oriented), new automatic methods based on machine learning algorithms are applied, and increased accessibility to these provide new opportunities for classification workflows (e.g., automatic coding for the new COICOP classification).
- Statistics Iceland has also broken new ground in the use of novel, often privately held, datasets. While the use of scanner data to produce price indices (not least the Consumer Price Index) and the use of debit/credit card transactions data for statistics on external trade in services and household consumption are established practice, Statistics Iceland has recently begun using electricity (smart meter) data. The data are accessed through a daily data stream from a single data provider that services sellers of electricity to households, municipalities, commerce and small industries.
- Geocoding of statistics is also a new feature to provide information at high levels of geographical granularity. This activity is based on an open data/open-source project related to building atlases with new, small-output-area datasets for census statistics, as part of a European grant project.
- Open-source code development (R, Python) and sharing (GitLab for internal and GitHub for public repositories) have been promoted and implemented to help accelerate new, innovative processes and spread their adoption across different parts of Statistics Iceland.

5.2 ISSUES AND RECOMMENDATIONS

5.2.1 STRENGTHENING STATISTICAL SYSTEM GOVERNANCE AND DATA FLOWS

The national statistical system is highly centralised and consists of Statistics Iceland at the centre of official statistics, Other National Authorities developing, producing and disseminating official statistics (the Central Bank, the Directorate of Health, the National Police Commissioner and the Transport Authority) and 17 other producers of national statistics. Even if Statistics Iceland has a clear legal mandate to coordinate the system, the reality is fuzzier and demonstrates that coordinating the system is extremely challenging and in reality non-existent outside the scope of European statistics.

Even so, it should be recognised that coordination can take place in many ways, with command-and-control approaches hard to implement and often not very effective. Hence, over the longer term, an important aspect of coordination is for the parties involved to accept and share a common vision of how the national statistical system should evolve.

An impartial advisory Statistical Council, seen as authoritative and representing members of the national statistical system, users and the general national interest, could help achieve this aim. Such a forum could put forward ideas leading to more coherence and consistency in the national statistical system; it could help provide advice on issues such as how to use and interpret the ES CoP in the Icelandic national context and it could help ensure that the producers of European and official national statistics are presented with a holistic picture of the needs for statistical information in society. Furthermore, it could boost transparency of the prioritisation inherent in Statistics Iceland's resource allocation. This latter function was the main argument behind the recommendation to create a Statistical Council in the previous peer review – an idea that was subsequently discussed, but not taken forward.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R1. With support from Statistics Iceland, the relevant authorities should establish an advisory Statistical Council to provide strategic guidance and vision to the national statistical system and input to Statistics Iceland's prioritisation of resources. (Improvement-related: ES CoP, Indicators 1bis.1 and 11.1)

The Statistics Law (Article 10) provides strong protection of confidentiality in official statistics; so strong, in fact, that it seems to prevent Statistics Iceland from sharing statistical information with all other entities, including ONAs, among them the Central Bank of Iceland. While well intentioned, to ensure that data remain confidential and are used for statistical purposes only, this provision is interpreted as barring the normal data exchange in an efficient statistical system – which is evidently conditional on all producers applying strict data protection rules.

As an example of the ramifications caused by these provisions in the Statistics Law, Statistics Iceland maintains a Statistical Business Register for internal use which has not been made available to other producers of official European statistics, even if the Central Bank of Iceland has expressed its wish to have access. Not having a shared and consistent classification of enterprises leads to inconsistency between the statistics of the two institutions. Such a lack of coherence is clearly undesirable and needs to be addressed by measures to allow the necessary exchange of data.

Unless existing legislation can be re-interpreted to allow for data exchanges within the national statistical system, governed by MoUs ensuring the necessary data protection, a legal change would seem to be necessary. Even in the latter case, however, it needs to be ensured that statistical data cannot be used administratively, which is an issue in the case of the Central Bank because it is also the financial supervisor. In any case, a solution will increase the quality and consistency of statistics.

To comply with the ES CoP, the peer review team recommends:

R2. The Prime Minister's Office should support Statistics Iceland in initiating and implementing legal or other changes to remove hindrances to the exchange of data and information within the national statistical system while ensuring that statistical data remain confidential and for statistical use only. (Compliance-relevant: ES CoP, Indicators 9.5 and 14.3)

The EU energy statistics regulation, revised in 2017, has not yet been integrated into the EEA Agreement pending Iceland's opinion, and Icelandic energy statistics are not transmitted to Eurostat. Previously, the National Energy Authority, being a government institute, was the official Icelandic producer of European energy statistics, with responsibilities including advising the government on energy issues, promoting energy research and administration, and the development of the exploitation of energy resources. However, the provision of official statistics by the National Energy Authority has stagnated and it has been unwilling to take on the role of an ONA. With the EEA agreement not yet amended, there is at present no legal obligation to provide the statistics and the issue remains in limbo.

The concrete case is symptomatic of a need for a general clarification of responsibilities, coordination and enforcement within the system of official statistics, at least in the context of new or changed EU regulations.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R3. Statistics Iceland, supported by the Prime Minister's Office, should define the scope and coverage of the national statistical system and agree on the responsibilities of Other National Authorities and data providers, respectively, with the relevant enforcement mechanisms. (Improvement-related: ES CoP, Indicator 1bis.1)

Statistics Iceland is obliged by the Statistics Law to use administrative data rather than direct data collection, when possible, to minimise the response burden. In this context, Statistics Iceland emphasises the rule that demand for data should be restricted to data that is needed to fulfil statistical requirements and nothing more. Statistics Iceland's heavy reliance on administrative data is also consistent with the government's emphasis on limiting the burden on households and enterprises to provide information.

Nonetheless, full knowledge of what information is available in administrative registers might allow Statistics Iceland and other producers of European or official national statistics to rely more on administrative data. It may also reveal cases where information for administrative registers is collected repeatedly and could provide a good opportunity for Statistics Iceland to discuss the collection of additional information with administrative data holders. Establishing full transparency would also be a necessary step towards any later attempts to achieve improvements across the board in the quality of and information on administrative data and to better manage aspects of government datasets by establishing a national data steward function.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R4. Statistics Iceland, with the support of the relevant authorities, should establish and maintain an inventory of information available in administrative data sources. (Improvement-related: ES CoP, Indicator 9.4)

Statistics Iceland has a long tradition of using privately held data for statistical purposes, possibly helped by wording in the Statistics Law that seems to grant right of access. Good examples are wage statistics (mainly based on wage data from private enterprises), price statistics (based partly on digital scanner data from supermarkets and discount stores), statistics on external trade in services and household final consumption expenditure in national accounts (based on transaction data from debit and credit cards). Worthy of mention is the work in progress on utilising data on energy consumption from smart meters, in which data pipes are in place to harness daily data. There are also plans in the pipeline to build up coordinated infrastructure for data architecture and validation.

Success lies in good interaction between Statistics Iceland and the data providers, and the above examples are all based on agreements by mutual consent with providers. Nevertheless, Statistics Iceland has lately encountered obstacles to the collection of some privately held data, with some private data holders questioning the strength of the legal mandate. The statistical value of the data is clear, it has been possible to strike agreements by mutual consent in the past and, in any case, the use of privately held data is undoubtedly much easier in consensual conditions. It is, therefore, important for Statistics Iceland to press on with agreements based on mutual consent.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R5. With the backing of its legal mandate, Statistics Iceland should continue to seek agreements by mutual consent with data holders to increase the use of privately held data. (Improvement-related: ES CoP, Indicators 2.4 and 10.3)

Due to the heavy reliance on administrative data, it is important for deliveries to be predictable, timely and with agreed content and coverage. For the main holders of administrative data, agreements are in place for data delivery in which Statistics Iceland describes the data concerned, how the data will be used and for what purposes, together with details on the actual delivery. Some of the most important agreements in force are signed with Registers Iceland (about the population in Iceland, information used for all social statistics produced and disseminated by Statistics Iceland), the Icelandic Revenue and Customs (about tax and customs register data used for social statistics, business statistics and international trade statistics), the Icelandic Directorate of Labour and the Directorate of Fisheries.

It is also important for agreements to be signed and maintained with ONAs. A state-of-the-art MoU was signed recently with the Directorate of Health and there is also an agreement with the Central Bank of Iceland.

In these respects, regular contact at working level with the holders of administrative data and ONAs is crucial, allowing the former to better understand Statistics Iceland's needs and how the data will be used to produce official statistics and the latter to seek advice on statistical matters. Statistics Iceland may better appreciate the practical limits and constraints on data deliveries and the needs of these institutions as users or, in the case of the Central Bank, as both a user and a producer of official statistics. Nevertheless, communication and cooperation at a more strategic and forward-looking level are equally valuable and can help smooth operations, allowing upcoming problems to be nipped in the bud and advantageous initiatives to be discussed.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R6. Statistics Iceland should continue to formalise and standardise agreements with administrative data providers and Other National Authorities through Memoranda of Understanding, with regular follow-up discussions at strategic level. In the case of administrative data providers, Statistics Iceland should establish clear timetables for revisions as well as specifications on quality, design, changes in data delivery and follow-up. (Improvement-related: ES CoP, Indicators 8.6, 2.2, 8.7 and 1bis.1)

5.2.2 STRENGTHENING THE QUALITY OF STATISTICS AND STATISTICAL PROCESSES

Article 3 of the Statistics Law provides Statistics Iceland with a clear mandate to coordinate official statistical activities. The coordination “...involves the tasks and methods applied, including the application of standards and classifications, requirements for quality and publication, and the treatment of data collected for statistical purposes.” Whilst the wording is different, this comes close to the spirit of the ES CoP principle on coordination. The Statistics Law also states that Statistics Iceland shall institute and maintain a process of regular consultation with the relevant institutions.

In practice, only limited progress has been made since the Statistics Law was adopted in 2007, though the recently concluded agreement with the Directorate of Health represents partial progress. Resource constraints may partly explain the limited coordination and these constraints may have been exacerbated by the proliferation of institutions that produce national statistics.

Another explanation for the limited progress made is a feeling on Statistics Iceland’s part that it lacks tools for coordination. This argument may not have fully internalised the fact that coordination can be many things and does not need to involve command and control approaches, which can be difficult to effect and may not be very productive. Indeed, softer forms of coordination could include the establishment of a shared vision for the national statistical system, voluntary agreements in areas covered by the Statistics Law, participation of ONAs in training provided by Statistics Iceland, or the elaboration of guidelines (either unilateral or, more desirable and effective, agreed) in relevant areas supplemented by regular monitoring of respect and progress vis-à-vis the guidelines and the publication of findings in this respect. Soft coordination along these latter lines corresponds to the ES CoP and has been introduced in some other Nordic countries, where it seems to have been effective, but it also represents a visible budgetary commitment.

To comply with the ES CoP, the peer review team recommends:

R7. Statistics Iceland should perform the coordinating role inscribed in the Statistics Law vis-à-vis the Other National Authorities developing, producing and disseminating official statistics and other producers of official national statistics, including the development and enforcement of quality guidelines. (Compliance-relevant: ES CoP, Indicator 1bis.2)

As a first and highly visible step in implementing its comprehensive reform programme – the details and timeline of which still need to be fully pinned down – Statistics Iceland has very recently announced a re-organisation of its office along more functional lines, taking inspiration from the GSBPM. The intention is that greater professionalisation and division of work will improve quality and reduce costs, both directly through specialisation gains and indirectly by allowing for the greater

standardisation and sophistication of IT tools that will enable the automation of certain processes, also helped by complete process documentation. Hence, data collection and editing should become less burdensome for Statistics Iceland and respondents alike, through the generalised use of features such as responsive design, prefilled questionnaires, upfront data checks, selective editing, etc. In addition to raising quality, lowering the response burden and reducing costs, these developments may also reduce the risks and costs associated with staff turnover and lower the barriers to internal mobility.

The peer review team is of the view that the orientations of the comprehensive reform programme have been well thought through and that the benefits described above could be substantial – hence the need to press ahead. However, it will be key to implement it in a way that does not jeopardise current production while also respecting the interlinkages between the different elements in the reform programme.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R8. Statistics Iceland should implement its recently launched comprehensive reform programme including, inter alia, organisational change along functional and business process lines, as well as increased standardisation and automation of data collection and internal processes such as data editing. (Improvement-related: ES CoP, Indicators 10.2, 10.4 and 4.2)

Budgetary constraints mean that quality audits and monitoring are undertaken at low and uneven frequency across statistics in Statistics Iceland. Reviews in the context of the institution’s ISO27001 certification help to some extent, but their main focus is narrower, pertaining to information security and, increasingly, privacy. Hence the need to strengthen quality audits and monitoring, which will help to ensure the quality of statistics and to correct any observed deficiencies while providing a good basis on which to communicate with users.

Reviews and audits can be undertaken at different levels of depth. It should also be borne in mind that there is a tendency for conclusions reached in one audit to spread to other statistics not undergoing audit, which can be strengthened by the appropriate communication. Hence, it may be sufficient to undertake a limited number of in-depth audits per year, provided there are judicious procedures for selecting statistics and an understanding that over the long run no statistics can “escape”. The ongoing investment in the Cloud Compliance and Quality system, which will also include an audit element due in 2024, may be a useful input in the process, with records on incidents and complaints already up and running. Such a procedure can then be combined with a much lighter and more high-frequency review exercise, possibly based on self-assessment. To sum up, current quality monitoring and audits seem inadequate and there is a need to move forward with a differentiated but systematic approach in this area.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R9. Statistics Iceland should undertake systematic quality monitoring and audits of its statistical products. (Improvement-related: ES CoP, Indicators 4.2, 4.4 and 8.3)

Metadata on both products and processes are crucial for both internal and external users and should be available electronically in a format that facilitates their use. There is indeed some pressure from external users for improved metadata and, internally, the insufficiencies of the current set-up were revealed during the Covid-19 pandemic when staff, including newly hired staff with limited knowledge

of products and work processes, had to work from home. Lack of comprehensive metadata showing the details of available data is also seen as complicating microdata access for research purposes.

Realising the need to move forward in the area of metadata, Statistics Iceland has been investing in this, but has not yet reached the stage of having smooth systems running. Hence, metadata for products have so far not been centrally managed and what is available on the website is not always up-to-date. However, a transition is taking place to move towards the Single Integrated Metadata Structure standard, which should be helpful. As regards internal users and processes, these are increasingly documented as part of the Cloud Compliance and Quality system, which should also help ensure regular updating. The metadata on processes for internal purposes should eventually feed into the metadata on products for external users.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R10. Statistics Iceland should finalise its process metadata system and use this as the basis for creating metadata for users based on the Single Integrated Metadata Structure. (Improvement-related: ES CoP, Indicators 8.4, 6.4, 15.5 and 15.6)

Although Statistics Iceland produces no estimates for the overall survey response burden on enterprises, it is likely to be high in relative terms, given the small size of the economy and the need to produce robust statistics. Indeed, larger enterprises have to respond to many surveys since the absence of even just a few enterprises could skew the results. Fortunately, there seems to be an understanding that this is a necessary part of being a large enterprise in Iceland.

For smaller enterprises, where sampling does not have to be complete, there may be less understanding of the need to supply data and hence more risk of political fall-out and effects on response rates. However, with replies to business surveys being mandatory, response rates have so far generally remained high, typically between 85 and 100 per cent.

Even so, to respond to the risks, Statistics Iceland needs to adapt procedures for surveys to avoid individual smaller enterprises being hit by many data requests at the same time or having to answer for long periods of time. This could take place via the use of rotational (and coordinated) frames for surveys. While this may not necessarily reduce the overall response burden – because others may have to answer if some enterprises are removed from surveys – it may still reduce the perceived response burden.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R11. Statistics Iceland should, where possible, undertake methodological and technological improvements to spread the response burden and hence increase the response rate. (Improvement-related: ES CoP, Indicator 9.2)

5.2.3 STRENGTHENING THE RESOURCE BASE FOR RESPONDING TO STATISTICAL DEMANDS AND ITS ALLOCATION

Overall, Statistics Iceland is doing a good job but some of its services are not of an adequate quality, as exemplified by long waiting lists for research data access and sub-par tools for data submission. Follow-up on its coordination mandate and user demands for metadata are other examples. Internal processes in the quality area also need strengthening. Some of the resources needed to respond to

these and other needs may be freed up by internal efficiency gains, including those targeted by the comprehensive reform programme. However, this is unlikely to be sufficient and will in any case not deliver efficiencies in the near term.

A significant part of the statistics produced and disseminated by Statistics Iceland and the Other National Authorities developing, producing and disseminating official statistics is based on EU regulations. Continuously growing demands from users are reflected in new EU statistical regulations and updates of existing regulations, which lead to increased resource demands for the production of official statistics meeting obligatory data quality requirements. Without corresponding funding, Statistics Iceland is forced either to cut other statistical activity or, failing that, squeeze the quality or its ability to invest and innovate. That said, EU grants supporting the transition to newly introduced or modified statistical processes usually provide a temporary tool to support the initial phase of adapting to the new EU regulation.

In recent years, Statistics Iceland has received financial allocations from the national budget for the implementation of EU regulations in some cases – for environmental statistics, tourism statistics, the census and national accounts. These additional funds have been allocated on an occasional basis, making it more difficult for Statistics Iceland to plan, and have not always covered the full costs. To ensure the necessary level of compliance with EU regulations on a sustained basis, a more systematic and transparent system for budget allocations should be applied. Such a mechanism would support the quality of statistics both for EU and national users.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R12. The relevant authorities should consider augmenting Statistics Iceland’s budget, while more systematically allocating resources to Statistics Iceland for additional EU-driven demands. (Improvement-related: ES CoP, Indicator 3.1)

Statistics Iceland is determined to modernise its activities and introduce systemic measures to enhance statistical processes and communication. The continued production and dissemination of a wide range of statistics, together with such modernisation in a context of limited resources, make high demands on the prioritisation of goals and activities.

Prioritisation should take into account mandatory demands on statistics and where statistics provide the most value. Users’ needs and opinions as expressed by user groups are other important inputs for the selection of priorities and ways of achieving them. Internal development also needs to be part of the prioritisation process. The transformation of such inputs into decisions on the allocation of resources is the responsibility of Statistics Iceland’s management. Achieving a higher degree of transparency on the trade-offs and choices involved may be supported by an advisory body such as a Statistical Council which could help clarify and synthesise the different demands. Transparency of the internal prioritisation process and, hence, clarity on the choices made and the arguments for doing so will increase the legitimacy vis-à-vis the external world and is also important for the motivation of staff and its active involvement in innovation and modernisation activities.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R13. Statistics Iceland should increase the transparency of its internal prioritisation mechanism. (Improvement-related: ES CoP, Indicator 11.2)

In accordance with the Statistics Law, Statistics Iceland has the possibility to raise revenue by selling statistical services. The practice has only been applied on a limited scale and scope so far. Revenue from selling statistical services is only a fraction of its overall income, since this budget item contains other components such as EU grants and research services, making up on average about 15% of the total Statistics Iceland budget. Nonetheless, interest in such services is seen as being potentially quite large. Indeed, when the cost of Statistics Iceland providing a statistical service is lower than the willingness of an outside customer to pay for it, there is a *prima facie* case that societal welfare would be enhanced by Statistics Iceland doing so. That said, requesting ministries, public institutions and organisations to increasingly pay for statistical services may cause some hesitation.

Therefore, to improve the overall understanding of this practice, Statistics Iceland should reinforce and refine its policy related to the provision of services paid by customers, including by clarifying the distinction between statistical services as public goods, financed by the ordinary budget appropriation, and services which are provided for payment. Clear guidelines should specify when such payment is legitimate, and how it might be used internally. Clear policies respecting competition guidelines and rules for reasonable pricing based on an analysis of Statistics Iceland's current and fixed costs are also required.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R14. Statistics Iceland should strengthen and refine its policy of requesting users to pay for statistical outputs and analyses that cannot reasonably be argued to be public goods. (Improvement-related: ES CoP, Indicator 15.3)

5.2.4 STRENGTHENING COMMUNICATION AND USER CONTACT

The release calendar for the coming year is published by Statistics Iceland annually in November as a tool informing users about the timing of statistical outputs. Based on objective factors such as the timing of data availability and the time needed for statistical processes, the publication of the release calendar and the predictability it embodies underlines Statistics Iceland's impartiality.

In addition to the dissemination of final statistical figures, covered by the release calendar, Statistics Iceland has the practice of publishing preliminary statistical findings on an ad hoc basis at short notice (2 days). Preliminary results are made available if considered useful and if the data quality is assessed as acceptable. Presenting data ahead of time, as soon as they are available, might be seen as a benefit to users, provided that the use of this procedure does not entail any risks. This is also why such a practice is considered potentially legitimate in the ES CoP. However, the decision on whether or not to publish preliminary statistics confers a degree of unpredictability on Statistics Iceland and might easily be perceived as problematic in certain circumstances and be associated with playing political games. Hence the practice could be seen as being inconsistent with impartiality.

The need and scope for this practice will depend on the degree of slack built into the regular timetables. With precise planning and data delivery built into the release calendar from the beginning, there should be less need for issuing preliminary statistical findings. Scheduling practices should therefore be looked at in this context.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R15. Statistics Iceland should reconsider the unplanned, ad hoc publication of preliminary statistical results, possibly in the context of refining its scheduling of published outputs. (Improvement-related: ES CoP, Indicators 6.5 and 13.5)

Statistics Iceland and the Central Bank of Iceland place great emphasis on the impartial preparation and publication of news releases, which makes their presentation rather cautious. Statistics are provided concisely, leaving it up to users to interpret them, either directly or through users specialised in commenting on such matters. In fairness, though, the Central Bank of Iceland provides considerably commentary in the context of its regular economic assessments.

A more detailed description of the statistics based on a deeper analysis of the available figures could potentially raise the value added by providing more explanation about the content of the data and their context. Indeed, a more analytical approach to this type of statistical product by knowledgeable and experienced producers could help ensure the correct interpretation of the essence of the statistics and their significance.

When expanding and giving more detail on the content of news releases, the objectivity of the texts must obviously be preserved and statements that could cast doubt on impartiality must be avoided. Training in the necessary analytical skills, including attention paid to impartiality in statistical products, should therefore be part of the approach. Indeed, such training has been initiated at Statistics Iceland and its continuation is important in this context.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R16. Statistics Iceland and the Central Bank of Iceland should enhance the analytical content of their communication on new data releases. (Improvement-related: ES CoP, Indicator 15.1)

Statistics Iceland has a wide variety of communication channels available through which it can help users interpret its statistics. These range from regular exchanges in user groups over written material such as news releases, to bilateral responses to questions posed by users about new data releases. To a large extent, communication takes place with expert users ranging from the media and economic commentators on government and financial-sector employees to researchers and employees in institutions such as the Central Bank of Iceland that not only produce but also use statistics. Many end users are fed by expert users rather than directly by Statistics Iceland. Hence, ensuring and facilitating interpretation by expert users is crucial. In this respect, the information flow from Statistics Iceland could be made more efficient.

The above-mentioned very terse style of writing news releases may not always be the most productive, as it may prompt requests for clarification and information on new releases in reactive mode and on a bilateral basis. To address this issue, all users – and not just those raising bilateral queries – should instead benefit from up-front information, clarification and context. Likewise, information on upcoming changes in definitions, data sources, etc. should be presented to expert users at an early stage, e.g., through user groups, to allow for preparations to be made and possibly also to allow for useful discussion.

Up-front communication on aspects of statistical production might contribute to a better understanding of statistical data, their potential and their limits, and Statistics Iceland should engage more strongly in this activity. More information should be provided on the uncertainty around the released data, specific conditions affecting statistical production such as regular data sources not capturing important developments at the time of production, particular current challenges of specific

official statistics, and new development needs. Better coverage of such issues in news releases and other public communication should provide greater insight, while discussions and the information provided to user groups, now helpfully organised by constituency, can prepare the ground for upcoming challenges and improvements.

To improve beyond compliance with the ES CoP, the peer review team recommends:

R17. Statistics Iceland should further engage and communicate with users in a structured, transparent and forward-looking way, including on uncertainty, data weaknesses and changes in statistics. (Improvement-related: ES CoP, Indicator 15.7)

5.3 VIEWS OF THE NSI, AS THE NATIONAL COORDINATOR OF THE NSS AND THE PEER REVIEW, ON THOSE RECOMMENDATIONS WHERE THEY DIVERGE FROM PEER REVIEW EXPERTS' ASSESSMENT

Statistics Iceland welcomes the thorough work of the experts in the peer review team and appreciates the efforts made to support Statistics Iceland and other national producers of European statistics in Iceland by putting forward recommendations that will improve the compliance with the ES CoP. There is however one recommendation where Statistics Iceland has a diverging view and would like to express some reservations.

R15. Statistics Iceland should reconsider the unplanned, ad hoc publication of preliminary statistical results, possibly in the context of refining its scheduling of published outputs. (Improvement-related: ES CoP, Indicators 6.5 and 13.5)

Principle 6 states the importance of impartiality and objectivity including the importance of equity of users. Indicator 6.5 states the principle of pre-announced release dates and times without putting forward any indication that the pre-announcement needs to be the same for all statistical releases. In the ESS Quality Assurance Framework the institutional methods presented for indicator 6.5 are two; having a publicly available and easily accessible release calendar containing information on the date and time of future releases and ensuring the stability of the release calendar by announcing changes to the dissemination schedule in a transparent manner.

In that context, Statistics Iceland would like to stress that the 2 days advance publication of statistical outputs based on administrative data follow all set requirements as they are pre-announced and abide with other dissemination rules in Statistics Iceland, complying with the description in ES CoP and the ESS Quality Assurance Framework. In addition, the 2 days pre-announced outputs are accounted for on Statistics Iceland's website although this is an exception from the basic rules of Statistics Iceland's release calendar. In addition, this publication category is clearly defined and is based on a prioritisation of timeliness above accuracy.

Statistics Iceland will, however, review procedures and information regarding this publication category and introduce necessary changes where needed - to improve and increase clarity in the matter.

ANNEX A – AGENDA OF THE VISIT

Timing	Topic	Participants
Day 1 - 12 June 2023		
09.00-09.30	Preparatory meeting	Peer review expert team: All NSI – Peer review team: National peer review coordinator
09:30-09:45	Welcome	Peer review expert team: All NSI - Internal participants: Director General Director of Communication Director of Data management Director of Statistical analysis Director of Finances NSI – Peer review team: National per review coordinator
09:45-10:45	Presentation of NSS and NSI	Peer review expert team: All NSI - Internal participants: Director General Director of Communication Director of Data management Director of Statistical analysis Director of Finances NSI – Peer review team: National per review coordinator
10:45-11:00	Coffee break	
11:00-12:30	Professional independence and statistical law	Peer review expert team: All NSI - Internal participants: Director General Director of Communication NSI – Peer review team: National per review coordinator
12:30-13:30	Lunch	
13:30-15:30	Coordination and cooperation	Peer review expert team: All

		<p>NSI - Internal participants: Director General Director of Communication Research manager</p> <p>NSI – Peer review team: National per review coordinator</p>
15:30-15:45	Coffee break	
15:45-16:45	Data and data governance	<p>Peer review expert team: All</p> <p>NSI - Internal participants: Director of Data management Director of Statistical analysis</p> <p>NSI – Peer review team: National per review coordinator</p>
16:45-17:45	Peer review expert team discussions	

Timing	Topic	Participants
Day 2 - 13 June 2023		
09:00-11:00	Central Bank of Iceland (CBI)	<p>Peer review expert team: All</p> <p>From CBI: Head of Data & Analytics, IT & Statistics Data Collection and Publications, IT & Statistics National Accounts Specialist, IT & Statistics</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
11:00-11:15	Coffee break	

11:15-12:15	Central Bank of Iceland (CBI)	<p>Peer review expert team: All</p> <p>From CBI: Head of Data & Analytics, IT & Statistics Data Collection and Publications, IT & Statistics National Accounts Specialist, IT & Statistics CBI, users</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
12:15-13:15	Lunch	
13:15-15:15	Directorate of Health (DoH)	<p>Peer review expert team: All</p> <p>From DoH: Head of Division, Health Information Project manager, Health Information</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
15:15-15:30	Coffee break	
15:30-17:00	Past progress, plans for future, COVID	<p>Peer review expert team: All</p> <p>NSI - Internal participants: Director General Head of Division, Innovation Research manager</p> <p>NSI – Peer review team: National per review coordinator</p>
17:00-18:00	Peer review expert team discussions	

Timing	Topic	Participants
Day 3 - 14 June 2023		
09:00-10:30	Resources and effectiveness	Peer review expert team: All NSI - Internal participants: Director of Finances Head of Division, Information technology NSI – Peer review team: National per review coordinator
10:30-10:45	Coffee break	
10:45-12:15	Dissemination, relations with users and other externals	Peer review expert team: All NSI - Internal participants: Director of Communication Research manager Dissemination expert NSI – Peer review team: National per review coordinator
12:15-13:15	Lunch	
13:15-16:00	Processing, quality, methodology, confidentiality	Peer review expert team: All NSI - Internal participants: Head of Division, Innovation Chief Methodologist Security manager Research manager Quality manager NSI – Peer review team: National per review coordinator
16:00-16:15	Coffee break	
16:15-17:15	Junior staff	Peer review expert team: All NSI - Internal participants: Statistics experts Web designer
17:15-18:15	Peer review expert team discussions	

Timing	Topic	Participants
Day 4 - 15 June 2023		
09.00-10.00	Data providers	<p>Peer review expert team: All</p> <p>External participants: Directorate of Immigration Directorate of Labour Directorate of Labour Registers Iceland Icelandic Transport Authority Iceland Revenue and Customs HMS Financial Management Authority</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
10:00-10:15	Coffee break	
10:15-11:15	Data users – official sector	<p>Peer review expert team: All</p> <p>External participants: Ministry of Culture and Business Affairs Prime Minister’s Office Ministry of Social and Labour Icelandic Association of Local Authorities Ministry of Finance and Economic Affairs Ministry of Health</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
11:15-11:20	Short break	
11:20-12:20	Main users – media / financials	<p>Peer review expert team: All</p> <p>External participants: Kjarninn / Heimildin</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
12:20-13:15	Lunch	
13:15-14:45	Main users - academia	<p>Peer review expert team: All</p>

		<p>External participants: University of Iceland</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
14:45-15:00	Coffee break	
15:00-16:00	Main users – business / trade unions, parliament	<p>Peer review expert team: All</p> <p>External participants: Íslandsbanki SA Confederation of Icelandic Enterprise Althingi KPMG PWC University of Iceland Landsbankinn</p> <p>NSI – Peer review team: National per review coordinator Head of Division, Innovation</p>
16:00-17:00	Peer review expert team discussions	

Timing	Topic	Participants
Day 5 - 16 June 2023		
09:30-11:30	Peer review expert team discussions	
11:30-12:30	Lunch	
12:30-14:30	Meeting with the senior management of the NSI: Conclusions and recommendations	<p>Peer review expert team: All</p> <p>NSI - Internal participants: Director General Director of Communication Director of Data management Director of Statistical analysis Director of Finances</p> <p>NSI – Peer review team: National per review coordinator</p>

ANNEX B – LIST OF PARTICIPANTS

NSI – Peer review team

National per review coordinator
Head of Division, Innovation

NSI - Internal participants

Director General
Director of Communication
Director of Data management
Director of Statistical analysis
Director of Finances
Research manager
Head of Division, Innovation
Head of Division, Information technology
Dissemination expert
Chief Methodologist
Security manager
Quality manager
Statistics experts
Web designer

Central Bank of Iceland (CBI)

Head of Data & Analytics, IT & Statistics
Data Collection and Publications, IT & Statistics
National Accounts Specialist, IT & Statistics
CBI users

Directorate of Health (DoH)

Head of Division, Health Information
Project manager, Health Information

Data providers

Directorate of Immigration
Directorate of Labour
Registers Iceland
Icelandic Transport Authority
Iceland Revenue and Customs
HMS
Financial Management Authority

Official sector (ministries, public institutions) as users of data

Ministry of Culture and Business Affairs
Prime Minister's Office
Ministry of Social Affairs and Labour
Icelandic Association of Local Authorities
Ministry of Finance and Economic Affairs
Ministry of Health
Prime Minister's Office

Media / financials

Kjarninn / Heimildin

Academic community

University of Iceland

Business/ trade unions as users of official statistics

Íslandsbanki

SA Confederation of Icelandic Enterprise

Althingi

KPMG

PWC

University of Iceland

Landsbankinn