

**Iceland: Report on the Observance of Standards and Codes—Data Module,  
Response by the Authorities, and Detailed Assessments Using  
the Data Quality Assessment Framework**

This Report on the Observance of Standards and Codes on Data Module for **Iceland** was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **November 10, 2005**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Iceland or the Executive Board of the IMF.

The Response by the Authorities on this report and the Detailed Assessment Using the Data Quality Assessment Framework (DQAF) are also included.

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**International Monetary Fund  
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INTERNATIONAL MONETARY FUND

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**Report on the Observance of Standards and Codes (ROSC)—Data Module**

Prepared by the Statistics Department

Approved by Robert W. Edwards and Michael Deppler

November 10, 2005

The Report on the Observance of Standards and Codes (ROSC) data module provides an assessment of Iceland's macroeconomic statistics against the Special Data Dissemination Standard (SDDS) complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework, July 2003 (DQAF). The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data-producing agencies to practices specific to datasets.

The datasets covered in this report are national accounts, consumer and producer price indices, government finance, monetary, and balance of payments statistics. The agencies that compile the datasets assessed in this report are the Central Bank of Iceland (CBI) and Statistics Iceland (SI).<sup>1</sup>

The datasets to which this report pertains can be accessed in print and on the Internet:

CBI's website (<http://www.sedlabanki.is>)

SI's websites (<http://www.hagstofa.is>) for the Icelandic version and (<http://www.statice.is>) for the English version

Iceland Stock Exchange (ICEX)'s website (<http://www.icex.is/is>)

This report is based on information provided prior to and during a staff mission (that visited Reykjavik on February 1–15, 2005) and publicly available information. The mission team was headed by Mr. Alfredo M. Leone and included Messrs. Thomas Alexander, Samuele Rosa, Subramanian Sriram, Louis Venter, David Allen (expert), and Ms. Maria Delia M. Araneta (Administrative Assistant).

Iceland is a member of the European Statistical System (ESS) which comprises the Statistical Office of the European Communities (Eurostat) and the statistical offices, ministries, and central banks that collect official statistics in the countries of the European Economic Area (EEA). These countries presently comprise the European Union Member States, Iceland, Liechtenstein, and Norway.

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<sup>1</sup> The Ministry of Finance (MOF) disseminates monthly data on the operations of the central government and central government debt. These data can be accessed on the Internet on the MOF's website (<http://eng.fjarmalaraduneyti.is>).

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## ABBREVIATIONS

<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
ALA	Association of Local Authorities
<i>BPM5</i>	<i>Balance of Payments Statistics Manual</i> , fifth edition
CBI	Central Bank of Iceland
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
DG	Director-General
DMBs	Deposit Money Banks
DQAF	Data Quality Assessment Framework, July 2003
DSBB	Dissemination Standards Bulletin Board
EEA	European Economic Area
ESS	European Statistical System
Eurostat	Statistical Office of the European Communities
FMA	Financial Management Authority
FME	Financial Supervisory Authority
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HES	Household Expenditure Survey
IBDC	Icelandic Banks Data Center
ICEX	Iceland Stock Exchange
IMF	International Monetary Fund
ISWGNA	Inter-Secretariat Working Group on National Accounts
ITRS	International Transactions Reporting System
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NA	National Accounts
NACE	Statistical Classification of Economic Activities in the European Communities
PPI	Producer Price Index
PRODCOM-list	Community Survey of Industrial Production (List of Products of the European Communities)
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
SI	Statistics Iceland
SM	Summary Methodology
SSF	Social Security Fund

## I. OVERALL ASSESSMENT

1. Iceland subscribed to the Special Data Dissemination Standard (SDDS) on June 21, 1996 and started posting its metadata on the Dissemination Standards Bulletin Board (DSBB) on April 16, 1998. Iceland has been in observance of the SDDS since June 30, 2004, meeting the specifications for coverage, periodicity, and timeliness, and using a flexibility option on the timeliness and periodicity for the production index and the producer price index (PPI). Iceland generally meets the requirements regarding advance release calendars. However, there are some delays in the dissemination of data on central government operations and central government debt, and the advance release dates posted for these data categories are tentative dates. Also, summary methodology (SM) statements in a number of data categories are neither provided nor posted on the DSBB. Table 4 provides an overview of Iceland's dissemination practices compared to the SDDS.

2. The ROSC data module contains the following main observations. Iceland's macroeconomic statistics are generally of high quality and are adequate to conduct effective surveillance. There is a high degree of quality awareness among Iceland's statistical managers. However, there are some deficiencies in the periodicity and timeliness of the PPI, and in the timeliness of central government finance statistics. In the context of the small size of the economy and population, which is reflected in the size of official institutions, there are potential vulnerabilities resulting from the concentration of responsibilities for some datasets in a few staff resources. There is scope for improvement in methodological soundness and in source data for some datasets. There is room for consolidating the legal framework governing Statistics Iceland (SI) in a single statistical act, and strengthening the authority for interagency coordination.

3. In applying the IMF's Data Quality Assessment Framework, July 2003 version (DQAF), the remainder of this section presents the mission's main conclusions. The presentation is done at the level of the DQAF's quality dimensions, by agency for the first two dimensions and across datasets for the remaining four. Section II provides a summary assessment by agency and dataset, based on a four-level scale. This is followed by staff recommendations in Section III. The authorities' response to this report and a volume of Detailed Assessments are presented in separate documents.

4. With regard to **prerequisites of quality**, several laws such as the *Act on Statistical Reports of 1895*, the *Act on Statistics Iceland of 1913*, the *Regulation of the Central Government Administration of 2004*, and the *Act on the Central Bank of Iceland of 2001* define the overall legal and institutional environment for the statistical activity. The legal framework and institutional arrangements are adequate for the collection, compilation, and dissemination of statistics by the agencies in their areas of responsibility. The laws establish adequate mandatory response procedures, the protection of confidentiality, as well as penalties for nonresponse/misreporting and for breach of confidentiality. Effective data sharing arrangements are in place. The legal framework provides clear authority to collect information in each dataset but is spread over a number of acts and regulations governing the production and dissemination of macroeconomic statistics. In the view of the mission, there

is a need to consolidate and strengthen the statistical legislation and to establish more clearly interagency coordination powers on statistical matters. In most instances, staff resources are adequate for the compilation of statistics, but need to be strengthened for increasing the scope of the national accounts, further developing methodologies and documentation, and coping with European statistical requirements. The current staffing levels leave the process of compiling and disseminating macroeconomic statistics relatively vulnerable; in many cases only one person is working on a specific sector, reflecting the small size of the economy, the population, and the official institutions in Iceland. Statistical agencies provide **assurances of integrity** as they adhere firmly to the principle of objectivity in the collection, processing, and dissemination of statistics. Agencies demonstrate professionalism, are transparent in their policies and practices, and provide guidelines to their staff on ethical conduct. Each agency has well-established and documented practices to ensure professionalism and impartiality in their work. Practices to inform in advance about methodological changes could be improved at the Central Bank of Iceland (CBI).

5. Overall, **methodological soundness** is observed as the macroeconomic statistics generally follow internationally accepted standards, guidelines, and good practices on definitions, scope, classification and sectorization, and basis for recording. There are some areas for improvement regarding the scope of the national accounts (NA) as the income accounts are not compiled. Some users have expressed concerns regarding the differing behavior of the consumer price index (CPI) and the deflator for household final consumption expenditure, and the SI is investigating this issue. The scope should be broadened for NA, PPI, and government finance statistics (GFS). In monetary statistics, the residency of holders of the currency-linked and indexed bonds issued by resident commercial banks needs to be ascertained so that these bonds can be classified appropriately into domestic/foreign liabilities. Also, differences in methodology used by the CBI and SI to produce statistics on exports and imports of goods need to be clarified to avoid the impression of conflicting information regarding the external current account.

6. Most statistics in Iceland get high marks for **accuracy and reliability**. Source data and statistical techniques are sound and most statistical outputs sufficiently portray reality. There are some excellent and innovative examples of electronic data capture and transmission in all datasets. However, users have expressed concerns that rapid change in the economy in recent years could be affecting the relevance of certain datasets as reflected in some unexplained structural breaks.<sup>2</sup> Statistics focus mainly on traditional sectors while certain other sectors are becoming more important (for example, statistics for the services sector). Also, the rapid expansion of the financial system calls for more disaggregated information on the composition of financial assets and liabilities to ensure that source data allow for full compliance with international standards. Moreover, changes in methodology and in accounting rules make intertemporal comparisons difficult.

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<sup>2</sup> With the assistance of the authorities, a user survey was conducted among official and private sector users. The outcome of this survey is presented in Appendix III of the accompanying Detailed Assessments document.

7. **Serviceability** of macroeconomic statistics is broadly adequate, as confirmed by the results of a recent user survey. In most instances, macroeconomic statistics are available with adequate periodicity and timeliness. Consistency of balance of payments statistics and GFS with monetary statistics could be improved. Most datasets follow the international good practices of providing the public with a clear statement of the revision schedule and of identifying provisional estimates. However, in some instances the factors underlying revisions were not well explained (as in the case of balance of payments). Also, explanations in revisions focus on the most recent data while revisions in certain datasets occurred in historical data as well. Further, most statistical publications do not identify the revised data in a clear manner.

8. In general, **accessibility** to macroeconomic statistics is adequate. All datasets are readily available to the public in electronic form and are easily downloadable from the websites of the data-producing agencies. Forms of data dissemination are very good. Most statistics are made available simultaneously to all users. Unpublished, nonconfidential data are made available to users on request. However, there is scope for improving metadata for some datasets by providing adequate documentation describing the concepts, scope, classifications, basis for recording, data sources, and statistical techniques.

9. Iceland's membership in the European Statistical System (ESS) shapes official statistical policies and practices.<sup>3</sup> Iceland produces and disseminates a significant share of its data consistent with the legal requirements of the European system. CBI and SI statisticians participate with colleagues from other member countries in working groups, committees, and other fora leading to close cooperation in statistical matters, and increasing opportunities for sharing good practices and enhancing professionalism. Iceland's adoption of an explicit inflation-targeting regime in March 2001 has created new challenges for policymakers to watch for early warnings—as provided by macroeconomic statistics and indicators—of the inflationary impact of public and private spending. In this context, it is important for the CBI to have access to adequate data sources to monitor significant developments in the economy that are likely to impact policy decisions.<sup>4</sup> Given the small size of the Icelandic reporting

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<sup>3</sup> The ESS comprises Eurostat and the statistical offices, ministries, and central banks that collect official statistics in the countries of the European Economic Area (EEA). These countries presently comprise the European Union Member States, Iceland, Liechtenstein, and Norway. With the adoption of common policies, harmonization has been extended to nearly all statistical fields. For instance, in the case of data collection and data processing of industrial commodity statistics, the methodological foundation is the annual Community Survey of Industrial Production (PRODCOM-list), which is agreed by Member States each year and issued by Eurostat.

<sup>4</sup> At the present time, for instance, the CBI is monitoring closely developments regarding aluminum and hydropower projects (some of the largest in Icelandic history) and assessing how it would be possible to keep economic stability and inflation close to the CBI's target through the interplay of autonomous economic adjustment and monetary and fiscal policy measures. See CBI, 2004 "Economic and Monetary Developments and Prospects:

(continued)



population, compiling agencies are restricted in the level of disaggregation that can be provided for most datasets, in order to preserve confidentiality.

## II. ASSESSMENT BY AGENCY AND DATASET

10. Assessments of the quality of six macroeconomic datasets—national accounts (NA), consumer price index (CPI), producer price index (PPI), government finance statistics (GFS), and monetary and balance of payments statistics—were conducted using the DQAF. In this section, the results are presented at the level of the DQAF elements and using a four-point rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions “0” and “1” of the DQAF, respectively) are presented in Tables 2a–b. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF, respectively) are shown in Tables 3a–f.

Table 1. Data Quality Assessment Framework July 2003—Summary Results

Key to symbols: O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; NA = Not Applicable		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics
<b>Datasets</b>							
<b>Dimensions/Elements</b>							
<b>0. Prerequisites of quality</b>							
0.1	Legal and institutional environment	LO	LO	LO	LO	O	O
0.2	Resources	LO	LO	LO	LO	LO	LO
0.3	Relevance	O	O	O	O	LO	LO
0.4	Other quality management	O	O	O	O	O	O
<b>1. Assurances of integrity</b>							
1.1	Professionalism	O	O	O	O	O	O
1.2	Transparency	O	O	O	O	LO	LO
1.3	Ethical standards	O	O	O	O	O	O
<b>2. Methodological soundness</b>							
2.1	Concepts and definitions	O	O	O	O	LO	O
2.2	Scope	LO	O	LO	LO	O	O
2.3	Classification/sectorization	O	O	O	O	LO	LO
2.4	Basis for recording	LO	O	O	LO	LO	O
<b>3. Accuracy and reliability</b>							
3.1	Source data	LO	O	O	LO	LO	LO
3.2	Assessment of source data	O	O	O	O	O	O
3.3	Statistical techniques	LO	O	O	O	O	O
3.4	Assessment and validation of intermediate data and statistical outputs	LO	O	O	O	O	O
3.5	Revision studies	O	O	O	O	O	O
<b>4. Serviceability</b>							
4.1	Periodicity and timeliness	O	O	LNO	LO	O	O
4.2	Consistency	LO	O	LO	LO	LO	LO
4.3	Revision policy and practice	LO	O	LO	LO	LO	LO
<b>5. Accessibility</b>							
5.1	Data accessibility	O	O	O	LO	LO	O
5.2	Metadata accessibility	LO	LO	LO	LO	LNO	LNO
5.3	Assistance to users	O	O	O	O	O	O

**Practice observed:** current practices generally meet or achieve the objectives of DQAF internationally accepted statistical practices without any significant deficiencies. **Practice largely observed:** some departures, but these are not seen as sufficient to raise doubts about the authorities' ability to observe the DQAF practices. **Practice largely not observed:** significant departures and the authorities will need to take significant action to achieve observance. **Practice not observed:** most DQAF practices are not met. **Not applicable:** used only exceptionally when statistical practices do not apply to a country's circumstances.

Table 2a. Assessment of Data Quality—Dimensions 0 and 1—Central Bank of Iceland

<p><b>0. Prerequisites of quality</b></p> <p><b>Legal and institutional environment</b> The CBI collects, compiles, and disseminates monetary and balance of payments statistics. The legal authority for the CBI to compile data from banks comes from the <i>Act on the Central Bank of Iceland</i> (No. 36; May 22, 2001) (<i>CBI Act</i>). While the <i>CBI Act</i> provides the CBI with the authority to collect and compile data from banks for monetary and balance of payments statistics purposes, it only refers to the CBI's obligation to disseminate monetary statistics. However, the CBI has a sound tradition to disseminate quarterly and annual balance of payments statistics on a regular basis. Reporting by banks is mandatory. The <i>CBI Act</i> does not explicitly state that the individual reporters' data will be kept confidential; however, the secrecy rules of the CBI and the <i>CBI Staff Rules</i> implicitly provide for such confidentiality. Existing data-sharing arrangements with the Financial Supervisory Authority (FME) are well coordinated and formalized through the <i>CBI Act</i> and the 2003 bilateral cooperation agreement between the CBI and the FME. As for balance of payments statistics, the 2001 <i>Foreign Exchange Act</i> ensures that banks report on crossborder and crosscurrency payments on own account and on behalf of resident clients. A gain, provision for confidentiality is made.</p> <p><b>Resources</b> Staff resources are adequate to compile monetary and balance of payments statistics. The compilation of monetary and (to a lesser extent) balance of payments statistics is highly automated. Computer facilities are adequate. Except for on-the-job training, the staff receive no formal training. Staff resources may need to be strengthened to meet the needs of the expanding financial system, the increasing statistical demands as a member of the EEA, and the need to undertake methodological reviews, prepare metadata, and further advance the methodological work.</p> <p><b>Relevance</b> The CBI monitors the relevance of monetary and balance of payments statistics through the requests from other departments, and from data users (through the enquiries made by e-mail or personal contact). Staff members attend meetings with international statistical organizations. There are no formal meetings with users outside the CBI. There are no user advisory groups.</p> <p><b>Other quality management</b> The CBI has well-established processes to focus on quality management, such as measures to monitor and review the quality of ongoing activities.</p>	<p><b>1. Assurances of integrity</b></p> <p><b>Professionalism</b> Staff at the CBI maintain a high degree of professionalism. Statutory provisions in the <i>CBI Act</i> provide the legal basis for institutional independence in compiling statistics. Professionalism is actively promoted and supported within the organization. The recruitment process furthers professionalism.</p> <p><b>Transparency</b> Transparency is fostered by the public availability of the <i>CBI Act</i> and other rules from the CBI. The CBI's website lists publications and carries background information on the CBI. No outside agency other than the FME has access to data on individual reporters. The CBI shares with the FME the most recent data of individual reporters only after the monetary statistics, for a given month, are released to the public. Statistical publications clearly identify the CBI as the source. Tables on monetary and balance of payments statistics presented on the CBI's website show the CBI's Statistics Department as the source for these tables. Advance notice to the public is not given of major changes in methodology, source data, and statistical techniques. The changes are indicated in the publications once they are introduced.</p> <p><b>Ethical standards</b> Clear and comprehensive ethical standards are set out in the <i>General Staff Rules and Ethical Code for Employees of the Central Bank of Iceland</i>. The staff are also required to sign the "Employee's Pledge" when they join the CBI.</p>
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Table 2b. Assessment of Data Quality—Dimensions 0 and 1—Statistics Iceland

<p><b>0. Prerequisites of quality</b></p> <p><b>Legal and institutional environment</b>          SI collects and compiles NA, CPI, and PPI statistics, as well as GFS. It also compiles data on foreign trade statistics. The legal and institutional framework for compiling statistics is established in various pieces of legislation. The <i>Act on Statistical Reports No. 29 of 1895</i> and the <i>Statistics Act of 1913</i> give SI the authority to compile and disseminate official statistics. The <i>Act on the Consumer Price Index No. 12 of 1993</i> provides for the compilation by SI of a monthly CPI. SI functions are also stipulated in the <i>Regulation on Central Government Administration No. 3 of 2004</i>, which outlines the responsibilities of all government ministries. The <i>Regulation</i> also gives SI the responsibility to coordinate official statistics; however, this responsibility is not supported by the relevant authority in the <i>Statistics Act</i>. Thus, the agency does not have the power to instruct other government bodies on the use of classifications or the dissemination of the statistics. The <i>Statistics Act</i> contains no specific provisions for maintaining the confidentiality of data. However, SI has implemented special guidelines for staff on the basis of other legislation, in the <i>Rules and Procedures for Treating Confidential Data</i> (dated October 8, 2004). The <i>Statistics Act</i> authorizes the agency to collect all information it deems necessary for the fulfillment of its duties.</p> <p><b>Resources</b>          Although the staff complement is of moderate size, the staff resources are not commensurate with the need to maintain the current compilation system and to meet international statistical requirements. Further, the current staffing arrangements may render the compilation system vulnerable in the event of unexpected staff turnover.</p> <p><b>Relevance</b>          Staff members conduct regular discussions with users in the MOF and the CBI. There is an advisory group on the CPI, and SI recently established a user advisory group on national accounts, including public finances. The CPI Committee does not have a broad representation of users. The views of a broad cross section of users are not solicited systematically such as through user surveys. SI staff members meet with major users of the CPI periodically.</p> <p><b>Other quality management</b>          There is no formal quality management program but quality is very much emphasized within SI and discussed in planning meetings. Regular monitoring of timeliness and response rates occurs.</p>	<p><b>1. Assurances of integrity</b></p> <p><b>Professionalism</b>          By stipulating the specific tasks and responsibilities of SI regarding statistics, the <i>Regulation on Central Government Administration</i> promotes professionalism and effectively prohibits interference from outside SI. The current Director-General (DG) has a lifetime appointment and cannot be removed except if he breaches the public service rules of conduct. However, the revised <i>Government Employees Act of 2004</i> stipulates that the DG be appointed for a fixed, renewable term of five years. Future appointees will be bound by these regulations.</p> <p>The DG has the sole authority to appoint staff based on the guidelines of the <i>Government Employees Act</i>. Staff are recruited based on the specific requirements for the position as established by the DG and are appointed for an indefinite period.</p> <p>The DG is the final authority on statistical matters. He is free to comment on erroneous interpretations of the statistics. Directors of the various divisions also have authority to comment directly to the media on the statistics compiled by their divisions, without seeking clearance from the DG.</p> <p><b>Transparency</b>          The terms and conditions for compiling statistics are disseminated on the SI's website in Icelandic and in English, and on the DSBB. Hardcopies are also available from the agency's library. The data on NA and GFS are provided to the MOF prior to release to the public. This advance release of the data is made known to the public via the SI's website and the DSBB.</p> <p><b>Ethical standards</b>          Staff behavior is guided by the rules for the general public services as outlined in the <i>Government Employees Act</i>.</p>
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Table 3a. Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> The NA are compiled according to the conceptual framework of the <i>European System of Accounts 1995 (1995 ESA)</i>.</p> <p><b>Scope</b> The scope of the NA does not cover all the accounts and tables recommended by the Inter-Secretariat Working Group on National Accounts (ISWGNA) as being necessary for implementing the <i>System of National Accounts 1993 (1993 SNA)/1995 ESA</i>. The annual accounts do not include income or higher order accounts. The production and assets boundaries are broadly in line with the framework.</p> <p><b>Classification/sectorization</b> Internationally accepted classifications are used for compiling and presenting the NA. These include the Statistical Classification of Economic Activities in the European Communities (NACE) to classify activities, and the Classification of Individual Consumption by Purpose (COICOP) for household consumption.</p> <p><b>Basis for recording</b> Market prices are used to value flows and stocks. All transactions and flows, including government transactions, are recorded on an accrual basis. However, transactions between establishments in the same enterprise are recorded on a net instead of a gross basis.</p>	<p><b>Source data</b> The source data on the financial operations of enterprises are derived almost exclusively from administrative data sources, primarily tax records. However, the data are available at the enterprise level only, thereby making it difficult to derive information on establishments. An annual household expenditure survey (HES) is conducted based on a three-year rolling sample of households. The source data are not timely to compile the production accounts.</p> <p><b>Assessment of source data</b> Administrative data are assessed to identify outliers and inconsistencies based on specific criteria. HES data are assessed for sampling errors.</p> <p><b>Statistical techniques</b> The annual estimates by type of activity and category of expenditure are deflated using different techniques and have different base years. However, the expenditure estimates are considered the primary estimates and are based on outdated 1990 prices. The quarterly estimates are not benchmarked to the annual estimates. The CPI and the deflator of household final consumption expenditure display different growth patterns.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> Results from supply-and-use tables were used to balance the estimates in 1997 but for the following years the discrepancy was incorporated into the estimates and not investigated. Since 2002, the discrepancy has been shown explicitly.</p> <p><b>Revision studies</b> Studies of revisions are conducted when major revisions are introduced. The last major study was presented in 2000 following the release of the revised series based on the newly adopted <i>1995 ESA</i>.</p>	<p><b>Periodicity and timeliness</b> The periodicity and timeliness of the quarterly accounts meet SDDS requirements.</p> <p><b>Consistency</b> The estimates at current prices are consistent or reconcilable with the other major datasets. The volume estimates of GDP by production and by category of expenditure are not consistent as they are derived using different constant price estimate techniques.</p> <p><b>Revision policy and practice</b> The revision cycle has been stable over the past few years. The cycle is closely related to the need to provide the policymakers with up-to-date data and the availability of the source data. However, users are not normally informed when the data have been revised as the revised data are not annotated.</p>	<p><b>Data accessibility</b> Detailed NA statistics are disseminated on the SI's website. Summary data are disseminated in hardcopy accompanied by a brief analysis. The data are released to all users at the same time based on a preannounced schedule that is available on the SI's website and on the DSBB. SI announces the release of the data through a press release at the same time the data are presented on the website.</p> <p><b>Metadata accessibility</b> The metadata are limited. A publication on sources and methods was released in 1994. SI prepared an inventory of the NA compilation system in 2004; however, it provides no information on the annual GDP constant price or the quarterly GDP compilation process. Thus, apart from the information on the DSBB, no metadata exist on the quarterly GDP compilation.</p> <p><b>Assistance to users</b> The hardcopy publications and the website provide comprehensive information on how users may contact SI.</p>

Table 3b. Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> The concepts and definitions for the CPI are in accordance with the guidelines of the <i>1995 ESA</i> and the <i>CPI Manual</i>.</p> <p><b>Scope</b> The scope of the CPI covers all resident noninstitutional households, including households whose major activity is farming or fishing or involves an unincorporated business activity. It also includes own-account consumption of meat, fish and vegetables, and services of owner-occupied dwellings. Illegal market goods and services are excluded.</p> <p><b>Classification/sectorization</b> <i>1995 ESA</i> is used to classify institutional units and transactions. Household expenditures are classified according to COICOP-Iceland version. The classification and sectorization used in the compilation of the CPI broadly conform to internationally accepted systems. The structure of the CPI is based on COICOP.</p> <p><b>Basis for recording</b> The basis for recording the CPI is purchasers' prices including trade and transport margins. Net weights are used for cars, insurance, and lotteries in accordance with the <i>1995 ESA</i>.</p>	<p><b>Source data</b> Source data (mainly the HES) provide an adequate basis for estimation of CPI weights. Comprehensive and well-managed price collections are conducted.</p> <p><b>Assessment of source data</b> Household expenditure data accord with appropriate definitions, scope, classifications, valuation, and time of recording. Sampling errors for the surveys are regularly monitored.</p> <p><b>Statistical techniques</b> Statistical techniques are generally sound, including treatment of missing prices, new products, and quality change. Appropriate formulae are used to calculate elementary aggregates and indices. CPI weights are revised annually.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> Validation includes reference to appropriate secondary source data. Some comparisons are made with other price series.</p> <p><b>Revision studies</b> Revision studies are conducted, primarily for annual revisions of weights. Two additional revisions were undertaken in recent years. Findings from revision studies are used to minimize future errors.</p>	<p><b>Periodicity and timeliness</b> Periodicity meets SDDS requirements. Timeliness exceeds SDDS requirements.</p> <p><b>Consistency</b> There are no consistency issues as the CPI is not calculated for regions. Long-term time series are available for the total CPI and for detailed subindices.</p> <p><b>Revision policy and practice</b> Revision policy is known to data users. CPI data are not revised following publication. The index weights for the CPI are revised annually. Studies of the annual weight updating are conducted, but are not disseminated.</p>	<p><b>Data accessibility</b> An advance release calendar is available on the SI's website. Precise release dates are announced in October each year for the following calendar year. Data are simultaneously released to all users. Detailed CPI data, including lengthy time series, are available on the website and in hardcopy publications. The website has provision for obtaining user-defined tables.</p> <p><b>Metadata accessibility</b> Metadata are available on the SI's website, but not yet translated into English. There is no comprehensive guide to the CPI in Icelandic or in English but some useful technical papers are published on CPI matters, mainly in English.</p> <p><b>Assistance to users</b> Contact persons are available to assist users and their contact details are advertised on the website. Users' requests for data are met in a timely manner. There is a simple listing of publications on the website, including prices applicable.</p>

Table 3c. Assessment of Data Quality—Dimensions 2 to 5—Producer Price Index

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> The PPI concepts and definitions accord with the guidelines of the 1995 <i>ESA</i> and the <i>PPI Manual</i> and broadly follow internationally accepted good practices.</p> <p><b>Scope</b> The PPI scope covers resident market enterprises producing manufacturing products and exported fish products. The manufacturing series commenced in the fourth quarter of 2003 and the fish products index in 1986. Some detail is available for fish products, but manufacturing products are not disaggregated, mainly because of confidentiality reasons. Own-account production and illegal production are not covered.</p> <p><b>Classification/sectorization</b> The 1993 <i>SNA</i> is followed in classifying institutional units and transactions. The Icelandic Standard Industrial Classification (compatible with NACE Rev.1.1) is used to classify enterprises according to their principal economic activity. The PRODCOM list is used to classify products.</p> <p><b>Basis for recording</b> The PPI weights and prices are based on sold production on a gross sales basis, valued at market prices. These are equivalent to basic prices as no subsidies are received.</p>	<p><b>Source data</b> The business register is sound. The manufacturing and fishing data used to construct weights are sound and comprehensive. The price collections are soundly based.</p> <p><b>Assessment of source data</b> Assessment of source data is routinely conducted. Most price information is obtained electronically from enterprises. Unusually large price changes are queried back to enterprises for verification.</p> <p><b>Statistical technique</b> Statistical techniques employ sound procedures. Adjustments to unit records are made only when clearly warranted and can be identified in datasets. Procedures for imputations, new products, and quality change are soundly based.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> Because the PPI is relatively new, the data are not yet regularly compared with other relevant intermediate price series and national accounts data.</p> <p><b>Revision studies</b> Revision studies are mainly conducted on weight revisions, and apply only to fish products at present. Findings from revision studies are used to minimize future errors.</p>	<p><b>Periodicity and timeliness</b> Periodicity and timeliness for the PPI do not meet SDDS requirements.</p> <p><b>Consistency</b> Consistent long-term series exist only for fish products. These are categorized by type of fish. At present, the PPI for manufacturing products is not dissected, mainly because of confidentiality reasons. No regular comparisons are made with other prices series.</p> <p><b>Revision policy and practice</b> The revision policy is known to data users. The PPI manufacturing weights are revised annually. The PPI fish product weights are revised annually. Revisions are made to indices for fish products. These are not clearly indicated in published data. To date no revisions have been made to the PPI for manufacturing products.</p>	<p><b>Data accessibility</b> An advance release calendar is available on the SI's website. Precise release dates are announced in October each year for the following calendar year. Data are simultaneously released to all users. Time series for fish products are available on the website and in hardcopy publications. A disaggregation of the manufacturing products price index is not available. The website has a provision for obtaining user-defined tables.</p> <p><b>Metadata accessibility</b> A general description of the PPI is included on the DSBB. A short description was given when the PPI was first published, but there is no comprehensive document.</p> <p><b>Assistance to users</b> Contact persons are available to assist users and their contact details are advertised on the website. Users' requests for data are met in a timely manner. There is a simple listing of publications on the website, including prices applicable.</p>

Table 3d. Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> SI compiles and disseminates the annual general government, central government, and local government statistics, in accordance with the <i>1995 ESA</i> and the <i>1995 ESA Manual on Government Deficit and Debt</i>.</p> <p><b>Scope</b> Annual general government statistics have full coverage of all government institutions at all levels. SI publishes the annual balance sheet for local governments, but only the annual financial balance sheet of the central government. SI also disseminates the main aggregates for the general government revenue, expenditure, and financial balance on a quarterly basis. The MOF disseminates monthly data on central government operations and debt.</p> <p><b>Classification/sectorization</b> The classification of transactions and the sectorization of the general government are consistent with the <i>1995 ESA</i>.</p> <p><b>Basis for recording</b> Most flows and stocks are valued at market prices. However, domestic central government debt is recorded at face value with accrued interest and indexation, but foreign central government debt is revalued for exchange rate changes. Annual transactions are based on accrual accounting principles. General government data are compiled on a gross basis and corrections are done in line with the <i>1995 ESA</i>.</p>	<p><b>Source data</b> Source data are accounting data received from the Financial Management Authority (FMA), the Social Security Fund (SSF), and the Association of Local Authorities (ALA). These data are adjusted and reclassified, where necessary, by SI to compile GFS. These sources provide SI with all the necessary stocks (except for the nonfinancial assets of the central government) and flow data. The source data allow SI to compile detailed data on revenue, expenditure, transactions in nonfinancial assets, and transactions in financial assets and liabilities. However, SI has not been receiving the source data to compile financing data for the local and general government sector since 2001.</p> <p><b>Assessment of source data</b> The final source data are based on audited accounts of all general government institutions.</p> <p><b>Statistical techniques</b> Source data do not require any estimation. However, SI makes estimates for some items, and adjustments to preliminary data.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> The final GFS use audited data based on full coverage. All tables are checked for internal consistency.</p> <p><b>Revision studies</b> Large revisions are analyzed and explained.</p>	<p><b>Periodicity and timeliness</b> Iceland meets the periodicity and timeliness requirements of the SDDS for general government operations data, but not the timeliness requirement for monthly central government operations. Although the SDDS prescribes a quarterly periodicity within one quarter for central government debt data, Iceland disseminates monthly data within one month. However, due to software problems, Iceland is not meeting its own timeliness standard, although the data are disseminated within the timeliness requirement of the SDDS.</p> <p><b>Consistency</b> GFS data are internally consistent for the general government account as well as the accounts for the other levels of government. However, in the source data, transfers paid between the subsectors of the general government. Data are consistent with the national accounts, but not with the monetary statistics.</p> <p><b>Revision policy and practice</b> The revision schedule is predetermined. Although, preliminary data are clearly indicated, revised data are not annotated. The results of major revisions are made public.</p>	<p><b>Data accessibility</b> The GFS are presented in a way that broadly allows major aggregates/balancing items to be identified and related to detailed underlying data. The annual dissemination provides coverage and details equivalent to those set out in the <i>Government Finance Statistics Manual 2001 (GFSM 2001)</i> tables with a few exceptions. For the annual figures, a large number of GFS time series from 1980 are available on the websites of the agencies. In October, SI releases an advance release calendar that covers the next calendar year. The MOF does not provide an advance release calendar. Statistics are made available simultaneously by SI to all the users. Statistics not routinely disseminated are made available upon request.</p> <p><b>Metadata accessibility</b> For the general government data, SI provides, on its website, a link to the metadata and SM on the DSBB. The MOF does not provide any metadata or methodology. However, metadata are available on the DSBB for central government operations and debt.</p> <p><b>Assistance to users</b> Contact points for each subject field and a list of publications are available on the SI's website.</p>



Table 3e. Assessment of Data Quality—Dimensions 2 to 5—Monetary Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> The concepts and definitions broadly conform to the guidelines of the <i>Monetary and Financial Statistics Manual (MFSM)</i>. Departing from the <i>MFSM</i>, monetary aggregates include deposits of the foreign sector and the central government. There is insufficient information on the residency of the holders to appropriately classify the currency-linked and indexed bonds issued by resident banks as domestic/foreign liabilities.</p> <p><b>Scope</b> Coverage includes all depository corporations in the country.</p> <p><b>Classification/sectorization</b> Classification and sectorization are mostly in line with the <i>MFSM</i>, except that in the accounts of the Deposit Money Banks (DMBs), financial derivatives are off balance sheet and positions of nonfinancial public corporations are indistinguishably included as part of government (in <i>treasury and government institutions</i>); and in the accounts of the CBI, fixed assets are off balance sheet.</p> <p><b>Basis for recording</b> The basis for recording follows the <i>MFSM</i>, except that several DMBs report loans net of provisions and securities for investment are not at market value; it is not possible to derive net claims on central government in the Accounts of the DMBs and Banking System; and it is difficult to measure net foreign assets with underlying gross figures in the Accounts of the CBI and DMBs.</p>	<p><b>Source data</b> The source data are the monthly balance sheet of the CBI and individual monthly reports submitted by the DMBs. The source data provide sufficient detail to classify sectors and instruments in line with the <i>MFSM</i>, except that the financial derivatives are not reported. The source data are timely.</p> <p><b>Assessment of source data</b> Assessment of source data is generally sound. The CBI's Statistics Department crosschecks data submitted by the DMBs with data provided by the Icelandic Banks Data Center (IBDC). For any errors and out-of-trend changes, staff immediately contact the DMBs for an explanation and/or revised data.</p> <p><b>Statistical techniques</b> Statistical techniques are sound. The compilation is highly automated. Electronic compilation procedures minimize compilation errors.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> The intermediate data are assessed and validated against data from the IBDC and from the FME (for December data).</p> <p><b>Revision studies</b> There are no formal revision studies; however, sources of errors are investigated and the errors are corrected.</p>	<p><b>Periodicity and timeliness</b> The periodicity and timeliness are in line with the SDDS requirements.</p> <p><b>Consistency</b> Monetary statistics are consistent within the dataset. The CBI's and DMBs' records on liabilities to, and claims on, each other, respectively, are consistent. However, current data disseminated are not consistent with historical data. Monetary statistics are not consistent with balance of payments statistics and GFS.</p> <p><b>Revision policy and practice</b> Revisions are rare and generally small. These revisions are not indicated. No studies and analyses are carried out routinely on the revisions. December data of each year are subject to revision until the external audit of the annual balance sheets of the DMBs is concluded. However, no information is posted regarding the possibility of such revision in the publications or on the CBI's website.</p>	<p><b>Data accessibility</b> Dissemination media is adequate. The statistics are released on a preannounced schedule. The existing layout of tables does not provide sufficient information to derive the accounts of the banking system from the accounts of the CBI and of the DMBs. Nonpublished nonconfidential data are available to users on request.</p> <p>The CBI's website shows two calendars for data release—advance release calendar and statistics calendar. Data are sent to a selected group of users on the date specified in the advance release calendar, but are posted on the CBI's website a few days later according to the statistics calendar.</p> <p><b>Metadata accessibility</b> No methodological notes are posted yet on the CBI's website or shown in publications. Brief metadata are posted on the IMF's DSBB in the form of SDDS metadata; but the DSBB is not hyperlinked from the CBI's website. There are no information materials to inform users on monetary statistics.</p> <p><b>Assistance to users</b> Assistance to users is provided on request. The CBI publications provide contact information. The CBI's website has an e-mail address for users to contact for data queries.</p>

Table 3f. Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p><b>Concepts and definitions</b> Balance of payments statistics are broadly in line with the <i>Balance of Payments Statistics Manual, fifth edition (BPM5)</i> concepts and definitions.</p> <p><b>Scope</b> The data collection system provides for all resident/nonresident transactions to be recorded in the balance of payments statement. A number of mechanisms improve the direct reporting coverage of the International Transactions Reporting System (ITRS).</p> <p><b>Classification/sectorization</b> The classification and sectorization are generally in line with the <i>BPM5</i> standards. Dividends are not shown separately for income on foreign direct investments and income on portfolio investments. Loan transactions of the banking sector are not classified separately from the currency and deposit transaction of this sector. The financial derivatives item is shown on a net instead of gross basis.</p> <p><b>Basis for recording</b> Market valuation is generally followed. Interest payments on long-term debt are not recorded on an accrual basis.</p>	<p><b>Source data</b> The ITRS is at the center of the data collection system. Additional direct reporting sources (for example, in the transportation industry) are used together with a survey on exports and imports of information technology services. Domestic currency deposits held by nonresidents in domestic banks are not reported as part of external liabilities. The CBI has initiated an in-depth discussion on revising the current data collection system and increasing the coverage of the services accounts. The degree of coverage of transactions settled through accounts abroad is incomplete as evidenced by contrasting trade and ITRS sources.</p> <p><b>Assessment of source data</b> The coverage of the ITRS and the various business registers is checked on an ongoing basis. The ITRS input data are checked electronically. Nonresponse or misreporting from some major respondents can affect the overall picture.</p> <p><b>Statistical techniques</b> All the spreadsheets used to compile the balance of payments use sound checking procedures. The ITRS uses internal consistency checking processes.</p> <p><b>Assessment and validation of intermediate data and statistical outputs</b> Financial flows and stock data and related business registers are checked against financial market news. Trade data are checked against the ITRS.</p> <p><b>Revision studies</b> Revisions are monitored and assessed.</p>	<p><b>Periodicity and timeliness</b> Data are disseminated in line with the SDDS requirements for periodicity and timeliness.</p> <p><b>Consistency</b> Data are consistent internally and with the NA and the GFS. Data on the external liabilities of domestic banks are not reconcilable between balance of payments and monetary statistics.</p> <p><b>Revision policy and practice</b> Provisional balance of payments data are clearly marked on all online and hardcopy publications. The CBI revises recent and historical statistics as soon as revised data are provided by respondents. However, users are not informed about this revision policy.</p>	<p><b>Data accessibility</b> Data are provided in well-presented tables both online and as paper publications. Tables are provided with different levels of breakdown, following specific users' requirements including the business community.</p> <p><b>Metadata accessibility</b> There is no documentation on the sources and methods used to compile statistics. The SM, however, is available on the IMF DSBB's website (except for trade and exchange rate statistics).</p> <p><b>Assistance to users</b> Assistance to users is available on request. The CBI publications provide contact information. The CBI's website has an e-mail address for users to contact for data queries.</p>

### III. STAFF'S RECOMMENDATIONS

11. Based on the review of Iceland's statistical practices, discussions with the staff of data-producing agencies, and responses from data users (see Appendix III of the Detailed Assessments volume), the mission has a set of recommendations. They are designed to increase further Iceland's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Iceland's statistics. Some additional technical suggestions are included in the Detailed Assessments volume, under relevant indicators and elements of various dimensions for each macroeconomic dataset.

#### **Cross-cutting Recommendations**

- Strengthen back-up arrangements and increase staff resources for work on macroeconomic statistics. Additional resources would be required to meet the increasing statistical demands as a member of the EEA, and the need to undertake methodological reviews, prepare metadata, and further advance the methodological work.
- Consolidate the legal framework governing SI by preparing a single and comprehensive statistical act.
- Strengthen the authority for coordinating official statistics by assigning specific responsibility to SI in the new legislation.
- Strengthen coordination among statistical agencies to ensure consistency of methodologies and statistical outputs.
- Provide detailed metadata through publications and/or websites of relevant compiling agencies to meet the requirements of the users.

#### **National Accounts**

- Expand the scope of the annual accounts to include income accounts and the capital account.
- Expand the scope of the quarterly accounts to include quarterly GDP by type of activity.
- Introduce benchmarking techniques to combine the quarterly estimates with the annual estimates.
- Clearly indicate revisions to published series, using annotations.

#### **Price Statistics**

##### ***General***

- Examine the adequacy of existing staff numbers and the desirability of concentrating price index expertise in one organizational unit.

##### ***Producer Price Index***

- Develop a phased and prioritized work program to ensure the planned improvements in the producer price indices.
- Clearly indicate revisions to published series, using annotations.

### **Government Finance Statistics**

- Compile an annual balance sheet for the central government and for the consolidated general government.
- Clarify the classification of financial liabilities of the local governments.
- Ensure the timely provision of source data to the compiling agencies in order to meet the timeliness requirement of the SDDS.

### **Monetary Statistics**

- Adopt the full scheme of sectorization of institutional units and classification of financial instruments as recommended in the *MFSM*.
- Present the accounts of the CBI, DMBs, and the Banking System in the analytical framework as recommended in the *MFSM*.
- Ascertain the residency of the holders of currency-linked and indexed bonds issued by the resident banks and classify these bonds into domestic/foreign liabilities as appropriate.
- Provide advance notice to the public of major changes in methodology, source data, and statistical techniques.
- Reconcile differences between historical and current data disseminated, as well as discrepancies between monetary statistics and balance of payments statistics and GFS.
- Clearly indicate revisions to published series, using annotations.
- Disseminate monetary statistics to all users simultaneously.

### **Balance of Payments Statistics**

- Compile data on an accrual basis on income on external debt, and on foreign direct investments.
- Collect and compile data on financial derivatives (at least from banks).
- Classify domestic currency deposits of nonresident nonbank entities as foreign liabilities and tighten the consistency between balance of payments and monetary statistics.
- Improve the revision policy and inform the users about it.

Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (Meets SDDS)	Periodicity		Timeliness		Comments
		SDDS	Iceland	SDDS	Iceland	
Real Sector						
National accounts	Yes	Q	Q	1Q	70-75 days for the data compiled using the expenditure approach  20-22M for data compiled using the production approach	
Production index	Yes	M	A	6W (1M encouraged)	3M	Flexibility options for periodicity and timeliness  Missing SM page
Labor market: Employment	Yes	Q	Q	1Q	17D	
Labor market: Unemployment (Registered unemployment)	Yes	Q	M	1Q	2-3W	Missing SM page
Labor market: Wages/earnings	Yes	Q	M	1Q	NLT 23D	
Price index: Consumer prices	Yes	M	M	1M	8WD	
Price index: Producer prices	Yes	M	Q	1M	45 days	Flexibility options for periodicity and timeliness
Fiscal Sector						
General government or public sector operations	Yes	A	A	2Q	180D	
Central government operations (revenue and expenditure, capital transactions, borrowing, and overall cash balance)	Yes	M	M	1M	M	Missing SM page
Central government debt	Yes	Q	M	1Q	NLT 1M	Missing SM page
Financial Sector						
Analytical accounts of the banking sector	Yes	M	M	1M	NLT 25D	Missing SM page
Analytical accounts of the central bank (accounts of the CBI)	Yes	M (W recommended)	M	2W (1W encouraged)	NLT 1W	Missing SM page
Interest rates	Yes	D	D (Central Bank lending and deposit rates for credit institutions and deposit money banks' deposit and lending rates)	<i>1</i>	D (see metadata)	Missing SM page

SDDS Data Category	Coverage (Meets SDDS)	Periodicity		Timeliness		Comments
		SDDS	Iceland	SDDS	Iceland	
Stock market: Share price index	Yes	D	Daily rates can be obtained at the Iceland Stock Exchange	<i>1</i>	2W	Missing SM page
External Sector						
Balance of payments	Yes	Q	Q	1Q	NLT 10W	
International reserves and foreign currency liquidity	Yes	M (W recommended)	M	1W for official reserve assets  1M (1W encouraged) for the reserves template	NLT 7D for international reserves  NLT 21D for the reserves template data	
Merchandise trade	Yes	M	M	8W (4-6W encouraged)	NLT 4-5W	Missing SM page
International investment position	Yes	A (Q recommended)	Q	3Q (1Q encouraged)	NLT 10W	
External debt	Yes	Q	Q	1Q	NLT 10W	
Exchange rates	Yes	D	D	<i>1</i>	D	Missing SM page
Socio-Demographic Data						
Population	Yes	A	A	...	10-15D	Missing SM page

**Note:** Periodicity and timeliness: (D) daily; (W) weekly or with a lag of no more than one week from the reference date or the closing of the reference week; (M) monthly or with a lag of no more than one month; (Q) quarterly or with a lag of no more than one quarter; (A) annually; and (...) not applicable. *Italics* indicate encouraged categories.

<sup>1</sup> Given that the data are broadly disseminated by private means, the timeliness with which official data are disseminated is not time critical.



DAVIÐ ODDSSON  
GOVERNOR

November 2, 2005  
SI 24619

Mr. Robert W. Edwards, Director  
Statistics Department  
International Monetary Fund  
Washington D.C. 20431  
U.S.A.

Dear Mr. Edwards,

On the behalf of the Icelandic authorities, Statistics Iceland, the Ministry of Finance and the Central Bank of Iceland, I am pleased to provide you with a joint response to the finalized Report on the Observance of Standards and Codes (ROSC – Data Module) and the Detailed Assessment using Data Quality Assessment Framework (DQAF).

The whole exercise was constructive for us. I would especially like to mention that the cooperation with the IMF Data ROSC mission that visited Reykjavik in February was excellent. We are also pleased to have had the opportunity to provide the mission with some factual corrections that were incorporated into the final report.

While our views may have differed slightly on some practical points, the ROSC Data Module and the DQAF reports are on the whole well balanced and give a good overview of the current status. Furthermore, we concur with most of the recommendations. Some of them are already being implemented and others scheduled to be implemented in the near future.

On behalf of the coordinating authority for the ROSC mission in Iceland, I am pleased to confirm you that all three institutions mentioned above approve the publication of the ROSC documents on the IMF's website; this would include the enclosed response of the Icelandic authorities.

Sincerely yours,  
CENTRAL BANK OF ICELAND

Davíð Oddsson  
Governor and Chairman  
of the Board of Governors

cc: Mr. Jon Solheim, Executive Director, IMF  
Mr. Michael Deppler, Director, European Department

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INTERNATIONAL MONETARY FUND

ICELAND

**Report on the Observance of Standards and Codes (ROSC)—Data Module**

**Response by the Authorities**

November 10, 2005

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2 November, 2005

## **Report on the Observance of Standards and Codes**

### **Response from the Icelandic Authorities**

#### **I. GENERAL RESPONSE AND THE CROSS-CUTTING RECOMMENDATIONS**

The Icelandic authorities—Statistics Iceland, the Central Bank of Iceland, and Ministry of Finance—are grateful for the opportunity to have some of the main official statistics reviewed and evaluated against the IMF’s Data Quality Assessment Framework. The ROSC exercise was found to be valuable and helpful in assessing current practices and methodologies. The authorities concur with most of the recommendations of the ROSC as they are in close harmony with the views of these institutions. As regards the recommendations that are of a cross-cutting nature, the following response can be given:

The ROSC has observed that Icelandic legislation on official statistics is spread over several legal acts, some of which are quite old. For this reason it is recommended that single, comprehensive statistical legislation be enacted. Furthermore, it is recommended to strengthen the authority for coordinating official statistics by assigning specific responsibility to Statistics Iceland in the new legislation. While being of the opinion that the present legal arrangements have been broadly adequate, the Icelandic authorities concur with the desirability of having a single and modern statistical act. The Icelandic authorities have decided to prepare comprehensive statistical legislation along the lines found in many neighboring countries, containing all the main principles of official statistics as recommended by the United Nations and the IMF.

#### **A. Staff Resources**

Statistics Iceland agrees that there is a need to increase staff resources for work on macroeconomic statistics. In view of the recommendation of the ROSC, the Icelandic authorities have decided to increase the staff in macroeconomic statistics (national accounts and price statistics) in the course of the next two years.

The Central Bank of Iceland will take a further look at the recommendation of increasing staff resources and decisions will be taken after careful studies of the cost and benefits.

It should be noted, however, that the perception of insufficient staffing is a misconception often applied to small economies. It is important to bear in mind the size of the economy and population when estimating the sufficiency of staff resources. The size of the economy already leads to official institutions being disproportionately large in international comparison in terms of population. Enlarging these institutions would be impossible in practice and out of line with IMF orthodoxy. Small economies such as Iceland learn to adapt

to size constraints, through sharing of tasks, etc. It should also be noted that size can also have benefits in terms of oversight and flexibility.

## **B. Metadata**

The ROSC makes several references to the provision of metadata as well as availability of summary methodologies for the IMF's DSBB. In the last year or so, substantial efforts have been made at Statistics Iceland to improve and increase the provision of data and metadata, not least through a new website which was launched in June 2005. Continued efforts will be made in this respect as well as in fulfilling the IMF's standards for providing and updating data and metadata on a regular basis.

The mission has recommended the Ministry of Finance provide detailed metadata through publications and/or websites of relevant compiling agencies to meet the requirement of the users. One of the objectives of the State Accounting Committee (SAC) is to look into the practices regarding the production and dissemination of metadata for the source data of the central government and to come up with improvements. This work is expected to be completed over the next two to three years.

The Central Bank's balance of payments metadata comply with requirements made in the SDDS. In addition, significant improvements are being made to inform the users about data sources, methodology, and compilation practice as the balance of payments metadata will be disseminated with the statistics on the Central Bank's website. Also, advanced notice will be given if major changes are decided in methodology, source data, and statistical techniques. The new metadata (and the SDDS) will explicitly mention that there is no external government access to the balance of payments statistics prior to release. New metadata on monetary statistics are being prepared that explain the data revision process with particular mention of the revision made when end-of-year data are externally audited. Metadata for monetary statistics have been disseminated on the Central Bank's website. The Central Bank website has hyperlinks to the IMF website. The Central Bank believes that the metadata accessibility has improved and become adequate.

## **C. User Groups**

One of the cross-cutting recommendations of the ROSC concerns regular user contacts through user groups and surveys. Statistics Iceland established a broadly based advisory user group on national accounts (including foreign trade) in 2004 and this year a similar group has been established for the consumer price index (CPI). That group is in addition to the mandatory advisory CPI group which has functioned for many decades. Apart from this, Statistics Iceland has for a long time sought user or expert advice through ad-hoc groups on specific tasks, such as new surveys or data collections, revisions of classifications and similar undertakings. At present several such groups are active, notably on the system of health accounts, wage statistics, implementation of Classification of the Functions of Government (COFOG) and local government finance. Statistics Iceland will continue to expand and maintain user contact, mainly through user or advisory groups. In the Icelandic setting with

its few actors and close proximity, the value of formal user surveys is more doubtful but will also be explored.

The Central Bank sees merits in establishing user groups. However, further analysis on the topic is needed before any decisions on implementation can be made.

## **II. NATIONAL ACCOUNTS—COMMENTS BY STATISTICS ICELAND**

Recently, much effort has been spent on increasing the work on national accounts and strengthening the relevant methodologies in that respect. Of such efforts, it may be mentioned that work on income accounts has been under way during the last three years, substantial work has already been done on supply and use accounts, and as of September 2005 chain-linking has replaced the fixed base year for constant price measurements, both in the annual and the quarterly accounts. Statistics Iceland is of the opinion that these efforts need to be continued and agrees fully with the recommendation to expand the scope of the annual national accounts. For this reason, the Icelandic authorities have now pledged to increase the staff in national accounting. At the same time Statistics Iceland will be seeking ways to redirect its work towards increasing the scope and the timeliness of national accounts and other macroeconomic statistics.

A particular effort will be made to improve the timeliness of the annual GDP by type of activity. In Iceland, such accounts are heavily dependent on tax data; these provide good coverage as they include standardized comprehensive company accounts but are quite late. Producing quarterly GDP by type of activity as recommended by the ROSC and by the advisory user group on national accounts has not been prioritized for reasons of scarce resources. However, this is certainly of great interest and will be explored in the near future. In particular, quite different and more timely data sources will be sought to enable the generation of provisional estimates.

As mentioned previously, chain-linking has been implemented in the fixed price measurements of the national accounts, both annual and quarterly. A revised series at constant prices, extending back to 1990, was released on schedule in September 2005 as well as a continuous time series at current prices from 1980. Hence, there is now harmony in the methodology used for the expenditure and the output approaches as well as in the quarterly accounts. Furthermore, and as anticipated during the ROSC mission, chain-linking has reduced substantially the differences in measurements between the CPI and the household final consumption deflator. As is the experience in most other countries, some differences continue to exist and can be related to the difference in scope of the two yardsticks.

The recommendation to include benchmarking techniques to combine quarterly estimates and annual series will be carefully explored in the near future in connection with further development of the quarterly accounts.

Statistics Iceland is of the opinion that to investigate annually the discrepancy between GDP by type of activity and by expenditure, as recommended by the ROSC, is one of the most important tasks for Icelandic national accounting. Such investigations have so far been

carried out by constructing supply and use tables at an interval of a few years; Statistics Iceland intends to do this more frequently and regularly, preferably annually if resources allow.

### **III. PRICE STATISTICS—COMMENTS BY STATISTICS ICELAND**

Statistics Iceland agrees with the findings of the ROSC that the present staff level in price statistics is insufficient to ensure the continued development of the PPI and to maintain the regular production and updating of the CPI without risk. As regards the CPI, the ROSC recommends that staffing back-up arrangements are strengthened and staff resources increased. Back-up arrangements are continuously in place and are regularly overhauled. The CPI work is always under much pressure and would clearly benefit from added staff resources.

As regards the development of the PPI, the work is being carried out according to a phased and prioritized work programme as recommended by the ROSC. In the first instance, the emphasis is on strengthening the regular quarterly production of the index, followed by extending its coverage to eventually introducing monthly data instead of the present quarterly ones. At present, a substantial part of the data is already collected on a monthly basis.

In light of the ROSC recommendation the Icelandic authorities will make an effort to increase the staff resources in price statistics over the next two years.

Finally, efforts will be made to prepare proper documentation covering all aspects of the basis, methodology, and production of the PPI.

### **IV. GOVERNMENT FINANCE STATISTICS—COMMENTS BY THE MINISTRY OF FINANCE (MOF)**

The mission has recommended that the MoF compile an annual balance sheet for the central government and for the consolidated general government. This would fall under the auspices of the State Accounting Committee (SAC), which is represented by all the main producers of source data and official statistics. The SAC has during this year further developed the accrual accounting for the central government. Its main task has been (1) to develop an overall presentation frame of the central government finances in line with the *GFSM 2001* framework, where the integrated system will be fully utilized and presented, (2) reclassifying the revenue presentation (structure) and the expenditure classification by economic type in line with the *GFSM 2001*, and (3) to fully develop the balance sheet for the central government, particularly the balance sheet for nonfinancial assets (a balance sheet for financial assets and liabilities exist already). Development of the balance sheet for the central government is expected to take two to three years. A more developed balance sheet exists for the local governments, which will make the consolidation for general government easier.

Clarifying the classification of financial liabilities of the local governments has been in progress. Since 2001, it has been problematic to distinguish between domestic and foreign financing, and between bank and nonbank financing, due to problems relating to

simplification and streamlining of compilation of financial data on the local government level. A committee is addressing the problem and expects to resume the publication of these data for the general government relatively soon, with statistics for 2005.

The authorities are making efforts to ensure the timely provision of source data to the compiling agencies in order to meet the timeliness requirement of the SDDS. As stated in a footnote on the DSBB “Iceland is in the process of updating its computer software used in compiling central government operations and central government debt data. As a result, there are some delays in the dissemination of these data.” The Financial Management Authority is expecting to overcome these delays in providing central government operations data to the compilers no later than in early 2006.

#### **V. MONETARY STATISTICS—COMMENTS BY THE CENTRAL BANK OF ICELAND (CBI)**

The staff report recommends that the CBI adopt the full scheme of sectorization of institutional units and classification of financial instruments as recommended in the *MFSM*. The CBI will respond to this recommendation *inter alia* by collecting data on financial derivatives from the Deposit Money Banks (DMBs) and disseminating these statistics in the coming months or as soon as collection of source data begins. Also, preparations have started to include fixed assets in the Central Bank’s balance sheet.

The deposits of nonfinancial public corporations with DMBs cannot be disaggregated from the Treasury and government agencies because the Enterprise Register does not distinguish between the two sets of entities. In the DMBs accounts, the net claims on the central government cannot be presented separately for the same reason.

Finally, it should be noted that deposit departments of cooperative societies are classified with DMBs in Iceland and therefore do not fall under the category of Other Financial Corporations (as stated in the DQAF). Also, disaggregated data on commercial banks and savings banks are no longer disseminated.

The Central Bank fully concurs with the ROSC recommendations that the accounts of the CBI, DMBs and the Banking system in the analytical framework should be presented as recommended in the *Monetary and Financial Statistics Manual (MFSM)*. Efforts are being made towards following this recommendation.

As regards the treatment of provisions for loan losses and securities held for investment purposes, this is consistent with the FME (Financial Supervisory Authority) Rules on Financial Statements of Credit Institutions. It has been convenient to compile reports in accordance with the provisions of rules on financial statements. The arguments for changing this arrangement will be examined. In addition, the Central Bank will take steps to present net foreign assets in the accounts of the CBI and of DMBs. The Central Bank accounts disseminated with other monetary statistics (see the Statistics pages on the Central Bank’s website) present both net and gross foreign assets.

The Central Bank has implemented the recommendation to exclude deposits of nonresidents from the definition of monetary aggregates. Central government deposits have not been excluded and in fact this is impossible under the current automatic classification of deposits by DMBs (because deposits of nonfinancial public corporations cannot be disaggregated from the Treasury and government agencies). Since the Treasury mainly banks with the Central Bank, it is assumed that it does not have major deposits with the DMBs. Treasury deposits in the Central Bank are not included in monetary aggregates. In the Central Bank's view, this is therefore a very minor problem and should not warrant a downgrading of the data quality assessment.

The recommendation of ascertaining the residency of the holders of currency-linked and indexed bonds issued by the resident banks, and classifying these bonds into domestic/foreign liabilities, has been implemented.

Staff has recommended that the public should be given advanced notice of major changes in methodology, source data, and statistical techniques but this has not fully been addressed. In this context, it was recommended that studies and analyses could be conducted on the level and direction of revisions, possibly on an annual basis and shared with users. The Central Bank will consider this recommendation but it will be subject to the availability of staff resources. It is stated in the staff report that in practice revisions are rare and insignificant because the monthly reports submitted by the DMBs are usually final. Therefore, the Bank is not entirely convinced that there is a need for such studies because of timely reporting of data by all the parties concerned. Also, it should be noted that seasonal adjustments are not carried out on a regular basis. However, seasonally adjusted data are sometimes examined during research or statistical analysis.

Efforts are being made to improve the data presentation in tables on Accounts of the Central Bank of Iceland, DMBs, and the Banking system. First, an investigation is in progress to explain the discrepancy between the monetary statistics and balance of payments (external position). Steps will be taken to do the same for government finance statistics. Second, steps will also be taken to explain the relation between monetary statistics tables. Inconsistencies in time series have been rectified and breaks in the series will be explained in metadata. Third, statistics are also clearly identified as preliminary, revised, or final. Fourth, monetary statistics releases have now been synchronized so that they are available to all users at the same time. Finally, please take note that "Chapter 2" data reports containing data on deposits, loans, and bonds issued by four commercial banks and seven savings banks are no longer sent to the banks after the monetary statistics are released to the public according to the Advance Release Calendar.

## **VI. BALANCE OF PAYMENTS STATISTICS—COMMENTS BY THE CENTRAL BANK OF ICELAND (CBI)**

On a general note, the Central Bank fully concurs with staff recommendations and will strive to improve the collection, compilation, and dissemination of the balance of payments statistics in accordance with international standards or best practices.

Measures will be taken to ensure that respondents fully understand their obligation to provide information for the balance of payments data. Respondents will also need to be informed of the Central Bank's commitment to confidentiality with a pledge that their data will not be disseminated on a disaggregated basis, but used solely in the aggregated compilation of the balance of payments and external position. In future, laws and regulations on the obligation to provide information and on confidentiality will be cited on forms of questionnaires or in a separate letter to regular respondents, and also in annual surveys of external trade and international investment position.

The mission recommended that direct investment income on equity and portfolio investments should be shown separately in the income account of the quarterly statistics. The Central Bank will implement this recommendation. In addition, balance on income statistics, disaggregated according to the IMF standard, are available from the supervisor of balance of payments statistics. The same applies to the disaggregation of assets and liabilities in the financial account regarding other investments: trade credits, loans, currency and deposits, and other. It is always debatable how far statistics for the general public should be broken down, since more detailed dissemination often obscures the headline issues. In Iceland, the presentation of balance of payments statistics has reflected this focus on headline issues, which has been shaped by historical experience (tradition). Interest payments will be calculated on an accrual basis instead of the previous due-for-payment basis.

The inclusion of financial derivatives in the balance of payments and external position statistics is scheduled to take place (at least from the banks). Derivatives are expected to be included in the balance sheets of DMBs next year (and expedited if possible) and efforts will be made to obtain information about derivatives of other financial institutions. Statistics for nonresidents' deposits have been reconciled with the monetary statistics. Permanent debt between parent and affiliated banks will be included under the direct investment category.

Efforts will be made to improve data collection for the balance of payments statistics. In particular, new approaches need to be explored for capturing data on growing cross-border investment when the quarterly balance of payments is compiled. As the staff has advised, the Central Bank has embarked on an investigation to disclose the reasons for inconsistency in the external position of the monetary statistics and balance of payments.

Regarding the revision of the data, steps will be taken to improve the policy (entailing the immediate inclusion of new data and explicit statement in statistical releases that this has been done). Steps will also be taken to identify which balance of payments data have been revised when they are released. Every effort will be made to inform users of the reasons for the revision of balance of payments statistics in Central Bank press releases and on the Statistics page of the Central Bank's website. Furthermore, the Central Bank will consider studies and analyses of revisions and making them public, subject to the availability of staff resources.

INTERNATIONAL MONETARY FUND

ICELAND

**Detailed Assessments Using the Data Quality Assessment Framework (DQAF)**

Prepared by the Statistics Department

Approved by Robert W. Edwards and Michael Deppler

November 10, 2005

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Iceland's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as appendices the DQAF generic framework and the results of the users' survey.

Iceland is a member of the European Statistical System (ESS) which comprises the Statistical Office of the European Communities (Eurostat) and the statistical offices, ministries, and central banks that collect official statistics in the countries of the European Economic Area (EEA). These countries presently comprise the European Union Member States, Iceland, Liechtenstein, and Norway.



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## ABBREVIATIONS

<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
AD	Accounting Department, Central Bank of Iceland
ALA	Association of Local Authorities
ARC	Advance Release Calendar
<i>BPM5</i>	<i>Balance of Payments Statistics Manual</i> , fifth edition
CA	Customs Administration
CBI	Central Bank of Iceland
c.i.f.	Cost, insurance, and freight
CMFB	Committee on Monetary, Financial and Balance of Payments Statistics of the EEA
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activity
CPI	Consumer Price Index
DCS	Depository Corporations Survey
DG	Director-General
DMBs	Deposit Money Banks
DQAF	Data Quality Assessment Framework, July 2003
DSBB	Dissemination Standards Bulletin Board
ECB	European Central Bank
EEA	European Economic Area
EFTA	European Free Trade Area
EMTN	European Medium Term Notes
E&O	Errors and Omissions
ESS	European Statistical System
Eurostat	Statistical Office of the European Communities
FDI	Foreign Direct Investment
FISIM	Financial Intermediation Services Indirectly Measured
FMA	Financial Management Authority
FME	Financial Supervisory Authority
f.o.b.	Free on board
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
GNP	Gross National Product
HES	Household Expenditure Survey
HFCE	Household Final Consumption Expenditure
HICP	Harmonized Index of Consumer Prices
IAOS	International Association for Official Statistics
IBDC	Icelandic Banks Data Center
ICEX	Iceland Stock Exchange

ILO	International Labour Organisation
IMF	International Monetary Fund
IRD	International Revenue Directorate
ISAT 95	Icelandic Standard Industrial Classification
ISWGNA	Inter-Secretariat Working Group on National Accounts
ITRS	International Transactions Reporting System
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NA	National Accounts
NACE	Statistical Classification of Economic Activities in the European Communities
NEI	National Economic Institute
NSDP	National Summary Data Page
ODCs	Other Depository Corporations
OECD	Organisation for Economic Cooperation and Development
OFCs	Other Financial Corporations
PAYE	Pay-as-you-earn
PPI	Producer Price Index
PPP	Purchasing Power Parity
PRODCOM-list	Community Survey of Industrial Production (List of Products of the European Communities)
ROSC	Report on the Observance of Standards and Codes
SD	Statistics Department, Central Bank of Iceland
SDDS	Special Data Dissemination Standard
SI	Statistics Iceland
SM	Summary Methodology
SSF	Social Security Fund
STA	IMF Statistics Department
SUT	Supply-and-Use Tables
UCITS	Management Companies of Undertakings for Collective Investment in Transferable Securities
UN	United Nations
VAT	Value Added Tax

## DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, prices (Consumer Price Index and Producer Price Index), government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the Icelandic officials. This information, which is organized along the lines of the generic framework DQAF (see Appendix II), was used to prepare the summary assessment of data quality elements, based on a four-level scale of observance, shown in Iceland's Report on the Observance of Standards and Codes (ROSC)—Data Module.

### I. NATIONAL ACCOUNTS

#### 0. Prerequisites of quality

##### 0.1 *Legal and institutional environment*

0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

Statistics Iceland (SI) is classified as a full-fledged ministry in the administrative structure of the government of Iceland. The agency is governed by the *Act on Statistics Iceland No. 24 of 1913*,<sup>1</sup> which entered into force on January 1, 1914. The *Act* gives SI broad authority to collect, produce, and disseminate statistics on social and economic conditions in Iceland. The *Act on Statistical Reports No. 29 of 1895*<sup>2</sup> established the initial authority of the central administration to produce and disseminate statistics on economic conditions in Iceland—an authority that was entrusted to the SI through the *Statistics Act*.

SI took over the compilation of the national accounts (NA) on July 1, 2002. The data were previously compiled by the National Economic Institute (NEI), a separate agency under the authority of the Office of the Prime Minister, which was abolished on that date. The relevant legislation that established the NEI was repealed by *Act No. 51/2002*.

*The Regulation on Central Government Administration No. 3 of 2004* establishes the specific tasks and responsibilities of all government ministries. Article 6 of the Regulation outlines the responsibilities of SI and specifically states that the agency is responsible for compiling the NA.

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<sup>1</sup> Amended by *Act No. 71 of 1919*, *Act No. 91 of 1991*, and *Act No. 83 of 1997*.

<sup>2</sup> Amended by *Act No. 20 of 1903*, *Act No. 16 of 1909*, *Act No. 64 of 1934*, *Act No. 10 of 1983*, and *Act No. 19 of 1991*.

*0.1.2 Data sharing and coordination among data-producing agencies are adequate*

Article 6 of the *Regulation of the Central Government Administration, No. 3, of February 1, 2004* states that SI is responsible for “organizing, coordinating and producing Iceland's official statistics.” The legislation does not give SI any specific coordinating powers and functions beyond this general statement, nor are there any regulations to this effect.

In practice, the coordination powers of SI appear sufficient to ensure that statistics are compiled consistently and that duplication is avoided. Cooperative agreements exist in statistics of trade in goods and services and government finance statistics, as noted in 0.1.1. A number of other examples of cooperation with agencies include Customs; the Land Registry; the Government Financial Management Authority (FMA); the Ministry of Social Affairs, the Institute of Labor; the Federation of Municipalities; the Ministry of Health; and the State Tobacco and Alcohol Monopoly. Under the taxation law, the taxation and other authorities undertake specific collections for statistical purposes. SI has directly or indirectly required other agencies to use specific classifications. One example is the requirement, in the *Official Gazette*, that agencies making use of an industrial classification must use the Icelandic Standard Industrial Classification (ISAT 95). Cooperation between SI and the various agencies is exercised through formal meetings and workshops but mainly through informal contacts.

On the other hand, SI does not have overall specific authority to require other agencies to adopt statistical standards. In some cases coordination and cooperation between agencies are less than optimal. This underlines the desirability of having some legislation that gives more specific coordinating powers and responsibilities to SI, especially in terms of adoption of national and international statistical standards and the elimination of duplication. Further, this indicates a strong need for the enactment of more modern statistical legislation. This has occurred in many countries over the past two decades, and there are many good models of statistical legislation from which to develop such legislation in Iceland.

*Recommendation: Consolidate the legal framework by preparing a single, modern, and comprehensive statistical Act and take steps towards its enactment. Include provision for strengthening coordination among statistical agencies and consistency of methodologies and statistical outputs by assigning the authority for coordination to the central statistical authority.*

*0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only*

There are no specific requirements for maintaining the confidentiality of individual reporters' data in the *Act on Statistics Iceland*. However, SI has established *Rules of Procedure for Treating Confidential Data* (dated October 8, 2004). These Rules of Procedure are established on the basis of, and with regard to, other legislation in force in Iceland and the *United Nations' Fundamental Principles of Official Statistics*.

Article 3 of the *Rules of Procedure* provides that all information gathered by SI for statistical purposes and that concerns specified natural or legal entities must be kept confidential. The same applies to information on natural and legal entities in the administrative registers, which SI uses for statistical purposes. In the case of administrative registers and records, however, SI is authorized to provide the respective government authority with confidential information from the data that this authority has previously taken part in collecting or has provided to SI.

Article 3 specifies that care must be taken that information cannot be traced to specific natural or legal entities when publishing and disseminating statistics. However, exceptions may be made to this when the respective natural/legal entity has consented to this sort of publication.

SI has established aggregation rules to prevent residual disclosure, for instance, where there are only two enterprises producing a specific commodity. This is important in an economy of the size of Iceland. Respondents to surveys are informed of their rights and obligations in questionnaires and in particular the requirement that individual data be kept confidential.

Under Article 5 of the *Rules of Procedure* SI employees are required to maintain confidentiality and show the utmost discretion concerning any confidential data or confidential information they become aware of in their jobs. Employees are required to treat all other information about individuals and legal entities with caution and respect, even in the case of public information. Confidentiality on the job is especially covered by the provisions of Article 18 of the *Government Employees Act, No. 70 of 1996*, which reads as follows:

Each employee is obliged to observe confidentiality in regard to matters of which he gains knowledge in his work and shall be regarded as confidential according to law, the instructions of superiors or by the nature of the matter. The obligation of confidentiality remains even if the employee concerned leaves his employ.

When hired, employees are informed of the rules and duties pertaining to confidential information and its treatment. Employees working on statistics are also informed of the *United Nations' Fundamental Principles of Official Statistics*, as well as of the *International Statistical Institute's Declaration on Professional Ethics*. Every employee is required to sign a pledge of confidentiality before commencing work. This applies to both permanent and temporary staff. The pledge of confidentiality is part of the job contract, and upon the employee's signing the contract, his/her attention shall be called in particular to this pledge.

No penalties are prescribed in the *Rules of Procedure* in the event that staff members divulge confidential information.

The *Rules of Procedure* provide (Article 8) that confidential electronic data that are for statistics shall be accessible only to those employees working with the data. The network administrator is responsible for controlling employee access to computer files, under the supervision of the Director-General (DG). Access is limited to employees needing it because

of their work. The DG may make decisions to grant access to confidential data to an employee for specified purposes such as research projects, linkage with other data, or software engineering. Such decisions must be made in writing, indicating how long the authorization is to remain valid.

Under Article 10 of the *Rules of Procedure* the DG may grant access to confidential data for research purposes, provided personal identities in a collection of data on individuals have been obliterated or encrypted and provided the data cannot be traceable to recognizable natural or legal entities.

Such access is granted on occasions to bona fide researchers who access data on SI premises and under strict supervision. Access is also subject to the requirement that it conforms to the rules of SI on utilizing data for research and that the Data Protection Authority (as provided for in the *Act on the Protection of Privacy as Regards the Processing of Personal Data No. 77/2000*) has not objected to such access.

Article 6 requires that confidential statistical data on paper must be kept secure during processing, but destroyed once utilization is complete. Project managers, in consultation with the division directors, are responsible for deciding how long such data are to be preserved after the completion of recording, processing, and publishing. Normally, these data are not kept for a longer period than assumed sufficient for possible errors or uncertainties to come to light which require the availability of the original data. Data are required to be preserved in specific, marked boxes in locked storage, with a note on the boxes as to when the data are to be destroyed.<sup>3</sup>

Article 7 deals with the preservation of confidential data in electronic form. It provides that electronically recorded confidential data for statistical purposes shall be kept in a secure manner so long as processing lasts, but once utilization is complete they shall either be destroyed or the personal identities in them be obliterated or encrypted. This type of data is allowed to retain the identities of the respective natural or legal entities so long as the survey and processing continue and for a limited time after publication of the statistical reports for which the data were employed.

Project managers, in consultation with the division directors, are responsible for deciding whether there is reason to preserve such data after processing and publishing are finished, and if so, how long such data are to be preserved. Normally, the electronic data shall not be

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<sup>3</sup> The confidential data mentioned in Article 6 are intended only for producing statistics and are collected on the presumption that they will be destroyed after utilization. Thus, such information does not fall under legal provisions on the requirements of submission to the National Archives and in general shall not be submitted for preservation there.

kept for longer than can be assumed sufficient for possible errors or uncertainties to be detected which require the availability of the original data.

When there is considered reason to preserve electronically recorded confidential data over a long period for further research inside or outside SI, the personal identities in them must be obliterated or encrypted. Should the data be independent, so that no reason can be foreseen to link them with other data later or should that be considered undesirable, the personal identities in the data must be obliterated once and for all. On the other hand, if it is considered desirable to preserve the potential for linkages later, the personal identities in the data shall be encrypted by a recognized method, according to special rules thereon.

In cases where personal identities in a collection of data on individuals have been obliterated or encrypted, and it is certain that the data cannot be traceable to recognizable natural or legal entities, permission of access to the database or the disclosure of it to others for research may be authorized.

As noted above, individual data must be preserved in specific, marked boxes in locked storage, with a note on each box as to when the data are to be destroyed.

SI premises are closed between 11 p.m. and 7 a.m. each day and at all times access to work areas can only be made with electronic code access. The division directors and project managers of SI are responsible for preserving or, as applicable, destroying confidential data (see Articles 5-7 of the *Rules of Procedure*) in consultation with the DG. Every year office managers are required to investigate and describe to the DG how confidential data are kept, what data are preserved, and data destruction practices. On one day each year all managers are required to supervise the destruction of data under their control.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

The *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. This is also provided for in the *Act on Statistics Iceland*. By that *Act* SI is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Specific provisions in the taxation legislation make it mandatory for the taxation authorities to supply SI with all the data it requires for statistical purposes. Similar provisions apply to Customs authorities.

Article 2 of the *Act on Statistics Iceland* specifies fields of statistics with which SI is charged with investigating. It states that SI shall compile such statistics that may be prescribed by law or mandated by the Government or which SI may itself propose in consultation with the



competent government authorities. This therefore covers not only NA and price statistics but also all component statistics required in compiling those statistics.

Article 4 of the *Act on Statistics Iceland* authorizes SI to mandate that reports, which up until the enactment of the legislation had been submitted by municipal authorities or individuals to county sheriffs, shall be submitted directly to SI, and SI may return for correction reports that it finds inadequate and may request further information, subject to such penalties as prescribed by law for failure to carry out the submission of legitimate reports. In practice, however, penalties have not applied for persons or legal entities that have not submitted returns or have submitted false information.

Response burden is not a major issue for SI, mainly because it relies very much on administrative records, especially in the economic statistics fields. SI provides assistance to respondents in completing and submitting forms (for instance, by providing a point of contact). In the case of the Consumer Price Index (CPI), price collectors obtain most of the price information through visits to selected outlets and response burden is therefore minimized. For the Producer Price Index (PPI), many of the price data are obtained electronically from the selected producers. In the case of NA compilation, reference is made to existing data sources, and no surveys are directly undertaken by NA staff.

Communications with respondents seek to secure cooperation by providing explanations about the needs and uses of the statistics being collected.

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs*

SI employs 97 full-time equivalent employees comprising 27 in the population register division and 70 in the economic and social statistics division. The National Accounts Department has 12 staff comprising 11.2 full-time equivalents. The time allocation of staff by areas of responsibility is as follows:

Supply-and-use tables and quarterly GDP	-	1
Household final consumption expenditure	-	1
Gross capital formation	-	1
Government finance statistics	-	1.8
Nonprofit institutions serving households, and agriculture	-	0.5
Production approach	-	1.9
Short-term indicators and Financial		
Financial Intermediation Services Directly Measured (FISIM)	-	1
Institutional sector accounts	-	1
Director	-	1
Deputy Director (income distribution; assists on all areas of the statistics)	-	1

National Accounts

Almost all the staff who compiled NA in the NEI joined SI when the responsibility for compiling the estimates was shifted to SI in 2002; thus, there was no loss in experienced staff as a result of the shift. All but one of the staff possess post-secondary education, and only four persons have less than five years experience in compiling the statistics.

There are currently no vacancies for NA staff; however, it is foreseen that two persons were expected to leave in May 2005. The agency notes that it normally experiences no difficulty in recruiting new staff, but most may not have relevant working experience.

The current staff complement is large relative to the overall population as compared with other countries in the region. However, staff levels may not be sufficient to maintain the compilation system in the medium term and to undertake the improvements necessary to meet international requirements (see also 2.2.1). Further, the current arrangement of duties renders the compilation process vulnerable as, in many cases, only one individual works on a specific sector. Thus, the compilation system may be vulnerable in the event of unanticipated staff turnover or the temporary unavailability of staff.

SI uses up-to-date computing resources. Staff work on individual computers, all less than two years old with broadband Internet access. The personal computers are also connected via a local area network.

The funding for SI is determined by the central government budget. Budget appropriations have increased in recent years, reflecting new tasks and obligations (including those resulting from European statistical cooperation) and the move to new premises in 2003. Budget appropriations tend to lag behind demand for services.

*Recommendation: Strengthen back-up arrangements and increase staff resources for compiling the national accounts statistics.*

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

There is ongoing monitoring of the collection, compilation, and dissemination process. SI constantly searches for ways to improve the efficient use of resources and sets priorities among its tasks to ensure the most efficient use of resources.

A long tradition exists of using administrative registers and records as the major source of data, mainly for reasons of financial efficiency. SI has increasingly relied on electronic reporting and electronic dissemination over recent years; for example, data from the tax authorities, the main source of data for the NA, are received electronically. Further, SI has increased the amount of data that are disseminated electronically through its website, thus cutting down on the cost of producing hardcopy publications. The users have not expressed any reduction in accessibility as a result of the move, and the recent survey of users conducted by the ROSC mission indicated that most users access the data electronically (see Appendix).

### **0.3 Relevance**

#### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

NA staff members conduct regular discussions with users in the Ministry of Finance (MOF), who are engaged in maintaining the forecasting model for the Iceland economy, and with the Central Bank of Iceland (CBI). SI recently established a user group for the NA comprising representatives of users in the CBI, the MOF, the major commercial banks, labor unions, the Federation of Employers, and the economic faculties of three universities. The terms of reference for the user group are yet to be established; however, it is expected that the group would provide regular feedback to the compilers. The group has held two meetings to date and is expected to meet two to three times a year. The agency has not conducted user surveys and does not solicit the views of private users systematically apart from the user group.

The agency is also active in the International Association for Official Statistics (IAOS), and the DG was president of the association during 1993-95.

*Recommendation: Establish programs to solicit the views of a broad cross section of users periodically, e.g., through surveys of users.*

### **0.4 Other quality management**

#### *0.4.1 Processes are in place to focus on quality*

Although no established processes are in place to focus on the quality of the statistics, management is sensitive to all dimensions of quality.

#### *0.4.2 Processes are in place to monitor the quality of the statistical program*

Processes are in place to monitor adequately the quality of compiled and disseminated statistics. Checks of coverage, classification, and missing data are undertaken regularly. In addition, the internal consistency of source data and consistency across source datasets are monitored. All deviations in the source data are noted and investigated. SI has established agreements with data producers in the public sector to ensure that source data are received on a timely basis.

Quality aspects of statistics are discussed with all subject matter managers in annual planning meetings and follow-up meetings. Iceland is one of three European Free Trade Area (EFTA) States that is a Contracting Party to the EEA Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the contracting parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at SI.

#### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

SI recognizes the tradeoff between accuracy and timeliness in the context of establishing release calendars and revision cycles for the statistics. For example, the first release of the annual NA estimates takes place in March and the second estimate, named preliminary data, in September, in time to meet the needs of policymakers preparing the annual budget. SI recognizes that the source data that are available at that time may not be optimal; however, the accuracy of the source data is considered sufficient to compile preliminary estimates.

### **1. Assurances of integrity**

#### **1.1 Professionalism**

##### *1.1.1 Statistics are produced on an impartial basis*

Article 6 of the *Regulation on Central Government Administration* establishes that SI has exclusive responsibility for compiling the NA statistics, thereby effectively barring other government institutions from compiling the statistics. The agency was assigned this responsibility following the closure of the NEI in 2002 (*see also 0.1.1*).

SI has had a long tradition of professional independence, and other institutions have respected the authority of the agency to produce the official statistics under its responsibility. Since the agency is a full-fledged ministry, the DG, as head of the ministry, has professional independence to conduct the affairs of the agency.

The current DG of SI was appointed for an open-ended, life-time term and can remain in the post until he reaches the retirement age of 70. The tenure of the head of the agency has been stable since the establishment of SI, and the current DG is only the third appointee to the post since 1914. Other government agencies recognize the importance of the statistical independence of the agency

However, the terms and conditions for the appointment of the head of SI have been amended with the introduction of the *Government Employees Act No. 70 of 1996*. Under the new *Act*, the DG is appointed by the Minister for SI for a fixed five-year term, subject to renewal. However, the Minister may decide to advertise the post as vacant at the end of term, in which case the DG may have to reapply. Chapter VI of the Regulations outlines the conditions under which the staff appointed under the Regulations (including the DG) may be relieved from the post.

Article 36 of the Regulation gives the Minister the authority to transfer appointees (including the DG) to another post under his authority or under another government authority, if that authority requests the transfer. Directors, who are responsible for the various divisions within SI, are subject to the same terms and conditions of employment as the DG.

The DG has the sole authority to appoint staff based on the guidelines of the *Government Employees Act*. Staff members are appointed on an indefinite contract and may be relieved of their post upon receiving three months notice. All vacant posts are publicly advertised, and the DG establishes the criteria for the recruitment of staff depending on the technical expertise required.

The DG and staff routinely participate in external seminars, expert groups, and task forces established by regional and international statistical bodies, including Eurostat and the Organisation for Economic Cooperation and Development (OECD). In addition, staff undertake regular study trips to other statistical agencies in the Nordic region and participate in network groups of the Nordic statistical agencies.

Staff have free, unlimited access to a wide range of international academic journals and research databases through a nationwide access portal on the Internet.

*1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

The DG has the sole authority to decide on statistical matters, which he may delegate to staff. SI decides on statistical techniques, methodology, and data sources based on the need to implement best international practices; however, these decisions are influenced by cost considerations and the resource constraints facing SI.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

The DG is entitled to provide feedback on the statistics to the press without having to obtain clearance from an authority outside SI. Further, the department heads within SI have complete authority, without having to seek the approval of the DG, to comment on the erroneous interpretation of the statistics compiled by their respective divisions. SI maintains a cordial working relationship with the media, and journalists frequently submit draft news reports on the statistics to staff to verify their accuracy before the reports are disseminated.

The agency no longer maintains a formal “clipping service;” however, division heads monitor news reports on the statistics following the dissemination of SI press releases.

**1.2 Transparency**

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

SI publishes the terms and conditions under which the statistics are compiled on its website in Icelandic and in English. In addition, a hardcopy of the legislation is available in the SI’s library; however, the staff note that the legislation is not widely requested. When SI conducts surveys, it informs respondents of the general purpose of the survey and notes that the

information received would be used for statistical purposes only. The terms and conditions are also presented on the Dissemination Standards Bulletin Board (DSBB).

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

The Economic Division of the MOF may be given access to the NA statistics prior to wider dissemination because the data are required for developing forecasts, which are due for dissemination shortly after the release of NA data. No established schedule exists for providing preaccess to the data, and the time span between the provision of the data to the MOF and wider dissemination may change from one period to the other. The MOF is instructed not to release the data and, so far, it has adhered to this instruction.

The internal government access to the NA is made known to the public through the IMF's DSBB on the SI's website.

*1.2.3 Products of statistical agencies/units are clearly identified as such*

All products of SI are clearly identified as such, with the agency's name and logo appearing on the front page of all its publications and on the website. The publications also advise users to identify the source of the information when quoting from the SI's publications.

*1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

SI may notify users in advance of changes in methodology, where appropriate. The last major revision of the NA was undertaken in 2000 with the release of estimates based on the *European System of Accounts 1995 (1995 ESA)*. The NEI, which was then responsible for compiling the estimates, provided advance notice of the changes in the framework and methodology to the major users in the CBI and the MOF. Eurostat was also made aware of the forthcoming revisions.

SI plans to release NA estimates containing major revisions during September 2005 and provided advance notice of this release on its website. In addition, SI provided further details of the revisions in the March 2005 edition of the NA publication. The recently established User Group on National Accounts, comprising user representatives from the main public and private sector institutions, has already been informed of the planned revisions.

**1.3 Ethical standards**

*1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

SI does not have its own comprehensive ethical guidelines, and staff behavior is guided mainly by the general rules and regulations of the civil service of Iceland as outlined in the *Government Employees Act. The Rules of Procedure for Treating Confidential Data*, adopted by SI in October 2004, establish additional guidelines to staff on the treatment of information

that the agency has collected for statistical purposes (*see also 0.1.3*). SI staff members are also bound by the regulations contained in the *Data Protection Act No. 77 of 2000*, which seeks to ensure that personal data are processed according to rules governing the protection of the data covered and the right to privacy.

Staff take an oath of secrecy upon being hired and are made aware of all regulations pertaining to the need to observe and protect the confidentiality of information collected by SI for statistical purposes. The potential for conflict of interest is avoided as staff are expected to seek the approval of the DG before undertaking any work outside of the agency. The DG notes that during his 20-year stint, he has never encountered a case of conflict of interest or the possibility of a conflict of interest.

Although no formal system reminds staff of the ethical guidelines, the rules and regulations are readily available on the SI's website and in the SI's library.

## **2. Methodological soundness**

### **2.1 Concepts and definitions**

*2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

The NA statistics are compiled according to the guidelines of the *1995 ESA*, which is consistent with the *System of National Accounts 1993 (1993 SNA)*. SI adopted the *1995 ESA* and released the first set of data based on this framework in 2000 as part of its commitments under the agreement of the EEA. The *1995 ESA* therefore replaced the United Nations' *System of National Accounts 1968 (1968 SNA)*.

### **2.2 Scope**

*2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

The NA estimates cover some of the accounts and tables that the Inter-Secretariat Working Group on National Accounts (ISWGNA) considers *the minimum requirements* for implementing the *1993 SNA/1995 ESA*. The accounts and tables covered are the following:

- annual value added at current and constant prices by activity;
- annual expenditures on Gross Domestic Product (GDP) at current and constant prices; and
- annual value added components at current prices by type of activity.

The NA do not cover the following accounts and tables that the ISWGNA considers the minimum requirements for implementing the *1993 SNA/1995 ESA*:

- income accounts and capital account, and
- annual rest-of-the-world account (until net lending).

The NA do not cover the following accounts and tables that the ISWGNA determined as *recommended* for implementing the *1993 SNA/1995 ESA*:

- quarterly value added and GDP at current and constant prices by type of activity, and
- annual supply-and-use tables.

SI compiles quarterly expenditures on GDP at current and constant prices. Supply-and-use tables are compiled at regular intervals of four years.

In addition to these accounts, SI compiles the supplementary data:

- Capital stock by type of asset
- Gross fixed capital formation by type of activity and type of asset
- Saving and net lending/borrowing

The delimitation of the constituent units of the economy is in accordance with the *1995 ESA*. Territorial enclaves in the rest of the world, such as embassies and consulates of Iceland, are included as part of the economy. Iceland has recently experienced an inflow of workers employed part of the year in Iceland. These workers may not meet the residency criteria established by the statistical framework and are not included as part of the economy. Bonded warehouses are included as part of the economy. No free zones operate in Iceland. The NATO military base at Keflavik is considered external territory and excluded from the domestic economy.

The production boundary is broadly in accordance with the *1995 ESA*. Final consumption includes the production of goods on own-account, in particular fishing and goods for own account fixed capital formation. Mineral exploration, production of literary or artistic originals, and production of computer software are also included in the production boundary. However, illegal output sold to willing buyers is not estimated and is therefore excluded from the production boundary.

Agricultural work in progress is included among tangible assets; however, for practical purposes, defense-related assets that could be used for civilian purposes, valuables, and historical monuments are not included.

Among intangible assets, the following are included in the assets boundary:



- mineral exploration;
- systems and standard applications computer software;
- entertainment, literary, and artistic originals;
- patented entities; and
- leases and other transferable contracts.

Mineral exploration in Iceland covers mainly geothermal and hydroelectric research, and the inclusion of these items as assets is facilitated by the national business accounting standards where exploration of this nature is capitalized in the accounts.

Eurostat has proposed some action points for developing the NA. SI has already carried out some of these points but will carry out the remaining action points as part of the major revisions to the NA to be completed in September 2005. Among the remaining points are the revision of pension liabilities of local government, clarification of some borderline cases between taxes and payments for services, more intensive use of household expenditure surveys (HES) for some areas of household final consumption, and construction of a balanced supply-and-use table for the year 2001.

*Recommendation: Broaden the scope of the annual accounts to include income accounts, the capital account, and the rest-of-the-world account.*

*Recommendation: Broaden the scope of the quarterly accounts to include quarterly GDP by type of activity.*

### **2.3 Classification/sectorization**

#### *2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

The classification systems used are consistent with internationally accepted guidelines, standards, and good practices. The 1995 ESA is used to classify institutional units, transactions, and other flows. The 1995 ESA guidelines (the 50 percent rule) on the classification of market and nonmarket transactions are applied.

The Statistical Classification of Economic Activities in the European Communities (NACE) is used to classify activities. SI adopted the classification in accordance with the *Council of the European Communities Regulation No. 3037/90 of 1990 and 761/93 of 1993*. The classification is used up to the five-digit level.

The Classification of Products by Activity (CPA) is used to classify products. The CPA is implemented at the two-digit level in compiling the supply-and-use tables.

The Classification of Individual Consumption by Purpose (COICOP) is used to classify household consumption.

The Classification of Functions of Government (COFOG) is used to classify government transactions. Government finance statistics (GFS) are compiled as part of the NA; therefore, the classification systems are consistent. The 1986 COFOG is currently being used. SI has introduced the new COFOG; however, data based on the new classification are yet to be published.

## **2.4 Basis for recording**

### *2.4.1 Market prices are used to value flows and stocks*

Market output is valued at basic prices. Output for own final use is valued at equivalent market prices where feasible; otherwise it is valued at cost. This approach is consistent with the 1993 SNA/1995 ESA.

Value-added taxes, excluding the deductible part, are included in the valuation of intermediate consumption.

Data are available for insurance and freight on merchandise imports, although it is not possible to disaggregate the two components. Thus, total imports and exports of merchandise could be valued on a free on board (f.o.b.) basis.

Transactions in foreign currency are converted using the midpoint exchange rate as they appear in the balance of payments statistics. But merchandise trade transactions are converted to national currency using the buying rates of each currency on the 28<sup>th</sup> of the previous month. There is only one official exchange rate.

### *2.4.2 Recording is done on an accrual basis*

Transactions and flows are recorded on an accrual basis.

- Work in progress in the form of capital formation is recorded in the period the production takes place.
- Government revenue and expenditure is recorded on an accrual basis.

### *2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Since the data are compiled at the enterprise level, most transactions between establishments within the same enterprise are recorded on a net basis. An exception is the treatment of fishing and fish processing industries, where vertical integration is common. The transactions of these industries are recorded gross as special investigations are carried out annually.

### **3. Accuracy and reliability**

#### **3.1 Source data**

##### *3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions*

The NA compilation system depends almost exclusively on administrative data sources. Enterprise surveys are not conducted, and direct enquiries for NA purposes have been limited to occasional small-scale surveys to collect limited information on specific sectors. SI notes that the relatively small size of the economy in terms of the number of units poses special challenges to the conducting of sample surveys. Sample sizes should be relatively large to minimize sampling errors, thereby resulting in the same units being covered regularly. Because of the cost effectiveness of the administrative data collection system and the resource limitations of SI, the agency has no plans to change the data collection system.

The compilers also utilize data from a household budget survey (see below).

#### **Administrative data sources**

The data are collected primarily from a combination of three administrative registers comprising the following:<sup>4</sup>

- Enterprise Accounts Register
- Value Added Tax (VAT) Register
- Pay-As-You-Earn (PAYE) Register

#### ***Enterprise Accounts Register***

The Enterprise Accounts Register is the most comprehensive and the most widely used. It is maintained by SI but derived from the records of the tax authorities. Since 1997, incorporated enterprises have been required to submit annual returns in a standardized format to the tax

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<sup>4</sup> The Internal Revenue currently maintains a business register. The register, established on the basis of legislation in 1969, was maintained by SI until July 2003. It contains a unique identification number for each enterprise as well as contact information, the legal status, and the nature of the activity. The register serves as a basis for comparing records of enterprises as all the other registers use the identification number and other information from the business register to identify enterprises. Currently, the register serves no other major purpose for SI.

SI is currently developing its own business register for statistical purposes; however, it is not yet in operation and will not be discussed in this assessment.

authorities, and from 2001 unincorporated enterprises have been required to submit such returns.

The Enterprise Accounts Register provides detailed information on the operating accounts and balance sheets of the units. The enterprises are classified according to the five-digit level of the NACE. Data are received for most of the enterprises that are obligated to respond. Now, more than 95 percent of enterprises are normally covered. The data are collected on a calendar year basis.

The register was developed by the Internal Revenue in collaboration with the now defunct NEI, which was then responsible for compiling the NA. However, the Internal Revenue is under no obligation to seek the approval of SI prior to amending the instruments used to collect the information. In fact, the Internal Revenue has made some minor adjustments to the reporting instrument since it was introduced in 1997 without consulting with SI.

The primary advantage of this data source is that it is cost-effective; the data are easily accessible in electronic format from the tax authorities.

However, the register presents some disadvantages for the NA compilation process; mainly the data are available for enterprises and not for establishments.

### ***Value Added Tax Register***

The Value Added Tax (VAT) Register comprehensively covers market activity. Personal transport and hospitals are exempt from VAT although they are required to pay VAT in their intermediate inputs. The current threshold of gross revenue for an enterprise to be registered to pay VAT is relatively low at 220,000 Icelandic kronur; thus, the vast majority of units engaged in market transactions are covered. The units provide information to the Customs Department on gross turnover subject to VAT, exports, and VAT exemptions.

Like the Enterprise Accounts Register, the VAT Register records units mainly at the enterprise level; thus, it is not possible to distinguish among the various types of activity being undertaken. The data aggregates match that received from the Enterprise Accounts Register; however, the latter is used in the NA compilation system because the information is more detailed.

The VAT data are used as a cross-check and for extrapolation in the quarterly GDP estimation process; however, the data are available bi-monthly and straddle quarters, thereby limiting their usefulness.

### ***Pay-As-You-Earn Register***

The pay-as-you-earn (PAYE) tax system has existed since 1988. It gained prominence as a source of statistics in 1998 when some amendments were introduced, thereby allowing for the collection of additional, critical information. The data are collected on a monthly basis for

all employees and self-employed persons. The data are to be submitted to the Internal Revenue within 15 days of the end of the month and are available to SI within 30 days of the end of the month, with coverage at about 80 percent. Coverage improves to about 95 percent over the next 30 days. The register provides data on the wages and salaries subject to income tax.

### **Ad-hoc surveys**

Limited ad-hoc surveys have been conducted over the past five years to obtain some basic information to fill data gaps. The SI conducted a survey of computer software suppliers to derive data on the extent to which enterprises were not capitalizing on software expenditures. In addition, the SI conducts annual surveys of sales of manufacturing, monthly surveys on hotel accommodation and power intensive industry, and quarterly surveys on inventories of fish processing companies.

### **Government finance statistics**

Comprehensive GFS are available. The National Accounts Division is also responsible for compiling the GFS according to the guidelines of the *1995 ESA*. There is full coverage of all levels of general government.

### **Price statistics**

The price statistics used in the national compilation comprise a monthly CPI, quarterly PPI for fish products, and unit value indices of imports and exports. The CPI is available at a level of disaggregation that is required for compiling the NA. The PPI is available on a quarterly basis; however, apart from the PPI for fish products, the data are not widely used because the index categories are highly aggregated. The level of aggregation is not suitable for deflating most of the categories of manufacturing. Unit value indices of imports and exports are available and are used to derive volume estimates of exports and imports of goods.

### **Household expenditure survey**

The household expenditure survey (HES) is continuous with a three-year cycle. The SI selects a single-stage random sample of 1,200 household units each year for the HES from the national population register. The actual number of responding households over the three-year period is approximately 1,900. Due to nonresponse and other factors the response rate is about 55 percent. The SI corrects for the bias attributable to the nonrespondents, using data obtained from other sources on family size and type and other major household characteristics. The SI also compares the data with geographical distribution data from the population register.

The samples of responding households for each year are spread evenly over the year in 26 two-week subsamples. Respondents to the HES complete a diary of day-to-day expenses and also report expenditures for a three-month period for less frequently occurring expenses.

However, extensive use is now made of cash register receipts in place of itemized purchases in the diaries provided to respondents. By 2002, 77 percent of all entries were taken from cash register receipts and, in the case of food and beverages, 89 percent of entries were taken from cash register receipts. In the remaining cases, the SI used itemized data reported by respondents in diaries.

The use of itemized receipts reduces response burden and costs to SI. The receipts also provide useful information, including a detailed dissection of the total amount of the transaction; a description of each item, its quantity, and total amount paid; the name of the store, thus assisting in determining outlet weights; and the form of payment (cash, credit card, or check).

Household expenditure data are compiled on a three-year moving average basis. For example, data have been compiled for the years 2000 to 2002. The data for 2000 and 2001 were revalued at 2002 prices for the purposes of deriving CPI weights. Standard errors are calculated for the main aggregates arising from the HES data. Standard errors for total expenditures are less than 2 percent and for groceries are less than 1 percent. Where standard errors are greater than 20 percent, those particular data cells show an asterisk accompanying the figure indicating that the figure should be used with caution.

### *3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required*

As noted previously, the primary purpose of the administrative data is for tax assessments; therefore, the data are presented according to business accounting concepts and not according to national accounting concepts. The compilers undertake the necessary adjustments to approximate the NA concepts, where feasible. However, since the data are based on monetary transactions, payments in kind and other nonmonetary transactions, which are important for NA estimation, are not recorded. One notable example is compensation of employees paid in kind. This estimate, which could be significant, is recorded separately in the registers. SI has developed alternative methods to derive estimates of this income, and the estimates are included in the NA.

The source data are available on a calendar year basis, thereby approximating the time of recording criteria for the annual estimates. Enterprise data are not available on a quarterly basis, but the compilers use alternative sources to derive data for estimating the quarterly accounts.

### *3.1.3 Source data are timely*

The source data for the estimates of GDP by expenditure categories are timely, thus allowing the compilation of preliminary estimates within three months of the end of the year and the second estimate, named preliminary data, within nine months of the end of the year. However, the estimates of GDP by type of activity are compiled 21 months after the end of the period because detailed source data on enterprises and industries are not available until

11 months after the end of the period. SI plans to shorten the publication lag of GDP by activity to 15 months.

*Recommendation: Improve the timeliness of the source data used to compile the estimates by type of activity. The timeliness of the Enterprise Accounts Register is relatively rigid and is beyond the control of SI; thus the compilers may wish to explore alternative and more timely data sources that could be used to derive provisional estimates. These data sources could include basic indicators of economic activity that could be used to derive first estimates.*

### **3.2 Assessment of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes*

SI has mechanical procedures in place to assess the administrative data received from the tax authorities. Specialized computer software highlights outliers in the data based on predefined criteria; however, these checks are conducted at the five-digit level of the NACE. When errors are spotted, manual checks are conducted at the enterprise level. The drawback with this approach is that offsetting errors at the enterprise level would not be identified when the data are assessed at the industry level.

### **3.3 Statistical techniques**

*3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

SI uses grossing up techniques to estimate full coverage based on the data derived from the main data sources. The main data sources include data on wages and salaries from the PAYE records and estimates of sales VAT records.

The nature of the basic data obviates the need for adjusting due to nonresponse. Further, the existence of outliers in the records of main data sources is rare and adjustments are not usually warranted.

*3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

The primary areas of nonobserved activity in the Icelandic NA relate to misspecifications in the enterprise accounts register and informal activities that are not covered by the register.

The misspecifications in the register are related to the application of the tax rules, which would affect the recording of some transactions. One group of transactions that is affected in this manner is the payments in kind to employees. These payments include the use of

business cars by employees, mileage allowances, travel allowances, food, accommodation, and telephones that are provided free of charge.

The informal activities, by definition, are undertaken primarily by self-employed persons and unincorporated enterprises.

SI uses detailed procedures and specific data sources to adjust these transactions.

### Production approach procedures

The estimates of output and intermediate consumption are compiled at the five-digit level of the NACE, where feasible. In cases where the five-digit presentation would reveal the identity of the producer, the data may be presented at a higher level of aggregation. Thus, the estimates are compiled for 457 activity groups. The industry classification is not precise because the activity data are derived from the Enterprise Accounts Register, which is enterprise oriented and not establishment oriented.

The estimates are based primarily on the annual returns from the Enterprise Accounts Register, and coverage is comprehensive. However, fixed ratios derived from benchmark surveys are used to estimate the value added for some activities, the most important being the services of owner-occupied dwellings. The contribution to overall GDP of activities, estimated using fixed ratios, remains small.

#### Estimates of GDP by Type of Activity

Activity Classification (NACE)		Main Data Sources
A.	Agriculture, hunting, and forestry	Business accounts compiled by the Agricultural Economic Institute
B.	Fishing	Operating accounts of fishing establishments
C.	Mining and quarrying	Enterprise Accounts Register
D.	Manufacturing	Enterprise Accounts Register
D. exc. 15.2	Manufacturing: excluding processing and preserving of fish and fish products	Enterprise Accounts Register
E.	Electricity, gas, and water supply	Company accounts
F.	Construction	Enterprise Accounts Register
G.	Wholesale and retail trade; etc.	Enterprise Accounts Register
H.	Hotels and restaurants	Enterprise Accounts Register
I.	Transport, storage, and communication	Enterprise Accounts Register
J.	Financial intermediation	Company accounts collected by Financial Supervisory Authority (FME)
K.	Real estate, renting, and business act. (except owner-occupied dwellings)	Enterprise Accounts Register
L.	Public administration and defense	Government accounts; State Social Security Institute
M.	Education	Government accounts; State Social Security Institute
N.	Health and social work	Government accounts; State Social Security Institute

Source: Gross National Income Inventory—200



### ***Owner-occupied dwellings***

Output of owner-occupied dwellings is valued as the estimated rental values that tenants would pay for similar accommodation. Estimates are derived based on the equivalent market rent. The benchmark data on the market rates were derived from a survey of rental of dwellings, using rental prices of March 1999. The survey categorized dwellings by type and obtained information on the rental prices of each type. The estimate of the number of dwellings is based on data from the Land Registry of Iceland, and the price level is based on the rental of dwellings component of the CPI. The extrapolation from the 1999 levels is based on the annual changes in the number of dwellings in each category and the price changes of the dwellings component of the CPI.

### ***Work in progress***

The growing of crops, standing timber, and stocks of fish is treated as work in progress. Livestock reared for food are not considered to be significant, and their estimation as work in progress is not considered. Large construction projects that span one period are also considered work in progress.

### ***Inventory valuation adjustment***

SI uses inventories to estimate output and intermediate consumption and adjusts the estimates to account for holding gains or losses on inventories.

### ***Consumption of fixed capital***

The perpetual inventory method is used to estimate consumption of fixed capital based on the accumulated gross fixed capital formation. The data that are derived using this method cannot be decomposed by industry classification; thus, the depreciation from the company accounts is used at the industry level.

### ***Cash versus accrual***

Taxes and subsidies on products, government revenue, and government expenditure are all converted from a cash to an accrual basis by allocating the transactions to the period to which they relate.

### ***Volume measures of GDP***

SI does not use the double deflation method anymore to derive value added for fishing and related activities. The use of the method was justifiable by unstable input-output coefficients in fishing activity and comprehensive and reliable data. The method has turned out to be erroneous and was therefore abolished. Thus, the single indicator technique is used to derive volume estimates for all activities.

### ***Volume measures of taxes and subsidies on products***

Volume estimates of taxes and subsidies are not compiled.

### ***Volume estimates of trade margins***

The international best practices to derive output volume of trade margins are to apply the base year margin rates to the corresponding volume of sales or to extrapolate the base year trade margins using volume extrapolators of sales. The latter method is used in Iceland. The volume extrapolator of sales is derived by deflating the gross turnover using the appropriate category of the CPI.

### ***Measurement of volume change***

The volume estimates of GDP by type of activity and by category of expenditure are derived differently. The volume estimates by type of activity are derived using annual chain linking. However, the volume estimates by category of expenditure are derived using fixed base indices with a base year of 1990, which is very outdated. International best practice is to use annual chain linking, and if the use of this method is not possible, then the base year should be updated with a minimum frequency of five years.

The use of different techniques to derive volume estimates of the two GDP approaches poses some difficulty for the interpretation and use of the statistics. SI considers the estimates by expenditure category to be the primary NA estimates because the series are compiled using more comprehensive and reliable data and are available earlier than the estimates by output. Thus, the official estimate of GDP growth is derived from the expenditure side. In this regard, it is fair to conclude that the compilation of the official volume estimates does not conform to international best practice.

SI is at an advanced stage in its efforts to compile the expenditure volume estimates using annual chain linking. The agency plans to release the revised data during the second half of 2005.

### **Expenditure approach procedures**

All the components of GDP by expenditure are derived independently.

Household final consumption expenditure is estimated using data from the five major sources, including the HES. The estimates are computed for 425 groups using the six-digit level of the former COICOP. The CPI is used to deflate most of the components of household final consumption expenditure. Expenditures by residents abroad are deflated using a weighted index of inflation in the EU countries and changes in the exchange rate of the Krona.

Gross fixed capital formation is estimated using data from the enterprise accounts register, the Land Registry of Iceland, merchandise trade statistics (imports), and the accounts of the general government. The estimates are compiled by type of asset and industry groups for 10 asset types and 36 industries.

Government final consumption expenditure is compiled at the most detailed four-digit level of the COFOG. The volume estimates are derived using a price index of the cost components of expenditure—the CPI, the building cost index, and the wage index.

Changes in inventories cover fish stocks, aluminum, and ferro-silicon. Volume measures of changes in inventories of fish stocks are derived by deflating the values using relevant prices of fish products. This technique is not considered international best practice.

Proper techniques are used to address specifics of expenditure on GDP compilation.

- Government final expenditure excludes incidental sales.
- Expenditure of residents abroad is included in estimates of imports.
- Expenditure of nonresidents in the domestic economy is included in exports.
- For enterprises, expenditures on valuables are included in gross capital formation if these expenditures are capitalized in the financial accounts of enterprises. However, expenditures on valuables by households are not estimated separately; therefore, expenditures on items considered stores of wealth are included in private final consumption expenditure.

### **Specific quarterly compilation techniques**

SI compiled the first set of estimates of quarterly GDP for 1997. The data for the estimates of quarterly GDP by expenditure category are derived using some of the same data sources as the annual estimates. The major exception is gross fixed capital formation. The annual estimates are derived using the Enterprise Accounts Register, which is only available annually. The data sources for the quarterly GDP are as follows:

- Gross capital formation
  - imported capital goods—imports
  - construction—extrapolation from previous year using VAT paid by contractors as an indicator
- Private final consumption expenditure
  - estimates of turnover from VAT register
  - imports of consumer goods
  - domestic production of consumer goods
- Government final consumption expenditure
  - government accounts
  - state Social Security Institute
- Exports and imports of goods and services
  - balance of payments statistics

The quarterly estimates are not benchmarked to the annual estimates. Thus, the “step” problem exists insofar as the quarterly indicators are not fine-tuned to correspond to the lower frequency and hence more reliable annual source data. The usefulness of the data for temporal comparisons is therefore limited.

In conformity with international best practice, the source data used to compile the quarterly estimates are not seasonally adjusted. However, the estimates are not seasonally adjusted. The compilers cite the “relatively short” length of the series as the reason for not adjusting the data. However, the IMF’s publication “*Quarterly National Accounts Manual—Concepts, Data Sources, and Compilation*” suggests that seasonal adjustment may be attempted with 20 quarters of estimates if the seasonality has been stable.

*Recommendation: Introduce benchmarking techniques to combine the quarterly estimates with the annual series.*

### **3.4 Assessment and validation of intermediate data and statistical outputs**

#### *3.4.1 Intermediate results are validated against other information where applicable*

Data on compensation of employees from the Enterprise Accounts Register are compared against similar data from the records of the PAYE Register. In addition, data from the VAT Register are checked against the aggregate data from the Enterprise Accounts Register. The data are reviewed for coverage and consistency by type of activity.

#### *3.4.2 Statistical discrepancies in intermediate data are assessed and investigated*

Potential discrepancies in major intermediate data are assessed, and adjustments, using data from alternative sources, are undertaken to address discrepancies. The annual changes in some key components of the source data are monitored and checked against other aggregates.

#### *3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated*

SI has compiled supply-and-use tables (SUT) for 1993, 1997, and 2001. The results of the 1997 survey were used to balance the estimates. Until 2002, the statistical discrepancy from the expenditure side of GDP was distributed proportionately among the intermediate consumption on the output side, the proportion being equivalent to the share of industry intermediate consumption in the total. For the most recent years when the output measure is still unavailable, the statistical discrepancy has been shown explicitly as part of the estimate by type of activity.

The estimates of quarterly GDP are compared and validated against the forecasts compiled by the CBI, the MOF, and the research departments of some commercial banks. If there are major differences between the forecast and the quarterly estimates, the NA staff would

investigate the nature of the differences. However, the quarterly estimates are never changed to conform to available forecasts.

*Recommendation: Investigate annually the statistical discrepancy between the GDP estimates by type of activity and by category of expenditure.*

### **3.5 Revision studies**

*3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)*

SI studies revisions following major revisions in the data. A comprehensive revision study was conducted in 2000 following the adoption of the 1995 ESA. The results were published by the NEI in a paper entitled *Revising the Icelandic National Accounts to Bring Them Into Conformity with New International Standards*. The study analyzed the purpose for the revisions, compared the new results with the old estimates, and assessed the implications of the revisions.

## **4. Serviceability**

### **4.1 Periodicity and timeliness**

*4.1.1 Periodicity follows dissemination standards*

NA data are produced and disseminated on a quarterly basis, thus meeting the SDDS requirements.

*4.1.2 Timeliness follows dissemination standards*

The quarterly accounts are disseminated within 80 days of the end of the period, which is in line with the SDDS requirements. The standards stipulate that the GDP estimates must be disseminated within three months of the end of the period.

### **4.2 Consistency**

*4.2.1 Statistics are consistent within the dataset*

The current price estimates are consistent. The estimate by expenditure category is considered the superior estimate. Since the methods used to derive volume estimates of GDP by type of activity are different from the techniques used to derive the estimates by category of expenditure, the volume estimates are not consistent.

#### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

A consistent series of GDP volumes is available from 1945. Current price estimates are available from 1990 based on the *1995 ESA* and from 1957 to 1990, based on the *1968 SNA*. Data for 1990 are available based on both techniques. The estimates for 1997 were balanced using the SUT compiled for that year; thus two estimates (one balanced with the SUT and another without) are available for that year.

#### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

The NA estimates are consistent and reconcilable with the balance of payments, the GFS, and the merchandise trade statistics. The balance of payments data are used as inputs into the GDP and Gross National Product (GNP) estimates. Differences between the merchandise trade statistics and the balance of payments are reconcilable. GFS are compiled by the NA staff as part of the NA; thus, the concepts and definitions used in compiling the two datasets are similar.

### **4.3 Revision policy and practice**

#### *4.3.1 Revisions follow a regular and transparent schedule*

The revisions to the annual and quarterly estimates of GDP by type of expenditure follow a regular and transparent schedule. The schedule for the annual estimates is as follows:

- First estimate: 75 to 80 days after the end of the period.
- First revision: Nine months after the end of the period.
- Second revision: 15 months after the end of the period.

For the quarterly estimates, the figures are revised mainly in March and September when revised annual figures are published. Minor revisions may be undertaken in June and December.

SI may undertake additional revisions to estimates in the years beyond the published revision cycle; thus the estimates are never considered final.

#### *4.3.2 Preliminary and/or revised data are clearly identified*

Preliminary data are clearly identified when the series are disseminated. However, the revisions are not always indicated.

#### *4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

The study of the revisions is available in Icelandic and in English.

*Recommendation: Identify clearly in all publications and on the Internet the statistics that have been revised.*

## **5. Accessibility**

### **5.1 Data accessibility**

#### *5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

The statistics are disseminated on the SI's website and in a hardcopy publication, "*Statistical Series: National Accounts*." The publication presents a six-year series of the broad estimates as well as a detailed three-year series of household final consumption expenditure and gross fixed capital formation. Charts and summary analyses in both English and in Icelandic are included in the publications to facilitate analysis.

The data are presented in varying levels of detail according to the dissemination media and to the needs of different users.

#### *5.1.2 Dissemination media and format are adequate*

Information on the overall change in GDP is presented in the press release notifying users of the availability of the data. The data are disseminated on the SI's website in a format that allows users to select and download the specific categories and series they require. Alternatively, users may download predefined series available in *pdf* format. The data are also disseminated in hardcopy publications.

#### *5.1.3 Statistics are released on a preannounced schedule*

The data are presented according to a preannounced schedule, available on the SI's website and on the DSBB. The schedule is prepared and released in October and presents the proposed release dates for the quarterly and annual statistics in the upcoming year.

Users are informed before the scheduled release if SI is unable to meet the preannounced schedule and a revised release date is presented. However, the NA have always been released according to the preannounced schedule.

#### *5.1.4 Statistics are made available to all users at the same time*

NA are simultaneously released to all users. The release of the data, according to the advance release calendar (ARC), is announced via a press release at 9:00 a.m. on the scheduled day. The data are presented on the SI's website at the same time of the press release.

### *5.1.5 Statistics not routinely disseminated are made available upon request*

SI makes available to users the data that are not routinely disseminated on the website and in the hardcopy publications.

## **5.2 Metadata accessibility**

### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

Documentation on sources and methods is limited. The NEI released a comprehensive publication on NA concepts, definitions, sources, and methods in 1994. However, the publication, “*National Accounts: 1945–1992*” is available only in Icelandic and has not been updated since the first release, although the NA compilation system has gone through many changes since the time of its release.

In 2004, SI published a comprehensive document on the compilation process entitled “*Gross National Income Inventory (ESA 95): Iceland.*” However, the inventory does not address the constant price estimation process or the quarterly GDP estimation process. In fact, apart from the information on the DSBB, no other information exists on the quarterly NA compilation process.

### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

The publication “*National Accounts: 1945–1992*” contains an introductory chapter with basic information on the interrelationships among the economic aggregates. The material is normally accessed and used in schools. Besides this broad information, no summary metadata exist to provide, to the casual user, basic information on the compilation system.

*Recommendation: Update the metadata for the annual accounts and disseminate metadata on the quarterly accounts. In addition to the comprehensive notes, the SI should also disseminate general, nontechnical metadata for use by the casual user.*

## **5.3 Assistance to users**

### *5.3.1 Contact points for each subject field are publicized*

The SI’s website and hardcopy publications list the name of the compiling agency, as well as the name, e-mail addresses, telephone, and facsimile number of the Director of the National Accounts Division. The publication also identifies the SI’s website, where users can obtain more detailed data. The website notifies users on how to obtain additional information about the agency or the dataset.



*5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

SI does not produce a hardcopy catalog of its publications; however, the website presents the list of available publications produced by the agency, with an accompanying brief description of the statistics contained, the price of the publication, and the method to place orders for publications.

Table I. DQAF (July 2003): Summary of Results for National Accounts  
*Compiling Agency: Statistics Iceland*

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
<b>0. Prerequisites of quality</b>						
0.1 Legal and institutional environment			X			SI does not have overall powers of coordination for the official statistics. Compilation could be vulnerable due to unexpected staff turnover.
0.2 Resources			X			
0.3 Relevance		X				
0.4 Other quality management		X				
<b>1. Assurances of integrity</b>						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
<b>2. Methodological soundness</b>						
2.1 Concepts and definitions		X				
2.2 Scope			X			Income accounts not compiled. Rest-of-the-world account not compiled. Quarterly GDP at constant prices and by type of activity not compiled.
2.3 Classification/sectorization		X				
2.4 Basis for recording			X			Transactions between establishments in the same enterprise are recorded net.
<b>3. Accuracy and reliability</b>						
3.1 Source data			X			Data on establishments are not available. Estimates by production approach are delayed because of lateness of source data.
3.2 Assessment and validation of source data		X				
3.3 Statistical techniques			X			Volume estimates of the two GDP estimates derived using different techniques. Quarterly GDP not benchmarked to the annual estimates. Statistical discrepancies between annual estimates not always investigated.
3.4 Assessment and validation of intermediate data and statistical outputs			X			
3.5 Revision studies		X				
<b>4. Serviceability</b>						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X			Volume estimates by type of activity and expenditure not consistent. Revised data are not identified when disseminated.
4.3 Revision policy and practice			X			
<b>5. Accessibility</b>						
5.1 Data accessibility		X				
5.2 Metadata accessibility			X			Metadata are limited. Metadata on constant prices not updated since 1994. No metadata on quarterly GDP except on DSBB.
5.3 Assistance to users		X				

## II. PRICE STATISTICS (CONSUMER PRICE INDEX)

### 0. Prerequisites of quality

#### 0.1 *Legal and institutional environment*

##### 0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

The bulk of Icelandic official statistics are produced and disseminated by SI, the national statistical institute. SI is formally a government ministry, and its operations are based on several acts of law.

Article 6 of the *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. As such, SI has exclusive responsibility for compiling the NA and price statistics, thereby effectively barring other government institutions from compiling the statistics.

Responsibility for collecting, compiling, and disseminating statistics is also provided for in the *Act on Statistics Iceland, 1913*. By that *Act*, SI is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Another important *Act* governing the operations of SI is the *Act on the Consumer Price Index, 1995*. This *Act* provides in Article 1 that SI shall compute and publish an index showing changes in the price levels of private consumption and that this index shall be called the CPI. Article 6 provides that the CPI shall be compiled on a base determined by SI according to the results of a household budget survey.

Where more than one data-producing agency is involved in producing a field of statistics, arrangements are in place to promote consistency of methods and results. Examples include:

- a joint project with the CBI regarding the compilation of statistics of trade in invisible services, and exchange of data on trade in goods and services between the two agencies; and
- cooperation on GFS between SI and the MOF through the committee on budget accounting.

There are no conflicts of interest on issues such as data security. The requirements of the Data Protection Authority enhance public trust in data security and assist the role of SI in data collection.

*0.1.2 Data sharing and coordination among data-producing agencies are adequate*

Article 6 of the *Regulation of the Central Government Administration, No. 3, of February 1, 2004* states that SI is responsible for “organizing, coordinating and producing Iceland's official statistics.” The legislation does not give SI any specific coordinating powers and functions beyond this general statement, nor are there any regulations to this effect.

In practice, the coordination powers of SI appear sufficient to ensure that statistics are compiled consistently and that duplication is avoided. Cooperative agreements in statistics of trade in goods and services and GFS are in place, as noted in 0.1.1. A number of other examples of cooperation with agencies include: Customs; the Land Registry; the Government FMA; the Ministry of Social Affairs, the Institute of Labour; the Federation of Municipalities; the Ministry of Health; and the State Tobacco and Alcohol Monopoly. Under the taxation law, the taxation authorities and other public bodies undertake specific collections for statistical purposes. SI has directly or indirectly required other agencies to use specific classifications. One example is the requirement, in the *Official Gazette*, that agencies making use of an industrial classification are obliged to use the Icelandic Standard Industrial Classification (ISAT 95). Cooperation between SI and the various agencies is exercised through formal meetings and workshops but mainly through informal contacts.

On the other hand, SI does not have overall specific authority to require agencies to adopt statistical standards. In some cases coordination and cooperation between agencies are less than optimal, including in the areas of GFS and balance of payments. This underlines the desirability of having some legislation that gives specific coordinating powers and responsibilities to SI, especially in terms of adoption of national and international statistical standards and the elimination of duplication. Further, this indicates a strong need for the enactment of more modern statistical legislation. Since this has occurred in many countries over the past two decades, there are many models of effective statistical legislation from which to develop such legislation in Iceland.

No issues arise related to data sharing and coordination among Icelandic agencies as far as the CPI is concerned because the data collection, processing, and compilation activities for these statistical fields are carried out within SI.

*Recommendation: Consolidate the legal framework by preparing a single and comprehensive statistical Act and take steps towards its enactment. Include provision for strengthening coordination among statistical agencies and consistency of methodologies and statistical outputs by assigning the authority for coordination to one agency in the legislation.*

*0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only*

There are no specific requirements for maintaining the confidentiality of individual reporters' data in the *Act on Statistics Iceland* or in the *Act on the Consumer Price Index*. However, SI has established *Rules of Procedure for Treating Confidential Data* (dated October 8, 2004), on the basis of, and with regard to, the following:

- *The United Nations' Fundamental Principles of Official Statistics*
- *Government Employees Act, No. 70/1996*
- *Administrative Procedures Act, No. 37/1993*
- *Information Act, No. 50/1996*
- *Act on the Protection of Privacy as Regards the Processing of Personal Data, No. 77/2000.*
- *Act on Statistics Iceland, No. 24/1913*
- *Act on the National Population Registry and Civil Registration, No. 54/1962*
- *Act on Notification of Change of Residence, No. 73/1952*
- *Domicile Act, No. 21/1990*
- *Rules on Publishing Certificates and Granting Information from the National Population Register No. 112/1958.*

Article 3 of the *Rules of Procedure* provides that all information gathered by SI for statistical purposes and that concerns specified natural or legal entities must be kept confidential. The same applies to information on natural and legal entities in the administrative registers, which SI uses for statistical purposes. In the case of administrative registers and records, however, SI is authorized to provide the respective government authority with confidential information from the data that this authority has previously taken part in collecting or has provided to SI.

Article 3 specifies that care must be taken that information cannot be traced to specific natural or legal entities when publishing and disseminating statistics. However, exceptions may be made to this when the respective natural/legal entity has consented to this sort of publication.

SI has established aggregation rules to prevent residual disclosure, e.g., where only two enterprises produce a specific commodity. This is important in an economy the size of Iceland.

Respondents to surveys are informed of their rights and obligations in questionnaires and in particular the requirement that individual data be kept confidential.

Under Article 5 of the *Rules of Procedure*, SI employees are required to maintain confidentiality and show the utmost discretion concerning any confidential data or confidential information they become aware of in their jobs. Employees are required to treat

all other information about individuals and legal entities with caution and respect, even in the case of public information.

Confidentiality on the job is especially covered by the provisions of Article 18 of the *Government Employees Act, No. 70/1996*, which reads as follows:

Each employee is obliged to observe confidentiality in regard to matters of which he gains knowledge in his work and shall be regarded as confidential according to law, the instructions of superiors or by the nature of the matter. The obligation of confidentiality remains even if the employee concerned leaves his employ.

When hired at SI, employees are informed of the rules and duties pertaining to confidential information and its treatment. Employees working on statistics are also informed of the *United Nations' Fundamental Principles of Official Statistics*, as well as of the *International Statistical Institute's Declaration on Professional Ethics*. Every employee is required to sign a pledge of confidentiality before commencing work. This applies to both permanent and temporary staff. The pledge of confidentiality is part of the job contract, and upon the employee's signing the contract, his/her attention shall be called in particular to this pledge. There have been no known breaches of the pledge of confidentiality. No penalties are prescribed in the *Rules of Procedure* in any instance of divulging confidential information. However, the *Government Employees Act* provides for the dismissal of an employee from his/her job in various circumstances.

The *Rules of Procedure* provide (Article 8) that confidential electronic data for statistics shall be accessible only to those employees working with the data. The network administrator at SI is responsible for controlling employee access to computer files, under the supervision of the DG. Access is limited to employees needing it because of their work. The DG may make decisions to grant access to confidential data to an employee for specified purposes such as research projects, linkage with other data, or software engineering. Such decisions must be made in writing, indicating how long the authorization is to remain valid.

Under Article 10 of the *Rules of Procedure* the DG may grant access to confidential data for research purposes, provided personal identities in a collection of data on individuals have been obliterated or encrypted and provided the data cannot be traceable to recognizable natural or legal entities. Such access is granted on occasions to bona fide researchers who access data on SI premises and under strict supervision. Access is also subject to the requirement that it conforms to the rules of SI on utilizing data for research and that the Data Protection Authority (as provided for in the *Act on the Protection of Privacy as Regards the Processing of Personal Data No. 77/2000*) has not objected to such access.

Article 6 requires that confidential statistical data on paper must be kept secure during processing, but destroyed once utilization is complete. Project managers, in consultation with the division directors, are responsible for deciding how long such data are to be preserved after the completion of recording, processing, and publishing. Normally, these data are not kept for longer than assumed sufficient for possible errors or uncertainties to come to light

which require the availability of the original data. Data are required to be preserved in specific, marked boxes in locked storage, with a note on the boxes as to when the data are to be destroyed.<sup>5</sup>

Article 7 deals with the preservation of confidential data in electronic form. It provides that electronically recorded confidential data for statistical purposes shall be kept in a secure manner so long as processing lasts, but once utilization is complete they shall either be destroyed or the personal identities in them be obliterated or encrypted. This type of data is allowed to retain the identities of the respective natural or legal entities so long as the survey and processing continue and for a limited time after publication of the statistical reports for which the data were employed.

Project managers, in consultation with the division directors, are responsible for deciding whether there is reason to preserve such data after processing and publishing are finished, and if so, how long such data are to be preserved. Normally, the electronic data shall not be kept for longer than can be assumed sufficient for possible errors or uncertainties to be detected which require the availability of the original data.

When there is considered reason to preserve electronically recorded confidential data over a long period for further research inside or outside SI, the personal identities in them must be obliterated or encrypted. Should the data be independent, so that no reason can be foreseen to link them with other data later or should that be considered undesirable, the personal identities in the data must be obliterated once and for all. On the other hand, if it is considered desirable to preserve the potential for linkages later, the personal identities in the data shall be encrypted by a recognized method, according to special rules thereon.

In cases where personal identities in a collection of data on individuals have been obliterated or encrypted, and it is certain that the data cannot be traceable to recognizable natural or legal entities, permission of access to the database or the disclosure of it to others for research may be authorized.

As noted above, individual data must be preserved in specific, marked boxes in locked storage, with a note on each box as to when the data are to be destroyed.

SI premises are closed between 11:00 p.m. and 7:00 a.m. each day, and at all times access to work areas can only be made with electronic code access. Access to computer files for each

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<sup>5</sup> The confidential data mentioned in Article 6 are intended only for producing statistics and are collected on the presumption that they will be destroyed after utilization. Thus, such information does not fall under legal provisions on the requirements of submission to the National Archives and in general shall not be submitted for preservation there.

staff member is restricted to those files that the staff member requires for his/her work. Access to additional files must be approved by the network administrator.

The division directors and project managers of SI are responsible for preserving or, as applicable, destroying confidential data (see Articles 5–7 of the *Rules of Procedure*) in consultation with the DG. Every year office managers are required to investigate and describe to the DG how confidential data are kept, what data are preserved, and data destruction practices. On one day each year all managers are required to supervise the destruction of data under their control.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

The *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. This is also provided for in the *Act on Statistics Iceland*. By that *Act* SI is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Specific provisions in the taxation legislation make it mandatory for the taxation authorities to supply SI with all the data it requires for statistical purposes. Similar provisions apply to the Customs authorities.

The *Act on the Consumer Price Index (No. 12, March 2, 1995)* provides that SI shall compute and publish an index, titled the CPI, showing changes in the price levels of private consumption.

Article 2 of the *Act on Statistics Iceland* specifies fields of statistics with which SI is charged with investigating. National accounts and price statistics are not specified in this list, but Article 2 also states that SI shall compile such statistics that may be prescribed by law or mandated by the Government or which SI may itself propose in consultation with the competent government authorities. This therefore covers not only NA and price statistics but also all component statistics required in compiling those statistics. SI has in fact compiled the CPI for many decades.

Article 4 of the *Act on Statistics Iceland* authorizes SI to mandate that reports, which up until the enactment of the legislation (January 1, 1914) had been submitted by municipal authorities or individuals to county sheriffs, shall be submitted directly to SI. SI may return for correction reports that it finds inadequate and may request further information, subject to such penalties as prescribed by law for failure to carry out the submission of legitimate reports. In practice, however, penalties have not applied for persons or legal entities that have not submitted returns or have submitted false information.



Response burden is not a major issue for SI, mainly because it relies very much on administrative records, especially in the economic statistics fields. SI provides assistance to respondents in completing and submitting forms (e.g., by providing a point of contact). In the case of the CPI, price collectors obtain most of the price information through visits to selected outlets, and response burden is therefore minimized. Communications with respondents seek to secure cooperation by providing explanations about the needs and uses of the statistics being collected.

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources and financing are commensurate with statistical programs*

SI has a staff of 97 full-time equivalent employees, comprising 27 in the population register division and 70 in statistical fields (including also administrative staff). This is a very small statistical office by international standards but is regarded as quite large by Icelandic standards.

The great majority of staff members are university graduates. Staff members attend appropriate courses and participate in a range of international seminars and workshops on statistical matters. Salary levels appear to be reasonably adequate but uncompetitive with banks and some other organizations. Staff turnover is reported to be quite small and not problematic. SI has made very effective use of technology to reduce reliance on staff.

Despite these factors, the present staff numbers are barely sufficient to cope with present demands, and it is difficult to see such a small staff complement being able to meet the inevitable increases in demand for statistics and the significant international statistical requirements. A related factor is the lack of robustness for individual statistical fields, which could render the statistical systems vulnerable in the event of unexpected staff turnover.

Four staff members are engaged in compiling Iceland's CPI and related statistics including the Harmonized Index of Consumer Prices (HICP), the Purchasing Power Parity (PPP), the building cost index, and the HES. In addition, 10 price collectors are engaged for two days per month and two interviewers who are engaged for four to five days per month. The interviewers undertake data entry, coding, and other support functions.

The four staff members on the CPI and related functions have appropriate university qualifications. One joined the CPI team two years ago, and the others have extensive experience in CPI work over many years. The Director of the CPI is a member of the Ottawa Group on Prices and the UN-ECE CPI Steering Group. He is a CPI expert with international standing, having contributed papers and participated in a number of conferences and seminars.

Appropriate emphasis is given to staff training and development in price index theory and practice. CPI staff members are, or have been, participants in working groups and seminars on HICP and PPP sponsored by Eurostat and Nordic countries. Staff turnover in the CPI has not been a problem in recent years. While the small number of CPI staff appears to be just adequate to undertake the CPI and related functions, the situation is certainly not robust. It would be prudent to allocate one additional staff member to this group to allow the group greater flexibility in coping with the ongoing responsibilities for maintaining and further developing the CPI and the related statistics. This would include the further development of internal training manuals and documentation (including metadata) on price indices.

SI places heavy emphasis on applying technology in collecting, compiling, and disseminating statistics. Up-to-date equipment and well-known and proven software is used throughout SI. SI emphasizes standardization, particularly through the use of Microsoft products. In-house development is aimed at data warehousing applications.

Appropriate back-up procedures guard against loss or corruption of data. Daily, weekly, and monthly back-up cycles are observed. The tape library is located in a secure computer room. Monthly tapes are kept in a “safe box” designed to withstand excess heat and strong magnetic fields. SI plans to mirror all data between two remote sites (locally and in another geologically safe site).

The CPI uses a high level of computer technology. Each person has his/her own work station, and many computer-assisted edit routines help analysts review data for unusual observations and circumstances. Computer technology has also been expanded to improve data collection in the HES.

On the other hand, SI relies on the mail for dispatching price questionnaires from price collectors stationed outside the capital area. While no problems have arisen in the past with lost or delayed mail, it may be prudent to establish some kind of back-up system.

The SI’s office premises and furnishings are of a good standard.

The funding for SI is determined by the central government budget. SI has some flexibility to determine specific uses of its allocation. Budget appropriations have increased in recent years, reflecting new tasks and obligations (including those resulting from European statistical cooperation) and the move to new premises in 2003. Funding is generally adequate, but budget appropriations tend to lag behind demand for services.

There are no formal forward planning systems in SI—simply planning scenarios on an informal basis.

*Recommendation: Strengthen staffing back-up arrangements and increase staff resources for work on the CPI.*

*Recommendation: Examine the desirability of concentrating price index expertise by bringing all price index staff together in one organizational unit.*

*Recommendation: Review staff resource requirements for all price indices as soon as possible with a view to allocating sufficient resources to allow further planned developments and to provide a more robust organization for price statistics generally.*

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

A long tradition exists of using administrative registers and records as the major source of data, mainly for reasons of financial efficiency. SI does not conduct periodic reviews of staff performance, or costing of resources used in the various statistical programs. However, there is ongoing monitoring of collection, compilation, and dissemination processes to ensure efficiencies. SI has greatly increased its reliance on electronic reporting and electronic dissemination over recent years, e.g., the electronic capture of prices information for the PPI and the dissemination of a large amount of data on the SI's website.

### **0.3 Relevance**

#### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

The *Act on the Consumer Price Index* provides for the establishment of an advisory body, with a member nominated by each of the Supreme Court of Iceland (currently an economist), the Icelandic Federation of Labour, and the Confederation of Icelandic Employers. This Advisory Committee on the CPI advises SI in producing the index. It has two main functions. First, the Committee meets each month one hour prior to the release of the CPI to receive a briefing from SI on the main points arising from the latest figures.<sup>6</sup> Second, the Committee meets approximately twice a year to be briefed by SI on current methodological issues and to provide comments. Its role is purely advisory and does not compromise the independence of SI. Although the membership is currently prescribed by legislation, it may be worth considering broadening the membership to include two or three additional members, for example, users from an academic institution, a government agency, and the private sector.

CPI staff members give briefings on methodological issues to major users (for example, financial institutions) providing opportunities for feedback about the index. Frequent less formal contact takes place with users, some of which provides opportunities for feedback.

A user survey on the CPI was conducted many years ago, prior to the establishment of the SI's website. Such surveys have not been conducted in recent times.

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<sup>6</sup> This is a "lock-up" situation. Advisory Committee members are not able to make outside contact until the release time of 9:00 a.m.

The user survey that was conducted for this ROSC assessment indicates that a high percentage of respondents to the survey were satisfied with the coverage of price statistics, their level of detail, frequency, accessibility, and underlying methodology. Also, a high proportion of respondents were satisfied with the timeliness of price statistics, their accuracy, and the availability of metadata.<sup>7</sup> (See Appendix III for details.)

SI has been a member of the International Statistical Institute since around 1930, and the DG of SI has been President of the International Association of Official Statistics.

CPI staff members regularly participate in international meetings, including the Ottawa Group on Prices, the UN-ECE CPI Steering Group, and working groups and seminars on HICP and PPP sponsored by Eurostat and Nordic countries. They have also contributed research papers to international meetings.

#### **0.4 Other quality management**

##### *0.4.1 Processes are in place to focus on quality*

Although no formal quality management program is in place, SI actively participates in discussions about quality and has examined quality meeting practices in Nordic and other European countries. Data quality is very much emphasized within SI.

##### *0.4.2 Processes are in place to monitor the quality of the statistical program*

SI discusses quality aspects of statistics with all subject matter managers in annual planning meetings and follow-up meetings. It regularly monitors response rates and timeliness and double-checks compilation work in the CPI. The ARC is produced every autumn for the coming year.

Iceland is one of three EFTA States that is a Contracting Party to the EEA Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the Contracting Parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at SI.

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<sup>7</sup> These responses relate to price statistics; separate responses were not obtained for the CPI and the PPI.

### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

SI considers quality issues in the annual planning process at the start of each year. During this process, CPI staff members outline their plans for the coming year to make other staff aware of developments and needs for cooperation.

SI has identified many opportunities for improving data quality and acted upon the opportunities through ongoing monitoring, periodic reviews, and feedback from users on quality issues.

## **1. Assurances of integrity**

### ***1.1 Professionalism***

#### *1.1.1 Statistics are produced on an impartial basis*

Article 6 of *the Regulation of the Central Government Administration* establishes that SI has exclusive responsibility for compiling price statistics, thereby effectively barring other government institutions from compiling such statistics.

SI has had a long tradition of professional independence, and other institutions have respected the authority of the agency to produce the official statistics under its control. Since SI is a full-fledged ministry, the DG, as head of the ministry, has professional independence to conduct the affairs of the agency.

The current DG of SI was appointed for an open-ended, life-time term and can remain in the post until he reaches the retirement age of 70. The tenure of the head of the agency has been stable since the establishment of SI, and the current DG is only the third appointee to the post since 1914. Other government agencies recognize the importance of the statistical independence of the agency.

However, the terms and conditions for appointing the head of the agency have been amended with the introduction of the *Government Employees Act No. 70 of 1996*. Under the new *Act*, the DG is appointed by the Minister responsible for Statistics, for a fixed five-year term, subject to renewal. However, the Minister may decide to advertise the post as vacant at the end of the term, in which case the DG at that time may have to reapply. Chapter VI of the *Act* outlines the conditions under which the staff appointed under the *Act* (including the DG) may be relieved from the post.

Article 36 of the *Act* gives the Minister the authority to transfer appointees (including the DG) to another post under his authority or under another government authority, if that authority requests the transfer. Directors, who are responsible for the various departments within SI, are subject to the same terms and conditions of employment as the DG.

The DG has the sole authority to appoint staff based on the guidelines of the *Government Employees Act*. Staff members are appointed on an indefinite contract and may be relieved of their post upon receiving three months notice. All vacant posts are publicly advertised, and the DG establishes the criteria for the recruitment of staff depending on the technical expertise required.

The DG and staff routinely participate in external seminars, expert groups, and task forces established by regional and international statistical bodies, including Eurostat and the OECD. In addition, staff members undertake regular study trips to other statistical agencies in the Nordic region and participate in network groups of the Nordic statistical agencies.

Staff members have free, unlimited access to a wide range of international academic journals and research databases through a nationwide access portal.

*1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

The DG has the sole authority to decide on statistical matters, which he may delegate to staff. The agency decides on statistical techniques, methodology, and data sources based on the need to implement best international practices; however, these decisions are influenced by cost considerations and the resource constraints facing SI.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

The DG is entitled to provide feedback on the statistics to the press without having to obtain clearance from an authority outside the agency. Further, the department heads within SI have complete authority, without having to seek the approval of the DG, to comment on the erroneous interpretation of the statistics compiled by their respective divisions. SI maintains a cordial working relationship with the media, and journalists frequently submit draft news reports on the statistics to staff to verify their accuracy before the reports are disseminated.

The agency no longer maintains a formal “clipping service;” however, division heads monitor news reports on the statistics following the dissemination of official SI press releases.

**1.2 Transparency**

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

SI publishes the terms and conditions under which the statistics are compiled on its website in Icelandic and in English. In addition, a hardcopy of the legislation is available in the agency’s library; however, the staff note that the legislation is not widely requested. When

the agency conducts surveys, it informs respondents of the general purpose of the survey and notes that the information received would be used for statistical purposes only.

The terms and conditions are also presented on the DSBB.

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

No internal government access to CPI data occurs prior to release.

*1.2.3 Products of statistical agencies/units are clearly identified as such*

All products of SI are clearly identified as such, with the agency's name and logo appearing on the front page of all its publications and on the website. The publications also advise users to identify the source of the information when quoting from the agency's publications.

*1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

The agency may provide advance notice of changes in methodology, where appropriate. Advance notice is given to users about forthcoming revisions to the CPI that occur with the release of the March index each year. Advance notice has also been given regarding other methodological changes.

**1.3 Ethical standards**

*1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

SI does not have its own comprehensive ethical guidelines, and staff behavior is guided mainly by the general rules and regulations of the civil service of Iceland as outlined in the *Government Employees Act*. The *Rules of Procedure for Treating Confidential Data*, in place since 2000 and formally adopted by SI in October 2004, establish additional guidelines to staff on the treatment of information that the agency has collected for statistical purposes (*see also 0.1.3*). Staff members are also bound by the regulations contained in the *Data Protection Act No. 77 of 2000*, which seeks to ensure that personal data are processed according to rules governing the protection of the data covered and the right to privacy.

Staff take an oath of secrecy upon being hired and are made aware of all regulations pertaining to the need to observe and protect the confidentiality of information collected by SI for statistical purposes. The potential for conflict of interest is avoided as staff members are expected to seek the approval of the DG before undertaking any work outside of the agency. The DG notes that during his 20-year tenure, he has never encountered a case of a conflict of interest or the possibility of a conflict of interest.

Although no formal system reminds staff of the ethical guidelines, the rules and regulations are readily available on the SI's website.

## **2. Methodological soundness**

### **2.1 Concepts and definitions**

#### *2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

The concepts and definitions used in the CPI for Iceland follow the *CPI Manual* and are also in line with the recommendations of the *1995 ESA*. There is one exception: illegal goods and services are excluded from the CPI. However, this exclusion is standard practice in price indices and is in agreement with specific EU regulations for price statistics.

The weights for the CPI are largely based on the HES. The concepts and definitions for the HES follow international standards and closely accord with those of the CPI.

Expenditure estimates from the HES are compiled at a sufficient level of detail for commodities and services to allow compilation and detailed analysis of price movement.

### **2.2 Scope**

The Icelandic CPI is used for many purposes including inflation targeting and indexation of financial obligations. The authorities have set inflation targets, and the current target is 2.5 percent plus or minus 1.5 percent. In this regard, attention is directed mainly to core index 1 (the CPI excluding agricultural products, vegetables, fruits, and petrol). The use of the CPI in the indexation of financial obligations is prescribed by law and refers to financial obligations that exceed a term of five years; these are adjusted for movements in the CPI.

The *Consumer Price Index Act, 1995* provides that the index must reflect prices throughout the country as far as practicable. Accordingly, SI collects prices in Reykjavik and three other major centers. However, no regional weights are used in calculating the national CPI, nor are any regional or city indices produced. There is no significant user demand for such indices.

#### *2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

The CPI covers the expenditures of all resident noninstitutional households (both urban and rural), where at least one member of the household is aged between 18 and 74 years. All income groups are covered. Households whose major activity involves an unincorporated business activity with separate records for business and consumption purchases are included. Similarly, households whose primary activity is farming or fishing are included

The CPI reflects purchases of all goods and services offered to households in Iceland, including the shelter services of owner-occupied dwellings. The CPI weights include own-account production of vegetables, meat, and fish for own final consumption. As noted above, the CPI excludes illegally sold goods and services.



The Icelandic CPI is a consumption CPI rather than an inflation CPI in that it excludes all capital formation but includes owner-occupied dwellings on the basis of user cost.

### **2.3 Classification/sectorization**

#### *2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

The 1995 ESA is used to classify institutional units and transactions in the enterprise statistics. Household expenditures are classified according to COICOP-Iceland, which is an extended version of the standard COICOP.

The structure of the CPI, based on COICOP, involves 12 major groups (2-digit COICOP), 39 classes (three-digit), 98 subclasses (four-digit), 654 basic headings (seven-digit), and approximately 4,000 items.

NACE Rev. 1.1 is used for the classification of enterprises in the business register.

### **2.4 Basis for recording**

#### *2.4.1 Market prices are used to value flows and stocks*

The weights for the goods and services in the consumer basket are valued at purchasers' prices including trade and transport margins and value added tax. Own-produced consumption of vegetables, meat, and fish is valued at market purchasers' prices.

The product specifications included in the CPI are usually very detailed and include price determining characteristics relating to the terms of transactions. For example, prices include the effects of unconditional discounts and rebates where applicable.

#### *2.4.2 Recording is done on an accrual basis*

Prices are obtained in respect of the first two working days of each month. Prices are collected monthly for most items. Prices for certain items, such as garbage, sewerage and water supply, kindergarten fees, and medical services, are collected annually. In all cases where prices are obtained less frequently than monthly, however, checks are made to ascertain whether prices have changed in the interim, and any such changes are incorporated in the CPI in the month in which they occur.

The recording of prices for packaged holidays occurs in the month in which consumption at the observed price commences, not the month in which the actual price is paid. For example, summer packaged holidays are consumed in August but may be paid for several months earlier. Such prices are recorded in the CPI when the services are actually consumed, i.e., August. This is not on the accrual basis but is in accord with the requirements of the HICP. This appears to be the only exception to the accruals basis.

*2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Grossing/netting procedures are consistent with international standards. The weights for cars in the CPI are calculated using net weights, i.e., purchases less sales of vehicles. The weights for insurance items are based on premiums paid less claims, and also taking account of changes in capital income (reserves) of insurance companies. The weight for lotteries is based on payments less winnings.

**3. Accuracy and reliability**

**3.1 Source data**

*3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions*

The weights for the CPI are mainly based on data from the HES, conducted by SI on a continuing basis. The survey cycle is three years and SI selects as a single-stage random sample for the HES 1,200 household units each year from the national population register. The actual number of responding households over the three-year period is approximately 1,900 each year; the response rate being about 55 percent due to nonresponse and other factors. SI corrects for the bias attributable to the nonrespondents, using data obtained from the HES and from other sources on family size and type and other major household characteristics. The SI also compares the data with geographical distribution data from the population register. Although the response rates for the HES are low, the measures to account for nonresponse are considered adequate.

The samples of responding households for each year are spread evenly over the year in 26 two-week subsamples. Respondents to the HES complete a diary of day-to-day expenses and also report expenditures for a three-month period for less frequently occurring expenses. However, extensive use is now made of the receipt approach by collecting cash register receipts in place of itemized purchases in the diaries provided to respondents. By 2002, 77 percent of all entries were taken from cash register receipts and, in the case of food and beverages, 89 percent of entries were taken from cash register receipts. In the remaining cases, the SI used itemized data reported by respondents in diaries.

The use of itemized receipts reduces response burden and costs to the statistical organization. The receipts also provide useful information, including a detailed disaggregation of the total amount of the transaction; a description of each item and its quantity (in some cases); the name of the store, thus assisting in determining outlet weights; and the form of payment (cash, credit card, or check).

Household expenditure data are compiled on a three-year moving average basis. For example, data have been compiled for the years 2000 to 2002. The data for 2000 and 2001 were revalued at 2002 prices for the purposes of deriving CPI weights. Standard errors are

calculated for the main aggregates arising from the HES data. Standard errors for total expenditures are less than 2 percent and for groceries are less than 1 percent. Where standard errors are greater than 20 percent, those particular data cells show an asterisk accompanying the figure indicating that the figure should be used with caution.

Survey questionnaires are constructed according to sound design principles, using International Labor Organization (ILO) models, and are reviewed periodically. The HES survey design and sampling procedures are reviewed on a regular basis.

The HES is the main data source for the calculation of CPI weights. HES data are used in the calculation of headings for about 64 percent of index expenditures. SI also uses other data sources in cases where HES data are insufficiently detailed. Expenditure categories estimated in this way include medicines, medical services, bus fares, domestic air fares, communications, swimming pool entrance fees, and television channel subscriptions. In addition, alternative data sources are used to estimate weights for tobacco, alcohol, lottery tickets, and insurance costs, as these sources have been found to be more reliable than the HES in these instances.

Outlet samples are selected purposively. In the case of groceries, SI uses cash register receipts data collected for compiling household expenditure statistics. The cash register receipts data used represent retailers accounting for over 90 percent of grocery sales. These data allow the compilation of expenditures by COICOP categories by type of outlet.

Three groups of chain stores dominate the retail market for groceries in Iceland. The retailers are divided into four groups, comprising the three dominant groups and “other.” Subsequently, each group is divided into its various chains, which currently total 11. Outlets are then selected within each of the 11 chains. Individual weights for outlets are established for each COICOP category using the cash register receipts data.

For nongrocery items, outlet samples are again selected purposively using HES data and VAT Register data. For example, VAT data allow the selection of retail outlets selling clothing that account for about 90 percent of all clothing sales.

The specific chain weights are used in the calculation of elementary indices for groceries. Outlet samples are reviewed continuously with reference to cash register receipts data. Shifts in consumer purchases from one chain to another (or from one type of chain to another type) are reflected in the average prices calculated.

SI selects outlets on the basis of retail chains that operate in the entire country. Regional CPIs are not calculated and regional weights are not used in compiling the national CPI but prices are collected in the regional outlets of the chains.

Items for pricing are selected based on HES data (including cash register receipts data), supplemented by information obtained from retail chains and importers. The price collection

program is comprehensive; approximately 19,000 prices are collected each month for about 4,200 items from around 450 outlets. This appears quite sufficient to compile consumer price statistics, including at the detailed levels that are published. The price collection program is monitored on a continuous basis to ensure that it remains sufficiently comprehensive to compile a valid measure of price change, including at detailed levels. Monitoring is done mainly through media reports, research papers, and interviews with major retailers.

Price data generally cover a range of product types and use sufficiently detailed product specifications to ensure that the same variety is priced each period.

Prices of food and clothing are collected by personal visits to the selected outlets and recorded on paper collection forms. Prices for other goods and services are collected centrally (i.e., from SI in Reykjavik) using telephone, fax, and e-mail.

Product specifications are very detailed to ensure that differences in quality are either eliminated or identified and quality effects removed from index calculations. Seasonal weights are not used for fruit and vegetable items, and imported fruits and vegetables are available year-round. Quality differences are not regarded as significant over the course of the year, and no attempt is made to take account of quality differences.

Problem areas at present include telephone services (due to the complexity and large variety of plans offered) and air fares (due to the variety of services offered and the rapidity of changes in the airline industry). CPI staff members pay particular attention to such items to ensure valid measures of price change are obtained.

The establishment of a new price collection at an outlet is handled by a CPI staff member from the head office. He explains the nature of the CPI collection and the methods used by price collectors to obtain prices and secures the agreement of the manager of the outlet for regular price collection. The CPI collector then visits the outlet to undertake regular price collection at that outlet. The representative CPI items for pricing are determined centrally but often with the advice of the price collector.

Price collectors obtain the required prices each month by inspection of prices on shelves or tags, and seek further information and clarification from the staff of the outlet where necessary. Prices are recorded on questionnaires and mailed or handed in to CPI staff after checking.

Most prices are obtained through visits to selected outlets but some are obtained by telephone, fax, or e-mail.

The prices reported are those applying during the first and second working days of the month.<sup>8</sup> This practice should be reviewed periodically. For items that display significant price volatility in the short term, there may be a case for more frequent price collection (e.g., twice a month, or weekly). This should also be considered in the light of plans by Eurostat to designate the middle of the month as the pricing period for HICP purposes.

SI conducts a separate survey of rental units each month, covering on average about 3,300 rental units. For the private rental market the sources are rent information collected by communal units managing rent supplements. For the social rental market, information is obtained from community rental firms and from nongovernment organizations about their rents.

SI occasionally conducts ad hoc surveys and investigations to supplement CPI and HES information. For example, detailed data on sales and prices of toys were obtained to establish specifications for pricing.

CPI staff members are very familiar with the *CPI Manual* and the various international requirements and standards for calculating CPIs through their involvement in international working groups and seminars. They are in a very good position to monitor international standards for changes necessary for the price index compilation system, especially through membership in the Ottawa Working Group on Prices.

### *3.1.2 Source data approximate the definitions, scope, classifications, valuation, and time of recording required in the CPI*

The frequency of price collection is adequate for the support of monthly consumer price indices. The CPI and the HES, under common management within SI, are completely consistent in terms of concepts, definitions, valuation bases, timing of transactions, and classifications.

### *3.1.3 Source data are timely*

The periodicity and timeliness of price collection are adequate for the dissemination of monthly consumer price indices. Prices data are collected and checked promptly each month. The CPI calculations are then carried out in the CPI Division. There has been no instance of missing the target date of eight working days after the end of the reference month. There have also been no instances of missing mail or late delivery of mail. However, it would be desirable to review this method of transmission periodically, and to consider back-up arrangements.

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<sup>8</sup> Working days are defined as Mondays to Fridays

### **3.2 Assessment and validation of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes*

#### **Accuracy of the data from surveys**

CPI staff routinely produce and use sampling error data from the HES to assess the accuracy and reliability of the HES data on an ongoing basis. HES data are produced on a rolling three-year basis.<sup>9</sup> This means that there are much larger numbers of observations compared with annual estimates with resulting positive effects on standard errors of the estimates.

In examining HES data prior to finalization, CPI staff direct attention to outlier observations to ensure they are valid or alternatively require query and amendment. Comparisons are made with a range of other data sources in respect of a number of items including the following: computers, telephones, car registrations, and production of agricultural products. Reference is also made to estimates of household final consumption. Sales data imputed from VAT data are of limited use because of the use of different classifications. A high proportion of household final consumption expenditure (HFCE) is covered by the CPI; it is estimated at about 94 percent, the main difference being the exclusion, from the CPI and the HES, of institutional households and expenditures in Iceland by foreign tourists.

Sampling errors for the surveys are regularly monitored to assess the continuing reliability of the data.

#### **Administrative data and other secondary sources**

The accuracy and reliability of administrative data received from government agencies and regulatory authorities for use in estimating CPI weights is routinely assessed. Examples include alcohol (from the State Tobacco and Alcohol Monopoly); cars (from the car registry); health care services (from the state Social Security Institute); and sales of medicines (from the Ministry of Health).

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<sup>9</sup> For example, the weights for the present CPI reflect household expenditures in 2000 to 2002, all valued at 2002 prices. An exception is for groceries, where weights reflect expenditures in 2001 to 2003, valued at 2003 prices.

### **3.3 Statistical techniques**

#### *3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

SI compiles data using a double entry system so that individual prices are entered by two different CPI staff independently and the results compared by computer and any differences resolved. All month-to-month price movements exceeding 20 percent are examined to ensure validity and queried back to the outlet where necessary. Price collectors are requested to make note of any special discounts at the time of collection. Nonresponse is not an issue in the CPI compilation.

The CPI weights are revised annually and the new weights are included in the index for March each year. The weights are adjusted for price change to align with the price reference period when they are introduced.

#### **Missing prices and new products**

For groceries, the price change is calculated in respect of items available in two consecutive periods. For other goods and services, a missing price can be carried forward for a maximum of three months before a replacement is selected. This accords with Eurostat's rules but is not often necessary. A replacement item is selected by choosing a close substitute for the replaced item. Products that are permanently unavailable are replaced in the sample.

New products are mainly introduced when rebasing the index in March each year. Occasional exceptions are made in the case of significant items. For example, a new road with a toll charge was introduced immediately, replacing a ferry service. A certain amount of overpricing goes on in which items are priced for several months before being actually incorporated in the CPI compilation. This allows the possibility of deferring introduction of a new item until it is being sold in reasonable quantities and avoids the effects of introducing a new item at a relatively high price, which may subsequently fall significantly when the item is sold in larger quantities.

Some clothing, recreational, and food items are regarded as seasonal items with different ranges of goods being priced in the summer and winter seasons. The prices of the summer goods are repeated in the index at the close of summer, and the same treatment is applied to winter goods. The method is consistent with international guidelines.

Prices are adjusted to remove the effects of quality changes. The procedures used vary according to the nature of the changes. In many cases attempts are made to obtain a "bridge" between the former and new product so that the difference in price implicitly reflects the difference in quality. Car prices are obtained, together with prices for various options. The option prices are used to identify and eliminate the effects of quality change. On occasions, where there are significant changes in quality, it is necessary to evaluate the effects of quality directly through an examination of car specifications.

### 3.3.2 *Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

#### **Measurement of CPI weights**

The CPI weights are estimated using HES data and other sources as mentioned above. Reference is also made to HFCE estimates from the NA when establishing the CPI weights.

Owner-occupied dwellings are represented in the CPI by a flow of service method using a simple user cost approach. The expenditure weight for owner-occupied dwellings is the household's annuity, taking account of the real interest rate and the lifetime of the asset (depreciation), in years. The base for the annuity is the real estate value of the house collected in the HES. Prices are measured by using a price index for all properties sold in the country covering on average approximately 1,800 sales per month. The price data are sales contracts obtained from the Land Registry of Iceland.

The value recorded for goods and services represents the economic cost to the consumer at the time the good or service is purchased, regardless of whether the method of payment was cash or credit. The use of credit cards for purchases is very common in Iceland even for small value purchases, but it is unusual for a surcharge to be imposed on the customer using a credit card or, conversely, for discounts to be given for cash sales.

Vegetables, meat, and fish produced for own consumption are included in the CPI weights and are valued at local market prices at the time produced.

#### **Compilation techniques**

The elementary aggregates are calculated using five methods:

- The relative of geometric mean prices, for 39 percent of the expenditures (32 percent of the basic headings);
- The weighted relative of geometric mean prices for groceries, for 18 percent of the expenditures (52 percent of the basic headings);
- A Lowe fixed base index, or relative of average prices, for 38 percent of the expenditures (14 percent of the basic headings);
- A superlative index (Fisher ideal formula), for 2 percent of the expenditures (1 percent of the basic headings); and
- Other indices<sup>10</sup> for 3 percent of the expenditures (1 percent of basic headings).

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<sup>10</sup> For example, housing maintenance uses the subindices for building materials from the building cost index.



These are all acceptable methods for calculating the elementary indices. The choice of methods depends on the appropriateness for each category of item and the availability of data required for the calculations.

The Icelandic CPI uses the Lowe index formula to aggregate elementary indices to higher levels. The weights are updated annually and new weights are introduced in March each year.

The overall Icelandic CPI is compiled with a reference period (time base) of May 1998 = 100 and the subindices series have a reference period of March 1997 = 100.<sup>11</sup> The present CPI weights refer to 2000 to 2002 (and 2001 to 2003 in the case of groceries).

New weights are introduced in March each year and are adjusted for price change between the base periods and March.

### ***3.4 Assessment and validation of intermediate data and statistical outputs***

#### *3.4.1 Intermediate results are validated against other information where applicable*

SI regularly compares data with results from price surveys. These surveys are conducted by the Competition Authorities, labor organizations, and newspapers. Some comparisons are made between CPI series and the unit value indices for exports and imports, although they are difficult to use because of significant differences in classification systems and problems connected with the effects of exchange rates. HICP subindices data are used for comparison with price developments in different European countries. The PPI component series are not yet published in sufficient detail to be of much use in comparing PPI results with CPI component data.

#### *3.4.2 Statistical discrepancies in intermediate data are assessed and investigated*

The regular CPI review process involves investigating large or unusual changes in aggregate indices for sectors and groups of commodities. Changes are examined to ensure they are correct representations of price movements, and amended after query where necessary. Reference is also made to appropriate secondary source data. For example, petrol prices are obtainable, by outlet, on oil company websites; and health care items may be checked against information from the health authorities. Reasons for major changes are documented based on analysis of component movements and findings from secondary source data.

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<sup>11</sup> There were strong representations from users for the May 1998 reference base to be continued because of the extensive and continuing use of these indices in indexation arrangements. However, CPI data are also available showing all indices, including the total CPI, on a reference base of March 1997.

### *3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated*

Regional CPIs are not calculated, and there is therefore no potential for discrepancies. The CPI compilation system is designed to produce consistent series across all parts of the CPI. Checks are made of price series compiled for the economic categories to ensure that significantly different movements are explainable. Similar checks are made at the subindices level.

## **3.5 Revision studies**

### *3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)*

SI revises the CPI weights every year in March using HES data from three recent years and other sources. For example, the weights introduced in the revision for March 2004 reflected household expenditures in 2000 to 2002, except for groceries where this revision reflected expenditures in 2001 to 2003 (using cash register receipts data).

The CPI staff members calculate, as part of each revision, the effects of the new weights on the published indices, but such studies are not published.

As noted, revisions are carried out in March each year but an additional revision was carried out in December 2001. This revision was undertaken in order to reflect the sudden great increase in market share of low price stores. The store weights and grocery headings were revised when the index for December 2001 was compiled. This yielded a 1.3 percent decrease in the food component of the CPI or a 0.27 percent decrease in the total CPI. This decrease was directly reflected in the index for December 2001 and consequently in the price movement between November and December 2001.<sup>12</sup>

On the basis of more precise receipts data in the HES, the effects of low price stores were again evaluated in April 2002, resulting in a 0.10 percent lowering of the index. Furthermore, the share of petrol sales by self-service outlets had significantly increased. In May 2003, changes due to this kind of substitution were introduced into the CPI, leading to a decrease of 0.07 percent in the CPI. These decreases were directly reflected in the index in April 2002 and May 2003.

Analyses of revisions are used to guide future decisions on potential changes in methods and the CPI basket, as evidenced by the revisions in December 2001, April 2002, and May 2003.

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<sup>12</sup> This treatment differs from a normal revision where the introduction of new weights does not affect the level of the index at that point.

The actual CPI price series have never been revised.

#### **4. Serviceability**

##### **4.1 *Periodicity and timeliness***

###### *4.1.1 Periodicity follows dissemination standards*

The CPI is published monthly according to the SDDS requirement.

###### *4.1.2 Timeliness follows dissemination standards*

The CPI is published on the eighth working day after the end of the month, which exceeds SDDS requirements.

#### **4.2 Consistency**

##### *4.2.1 Statistics are consistent with the dataset*

The CPI is aggregated in such a way that there is complete consistency between the total CPI and the indices for expenditure groups, subindices, and economic categories.

No CPI series are produced for geographical areas, apart from dwelling ownership where there are separate indices for the capital area (multi-flat houses, single-flat houses separately) and outside the capital area. There are no problems of lack of consistency in these series.

##### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

As a result of linking the new CPI time series to previous series, continuous CPI time series are available back to 1939 and, for the CPI excluding housing, back to 1914. Subindices are also available for long-term time series.

A broad summary of the underlying methodology for the CPI during various periods is shown in tabular form in the *Icelandic Historical Statistics*. This is useful for those using long-term CPI series.

##### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

SI constructs the CPI on a basis consistent with the household final consumption expenditure component in the NA. However, trends in movements in the total CPI data are different from trends in the HFCE deflator over recent years. It is understood that the CPI usually shows larger annual movements than the HFCE deflator. A number of factors (such as coverage, timing, and formulae) can contribute to different movements between the two series. The

mission considers that the CPI and national accounts staff should review these trends periodically.

It would also be desirable to make such comparisons between CPI component data and relevant PPI series, as the latter become more firmly established.

### **4.3 *Revision policy and practice***

#### *4.3.1 Revisions follow a regular and transparent schedule*

The weights for the CPI are revised in March of each year according to a predetermined revision schedule made known to data users. When new weights are introduced into the index some analytical comment is supplied concerning major changes in the weights from those applying prior to the revision. The weights revisions are sometimes accompanied by changes in methodology.

The CPI series themselves are published as final and are never revised.

#### *4.3.2 Preliminary and/or revised data are clearly identified*

There are no preliminary CPI data. The CPI is final when published, and there are no revised CPI data.

#### *4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

The CPI is never revised, as noted, but the CPI weights are revised every year with the release of the data for March. As part of the revision exercise, the CPI staff members calculate the effects of the new weights on the published indices for economic categories but not for the total CPI (although this is derivable). These calculations are carried out retrospectively for each of the previous 12 months.

As noted in 4.3.1, some analytical comment is supplied concerning major changes in the weights from those applying prior to the revision at the time when the new weights are introduced into the index.

## 5. Accessibility

### 5.1 Data accessibility

#### 5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)

The CPI is compiled and published for 12 major groups and 60 subgroups and for major groups, subgroups, and 270 subindices in the SI's publication *Statistical Series*, and on the SI's website.<sup>13</sup> This is ample for detailed analyses of price movement.

The CPI is also published for eight economic categories: domestic goods; agricultural products; domestic goods less agricultural products and vegetables; imported goods; imported goods less alcohol and tobacco; groceries (perishable items); core index 1 (CPI less agricultural products, vegetables, fruits, and petrol) and core index 2 (core index 1 less public services).

Other data provided to assist in interpretation and improved utility of the CPI data include:

- the CPI for indexation of financial obligations,<sup>14</sup>
- the long-term CPI series from 1939 to date,
- CPI weights for subindices, according to the *COICOP* classification, in November 1992, March 1997, and March of subsequent years;
- percentage dissections for each expenditure group of the CPI in March 2004 (the latest revision date) on both the new and old bases;
- index points contributions to the index aggregate; and
- housing price indices (classified by three categories) from March 2000 to date.

Users may make long-term comparisons using the table for the CPI from 1939 and other tables included on the SI's website and in the *Statistical Yearbook of Iceland* and *Iceland in Figures*.

The overall CPI is not presented in seasonally adjusted terms, and no plans exist for seasonally adjusting the CPI series.

The CPI data on the SI's website and in hard copy publications are clearly presented, facilitating meaningful comparisons and analysis by users. Some graphs are included. The SI's website contains provision for obtaining user-defined tables through the selection of

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<sup>13</sup> <http://www.hagstofa> is for the Icelandic version and <http://www.statice.is> for the English version.

<sup>14</sup> This is required by users for the indexation of loans and other financial instruments.

specific variables and time periods required, as well as format (Excel, PC-Axis, Text-file, and HTML).

#### *5.1.2 Dissemination media and format are adequate*

The main vehicle for releasing statistics is the SI's website.<sup>15</sup> Most users are aware of the electronic availability of data series and take advantage of it. As noted in 5.1.1 above, very detailed CPI data are posted on the SI's website. CPI data are released through a press release titled *The Consumer Price Index in ....month, year* which is also included on the SI's website. Press releases are no longer routinely produced in hard copy, but SI will provide such hard copy if requested.

The recently introduced periodical publication *Statistical Series: Prices, Wages, Income, Consumption* publishes detailed and long-term time series data on the CPI with analytical comment and graphs. The CPI data are published annually after the new weights have been introduced. This publication is available in Icelandic with an English translation of tables and a short English summary. The publication is available in printed format, by subscription and individual copies, and on the SI's website.

CPI data are also published in the *Statistical Yearbook of Iceland* and *Iceland in Figures (annual)*. There are charges applicable to these publications, but all price data contained in these publications are available free of charge on the SI's website. The latest CPI data are also available via e-mail, through a fax service, and by telephone to SI.

The CPI is well reported in the media. The daily *Morning Newspaper* publishes the indexation indices and CPI data are also shown in the financial pages of text television.

#### *5.1.3 Statistics are released on a preannounced schedule*

Precise release dates for the CPI data during the coming calendar year are announced in a special press release at the beginning of October each year and are also disseminated on the SI's website. Copies of the press release, titled "Advance Release Calendar...year," are available from the SI's contact person indicated on the dissemination formats page.

#### *5.1.4 Statistics are made available to all users at the same time*

The CPI is released simultaneously to all users with one exception. The three members of the Advisory Committee on the CPI meet with the CPI Division one hour prior to the release of the CPI to receive a briefing from SI on main points arising from the latest figures. However, this is a "lock-up" situation; Advisory Committee members are obliged not to make outside contact until the release time of 9:00 a.m.

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<sup>15</sup> It is noted that there is a very high level of computer usage and Internet access in Iceland.

The CPI data are released punctually according to the preannounced schedule. Rigorous procedures are adopted to ensure that the CPI is released at 9:00 a.m. on the scheduled day of release. When the CPI data are finalized for a particular month, two CPI staff members check all information to be published, and also check that all files in a specified list are loaded on computers. Each one signs that this has been done. The CPI data to be released are then sent to the server provider in encrypted form at 8:55 a.m. The data are posted to the SI's website (in the form of a press release) at precisely 9:00 a.m. At this same time the data are delivered to the SI's information center and are sent to specific users by e-mail and fax.

#### *5.1.5 Statistics not routinely disseminated are made available upon request*

Unpublished CPI data may be made available to users on request to SI. However there are relatively few instances of this because a considerable amount of detailed CPI data is available free of charge on the website or is otherwise available. In addition, data below the level of the subindices would not normally be considered sufficiently reliable for release. SI evaluates requests for unpublished data based on the proposed use of the data. Data for research purposes, which would not be otherwise published or released, are generally supplied. Charges are not usually made for release of unpublished data. The limiting factor is the availability of scarce CPI resources to satisfy requests. If a large workload is involved, the request would normally be declined. The availability of additional nonpublished CPI data could be more specifically mentioned in publications containing CPI series although, as noted, a considerable amount of detail is published anyway.

### **5.2 Metadata accessibility**

#### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

CPI metadata are included on the IMF's DSBB, and these are updated regularly. Documentation covering concepts, scope, classifications, data sources, statistical techniques, and weighting pattern is included on the SI's website but only in Icelandic. It would be very desirable to provide an English translation of this for the benefit of foreign users and it is understood that this will be done.

Some very useful technical papers about aspects of the CPI (including dwelling ownership, housing costs, telecommunication services, measurement of inflation, and measurement of quality) are listed on the website and may be accessed through links from the website. These papers are available mainly in English. On the other hand, there is a need for some kind of guide to the CPI (of about 20 pages) that describes the index in nontechnical terms in both Icelandic and in English.

Methodological revisions are noted on the SI's website at the time changes are made. When the CPI is rebased, the methodology is described and disseminated in both Icelandic and English on the SI's website.

*Recommendation: Prepare and publish a guide to the CPI (of about 20 pages) describing the index in nontechnical terms, in both Icelandic and English.*

### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

As noted above, SI publishes metadata about the CPI on its website. Summary metadata are available in some publications. Useful and detailed technical papers are available for reference by users but, as noted earlier, there is a need for a nontechnical guide to the CPI.

## **5.3 Assistance to users**

### *5.3.1 Contact points for each subject field are publicized*

Publications containing CPI data list the main contact persons and their telephone numbers and e-mail addresses. The website also lists all relevant contact information. SI staff members in the Information Center and the Prices Division are equipped to provide prompt and knowledgeable service and support to users of CPI data, and are available to promptly answer queries from users by telephone or e-mail. This service is well publicized on the SI's website.

Assistance to users is monitored and reviewed periodically. The Information Center and Prices Division handle about 250 enquiries per month.

### *5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

SI does not produce a catalog of publications and other data products. However, a simple list of all publications issued by SI is shown on the SI's website. This list includes prices.



Table II. DQAF (July 2003): Summary of Results for Price Statistics  
(Consumer Price Index)

*Compiling Agency: Statistics Iceland*

Element	NA	Assessment			Comments
		O	LO	NO	
<b>0. Prerequisites of quality</b>					
0.1 Legal and institutional environment			X		Some lack of coordination; legislation assigning coordination role is important. Staff resources barely adequate to maintain the current compilation systems and meet international statistical requirements.
0.2 Resources			X		
0.3 Relevance		X			
0.4 Other quality management		X			
<b>1. Assurances of integrity</b>					
1.1 Professionalism		X			
1.2 Transparency		X			
1.3 Ethical standards		X			
<b>2. Methodological soundness</b>					
2.1 Concepts and definitions		X			
2.2 Scope		X			
2.3 Classification/sectorization		X			
2.4 Basis for recording		X			
<b>3. Accuracy and reliability</b>					
3.1 Source data		X			
3.2 Assessment and validation of source data		X			
3.3 Statistical techniques		X			
3.4 Assessment and validation of intermediate data and statistical outputs		X			
3.5 Revision studies		X			
<b>4. Serviceability</b>					
4.1 Periodicity and timeliness		X			
4.2 Consistency		X			
4.3 Revision policy and practice		X			
<b>5. Accessibility</b>					
5.1 Data accessibility		X			Nontechnical guide available only in Icelandic.
5.2 Metadata accessibility			X		
5.3 Assistance to users		X			

### III. PRICE STATISTICS (PRODUCER PRICE INDEX)

#### 0. Prerequisites of quality

##### 0.1 *Legal and institutional environment*

###### 0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

The bulk of Icelandic official statistics are produced and disseminated by SI, the national statistical institute. SI is formally a government ministry, and its operations are based on several acts of law.

Article 6 of the *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. As such, SI has exclusive responsibility for compiling the NA and price statistics, thereby effectively barring other government institutions from compiling the statistics.

Responsibility for collecting, compiling, and disseminating statistics is also provided for in the *Act on Statistics Iceland, 1913*. By that *Act* the institution is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Another important *Act* governing the operations of SI is the *Act on the Consumer Price Index, 1995*. This provides that SI shall compute and publish an index showing changes in the price levels of private consumption and that this index shall be called the Consumer Price Index (CPI). There is no corresponding *Act* for the Producer Price Index.

Where more than one data-producing agency is involved in producing a field of statistics, arrangements are in place to promote consistency of methods and results. Examples include:

- A joint project with the CBI regarding the compilation of statistics of trade in invisible services, and exchange of data on trade in goods and services between the two agencies; and
- Cooperation on GFS between SI and the MOF through the committee on budget accounting.

There are no conflicts of interest on issues such as data security. The requirements of the Data Protection Authority in fact enhance public trust in data security and assist the role of SI in data collection.

*0.1.2 Data sharing and coordination among data-producing agencies are adequate*

Article 6 of the *Regulation of the Central Government Administration, No. 3, February 1, 2004* states that SI is responsible for “organizing, coordinating and producing Iceland's official statistics.” The legislation does not give SI any specific coordinating powers and functions beyond this general statement, nor are there any regulations to this effect.

In practice, the coordination powers of SI appear to ensure that statistics are compiled consistently and that duplication is avoided. Cooperative agreements exist in statistics of trade in goods and services and government finance statistics, as noted in 0.1.1. Many other examples of cooperation with agencies include Customs; the Land Registry; the Government FMA; the Ministry of Social Affairs, the Institute of Labour; the Federation of Municipalities; the Ministry of Health; and the State Tobacco and Alcohol Monopoly. Under the taxation law, the taxation and other authorities undertake specific collections for statistical purposes. SI has directly or indirectly required other agencies to use specific classifications. One example is the requirement, in the *Official Gazette*, that agencies making use of and industrial classification must use the ISAT 95. Cooperation between SI and the various agencies is exercised through formal meetings and workshops but mainly through informal contacts.

On the other hand, SI does not have overall specific authority to require other agencies to adopt statistical standards. In some cases coordination and cooperation between agencies are less than optimal, including in the areas of government finance and balance of payments. This underlines the desirability of having some legislation that gives more specific coordinating powers and responsibilities to SI, especially in terms of adoption of national and international statistical standards and the elimination of duplication. Further, this indicates a strong need for the enactment of more modern statistical legislation. Since this has occurred in many countries over the past two decades, there are many good models of statistical legislation from which to develop such legislation in Iceland.

No issues arise related to data sharing and coordination among Icelandic agencies as far as the PPI is concerned because the data collection, processing, and compilation activities for these statistical fields are carried out within SI.

*Recommendation: Consolidate the legal framework by preparing a single, modern, and comprehensive statistical Act and take steps towards its enactment. Include provision for strengthening coordination among statistical agencies and consistency of methodologies and statistical outputs by assigning the authority for coordination to the central statistical authority.*

*0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only*

There are no specific requirements for maintaining the confidentiality of individual reporters' data in the *Act on Statistics Iceland* or in the *Act on the Consumer Price Index*. However, SI has established *Rules of Procedure for Treating Confidential Data* (dated October 8, 2004), on the basis of, and with regard to, the following:

- *The United Nations' Fundamental Principles of Official Statistics*
- *Government Employees Act, No. 70/1996*
- *Administrative Procedures Act, No. 37/1993*
- *Information Act, No. 50/1996*
- *Act on the Protection of Privacy as Regards the Processing of Personal Data, No. 77/2000.*
- *Act on Statistics Iceland, No. 24/1913*
- *Act on the National Population Registry and Civil Registration, No. 54/1962*
- *Act on Notification of Change of Residence, No. 73/1952*
- *Domicile Act, No. 21/1990*
- *Rules on Publishing Certificates and Granting Information from the National Population Register No. 112/1958.*

Article 3 of the *Rules of Procedure* provides that all information gathered by SI for statistical purposes and that concerns specified natural or legal entities must be kept confidential. The same applies to information on natural and legal entities in the administrative registers, which SI uses for statistical purposes. In the case of administrative registers and records, however, SI is authorized to provide the respective government authority with confidential information from the data that this authority has previously taken part in collecting or has provided to SI.

Article 3 specifies that care must be taken that information cannot be traced to specific natural or legal entities when publishing and disseminating statistics. However, exceptions may be made to this when the respective natural/legal entity has consented to this sort of publication.

SI has established aggregation rules to prevent residual disclosure, e.g., where only two enterprises produce a specific commodity. This is important in an economy the size of Iceland.

Respondents to surveys are informed of their rights and obligations in questionnaires and in particular the requirement that individual data be kept confidential.

Under Article 5 of the *Rules of Procedure*, SI employees are required to maintain confidentiality and show the utmost discretion concerning any confidential data or confidential information they become aware of in their jobs. Employees are required to treat

all other information about individuals and legal entities with caution and respect, even in the case of public information.

Confidentiality on the job is especially covered by the provisions of Article 18 of the *Government Employees Act, No. 70/1996*, which reads as follows:

Each employee is obliged to observe confidentiality in regard to matters of which he gains knowledge in his work and shall be regarded as confidential according to law, the instructions of superiors or by the nature of the matter. The obligation of confidentiality remains even if the employee concerned leaves his employ.

When hired at SI, employees are informed of the rules and duties pertaining to confidential information and its treatment. Employees working on statistics are also informed of the *United Nations' Fundamental Principles of Official Statistics*, as well as of the *International Statistical Institute's Declaration on Professional Ethics*. Every employee is required to sign a pledge of confidentiality before commencing work. This applies to both permanent and temporary staff. The pledge of confidentiality is part of the job contract, and upon the employee's signing the contract, his/her attention shall be called in particular to this pledge. There have been no known breaches of the pledge of confidentiality.

No penalties are prescribed in the *Rules of Procedure* in any instance of divulging confidential information. However, the *Government Employees Act* provides for the dismissal of an employee from his/her job in various circumstances.

The *Rules of Procedure* provide (Article 8) that confidential electronic data for statistics shall be accessible only to those employees working with the data. The network administrator at SI is responsible for controlling employee access to computer files, under the supervision of the DG. Access is limited to employees needing it because of their work. The DG may make decisions to grant access to confidential data to an employee for specified purposes such as research projects, linkage with other data, or software engineering. Such decisions must be made in writing, indicating how long the authorization is to remain valid.

Under Article 10 of the *Rules of Procedure* the DG may grant access to confidential data for research purposes, provided personal identities in a collection of data on individuals have been obliterated or encrypted and provided the data cannot be traceable to recognizable natural or legal entities. Such access is granted on occasions to bona fide researchers who access data on SI premises and under strict supervision. Access is also subject to the requirement that it conforms to the rules of SI on utilizing data for research and that the Data Protection Authority (as provided for in the *Act on the Protection of Privacy as Regards the Processing of Personal Data No. 77/2000*) has not objected to such access.

Article 6 requires that confidential statistical data on paper must be kept secure during processing, but destroyed once utilization is complete. Project managers, in consultation with the division directors, are responsible for deciding how long such data are to be preserved after the completion of recording, processing, and publishing. Normally, these data are not

kept for longer than assumed sufficient for possible errors or uncertainties to come to light which require the availability of the original data. Data are required to be preserved in specific, marked boxes in locked storage, with a note on the boxes as to when the data are to be destroyed.<sup>16</sup>

Article 7 deals with the preservation of confidential data in electronic form. It provides that electronically recorded confidential data for statistical purposes shall be kept secure so long as processing lasts, but once utilization is complete they shall either be destroyed or the personal identities in them be obliterated or encrypted. This type of data is allowed to retain the identities of the respective natural or legal entities so long as the survey and processing continue and for a limited time after publication of the statistical reports for which the data were employed.

Project managers, in consultation with the division directors, are responsible for deciding whether to preserve such data after processing and publishing are finished, and if so, how long such data are to be preserved. Normally, the electronic data shall not be kept for longer than can be assumed sufficient for possible errors or uncertainties to be detected, which require the availability of the original data.

When there is considered reason to preserve electronically recorded confidential data over a long period for further research inside or outside SI, the personal identities in them must be obliterated or encrypted. Should the data be independent, so that no reason can be foreseen to link them with other data later or should that be considered undesirable, the personal identities in the data must be obliterated. On the other hand, if it is considered desirable to preserve the potential for linkages later, the personal identities in the data shall be encrypted by a recognized method, according to special rules.

In cases where personal identities in a collection of data on individuals have been obliterated or encrypted, and it is certain that the data cannot be traceable to recognizable natural or legal entities, permission of access to the database or the disclosure of it to others for research may be authorized.

As noted above, individual data must be preserved in specific, marked boxes in locked storage, with a note on each box as to when the data are to be destroyed.

SI premises are closed between 11:00 p.m. and 7:00 a.m. each day, and at all times access to work areas can only be made with electronic code access. Access to computer files for each

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<sup>16</sup> The confidential data mentioned in Article 6 are intended only for producing statistics and are collected on the presumption that they will be destroyed after utilization. Thus, such information does not fall under legal provisions on the requirements of submission to the National Archives and in general shall not be submitted for preservation there.

staff member is restricted to those files that the staff member requires for his/her work. Access to additional files must be approved by the network administrator.

The division directors and project managers of SI are responsible for preserving or, as applicable, destroying confidential data (see Articles 5–7 of the *Rules of Procedure*) in consultation with the DG. Every year office managers are required to investigate and describe to the DG how confidential data are kept, what data are preserved, and data destruction practices. On one day each year all managers are required to supervise the destruction of data under their control.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

The *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. This is also provided for in the *Act on Statistics Iceland*. By that *Act* SI is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Specific provisions in the taxation legislation make it mandatory for the taxation authorities to supply SI with all the data it requires for statistical purposes. Similar provisions apply to Customs authorities.

The *Act on the Consumer Price Index (No. 12, March 2, 1995)* provides that SI shall compute and publish an index, titled the CPI, showing changes in the price levels of private consumption.

Article 2 of the *Act on Statistics Iceland* specifies fields of statistics with which SI is charged with investigating. National accounts and price statistics are not specified in this list, but Article 2 also states that SI shall compile such statistics that may be prescribed by law or mandated by the Government or which SI may itself propose in consultation with the competent government authorities. This therefore covers not only NA and price statistics but also all component statistics required in compiling those statistics. SI has compiled the PPI for exported fish products since 1986. However, the PPI for manufacturing products has only recently been commenced.

Article 4 of the *Act on Statistics Iceland* authorizes SI to mandate that reports, which up until the enactment of the legislation (January 1, 1914) had been submitted by municipal authorities or individuals to county sheriffs, shall be submitted directly to SI. SI may return for correction reports that it finds inadequate and may request further information, subject to such penalties as prescribed by law for failure to carry out the submission of legitimate reports. In practice, however, penalties have not applied for persons or legal entities that have not submitted returns or have submitted false information.

Response burden is not a major issue for SI, mainly because it relies very much on administrative records, especially in the economic statistics fields. SI provides assistance to respondents in completing and submitting forms (e.g., by providing a point of contact). In the case of the PPI for manufacturing products, the data are obtained electronically from respondents who post required information on a secure website at SI.

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources and financing are commensurate with statistical programs*

SI has a staff of 97 full-time equivalent employees, comprising 27 in the population register division and 70 in statistical fields (including also administrative staff). This is a very small statistical office by international standards but is regarded as quite large by Icelandic standards.

The great majority of staff members are university graduates. Staff members attend appropriate courses and participate in a range of international seminars and workshops on statistical matters. Salary levels appear to be reasonably adequate but uncompetitive with banks and some other organizations. Staff turnover is reported to be quite small and not problematic. SI has made very effective use of technology to reduce reliance on staff.

Despite these factors, the present staff numbers are barely sufficient to cope with present demands, and it is difficult to see such a small staff complement being able to meet the inevitable increases in demand for statistics and the significant international statistical requirements. A related factor is the lack of robustness for individual statistical fields, which could render the statistical systems vulnerable in the event of unexpected staff turnover.

The staff allocation for the PPI for manufacturing products is approximately 1.5 full-time equivalents. In addition, about 0.3 full-time equivalents are allocated for the PPI for fish products. The latter resource is located in the national accounts branch. This amounts to a total of slightly fewer than two persons on a full-time basis. There has been no significant turnover in staff over recent years.

The PPI staff members have appropriate qualifications and have participated in a number of conferences and seminars. Appropriate emphasis is given to staff training and development on price index theory and practice.

The small number of PPI staff appears to be barely adequate to undertake the current functions. It is not sufficiently robust to cope with any unexpected staff turnover. Further the staffing is clearly insufficient to undertake a number of planned developments including increased sample sizes to improve data validity; improved periodicity from quarterly to monthly publication; and increased scope of the indices beyond manufacturing and fishing products. It is necessary to carefully estimate the staffing numbers required to undertake



these initiatives and to address budgetary, recruitment, and training issues as a matter of some urgency.

The organizational arrangements for price indices within SI were reviewed a few years ago, and it now seems an opportune time for a further review. This should focus on the desirability of bringing all price index work together in one organizational unit. The review should also consider the staffing needs for prices work in the context of recent and planned developments.

SI places heavy emphasis on the application of technology in the collection, compilation, and dissemination of statistics. Up-to-date equipment and well-known and proven software is used throughout SI. SI emphasizes standardization, particularly through the use of Microsoft products. In-house development is aimed at data warehousing applications.

Appropriate back-up procedures guard against loss or corruption of data. Daily, weekly, and monthly back-up cycles are observed. The tape library is located in a secure computer room. Monthly tapes are kept in a “safe box” designed to withstand excess heat and strong magnetic fields. SI plans to mirror all data between two remote sites (locally and in another geologically safe site).

SI regards the computing resources allocated to PPI compilation as adequate. Data for the manufacturing products PPI are obtained electronically; the data are sent from the respondents’ computers to a secure website maintained by SI. A system has been developed to check data supplied and to compile PPI series. However, there is a need for some programmer support to further develop and refine this system.

Computing resources for the fish products price index are adequate, but the Excel-based processing system could well be streamlined and made more efficient.

SI’s office premises and furnishings are of a good standard.

The funding for SI is determined by the central government budget. SI has some flexibility to determine specific uses of its allocation. Budget appropriations have increased in recent years, reflecting new tasks and obligations (including those resulting from European statistical cooperation) and the move to new premises in 2003. Funding is generally adequate, but budget appropriations tend to lag behind demand for services.

There are no formal forward planning systems in SI—simply planning scenarios on an informal basis.

*Recommendation: Strengthen staffing back-up arrangements and increase staff resources for work on the PPI.*

*Recommendation: Examine the desirability of concentrating price index expertise by bringing all price index staff together in one organizational unit.*

*Recommendation: Review staff resource requirements for all price indices as soon as possible with a view to allocating sufficient resources to allow further planned developments and to provide a more robust organization for price statistics generally.*

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

A long tradition exists of using administrative registers and records as the major source of data, mainly for reasons of financial efficiency. There is also ongoing monitoring of collection, compilation, and dissemination processes to ensure efficiencies. SI has greatly increased its reliance on electronic reporting and electronic dissemination over recent years—for instance, the electronic capture of prices information for the PPI and the dissemination of a large amount of data on the SI's website. On the other hand, SI does not periodically review staff performance or cost resources used in the various statistical programs.

### **0.3 Relevance**

#### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

PPI staff had significant contact with a range of users when first establishing the PPI for manufacturing products. There is no advisory body on the PPI, but consideration is being given to establishing such a group.

The user survey conducted for this ROSC assessment indicates a large proportion of respondents to the survey were satisfied with the coverage of price statistics, their level of detail, frequency, accessibility, and underlying methodology. Also, a large percentage of respondents were satisfied with the timeliness of price statistics, their accuracy, and the availability of metadata.<sup>17</sup> (See Appendix III for details.)

PPI staff has participated in international statistical meetings and visited neighboring countries to study PPI methodology and practice.

SI has been a member of the International Statistical Institute since around 1930, and the DG of SI has been President of the International Association of Official Statistics.

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<sup>17</sup> These responses relate to price statistics; separate responses were not obtained for the CPI and the PPI.

## **0.4 Other quality management**

### *0.4.1 Processes are in place to focus on quality*

Although no formal quality management program is in place, SI actively participates in discussions about quality and has examined quality meeting practices in Nordic and other European countries. Data quality is very much emphasized within SI.

### *0.4.2 Processes are in place to monitor the quality of the statistical program*

Quality aspects of statistics are discussed with all subject matter managers in annual planning meetings and follow-up meetings. SI regularly monitors response rates and timeliness. Double checking of compilation work is practiced in the PPI. The ARC is produced every autumn for the coming year.

Iceland is one of three EFTA States that is a Contracting Party to the EEA Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the Contracting Parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at SI.

### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

SI considers quality issues in the annual planning process at the start of each year. As part of this process, PPI staff members outline their plans for the coming year to make other staff aware of developments and needs for cooperation.

SI has identified many opportunities for improving data quality and acted upon them through ongoing monitoring, periodic reviews, and feedback from users on quality issues.

## **1. Assurances of integrity**

### **1.1 Professionalism**

#### *1.1.1 Statistics are produced on an impartial basis*

Article 6 of *the Regulation of the Central Government Administration* establishes that SI has exclusive responsibility for compiling price statistics, thereby effectively barring other government institutions from compiling such statistics.

SI has had a long tradition of professional independence, and other institutions have respected the authority of the agency to produce the official statistics under its control. Since

the agency is a full-fledged ministry, the DG, as head of the ministry, has professional independence to conduct the affairs of the agency.

The current DG of SI was appointed for an open-ended, life-time term and can remain in the post until he reaches the retirement age of 70. The tenure of the head of the agency has been stable since the establishment of SI, and the current DG is only the third appointee to the post since 1914. Other government agencies recognize the importance of the statistical independence of the agency

However, the terms and conditions for appointing the head of the agency have been amended with the introduction of the *Government Employees Act No. 70 of 1996*. Under the new *Act*, the DG is appointed by the Minister responsible for Statistics for a fixed five-year term, subject to renewal. However, the Minister may decide to advertise the post as vacant at the end of the term, in which case the DG at that time may have to reapply. Chapter VI of the Regulations outlines the conditions under which the staff appointed under the Regulations (including the DG) may be relieved from the post.

Article 36 of the *Regulation* gives the Minister the authority to transfer appointees (including the DG) to another post under his authority or under another government authority, if that authority requests the transfer. Directors, who are responsible for the various departments within SI, are subject to the same terms and conditions of employment as the DG.

The DG has the sole authority to appoint staff based on the guidelines of the *Government Employees Act*. Staff members are appointed on an indefinite contract and may be relieved of their post upon receiving three months notice. All vacant posts are publicly advertised, and the DG establishes the criteria for the recruitment of staff depending on the technical expertise required.

The DG and staff routinely participate in external seminars, expert groups, and task forces established by regional and international statistical bodies, including Eurostat and the OECD. In addition, staff members undertake regular study trips to other statistical agencies in the Nordic region and participate in network groups of the Nordic statistical agencies.

Staff members have free, unlimited access to a wide range of international academic journals and research databases through a nationwide access portal.

#### *1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

The DG has the sole authority to decide on statistical matters, which he may delegate to staff. The agency decides on statistical techniques, methodology, and data sources based on the need to implement best international practices; however, these decisions are influenced by cost considerations and the resource constraints facing SI.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

The DG is entitled to provide feedback on the statistics to the press without having to obtain clearance from an authority outside the agency. Further, the department heads within SI have complete authority, without having to seek the approval of the DG, to comment on the erroneous interpretation of the statistics compiled by their respective divisions. SI maintains a cordial working relationship with the media, and journalists routinely submit draft news reports on the statistics to staff to verify their accuracy before the reports are disseminated.

The agency no longer maintains a formal “clipping service;” however, division heads monitor news reports on the statistics following the dissemination of official SI press releases.

**1.2 Transparency**

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

SI publishes the terms and conditions under which the statistics are compiled, on its website in Icelandic and in English. In addition, a hardcopy of the legislation is available in the agency’s library; however, the staff note that the legislation is not widely requested. When SI conducts surveys, it informs respondents of the general purpose of the survey and notes that the information received would be used for statistical purposes only.

The terms and conditions are also presented on the DSBB.

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

Access is not given to PPI data prior to release.

*1.2.3 Products of statistical agencies/units are clearly identified as such*

All SI products are clearly identified as such, with the agency’s name and logo appearing on the front page of all its publications and on the SI’s website. The publications also advise users to identify the source of the information when quoting from SI’s publications.

*1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

SI may provide advance notice of changes in methodology, where appropriate. Advance notice was given to users that a PPI for manufacturing products was being developed and meetings were arranged to solicit views of users.

### **1.3 Ethical standards**

#### *1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

SI does not have its own comprehensive ethical guidelines, and staff behavior is guided mainly by the general rules and regulations of the civil service of Iceland as outlined in the *Government Employees Act*. The *Rules of Procedure for Treating Confidential Data*, in place since 2000 and formally adopted by SI in October 2004, establish additional guidelines for staff on the treatment of information that has been collected by the agency for statistical purposes (*see also 0.1.3*). Staff members are also bound by the regulations contained in the *Data Protection Act No. 77 of 2000*, which seeks to ensure that personal data are processed according to rules governing the protection of the data covered and the right to privacy.

Staff take an oath of secrecy upon being hired and are made aware of all regulations pertaining to the need to observe and protect the confidentiality of information collected by SI for statistical purposes. The potential for conflict of interest is avoided as staff members are expected to seek the approval of the DG before undertaking any work outside of the agency. The DG notes that during his 20-year tenure, he has never encountered a case of conflict of interest or the possibility of a conflict of interest.

Although no formal system reminds staff of the ethical guidelines, the rules and regulations are readily available on the SI's website and in the SI's library.

## **2. Methodological soundness**

SI disseminated the PPI for the first time on May 13, 2004. The PPI is at present compiled as a *quarterly* price index with a reference period of fourth quarter 2003 = 100. The weights at present relate to the year 2002 and are based on the results of the annual PRODCOM (industrial) survey. The PPI is a Laspeyres annual chain-linked index.

The PPI currently covers most of manufacturing production.<sup>18</sup> The PPI measures changes in prices received by producers for their products and covers both domestic sales and exports.

Apart from the PPI described above, SI publishes a *monthly* price index for exports of fish products. The price index for exports of fish products is an annually chained Laspeyres index, with a reference base of 1986 = 100. The results of this price index are now incorporated with those of the new PPI for manufacturing products for publication purposes.

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<sup>18</sup> Manufacturing is defined for PPI purposes as industries within Divisions 14-36 of NACE Rev. 1.1 with the exception of 22.1 (publishing) and 35.1 (building and repairing of ships and boats), in accordance with EU Council Regulation No. 1165/98 concerning short-term statistics. Mining and quarrying industries are also included with Manufacturing for PPI purposes.

The PPI in fact has two published components: manufacturing products and fish products. No additional detail is released at present and the index is restricted to these industries/products. However, some further details are published separately in respect of the monthly fish products index.

Quarterly unit value indices for all exported and imported goods are compiled by the national accounts division, using information sourced from the Customs Department. These are compiled quarterly as Laspeyres indices and annually as Fisher ideal indices. When the annual indices have been compiled, the quarterly unit value indices are recompiled as Fisher indices.

This assessment covers the PPI for manufacturing products and fish products.

## **2.1 Concepts and definitions**

### *2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

The 1995 ESA is followed regarding determination of index output weights for the PPI. Concepts and definitions given in the *Producer Price Index Manual (PPI Manual)* are followed regarding the specification of individual goods and services whose prices are measured on a continuing basis.

The weighting concept is the market output of finished goods and services (as defined in 1995 ESA) or value of production (as defined in the *PPI Manual*).

Basic prices are obtained and used in the PPI. Only actual transaction prices are used. The export prices obtained for both manufacturing products and fish products are f.o.b. prices and are calculated from quantities and values obtained monthly from the selected respondents.

Average prices for each respective quarter are used in the index calculation. Quarterly prices for manufacturing products are derived from total quantities and values of sales for each quarter, which are in turn compiled from quantities and values of sales for the month as reported by respondents. Quarterly price indices for fish products are derived from monthly price indices.

The PRODCOM list (List of Products of the European Community) is used as the basis for the output weights and for the compilation of indices within the PPI. The PRODCOM list is linked to the Statistical Classification of Economic Activities in the European Community (NACE Rev.1.1) at the four-digit level. The NACE Rev. 1.1 is also comparable to the ISAT 95 at the four-digit level.

The PPI is published only for manufacturing products and fish products, although more detailed indices for fish products are available elsewhere. There are plans to publish more detail for manufacturing products, although there are some sensitive confidentiality issues,

and it appears likely that indices can only be made available for three or four broad industry groupings.

The PPI is not seasonally adjusted.

## **2.2 Scope**

### *2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

The PPI covers manufacturing products and fish products. Manufacturing production is defined as industries within Divisions 14-36 of NACE Rev. 1.1 with the exception of 22.1 (publishing) and 35.1 (building and repairing of ships and boats), in accordance with *EU Council Regulation No. 1165/98* concerning short-term statistics.<sup>19</sup> Mining and quarrying industries are included in Manufacturing for PPI purposes. The PPI for fish products relates solely to fish products that are exported; exports are a very large component (at least 95 percent) of total fish production.

Energy and construction industries are not covered in the PPI. It is envisaged that the scope of the PPI will ultimately be expanded to include energy and construction industries, but there is no firm timetable for these extensions.<sup>20</sup> The energy industry is currently undergoing significant structural changes, and SI considers that the expansion of the PPI in this regard should be deferred until these changes are fully effected. SI is considering the possibility of developing a PPI for construction taking—as a starting point, the existing building cost indices—and supplementing this information with selling price data.

All resident market enterprises are in scope for the PPI. There are no free trade zones. Bonded warehouses are not included because no selected enterprises sell manufactured products from such warehouses.

The PPI excludes own-account production of goods for own final consumption and capital formation, services, and the production of illegal goods. These exclusions are common for PPIs.

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<sup>19</sup> The exclusion of publishing and ships and boats is not of great significance in the economy of Iceland.

<sup>20</sup> Construction and energy account for about 9 percent and 3 to 4 percent of GDP, respectively, compared with about 8 percent for Fishing and Fish Processing and about 9 percent for Manufacturing and Mining and Quarrying.



*Recommendation: Develop a phased and prioritized work program to ensure the planned improvements in the producer price indices.*

### **2.3 Classification/sectorization**

*2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

The ISAT 95 is used to classify enterprises and establishments according to their principal economic activity, down to the five-digit level.<sup>21</sup>

The PRODCOM classification is used to classify products at the nine-digit national level, which can be linked to the eight-digit PRODCOM list. The individual product classification system of each enterprise is used to classify the products within each PRODCOM nine-digit group.

### **2.4 Basis for recording**

*2.4.1 Market prices are used to value flows and stocks*

The weights and prices are valued at market prices. These are ex-factory prices excluding VAT, other taxes on products, and transport charges separately invoiced. In practice these prices are equivalent to basic prices because there are no subsidies paid on products and production. For exports of manufacturing and fish, products are f.o.b. Only actual transaction prices are used.

The prices collected relate to detailed specifications of each transaction. Each transaction is defined as narrowly as possible. The transactions are established through discussions with each respondent. Ideally the transaction is for each good sold to each customer under exactly the same terms from month to month.

Specifications for pricing fall into two different categories: first, the transaction terms for each individual customer and, second, the specifications of the product itself. In the first case, any significant or unusual price changes should be identified during the checking stage and, if the changes are not explained by the data supplied, the enterprises would be contacted. In the second case, the prices are obtained for product numbers, according to respondents' records, and a change in specification would normally result in a different product number.

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<sup>21</sup> The ISAT 95 is comparable to NACE Rev. 1.1 at the four-digit level.

#### *2.4.2 Recording is done on an accrual basis*

The weights and prices for the PPI are based on sold production on a gross sales basis. Therefore, both weights and prices do not necessarily relate to actual production in the period concerned. The weights are based on the PRODCOM survey, which records volume and value of sold production in accordance with the requirements of the European Community survey of industrial production.

For industrial finished goods the values used in calculating weights are total invoiced sales without correction for changes in inventories.

Average prices for each respective quarter are used in the index calculations. Quarterly prices for manufacturing products are derived from total quantities and values of sales for each quarter, which are in turn compiled from quantities and values of sales for the month as reported by respondents. Quarterly price indices for fish products are derived from monthly price indices.

Consistent with the *PPI Manual*, prices are those applying at the time when there is a change of ownership from producer to buyer.

For fish products the values used for calculating weights are based on exports data on an f.o.b. basis, derived mainly from Customs declarations.

#### *2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Stages of processing indices are not calculated, and transactions between establishments of the same enterprise are not covered. Therefore net weights are not an issue in the PPI.

### **3. Accuracy and reliability**

#### **3.1 Source data**

##### *3.1.1 Source data are collected from comprehensive data collection programs that take into account country-specific conditions*

#### **Source data for output weights**

SI maintains a business register, which provides the basis for conducting enterprise/ establishment surveys. The business register is the main framework for conducting the PRODCOM survey (discussed below).

The business register relies mainly on tax data such as monthly PAYE records, bi-monthly VAT data, Standardized Annual Accounts,<sup>22</sup> and daily data from the Enterprise Register maintained by the Director of Internal Revenue. By law (No 17/2003), all enterprises are required to be registered in the Enterprise Register maintained by the Director of Internal Revenue. Data contained in the Enterprise Register are supplied to SI on a daily basis. Collectively, the various sources comprehensively cover for the business register.

The data provided for incorporation in SI's business register include an activity code for each employee, according to ISAT 95. This in turn enables classification by economic activity for each unit on the register and monitoring of any changes in economic activity within enterprises.

To supplement the extensive information on enterprises incorporated in the business register, SI surveys enterprises annually to provide detailed data on local units.

The annual PRODCOM survey is the major source for deriving output weights. The survey for reference year 2003 covered all enterprises exceeding a turnover threshold of 30 million ISK. The survey covered about 600 enterprises, accounting for about 97 percent of total industrial turnover. The survey population is derived from SI's business register, as well as VAT and PAYE data from the Director of Internal Revenue.

Questionnaires used by SI are subject to pilot testing and observation studies. The PRODCOM questionnaires are tailor-made for each enterprise; data from the previous year are included on the respective questionnaires to assist the respondent when completing the latest questionnaire. Pretesting and observation studies took place when the PRODCOM survey was initially established in 1996, and questionnaires have been subject to annual review subsequently.

The response rate for the PRODCOM survey is about 85 percent, with imputation for nonresponse cases. The collected data are subject to a number of manual and computer checks for consistency and comparability. The data sources are sufficient for the establishment and review of weights and respondent samples for the PPI.

### **The PPI data collection program**

The data collection program for the PPI is sufficient for ongoing index compilation. About 23,000 price observations are obtained each month. The PPI data collection covers about

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<sup>22</sup> Enterprises and self-employed persons are required under taxation law to return a standardized annual account, which is used for corporate income tax purposes. This contains all the usual accounting variables and some additional ones.

40 percent of total turnover for manufacturing as defined. At the four-digit level of ISAT 95, activities accounting for about 71 percent of total turnover are covered. At the two-digit level of ISAT 95, activities accounting for about 84 percent of total turnover are covered.

SI has taken steps to enlarge the PPI sample, and this will increase coverage from 40 percent to about 47 percent. At the four-digit level of ISAT 95, activities accounting for about 80 percent of total turnover will be covered, and 94 percent at the two-digit level.

The data used for compiling the price index for export of fish products are obtained from a sample survey of several exporters who provide information on prices for their main products. The sample covers nearly 50 percent of the export value of fish products. The weights reflect the composition of total exports of fish products in the previous year

Enterprises are selected using judgment sampling. The selected transactions are determined in cooperation with each enterprise. The scope of the transactions can range from a few representative items for each PRODCOM category to a complete coverage of all the transactions for the enterprise. Close contact is maintained with respondents and the sample of respondents and products is under continuing review.

Very detailed price data are collected, down to actual invoices for some enterprises. The specifications are as detailed as possible, specifying all price determining characteristics. The respondents create text files and send them electronically to a secure dedicated website at SI. For the PPI for manufacturing products, the basic value and quantity data from each enterprise (from which average prices are derived) are reviewed and checked when they are received. New enterprises are added to the sample as they are identified through tax data received monthly or from other sources such as the media.

The data are sufficiently detailed to derive valid PPIs at quite detailed levels. However, there are confidentiality issues that need to be taken into account when deciding on the level of publication. At present the index is published only for fish products and manufacturing products. SI is able to publish confidential data with the consent of the respondents concerned. However, this is a very sensitive issue, requiring careful negotiation.

In the case of the established indices for exported fish products, price indices are available disaggregated into a number of categories. Interested parties can obtain these more disaggregated indices on the SI's website or on request from the contact person.

Media reports are monitored for information on prices and developments within manufacturing, which is then taken into account in index compilation.

PPI staff have had several meetings with producers and the business community while developing the PPI and plan to continue these as further development of the index occurs. PPI staff are also in constant contact with respondents to identify new developments within industry.

The *PPI Manual* has been the main source of information concerning international standards and has been closely followed in developing the PPI. Information from Eurostat and on PPIs in other countries has also been examined.

*3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required*

The source data used for weights and prices are consistent with the definition, scope, classification, valuation, and timing requirements of the PPI.

*3.1.3 Source data are timely*

The PPI data are collected at a monthly frequency but currently only quarterly indices are compiled. Publication occurs about 45 days after the end of the quarter.

The situation reflects the development nature of the index. As regards the price collection, virtually 100 percent response is achieved within each quarter. The selected enterprises send reports electronically each month directly from their computer systems to SI. The data are posted by the respondents on a secure SI website. The range of price and quantity data supplied each month is reasonably constant for each respondent and they could—and many do—supply information very promptly after the end of each month. The present organization of the price collection reflects the fact that the index is currently published quarterly.

**3.2 Assessment and validation of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide planning*

The PRODCOM (industrial commodity) survey is conducted annually. The PRODCOM questionnaire gives enterprises the opportunity to report changes to the structure of the enterprises. Each questionnaire is evaluated and entered manually into the SI's computer system. Response to the survey is about 85 percent, and data for outstanding questionnaires are imputed through reference to previous year's data, VAT data, and key data that are sometimes obtained from the outstanding enterprise. Sampling errors are not calculated for the PRODCOM survey, as it is virtually a census.

The collected data are subject to different manual and computerized checks. The manual checks concern the formal content of the questionnaire, such as the reporting units' name and address. The computerized checks relate to internal data consistency and comparability over time. Outliers are identified and confirmed with respondents.

As noted above, administrative data are used when selecting enterprises for the annual PRODCOM survey. The administrative sources include PAYE records and VAT data.

Administrative data are checked for general validity when received at arrival from the Internal Revenue Directorate (IRD), and this applies especially to the activity codes included in PAYE records.

The response rates for the PPI manufactured products and fish products are virtually 100 percent. Substantial computerized editing procedures are in place to examine reported prices data and to identify outliers and unusual price changes. Outliers in terms of price change for the previous month and quarter are identified in tables and are also shown in graph form. These data also show the effect on the relevant indices at the next level of aggregation.

The PPI data for each specific enterprise are checked thoroughly for any unusual differences in level or movement, and enterprises are contacted for further information and clarification when abnormal fluctuations appear in prices.

Sampling errors are not calculated for the price surveys as they are based on judgment samples and not random samples.

Response error/bias in price collection is minimized, owing to the method of collection, because the data are transferred directly from the respondent's computer system to the PPI computer system. New goods bias is also minimized because information is obtained from most enterprises about all their goods produced and sold each month. However, there could be new goods entering the market that are produced by other companies.

New enterprise bias is unlikely, owing to the small Icelandic market and the monitoring by SI of the media and administrative sources to identify new enterprises. Thus, such new enterprises can easily be incorporated promptly in the index. Substitution bias is minimized within each enterprise, owing to the calculation of a Fisher ideal price index between each consecutive period.

At present, limited opportunities exist to compare PPI data with other related data sources because the PPI series are very new. However, it would be worthwhile to make some comparisons in the future, especially with relevant components of the CPI.

### **3.3 *Statistical techniques***

#### *3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

PPI data are collected electronically with data transferred from the respondent's computer system to the PPI computer system so processing errors are kept at a minimum. In addition, all work is double-checked during the production of the index.

Adjustments to unit records are made only when clearly warranted (for instance, unusual values are not replaced or modified unless clearly required) and can be identified in datasets. The response rate for the new PPI survey to date has been 100 percent and imputation has not

been necessary. If there is a lack of price data in the fish product index, the price from the previous month is used.

Replacement items are selected from other items produced at the same enterprise, based on volume of sales and representativeness. New products are introduced in situations where an old item is permanently missing and where the sample is augmented to increase coverage.

In the first case the new product is linked into the price series using the method best suited to each specific case (such as overlap, link to show no change, or quality adjustment). The overlap method is generally used.

In the second case, new products are either introduced at the time of rebasing or their price change is followed from the time of introduction, and a special base price is constructed that conforms to the price change of that particular product group. If a very significant new product were to become available on the market, there may be an argument for introducing it in between annual reviews, constituting a mini-revision.

Specific procedures are developed to adjust data sources to improve the coverage and definitions. New enterprises are added to the sample when identified through the tax data received monthly or from other sources, such as the media, to improve coverage. Grossing-up factors are derived scientifically based on sample design.

The *PPI Manual* is adhered to in determining the treatment of missing prices and the introduction of new products within the scope of the PPI. Prices for temporarily missing products are handled by imputing the price based on the change in similar product prices or carrying forward the last reported price. However, due to the nature of the data collection in which information for a large number of detailed specifications is obtained, products are rarely missing temporarily.

There are no special procedures for handling seasonal items; they are treated the same way as other missing prices. Seasonal products are not of great significance at this stage where the index is calculated quarterly. However, the imputation of missing prices for seasonal products will need to be explored before the index is published on a monthly basis. When products become permanently unavailable, replacement products are selected automatically when the index is calculated. In the fish products price index, the price of the unavailable product is maintained until the next annual change in the base year. This is not normally recommended practice, but in these cases the unavailability is usually due to seasonal factors, and substitution of another product would not be appropriate.

Where quality changes are identified and overlap pricing is not appropriate, quality changes are evaluated, usually in cooperation with the enterprise, and prices are adjusted accordingly. Quality adjustments (using internationally accepted methods) are made when quality differences are observed in replacement products.

### *3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

The PPI weights relate to sold production on a gross sales basis. The weight reference period is updated in the fourth quarter each year, and weights at the detailed level (within elementary aggregates) are updated quarterly.

When new weights are introduced, the new index is linked to the old index using internationally accepted methods.

The elementary level indices for PPI for manufacturing products are calculated using the Fisher ideal price index. The weights are calculated from the values of sales reported by each respondent. Price change is calculated using a matched sample approach; i.e., the prices used relate to those specifications that are available in consecutive quarters. The Laspeyres formula is used to aggregate the elementary indices to higher levels. Product indices are aggregated by industry using the PRODCOM classification structure.

The Laspeyres index formula is used for compiling the fish products index at all levels.

A short-term price change from the previous period is used for the PPI for manufacturing products. The current weight reference period and price reference period are the same for the first level indices. For the second level index, no indices have been available to update the weights, so the Young Index has been used. The Lowe Index will be used as soon as practicable.

## **3.4 Assessment and validation of intermediate data and statistical outputs**

### *3.4.1 Intermediate results are validated against other information where applicable*

The PPI is a newly developed index and PPI component data are not yet regularly compared with similar component series from the CPI. For fish products, comparisons are made with unit value indices for exports. As the PPI series is further developed, these kinds of comparisons will become increasingly worthwhile and are encouraged.

### *3.4.2 Statistical discrepancies in intermediate data are assessed and investigated*

Part of the regular PPI review process involves investigating large or unusual changes in aggregate indices for particular industries or products.

### *3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated*

No inconsistencies or statistical discrepancies exist in the PPI at various levels because it is compiled on a completely consistent basis throughout.



### **3.5 Revision studies**

#### *3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)*

The PPI weights are revised in the fourth quarter each year. The weights for the fish product PPI are revised annually. As part of each revision, the PPI staff members calculate the effects of the new weights on the published indices.

For the actual price series there have so far been no revisions of the PPI for manufacturing products. There have been reasonably frequent revisions for fish product indices. These are usually confined to the previous month.

In the case of the fish product index, SI studies revisions to data arising from the collection and compilation phases to ascertain the causes of revisions and to improve data collection and compilation in future periods

## **4. Serviceability**

### **4.1 Periodicity and timeliness**

#### *4.1.1 Periodicity follows dissemination standards*

The PPI is compiled on a monthly basis but is published quarterly and therefore does not meet SDDS requirements. SI is availing itself of a flexibility option on the periodicity of the PPI. A monthly PPI is being developed and is planned to be completed by the end of 2005. The price index of exported fish products is already compiled monthly.

#### *4.1.2 Timeliness follows dissemination standards*

The PPI is published 45 days after the end of the reference quarter and therefore does not meet SDDS requirements. SI is availing itself of a flexibility option on the timeliness of the PPI. A monthly PPI is being developed and is planned to meet the SDDS requirement of dissemination within a month of the end of the reference month.

### **4.2 Consistency**

#### *4.2.1 Statistics are consistent with the dataset*

Price series compiled within the dataset by industry and product are entirely consistent.

#### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

The PPI for manufacturing products was introduced in May 2004, and consistent time series data are only available from the fourth quarter of 2003. However, the price index for export

of fish products has been compiled as an annually-chained Laspeyres index since 1986, on a base 1986 = 100.

*4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

The PPI is a newly developed index, and PPI component data are not yet regularly compared with similar component series from the CPI. For fish products, comparisons are made with unit value indices for exports.

**4.3 Revision policy and practice**

*4.3.1 Revisions follow a regular and transparent schedule*

The PPI weights are to be updated in the fourth quarter of each year. This schedule was announced when the PPI series was first published and is also announced in the DSBB. The weights for the fish products PPI are also updated annually.

The actual PPI series for manufacturing have not been revised to date. However, in principle the PPI series are subject to revision at any time. If changes are necessary to data already published, they will be shown in a press release, posted on the SI's website, with explanations about the changes. As noted earlier, revisions have been made to the PPI series for fish products, and these are shown in published tables.

*4.3.2 Preliminary and/or revised data are clearly identified*

The PPI data for manufacturing products are published as final data but, as noted above, may be subject to revision. In practice they have not yet been revised.

Revisions have been made to the PPI series for fish products, and these are shown in published tables. However, the revised data are not indicated as such in the published tables, through the use of some kind of annotation symbol to alert the user to the revised data.

*Recommendation: Clearly indicate revised data in published tables.*

*4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

Revisions to weights have not yet occurred for the PPI manufacturing component. The nature of the index and the process of introducing new weights will be described in detail in a document, to be issued in hardcopy and on the SI's website. This document is expected to be available in early 2006.

Revisions to weights for the PPI for fish products occur annually and are announced in published statistics.

Revisions to PPI data for manufacturing products have not yet occurred. Revisions to PPI data for fish products are shown in publications, as already noted.

## **5. Accessibility**

### **5.1 Data accessibility**

#### *5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

The PPI data on the SI's website are at present restricted to the quarterly indices and quarterly changes from last quarter for the total PPI and for fish products and manufacturing products.

The data are clearly presented and are shown in PX Web tables that allow the user to download required series in Excel, PC-Axis, Text-file, and HTML to facilitate comparisons and analysis and to create user-defined tables and graphs and charts if desired.

Main findings are reported in a press release, which clearly identifies a link to the PX Web tables. Basic footnotes and explanations are attached to the PX Web tables.

The main limitations at present are the lack of detailed PPI data, the lack of monthly data, and the restricted scope of the PPI. However, in the case of the established indices for exported fish products, price indices are available disaggregated into a number of categories. Interested parties can obtain these more disaggregated indices on the SI's website or on request from the contact person.

#### *5.1.2 Dissemination media and format are adequate*

Statistics are disseminated in ways that facilitate redissemination in the media. More comprehensive and/or detailed statistics are also available in the case of the PPI for fish products.

Current statistics and longer time series can be accessed through the SI's website in the case of fish products. The SI's general publications include broad-level PPI data.

#### *5.1.3 Statistics are released on a preannounced schedule*

The PPI is released in accordance with the ARC which covers the calendar year. The ARC for the coming year is released in October. The ARC indicates in advance the release date for the PPI. The ARC is shown on the DSBB and on the SI's website.

The PPI data are always released according to the schedule of 45 days after the end of the quarter.

#### *5.1.4 Statistics are made available to all users at the same time*

The PPI is released at 9:00 a.m. on the SI's website. Simultaneously a news release is sent to the media as well as other users by e-mail. The news release is free of charge, and description is open for all. The news release includes a hyperlink to the appropriate website where the users can build their own set of tables as described above. No advance release of data is given.

#### *5.1.5 Statistics not routinely disseminated are made available upon request*

PPI data, additional to the published series, have so far not been made available because the PPI is still in a developmental stage and some major confidentiality issues remain to be resolved. More detailed data on price indices for fish products are available on request and have been supplied to users.

### **5.2 Metadata accessibility**

#### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

When publishing the PPI for the first time (on May 13, 2004) a short methodology description was given. A general description of the PPI is included on the DSBB, and a hyperlink is made from the SI's website to the section of the DSBB relating to the PPI. SI has plans to prepare metadata for inclusion on the SI's website in the first half of 2005. A more comprehensive document, to be published both on the SI's website and in hardcopy, is also planned and is expected to be released in early 2006.

*Recommendation: Prepare detailed documentation in Icelandic and in English, covering concepts, scope, classifications, data sources, statistical techniques, and weighting pattern.*

*Recommendation: Clarify methodology descriptions for price indices to emphasize that the introduction of new weights does not affect the level of the indices at the time of introduction.*

#### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

As noted above, a very general description of the PPI is available at present, but there is also a hyperlink from the SI's website to the section of the DSBB that covers the PPIs.

*Recommendation: Include brief metadata about the PPI in general statistical publications, together with cross-references to more complete descriptions.*

### **5.3 Assistance to users**

#### *5.3.1 Contact points for each subject field is publicized*

News releases are sent by e-mail and the recipients can request further information if needed. The news release indicates the name, telephone number, and e-mail address of the appropriate contact person.

The name and e-mail address of the expert in charge of the relevant statistics are also indicated, as well as the main telephone number, fax number, and address of SI in the publication *Statistical Series*. Contact information is also shown on the SI's website and on the DSBB. SI staff members are available to answer queries from users by telephone or e-mail.

#### *5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

SI does not issue a catalog of statistical products and services but includes a list of publications on its website. This shows the prices of each publication. Much of this data may also be accessed from the SI's website free of charge.

Table III. DQAF (July 2003): Summary of Results for Price Statistics  
(Producer Price Index)

*Compiling Agency: Statistics Iceland*

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
<b>0. Prerequisites of quality</b>						
0.1 Legal and institutional environment			X			Some lack of coordination; legislation assigning coordination role is important.
0.2 Resources			X			Staff resources barely adequate to maintain current compilation and meet requirements of planned new developments.
0.3 Relevance		X				
0.4 Other quality management		X				
<b>1. Assurances of integrity</b>						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
<b>2. Methodological soundness</b>						
2.1 Concepts and definitions		X				
2.2 Scope			X			Scope limited to manufacturing and fishing products.
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
<b>3. Accuracy and reliability</b>						
3.1 Source data		X				
3.2 Assessment and validation of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
<b>4. Serviceability</b>						
4.1 Periodicity and timeliness				X		Only quarterly published, 45 days after end of quarter.
4.2 Consistency			X			No long-term series for manufacturing products.
4.3 Revision policy and practice			X			Revisions not clearly identified.
<b>5. Accessibility</b>						
5.1 Data accessibility		X				
5.2 Metadata accessibility			X			Only a general description published.
5.3 Assistance to users		X				

## IV. GOVERNMENT FINANCE STATISTICS

### 0. Prerequisites of quality

#### 0.1 *Legal and institutional environment*

The GFS examined in this assessment are those of the general government account prepared in the national accounting framework. The classification and sectorization are broadly consistent with the guidelines outlined in the IMF's *Government Finance Statistics Manual, 2001 (GFSM 2001)*.

##### 0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

The bulk of Iceland's official statistics are produced and disseminated by SI, the national statistical institute. SI is formally a government ministry, and its operations are based on several acts of law.

Article 6 of the *Regulation on Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing and disseminating statistics on economic and social developments. As such, SI has exclusive responsibility for compiling the NA, which include the general government account and price statistics, thereby effectively barring other government institutions from compiling the statistics. Until 2002, the NEI was responsible for compiling the GFS and several other economic statistics as well as macroeconomic forecasting and evaluations. After the abolishment of the NEI, the statistical activities of the Institute, including the GFS, were transferred to the SI.

Responsibility for collecting, compiling, and disseminating statistics is also provided for in the *Act on Statistics Iceland, 1913*. By that *Act* the institution is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties. The *Act* is published in Icelandic in the *Lagasafn* (Statute Book), which is available to the public in all libraries in Iceland and can be purchased from the main bookstores in Reykjavik. In addition, the *Act* is accessible in Icelandic and English on the Althingi's (Parliament) website (<http://www.althingi.is>) and on the SI's website (<http://www.hagstofa.is>). A copy can also be obtained from the contact person on request.

Where more than one data-producing agency is involved in producing a field of statistics, arrangements are in place to promote consistency of methods and results.

There are no conflicts of interest on issues such as data security. The requirements of the Data Protection Agency enhance public trust in data security and assist the role of SI in data collection.

As part of the ESS, the SI produces and disseminates a significant share of its data according to the legal requirements mandated within this system. SI collects information from the MOF on central government operations and from the Association of Local Authorities in Iceland (ALA) on the operations of local governments. There are no central government extrabudgetary funds in Iceland. Information on the operations of the Social Security Fund (SSF) is obtained directly from the SSF.

The FMA, an agency of the MOF, compiles and publishes monthly data on the outstanding debt of the central government and data on central government operations on a modified cash basis. Data on the outstanding debt of the central government are obtained from the CBI and the National Debt Management Agency. The monthly data on central government operations are prepared by the FMA after compilation of accounts from numerous ministries and agencies. The publication of the annual *Frumvarp til fjárlaga* (Budget Proposal) and the annual *Ríkisreikningur* (State Accounts) is required by the 1997 law, *Lög um fjárreiður ríkissins* (Act No. 88, May 27, 1997, Clauses 7 and 21).

The *Acts* are published in Icelandic in the *Lagasafn* (Statute Book), which is available to the public in all libraries in Iceland and can be purchased from the main bookstores. In addition, the *Acts* are accessible in Icelandic on the Althingi's (Parliament) Internet website: <http://www.althingi.is>.

#### *0.1.2 Data sharing and coordination among data-producing agencies are adequate*

Article 6 of the *Regulation on Central Government Administration, No. 3*, of February 1, 2004, states that SI is responsible for “organizing, coordinating and producing Iceland's official statistics.” The legislation does not give SI any specific coordinating powers and functions beyond this general statement, nor are there any regulations to this effect.

In practice, however, the coordination powers of SI appear to be sufficient to ensure that statistics are compiled consistently and that duplication is avoided. Cooperative agreements exist in statistics of trade in goods and services and GFS. In addition, cooperation with many of the other data-producing agencies is adequate. Cooperation between SI and the various agencies is exercised through formal meetings and workshops but mainly through informal contacts. Data sharing and coordination among Icelandic agencies as far as GFS are concerned are very good, and the compilers of GFS in SI have frequent informal contact with colleagues in the data-producing agencies.

According to the *Act on Statistics Iceland No. 24/1913* and the *Statistics Act No. 29/1895*, SI has the right to decide which statistics are considered official. This right also concerns statistics produced by other Icelandic government agencies.

SI and the FMA, the MOF, the CBI, the ALA, the SSF, and the National Debt Management Agency have established a number of specific arrangements for the exchange of data. Data are transferred between the agencies in agreed formats. The use of general government statistics in fiscal policy formulation, monitoring, and forecasting is a special reason for the



close liaison between SI and the MOF. SI supplies the MOF with national accounts data including the general government account as well as the accounts for all levels of government.

*Recommendation: Consolidate the legal framework by preparing a single comprehensive statistical act and assign the authority for coordination of official statistics, in the act, to SI.*

*0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only*

Confidentiality of individual responses of government units is not generally an issue. However, SI treats its collection and processing of GFS in the same manner as other sources.

There are no specific requirements for maintaining the confidentiality of individual reporters' data in the *Act on Statistics Iceland*. However, SI has established *Rules of Procedure for Treating Confidential Data* (dated October 8, 2004), on the basis of, and with regard, to the following:

- *The United Nations' Fundamental Principles of Official Statistics*
- *Government Employees Act, No. 70/1996*
- *Administrative Procedures Act, No. 37/1993*
- *Information Act, No. 50/1996*
- *Act on the Protection of Privacy as Regards the Processing of Personal Data, No. 77/2000.*
- *Act on SI, No. 24/1913*
- *Act on the National Population Registry and Civil Registration, No. 54/1962*
- *Act on Notification of Change of Residence, No. 73/1952*
- *Domicile Act, No. 21/1990*
- *Rules on Publishing Certificates and Granting Information from the National Population Register, No. 112/1958.*

Confidentiality on the job is especially covered by the provisions of Article 18 of the *Government Employees Act, No. 70/1996*, which reads as follows:

“Each employee is obliged to observe confidentiality in regard to matters of which he gains knowledge in his work and shall be regarded as confidential according to law, the instructions of superiors or by the nature of the matter. The obligation of confidentiality remains even if the employee concerned leaves his employment.”

When hired at SI, employees are informed of the rules and duties pertaining to confidential information and its treatment. Employees working on statistics are also informed of the *United Nations' Fundamental Principles of Official Statistics*, as well as of the *International Statistical Institute's Declaration on Professional Ethics*. Every employee is required to sign a pledge of confidentiality before commencing work. This applies to both permanent and

temporary staff. The pledge of confidentiality is part of the job contract, and upon the employee's signing the contract, his/her attention shall be called in particular to this pledge.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

The *Regulation of the Central Government Administration* stipulates that SI has the responsibility for organizing, coordinating, and executing official statistics in Iceland as well as collecting data, producing, and disseminating statistics on economic and social developments. This is also provided for in the *Act on Statistics Iceland*. By that *Act* SI is authorized to request and collect from both public and private parties all information it deems necessary for the fulfillment of its duties.

Specific provisions in the taxation legislation make it mandatory for the taxation authorities to supply SI with all the data it requires for statistical purposes. Similar provisions apply to the Customs authorities.

Article 2 states that SI shall compile such statistics that may be prescribed by law or mandated by the Government or which SI may propose in consultation with the competent government authorities. This therefore covers not only NA, general government accounts and price statistics, but also all component statistics required in compiling those statistics.

Response burden is not a major issue for SI, mainly because it relies very much on administrative records, especially in the economic statistics fields. SI provides assistance to respondents in completing and submitting forms (e.g., by providing a point of contact).

According to the *Act on Statistics Iceland No. 24/1913* and the *Statistics Act No 29/1895*, all government agencies, bodies, and administrative offices are required and obliged to supply to SI any data and information that is requested of them. In addition, SI encourages responses by means of telephone calls, and via focus groups. Data on local governments are reported within a reasonable time frame.

For the MOF, a similar legal mandate ensures the reporting of data on the operations of the central government and the social security system. The publication of the annual *Ríkisreikningur* (State Accounts) and the annual *Frumvarp til fjárlaga* (Budget Proposal) by the MOF is required by the 1997 law, *Lög um fjárreiður ríkissins (Act No. 88, of May 27, 1997, Clauses 7 and 21)*.

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs*

SI has a staff of 97 full-time equivalent employees, comprising 27 in the population register division, and 70 in statistical fields (including administrative staff). This is a very small statistical office by international standards but is regarded as quite large by Icelandic standards.

Staff turnover is reported to be quite small and not problematic. SI has made very effective use of technology to reduce reliance on staff.

In SI, two employees, one on a full-time basis and one on a part-time basis, compile the macroeconomic statistics in the government finance area. Although these two employees are currently considered as sufficient to carry out SI's mandate, these limited resources do not allow for any additional development work and SI may be vulnerable if any one of these staff should not be available. In January 2005, the two employees in the National Accounts Department responsible for compiling GFS have on average 3.5 years working experience in this area of statistics.

In SI, most training in GFS occurs on the job. SI is also in the process of obtaining the services of an expert in the field of NA to visit SI. This will allow a large number of staff to receive theoretical training and on-the-job training. However, none of the current staff has attended an IMF course on GFS or received any official training in GFS.

A modern computer system exists to collect and process data, maintain databases, receive source data automatically, and disseminate compiled statistics. The system stores bridge and derivation tables that define the links between accounting and budgeting source data and the GFS. These tables are stored in a form that facilitates accessing and updating.

In the MOF three staff members take care of the evaluation and dissemination of monthly statistics on central government debt and central government operations as a small part of their job description.

*Recommendation: Strengthen back-up arrangements and increase staff resources for work on GFS. In addition, increase the level of training made available to GFS compilers.*

### *0.2.2 Measures to ensure efficient use of resources are implemented*

There is ongoing monitoring of collection, compilation, and dissemination processes. The preparation of GFS follows the same measures as those of the NA. SI is constantly searching for ways to improve the efficient use of resources and sets priorities among its tasks to ensure the most efficient use of the resources.

### **0.3 Relevance**

#### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

To monitor the relevance and practical utility of existing statistics in meeting users needs, SI has recently created a National Accounts Users Committee. The User Committee is composed of representatives from the MOF, the CBI, the economic faculties of three universities (University of Iceland, University of Reykjavik, and Bifröst School of Business), the Federation of Labour, the Confederation of Icelandic Employers and the research departments of the three largest commercial banks. The Committee is scheduled to meet approximately three times a year. This Committee will also inform SI on the relevance and practical utility of GFS.

### **0.4 Other quality management**

#### *0.4.1 Processes are in place to focus on quality*

Although no official processes are in place to monitor the quality of statistics, management is sensitive to all the dimensions of quality. This is regularly discussed with the staff to promote a shared concern for quality throughout the organization.

#### *0.4.2 Processes are in place to monitor the quality of the statistical program*

Processes are in place to adequately monitor the quality of compiled and disseminated GFS. For example, checks for coverage, classification, missing or erroneous recordings, their internal consistency, and the consistency between data coming from alternative or linked data sources (SI, the MOF, the SSF, and local governments) are regularly monitored. All deviations between data disseminated by the MOF and SI are thoroughly checked and recorded as part of an annual reconciliation.

Final data on all levels of government are submitted to SI by the responsible agencies by August of the following accounting year after being audited by the Office of the Auditor General.

Quality aspects of statistics are discussed with all subject matter managers in annual planning meetings and follow-up meetings. Iceland is one of three EFTA States that is a Contracting Party to the EEA Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the Contracting Parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at SI.

#### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

A trade-off among quality considerations (such as accuracy and timeliness) is recognized by SI in the area of GFS. This trade-off has been explicitly recognized in the context of general government statistics produced in the context of the NA and in the context of local government data reported to SI.

### **1. Assurances of integrity**

#### ***1.1 Professionalism***

##### *1.1.1 Statistics are produced on an impartial basis*

Article 6 of the *Regulation on Central Government Administration* establishes that SI has exclusive responsibility for compiling the NA, which include the general government account, thereby effectively barring other government institutions from compiling the statistics.

Until the middle of 2002, the NEI was given the responsibility to compile the general government account and to provide the MOF with projections of future government revenue and expenditure. After the abolishment of the NEI, the statistical activities of the Institute, including the GFS, were transferred to SI. SI was assigned the responsibility to compile and disseminate the general government account. The responsibility for the forecasts of government revenue and expenditure was assigned to the MOF.

SI has had a long tradition of professional independence, and other institutions and politicians have respected the authority of the agency to produce the official statistics under its responsibility. Since the agency is a full-fledged ministry, the DG, as head of the ministry, has professional independence to conduct the affairs of the agency.

The current DG of SI was appointed for an open-ended, life-time term and can remain in the post until he reaches the retirement age of 70. The tenure of the head of the agency has been stable since the establishment of SI, and the current DG is only the third appointee to the post since 1914. Other government agencies recognize the importance of the statistical independence of the agency.

However, the terms and conditions for appointing the head of the agency have been amended with the introduction of the *Government Employees Act No. 70 of 1996*. Under the new *Act*, the DG is appointed by the Minister, responsible for statistics, for a fixed five-year term, subject to renewal. However, the Minister may decide to advertise the post as vacant at the end of term, in which case the DG may have to reapply. Chapter VI of the Regulations outlines the conditions under which the staff appointed under the Regulations (including the DG) may be relieved from the post.

Article 36 of the Regulation gives the Minister the authority to transfer appointees (including the DG) to another post under his authority or under another government authority, if that authority requests the transfer. Directors, who are responsible for the various divisions within SI, are subject to the same terms and conditions of employment as the DG.

The DG has the sole authority to appoint staff based on the guidelines of the *Government Employees Act*. Staff are appointed on an indefinite contract and may be relieved of their post upon receiving three months notice. All vacant posts are publicly advertised, and the DG establishes the criteria for the recruitment of staff depending on the technical expertise required.

The DG and staff routinely participate in external seminars, expert groups, and task forces established by regional and international statistical bodies, including Eurostat and the OECD.

Staff have free, unlimited access to a wide range of international academic journals and research databases through a nationwide access portal.

*1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

The DG has the sole authority to decide on statistical matters, which he may delegate to staff. The agency decides on statistical techniques, methodology, and data sources based on the need to implement best international practices; however, these decisions are influenced by cost considerations and the resource constraints facing SI.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

The DG is entitled to provide feedback to the press on the statistics without having to obtain clearance from an authority outside the agency. Further, the department heads within SI have complete authority, without having to seek the approval of the DG, to comment on the erroneous interpretation of the statistics compiled by their respective divisions. SI maintains a cordial working relationship with the media and journalists frequently submit news reports on the statistics to staff to verify the accuracy before the reports are disseminated.

SI no longer maintains a formal “clipping service;” however, division heads monitor news reports on the statistics following the dissemination of official SI press releases.

## **1.2 Transparency**

### *1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

SI publishes the terms and conditions under which the statistics are compiled on its website in Icelandic and in English. In addition, a hardcopy of the legislation is available in the agency's library; however, the staff note that the legislation is not widely requested. When SI conducts surveys, it informs respondents of the general purpose of the survey and notes that the information received would be used for statistical purposes only.

### *1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

SI provides the annual data on general government to the Economic Division of the MOF prior to the wider dissemination, as the data are required for developing forecasts. These forecasts are due for dissemination shortly after the general government account is disseminated by SI. There is no established schedule for providing preaccess to the data, and the time span between the provision of the data to the MOF and wider public dissemination may change from one period to the other. The MOF is under strict instructions not to release the data, and it has adhered to these instructions.

This internal government access to the statistics prior to their release to the public is described on the SI's website and in the metadata on the DSBB of the IMF. SI, the FMA, and the MOF share working materials with each other, but these data are not shared with policy-level staff.

There is no internal government access to the monthly central government operations data, which are compiled by the FMA, and to the central government debt data, which are compiled by the CBI and the National Debt Management Agency, before these data are released by the MOF to the public.

### *1.2.3 Products of statistical agencies/units are clearly identified as such*

All products of SI are clearly identified as such with the agency's name and logo appearing on the front page of all its publications and on the website. The publications also advise users to identify the source of the information when quoting from the agency's publications.

### *1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

SI may provide advance notice of changes in methodology, where appropriate. The last major revision of the general government account was undertaken in 1998 when an accrual accounting system, consistent with the sectorization and classification of international standards, was adopted by the NEI, which was then responsible for compiling the estimates.

The NEI provided advance notice of the changes in the framework and methodology to the major users in the CBI and the MOF.

### **1.3 Ethical standards**

#### *1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

Neither SI, nor the MOF, nor the FMA have their own comprehensive ethical guidelines. Staff is guided mainly by the general rules and regulations of the civil service of Iceland as outlined in the *Government Employees Act*. The *Rules of Procedure for Treating Confidential Data*, in place since 2000 and formally adopted by SI in October 2004, establish additional guidelines for staff on the treatment of information that has been collected by the agency for statistical purposes. Staff is also bound by the regulations contained in the *Data Protection Act No. 77 of 2000*, which seeks to ensure that personal data are processed according to rules governing the protection of the data covered and the right to privacy.

Staff take an oath of secrecy upon hiring and are made aware of all regulations pertaining to the need to observe and protect the confidentiality of information collected by SI for statistical purposes. The potential for conflict of interest is avoided as staff are expected to seek the approval of the DG before undertaking any work outside of the agency. The DG notes that during his 20-year tenure, he has never observed a case of conflict of interest or the possibility of a conflict of interest.

Although no formal system reminds staff of the ethical guidelines, the rules and regulations are readily available on the SI's website.

## **2. Methodological soundness**

### **2.1 Concepts and definitions**

#### *2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

Iceland has been a leader in the implementation of accrual accounting since 1998. As a result, SI compiles the annual general government, central government, and local government statistics, on an accrual basis, in the context of the national accounts based on the *1995 ESA* and the *ESA 95 Manual on Government Deficit and Debt*. Therefore, the overall structure of the Icelandic GFS in terms of concepts and definitions closely follows international standards and guidelines as recommended in the *1995 ESA* and *ESA 95 Manual on Government Deficit and Debt*. In the field of government finance, these definitions and concepts are broadly



similar to those of the IMF's *GFSM 2001*, and the divergences are well known.<sup>23</sup> The analytical framework closely follows the framework as required by European regulations. The revenue and expenditure data by economic type and by function can be related to the international standards as described in the *GFSM 2001*.

## **2.2 Scope**

### *2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

Annual GFS, covering the central government, the SSF, and local governments, are compiled and disseminated by SI. SI also disseminates the annual balance sheet for the local governments, but only the annual financial balance sheet of the central government in its yearbook *Statistical Yearbook of Iceland*. A register of the central government's nonfinancial assets, excluding infrastructure, such as roads and bridges, is kept by the FMA. In June 2004 SI started to disseminate the main aggregates of general government revenue, expenditure, and financial balance on a quarterly basis. By the introduction of the quarterly dissemination, users have access to data that are closer to accruals during the year.

The dissemination of government expenditure according to function is based on the accounting system of the FMA. The accounting system of the FMA is identified according to the COFOG classification. SI is cooperating with the FMA and the MOF and plans to implement the new COFOG classification for both the central and the local governments in 2005.

The MOF disseminates monthly data compiled by the FMA on the central government accounts, although these data are not presented according to international standards. For these data, the MOF adopted instead, the presentation required to monitor budget execution. The MOF, in cooperation with the CBI and the National Debt Management Agency, disseminates monthly central government debt data.

All general government activities are included in the general government statistics. The basic sources of GFS are the central government accounts, the SSF, and the accounts for local governments.

*Recommendation: Compile and disseminate annual balance sheets for the central government and for the consolidated general government.*

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<sup>23</sup> The *GFSM 2001* describes, among other things in an annex, the differences with the 1993 *SNA*. That description also applies for 1995 *ESA*. Additional information regarding these differences can be found in the supplement to the *Government Finance Statistics Yearbook 2002*.

*Recommendation: Disseminate more detailed quarterly GFS.*

### **2.3 Classification/sectorization**

#### *2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

SI compiles the general government statistics in the context of national accounts (*1993 SNA and 1995 ESA*). Consequently, the institutional sector of the general government is fully consistent with the *SNA*. The GFS statistics are provided separately for the consolidated general government and the central and local governments.

Data for the general government and its subsectors are disseminated for revenue and expenditure by economic type and function, and the main financial balance like savings and net lending and borrowing are disseminated. Except for central government and the SSF, data on financial transactions are only disseminated until 2001 (see 3.1.1). Financing data distinguish between domestic and foreign financing, and between bank and nonbank financing for domestic financing, but it is not possible to distinguish between types of instruments.

Central government debt data are disseminated by the MOF and distinguish between foreign and domestic debt. This data further distinguish between short- and long-term debt.

### **2.4 Basis for recording**

#### *2.4.1 Market prices are used to value flows and stocks*

Most flows and stocks (excluding infrastructure) are valued at market prices. In accordance with EU recommendations, the outstanding government debt is recorded at face value. Domestic central government debt is recorded at face value with accrued interest and indexation, but foreign central government debt is revalued for exchange rate exchanges. Regarding foreign currency assets/liabilities of the central and local governments, the mid-point exchange rates in the market, at the end of each period, are used to convert these liabilities/assets to local currency.

As stated under 2.2.1 above, the central government balance sheet only includes financial assets and liabilities. All financial assets of the central government, of which the shares in the local Phone Company are the most important, are discussed on an annual basis in the MOF after which a decision is made on the revaluation of the market value of these assets.

*Recommendation: Use market prices to value all stocks.*

#### *2.4.2 Recording is done on an accrual basis*

Statistics on the general government sector, published by SI, are based on accrual accounting. Most transactions are recorded when economic value is created, transformed, exchanged, transferred, or extinguished. In practice, however, preliminary data published (March of each year) by SI for the central government are based on a modified accrual data, which are adjusted by SI to meet full accrual accounting (e.g., including consumption of fixed capital). The FMA is in the process of including all agencies into its new Oracle software system. In other words, all agencies are on an accrual accounting, but some of them have not been included in the centralized system (*Oracle*). The FMA is also in the process of implementing accrual accounting in those agencies that are still making use of cash accounting.

#### *2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Statistics for general government and for the subsectors of the general government are compiled on a gross basis for revenue and expenditure and financing. This is in line with *1995 ESA*. In the process of adjusting the FMA's quarterly and annual modified accrual data of the central government, the operational central government data are corrected in line with the *1995 ESA* and items are added or deducted from the corresponding aggregates of the FMA's presentation. However, attention should be given to the estimation of tax revenue as it should only include the amount that is realistically expected to be collected.

Financing is compiled on a gross basis but recorded on a net basis (e.g., loans minus repayments, purchase of shares minus sale, etc.).

### **3. Accuracy and reliability**

#### **3.1 Source data**

##### *3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions*

SI prepares a preliminary annual general government account for the national accounts, in March of each year, based on the accounting data received from the FMA, the SSF, and a sample survey conducted by SI on local governments. These source data are adjusted and reclassified where necessary by SI in order to compile statistics that are consistent with the *1995 ESA*. In August of each year, SI receives final audited central government data from the FMA, the SSF, and consolidated local government data from the ALA. These data allow SI to compile a final annual general government account. The above data sources provide SI with all the necessary stocks, except for the nonfinancial assets of the central government, and flow data, and there is no need for other data sources. Since 2001 SI is, however, experiencing problems distinguishing between domestic and foreign financing, and between bank and nonbank financing, due to problems experienced at the level of local governments. SI is part of a committee, which is in the process of addressing the problem. SI is expecting

to resume the publication of this data for the general government for 2005. Data on intergovernmental transactions and positions are available in enough detail to allow SI to compile a consolidated general government account. In the case of transfers from the central government to the SSF, the amount received by the SSF is regarded as more precise, and an adjustment is made to the transfers made by the central government. All the adjustments made by SI to the data received from the FMA are stored in the database and were made available to the mission.

*Recommendation: Clarify the classification of financial liabilities of the local governments.*

*3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required*

The accounting system used by the FMA, the local governments, and the SSF allow for sufficient detail for government statistical purposes. The source data allow SI to compile relatively detailed data on revenue, expenditure, transactions in nonfinancial assets, and transactions in financial assets and liabilities. The data, received on a monthly basis by the MOF from the FMA, allow the MOF to monitor budgeted receipts, expenditure, and financing.

The final source data are mostly based on an accrual accounting. For many agencies the gap between cash and accrual is very small, particularly on the expenditure side. The general rule is that transactions on the expenditure side are recorded when claims are created, not when payments are made. Only preliminary central government data, which are provided to SI on a modified cash basis, need to be adjusted to an accrual basis by SI.

*3.1.3 Source data are timely*

Annual data for central government operations are provided to SI by the FMA in August of each year, but in March data are based on monthly cash data (January-December). A sample set of data for local governments is compiled by SI in March of each year, and data covering all the local governments are provided to SI by the ALA in August of each year. The availability of preliminary source data is timely enough to comply with the timeliness requirement of the SDDS for general government operations. The preliminary data are replaced in August of each year when final data are provided to SI by the FMA and ALA.

However, monthly data provided by the FMA to the MOF for the publication of central government operations and central government debt data on the National Summary Data Page (NSDP) are not timely enough to allow the MOF to comply with the timeliness requirement of the SDDS. Iceland is updating its computer software used for compiling central government operations and central government debt data. As a result, there are some delays in the dissemination of these data.

*Recommendation: Expedite the resolution of the software problems at the FMA to provide the compiling agencies with timely monthly source data.*

### **3.2 Assessment and validation of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes*

The final source data are based on audited accounts of all general government institutions. However, payments made by one level of government to another level of government are checked against the amount received by the receiving level of government.

Preliminary data obtained for the central government are assessed against the final data, and large changes are noted and investigated. The preliminary data obtained from the survey on local governments are also assessed against the final data, and large changes are investigated to adjust the survey if there is a change in the size and importance of a local authority.

The changes in financing data are regularly reconciled with the changes in financial assets and liabilities.

### **3.3 Statistical techniques**

*3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

Data for central government, the SSF, and local governments are collected from administrative records and do not require any estimation. However, as in the NA, the perpetual inventory method is used to estimate the written-down replacement costs of fixed assets, including infrastructure assets, to calculate the consumption of fixed capital. The value of the stocks is based on acquisitions and disposals that have been accumulated and revalued over a very long period. The value of the assets is the original acquisition value adjusted by an allowance for price changes (assumptions are made regarding the remaining service life of each asset) and written down for the accumulated consumption of fixed capital. SI also estimates the continuous underfunding of the so-called Government Employees B-Pension Fund and records the estimate on the expense side as compensation of employees (debit) and the liabilities as insurance technical reserves (credit) on the liability side. The Government Employees A-Pension Fund is, on the other hand, a fully-funded pension fund.

*3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

The use of other statistical procedures is rarely necessary. However, SI makes adjustments to convert the preliminary modified cash data on central government to accrual data. These adjustments are based on the data of the previous year. The difference between the previous years' modified cash data and final accrual data are used as an approximation in the preliminary data.

Preliminary annual data for local governments are obtained by means of a sample survey that covers more than 80 percent of local governments' revenue and expenditure. The results of the survey are then adjusted for full coverage. For the compilation of quarterly data SI makes use of the budgets of the central and local governments to estimate quarterly revenue and expenditure in addition to a sample of a few local authorities covering approximately 50 percent of the total activities of all local governments.

### **3.4 *Assessment and validation of intermediate data and statistical outputs***

#### **3.4.1 *Intermediate results are validated against other information where applicable***

The final GFS data that are disseminated by SI use the audited accounts of all levels of government and are based on full coverage of the general government sector in Iceland. Before the dissemination of the data, all tables are checked for internal consistency.

Comparisons are also made between net lending/borrowing (derived from the nonfinancial accounts) and changes in net financial assets/liabilities (derived from the financial accounts).

### **3.5 *Revision studies***

#### **3.5.1 *Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)***

The revision practice of general government account statistics is the same as that adopted for all the national accounts. The reasons for revisions are accounted for and analyzed. They do not generally entail long-term series, and the changes are minimized owing to the extensive use of accounting data as the data source to compile results, even at the preliminary stage.

## **4. *Serviceability***

### **4.1 *Periodicity and timeliness***

#### **4.1.1 *Periodicity follows dissemination standards***

Iceland meets the periodicity requirements of the SDDS, as follows:

- Central government operations data, on a modified cash basis, are published monthly.
- Central government debt data are published monthly. These data distinguish between foreign and domestic debt and between short- and long-term maturity.
- General government operations data are published annually.
- Since June 2004, SI started to publish some of the main aggregates of general government operations on a quarterly basis.

#### *4.1.2 Timeliness follows dissemination standards*

Iceland meets the timeliness requirements of the SDDS as follows:

- General government operations data: the annual preliminary data for each financial year are published in March of the following year, which is well within the timeliness requirement of two quarters after the end of the financial year. However, final data for the general government are only available in August.
- Central government operations: currently Iceland does not meet the timeliness requirement of the SDDS of one month after the reference period. As stated in a footnote on the DSBB “Iceland is in the process of updating its computer software used for compiling central government operations and central government debt data. As a result, there are some delays in the dissemination of these data.”
- Central government debt data: although the Special Data Dissemination Standard (SDDS) prescribes a quarterly periodicity within one quarter after the reference date, Iceland is disseminating monthly data within one month after the reference date. Due to the updating of its computer software mentioned above, Iceland is not meeting its own monthly timeliness standard, although the data are disseminated within the timeliness requirement of the SDDS.

*Recommendation: Ensure the dissemination of data on the central government operations is in line with the requirement of the SDDS.*

## **4.2 Consistency**

### *4.2.1 Statistics are consistent within the dataset*

General government finance data are internally consistent for the general government account as well as the accounts for the other levels of government. On the revenue and expenditure sides, the aggregates are consistent with their components, and balances are consistent with these aggregates. The sum of the transaction data for the subsectors of the general government, after consolidation, is consistent with data on the consolidated general government.

However, in the source data, transfers received do not always equal transfers paid between the subsectors of the general government. SI notes and closely monitors these differences in transactions. Adjustments are made for these differences and recorded in an annual reconciliation table. This table was made available to the mission.

#### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

For general government statistics, changes arising from major methodological improvements or changes in the accounting standard, concepts, and definitions are explained, and the time series are revised (for example, when the accounting system was revised and implemented in 1998). After this change in the accounting system, the time series for the general, central, and local government were revised back to 1980, and some time series back to 1970.

#### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

As SI compiles the general government account as part of the national accounts it is consistent with the NA aggregates. That ensures consistency with related NA aggregates such as savings, net lending/borrowing, government consumption, gross fixed capital formation, and consumption of fixed capital.

The general government financial balance sheets/financing data and government financial assets and liabilities held by other sectors are not consistent with annual monetary and banking statistics. The definition of general government in GFS is different from the definition for general government in the monetary statistics.

All foreign grants and other transactions are assumed consistent with the balance of payments data, as the same source data are used for the compilation of the balance of payments.

*Recommendation: Reconcile GFS with the monetary statistics and regularly check the consistency between GFS and balance of payments.*

### **4.3 Revision policy and practice**

#### *4.3.1 Revisions follow a regular and transparent schedule*

The publication of general government data follows a regular and well-known time table, the same as national accounts, whereby initial data are preliminary and are subsequently replaced by final data. The ordinary revision schedule is predetermined and reasonably stable from year to year, with preliminary data in March subsequently replaced by final data in September.

#### *4.3.2 Preliminary and/or revised data are clearly identified*

Preliminary data are clearly indicated in the publications or on the cover pages of the publications. However, revised data are not annotated in the publications.

*Recommendation: Clearly indicate, in all publications, data that were revised.*



#### *4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

Owing to the nature of the statistics and the full coverage of the general government sector, no specific studies or analyses of routine revisions are made public. However, if major revisions are undertaken, their results (analyses and descriptions) are made public. An example is the 1998 revision of the accounting system for the general government and the implementation of *1995 ESA* in August 2000 where all the main aggregates were calculated backwards to 1990.

## **5. Accessibility**

### **5.1 Data accessibility**

#### *5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

The GFS are presented in a way that broadly allows major aggregates/balancing items to be identified and related to detailed underlying data. The annual publication provides equivalent coverage and details set out in the *GFSM 2001* tables with a few exceptions. For the annual figures, a large number of GFS time series are available from 1980 and some figures are available from 1970.

Monthly data disseminated by the MOF for central government operations are on a modified cash basis. These data are useful for cashflow analysis and are used internally by the MOF to compare with the anticipated monthly expenditure of central government ministries and agencies. Further, the FMA compiles for the SI every quarter data on central government finances based on a modified accrual basis. Finally, the FMA compiles the Government Account for the year as a whole on a modified accrual basis. The fiscal budget for the year is also based on a modified accrual basis. Within the year the budget is distributed in such a way to give a comparable measure with the monthly and quarterly accounts of central government. The FMA also makes adjustments to its modified cash data on a quarterly basis to approach modified accrual data to meet the SI demand for quarterly data on an accrual basis. These central government data are adjusted further by the SI to meet the full accrual requirements of the national accounts.

#### *5.1.2 Dissemination media and format are adequate*

All the data are released by the compiling agencies on their websites in Icelandic and in English. As most people in Iceland have access to the Internet, it is deemed to be adequate. The information can also be obtained in a hard-copy format from the agency for a fee.

### *5.1.3 Statistics are released on a preannounced schedule*

SI releases statistics according to an ARC that covers the next 12 months and is updated routinely (<http://www.hagstofa.is/template44.asp?pageid=346>). An ARC is also available on the DSBB. In the calendar on the SI's website, the upcoming statistics are listed by date and by sector. In the ARC on the DSBB the upcoming statistics are listed by sector. A key release policy is to keep the actual date of dissemination in accordance with the preannounced date.

Because of timeliness problems resulting from the updating of the computer software at the FMA, the MOF stopped releasing an ARC. The only ARC available for data released by the MOF is on the DSBB of the IMF. As a result of the noted problems, the MOF is currently experiencing problems keeping the actual date of dissemination in accordance with the preannounced date on the DSBB.

*Recommendation: The MOF should resume the publication of an ARC on its website.*

### *5.1.4 Statistics are made available to all users at the same time*

Owing to the publication of the statistics on the SI's website, they are made available to all users at the same time. As previously indicated, SI does release data to the MOF in advance. The prerelease of data to the MOF is made known publicly.

### *5.1.5 Statistics not routinely disseminated are made available upon request*

Although statistics not routinely disseminated are made available upon request, this fact is not made public, and SI charges a fee for this information.

## **5.2 Metadata accessibility**

### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

For the general government SI does provide, on its own website, a link to the metadata and summary methodology on the DSBB:  
([http://www.hagstofa.is/template\\_lb\\_frameset\\_en.asp?PageID=325&intPXCatID=258&ifrmsrc=template\\_lb\\_content.asp?PageID=1255](http://www.hagstofa.is/template_lb_frameset_en.asp?PageID=325&intPXCatID=258&ifrmsrc=template_lb_content.asp?PageID=1255))

The MOF does not provide any metadata or summary methodology on its website. Metadata are, however, available on the DSBB of the IMF for central government operations and central government debt. These pages on the DSBB do not provide any information on the methodology used in compiling the statistics.

*Recommendation: The MOF should provide metadata and summary methodology, explaining the compilation of statistics on central government operations and debt on its website. Information on the methodology used in compiling the central government operations and debt should also be provided to the IMF in order to comply with the requirements of the SDDS.*

### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

The metadata and methodology notes that are available on general government statistics on the SI's website under "publications" will serve the needs of most users of these statistics.

## **5.3 Assistance to users**

### *5.3.1 Contact points for each subject field are publicized*

Contact persons are indicated on the SI's website:

[http://www.hagstofa.is/template\\_lb\\_frameset\\_en.asp?PageID=325&intPXCatID=106&ifrmsrc=template\\_lb\\_content.asp?PageID=429](http://www.hagstofa.is/template_lb_frameset_en.asp?PageID=325&intPXCatID=106&ifrmsrc=template_lb_content.asp?PageID=429)

### *5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

A list of publications, prices, and an order form are available on the SI's website at:

[http://www.hagstofa.is/template\\_lb\\_frameset\\_en.asp?PageID=325&intPXCatID=118&ifrmsrc=template\\_lb\\_content.asp?PageID=413](http://www.hagstofa.is/template_lb_frameset_en.asp?PageID=325&intPXCatID=118&ifrmsrc=template_lb_content.asp?PageID=413)

Table IV. DQAF (July 2003): Summary of Results for Government Finance Statistics  
*Compiling Agency: Statistics Iceland*

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
<b>0. Prerequisites of quality</b>						
0.1 Legal and institutional environment			X			The authority for the coordination of official statistics can be improved. Due to the small number of human resources involved in compiling the GFS (only two staff members), SI may be vulnerable to staff turnover or absence.
0.2 Resources			X			
0.3 Relevance		X				
0.4 Other quality management		X				
<b>1. Assurances of integrity</b>						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
<b>2. Methodological soundness</b>						
2.1 Concepts and definitions		X				Currently, the balance sheet of the central government excludes all nonfinancial assets.
2.2 Scope			X			
2.3 Classification/sectorization		X				Not all stocks are valued at market prices.
2.4 Basis for recording			X			
<b>3. Accuracy and reliability</b>						
3.1 Source data			X			Source data on the financial liabilities of the local governments are not available for 2002, 2003, and 2004. Therefore, there is no information disseminated on the financing of the general government. Due to the implementation of new software at the FMA, the monthly source data on central government are slightly delayed.
3.2 Assessment and validation of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
<b>4. Serviceability</b>						
4.1 Periodicity and timeliness			X			The monthly dissemination of central government operations data does not comply with the SDDS requirement.
4.2 Consistency			X			Due to the different definitions used to define general government in the GFS and monetary sector, the data are not consistent.
4.3 Revision policy and practice			X			Revised data are not clearly annotated in all the publications.
<b>5. Accessibility</b>						
5.1 Data accessibility			X			MOF has stopped the publication of an ARC on its website.
5.2 Metadata accessibility			X			MOF does not disseminate metadata or methodological notes on the compilation of data on central government operations and debt to the public.
5.3 Assistance to users		X				

## V. MONETARY STATISTICS

### 0. Prerequisites of quality

#### 0.1 *Legal and institutional environment*

##### 0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

The CBI is responsible for collecting, compiling, and disseminating the analytical accounts of the central bank and the banking sector. The legal authority to collect statistics is provided for the CBI by the *Act on the Central Bank of Iceland (No. 36, May 22, 2001) (CBI Act)*. Article 29 of the *CBI Act* states, “the Central Bank can directly collect information from those institutions which engage in transactions with the Bank . . . , in addition to institutions and firms engaged in payments systems, and other firms or institutions subject to official supervision.”

Although the responsibility for producing monetary statistics is not explicitly mentioned in the *CBI Act*, the CBI has compiled and disseminated monetary statistics since its establishment in 1961. Article 30 implicitly provides the responsibility for the CBI to compile and disseminate monetary statistics. It states, “The Central Bank compiles reports and prepares forecasts on monetary matters, the balance of payments and exchange rate and foreign exchange issues and other matters pertaining to the functions and policies of the Bank. The Central Bank shall, at no less frequent than quarterly intervals, publish reports on its monetary policy and monetary, exchange rate and foreign exchange developments and its measures in these areas. The Central Bank shall also issue an annual report in which it explains in detail its activities.”

##### 0.1.2 *Data sharing and coordination among data-producing agencies are adequate*

The CBI solely compiles monetary statistics. The responsibility for compilation of monetary statistics is assigned to the Statistics Department (SD). The SD collects all requisite source data needed for this purpose. Arrangements are in place to ensure the smooth flow of information between the SD and all other departments within the CBI, Icelandic Banks Data Center (IBDC),<sup>24</sup> and Financial Supervisory Authority (FME).<sup>25</sup>

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<sup>24</sup> A joint clearinghouse and data-processing center owned by the CBI, commercial banks, savings banks, and credit card companies.

<sup>25</sup> See *Cooperation Agreement Between the Financial Supervisory Authority and Central Bank of Iceland*, March 28, 2003 (Reykjavik: FME and CBI).

0.1.3 *Individual reporters' data are to be kept confidential and used for statistical purposes only*

Monetary statistics do not disclose transactions or data of individual institutions. The CBI collects data on individual commercial banks and savings banks. These individual reporters' data are not disseminated outside the CBI, except to share them with the FME, which is responsible for supervising all the financial institutions in Iceland. This data-sharing arrangement has been formalized in the *CBI Act*. Article 35 of the *CBI Act* states that the CBI shall grant the FME all the information held by the CBI and which may be utilized for the activities of the FME. It adds, "Information granted in accordance with the present Article is subject to confidentiality in accordance with the *CBI Act* and the *Act on the Official Supervision of Financial Activities*."<sup>26</sup>

No law explicitly states that the individual reporters' data will be kept confidential, although this has been the case in practice. The authorities indicate that the data collected by the CBI are confidential until they are published. The authorities added that since individual banks' data were not published they remained confidential. The *CBI Act and the General Staff Rules and Ethical Code for Employees of the Central Bank of Iceland (Staff Rules)* (December 30, 2003) contain secrecy clauses. Article 35 of the *CBI Act* states, "Members of the Supervisory Board, Governors and other employees of the Central Bank are bound by secrecy concerning the affairs of the customers of the Bank, the affairs of the Bank itself and other matters of which they gain knowledge in the course of their work and which should be kept secret according to law or the nature of the case, except where a judge may decree that information must be provided in court or to the police or there is a duty to provide information according to law. The duty to secrecy shall prevail even though employment may cease."

Article 3.1 of Sundry Rules 10.2.1 of the *Staff Rules* specifies, "Employees of the Bank are bound by secrecy concerning any matter of which they gain knowledge in the course of their work and which should be kept secret according to law or the nature of the case. The duty of secrecy shall prevail even though employment may cease." The secrecy rules are enhanced by the requirement by the CBI staff to sign a form called "Employee's Pledge" when they join the CBI. This form says, "As an employee of the Central Bank I pledge with my signature to show dedication and conscientiousness in any task that may be assigned to me to undertake, and to honor the Bank's procedures and code of ethics. I am aware that I am bound by secrecy concerning the affairs of the customers of the Bank and the affairs of the Bank itself and other matters which should be kept secret according to law or the nature of the case, cf. also Article 35 of *Act No. 36/2001 (CBI Act)*. I promise to honor this duty of secrecy even on ceasing to work for the Bank."

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<sup>26</sup> *Act No. 87/1998 on Official Supervision of Financial Activities* (January 1, 1999) available on the Ministries of Industry and Commerce's website.

The SD saves the individual monthly reports on a dedicated computer network drive to which no-one outside the SD has access. The compiler also saves data from these reports in the CBI's mainframe database (in Microsoft SQL server) and only the compiler and the back up have full access to these data. Only limited (read) access is granted to one staff member from the Economics Department and the Financial Stability Department of the CBI to these individual reporters' data as well as for the monetary statistics compiled. In general, the CBI has installed powerful protection against any unauthorized access to its computer systems. The CBI disseminates only aggregated data for commercial banks and savings banks to the public. However, as a service, and with prior agreement, it also sends disaggregated data to commercial banks and seven of 24 savings banks (see 5.1.4). If the sample size gets very small and one can infer from the aggregates presented, the CBI decides not to publish these aggregates any longer or devise new aggregates that would not allow the users to infer data on any single reporter.

*0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

The *CBI Act* contains legal provisions underpinning the obligation of commercial banks and savings banks to report data to the CBI. This *Act* has provisions for imposing penalties and/or sanctions for noncompliance or failure to submit reports. Article 29 of the *CBI Act* states, "The Central Bank shall be provided with the information which it needs for the purpose of compiling statistical reports. Failure to provide information to the Bank is subject to penalties." Article 37 authorizes the CBI to impose penalties for failure to provide required information. It states, "The Central Bank is authorized to impose penalties in the form of per diem sanctions upon parties neglect to provide information to the Bank which the Bank is entitled to collect on the basis of the present *Act*, or that provide deliberately misleading information to the Bank." The CBI Rule No. 389 of May 29, 2002, titled, *Rules on the Imposition of Periodic Penalty Payments*, in its Articles 2, 3, 4, and 5, provides information on penalties (kronur per day) imposed for failure to provide information or deliberately providing incorrect or inadequate information. However, this provision has never been invoked. If reporting is delayed, the CBI either sends a letter or conveys the message citing these rules. Such warnings have been effective to ensure delivery of reports.

The CBI is mindful of not overburdening the banks on data reporting. The SD obtains data from the FME and IBDC as well (see 0.1.2). The CBI also encourages the reporting by banks by developing goodwill among respondents. As one measure, at the request of the banks, the CBI sends data reports called "Chapter 1," "Chapter 2," and "Chapter 3" after the monetary statistics are released to the public according to the ARC (see 5.1.4).

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs*

The SD has nine staff members, of which one staff is assigned to the compilation of monetary statistics. Another staff member of the SD has been designated as the back up to compile monetary statistics in case the compiler is away. The monetary compilation is highly automated and, hence, is done as a routine operation. The compiler consults with the senior management of the SD on matters that need special attention. Although one staff member is sufficient to carry out this routine operation, the human resources may need to be strengthened to undertake methodological reviews, prepare metadata, and further advance the methodological work, given that the country is facing a rapid change in the financial landscape.

The compiling staff member is recruited on a competitive basis. Only a candidate with a bachelor's degree (business or economics) is recruited. No prior experience is necessary although it is encouraged. The new recruit is given on-the-job training. No formal courses or seminars are offered within the CBI to its staff. In some instances, the CBI staff attend courses offered by international organizations such as the Bank for International Settlements and the IMF. Some staff take courses on their own initiative with the local colleges and at the university.

Salary levels are comparable with those offered at other government agencies, but are below those offered in the private sector. There has been staff turnover in compilation of monetary statistics. During the past six years, three different staff members have been assigned to the compilation of monetary statistics because they either got a job outside the CBI or were working on other projects within the SD.

Computer and other office resources are adequate. Each staff member at the SD has a computer. Monetary data are stored in the CBI's mainframe computer. Software developed within the CBI called "LAKI" is used to extract data from the mainframe computer. A project is underway to transfer the data into a FAME database. Some aggregated data have already been transferred. The Information Technology Department backs up the database every night. The SD has sufficient funding to procure the necessary pieces of equipment and other resources necessary to compile monetary statistics.

*Recommendation: Consider providing additional staff resources to undertake methodological reviews, prepare metadata, and further advance the methodological work, given that the country is facing a rapid change in the financial landscape.*



### *0.2.2 Measures to ensure efficient use of resources are implemented*

Each year the staff undergo the performance review process. This exercise is conducted to inform the staff member where he/she stands with respect to what was expected. However, the performance review process is not connected to salary increase. The salary increase given to the staff is negotiated by the staff union with the management. The Director of the SD informs the staff if any deficiency is noted and encourages the staff to improve performance in the coming year.

## **0.3 Relevance**

### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

The data needs of the main users of statistics within the CBI (Economics Department, Financial Stability Department, and the management) are regularly reviewed. The Director of the SD twice a year attends the Committee on Monetary, Financial, and Balance of Payments Statistics (CMFB).<sup>27</sup> The SD considers that enquiries from users made through personal contacts or through the common e-mail address at the CBI's website for data queries provide sufficient feedback to the compilers. There are no formal meetings with users outside the CBI. There are no user advisory groups either.

*Recommendation: Establish a formal users' group and/or user advisory groups, including representatives from the private and academic sectors, to (1) solicit the views of a broad cross section of users, and (2) assess the relevance and practical utility of existing monetary statistics as well as monitor the evolving needs of the data users.*

## **0.4 Other quality management**

### *0.4.1 Processes are in place to focus on quality*

In the compilation of monetary statistics, priority is given to meeting the requirements of macroeconomic analysis and policymaking within the CBI. Management is aware of the need

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<sup>27</sup> The CMFB is an EEA committee. In addition to senior central bank and government statisticians responsible for its areas of interest in the member states, it includes representatives of the European Commission and the European Central Bank (ECB). The CMFB was established by a Council Decision in 1991 to assist the European Commission in drawing up and implementing work programs concerning monetary, financial, and balance of payments statistics. The CMFB is the forum for coordination of statisticians from the National Statistical Institutes and Eurostat on the one hand, and the National Central Banks and the ECB on the other. The secretariat is at Eurostat (in Luxembourg) and at the ECB (in Frankfurt).

for quality in statistics. In recent years such awareness has been heightened, owing to rapid expansion of the banking system and the efforts of the CBI to improve sectorization of loans by category of borrowers from and of deposits by category of holders with the deposit money banks (DMBs). The CBI is pondering further expansion of statistical activities, especially due to the rapid transformation of the economy in the past few years and emerging data needs to effectively conduct its monetary policy.

#### *0.4.2 Processes are in place to monitor the quality of the statistical program*

The monitoring of quality of the statistical program is an ongoing process. The meeting of directors of various departments with the management each week provides an opportunity to brief the management on developments in the SD's tasks. The Director of the SD presents a work program to the Governor at the beginning of each year in one of these weekly meetings. These actions by the SD provide a mechanism to monitor the quality of its statistical program.

#### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

An ongoing process is in place to deal with the quality considerations in planning the statistical program. The CBI monitors the financial markets for any new developments and new instruments. The SD carefully considers the feedback from internal and external users with a view to improving the CBI's collection and compilation system.

### **1. Assurances of integrity**

#### ***1.1 Professionalism***

##### *1.1.1 Statistics are produced on an impartial basis*

Since March 27, 2001, Iceland has adopted inflation targeting as its monetary policy framework. The Prime Minister sets the inflation target, and the CBI has full independence in employing various monetary policy instruments to keep the inflation within the target. The *CBI Act* ensures that the CBI has instrument and financial independence in conducting its operations without interference from outside agencies. Within the CBI, internal procedures have been formulated to facilitate appropriate monetary policy decisions and statistics that will be used to carry out these decisions. Within this framework, monetary statistics are compiled on an impartial basis.

The professionalism of the SD staff is aided by the CBI recruitment process. When a vacancy arises, the Operations Department places an advertisement in the local newspaper (*Morgunblaðið*) and on the website of the Confederation of Icelandic Bank and Finance Employees. The staff manager at the Operations Department makes a short list of candidates and forwards it to the SD. Through interviews, the SD chooses the best suitable candidate. The staff members are appointed on a probationary period of three-to-six months before they

become regular. Some CBI staff members conduct lectures, and some others, including the SD staff, attend classes in local colleges/universities. They are also encouraged to publish papers in the CBI's *Fjármálatíðindi* and *Monetary Bulletin*. Sometimes, they also write articles in the local weekly business paper, *Vísbending*.

*1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

The choices of source data and statistical techniques are based solely on statistical considerations. The objective of the compilation system is to provide data suitable for the CBI's macroeconomic policy decisions and for publication meeting the international standards. Accordingly, the SD collects source data from all four commercial banks and 24 savings banks.<sup>28</sup> It also obtains data on savings deposits with the cooperatives from the FME. Except for carrying forward the quarterly data on savings deposits with the cooperatives to compile monthly monetary statistics, the SD does not make any estimation. The dissemination of monetary statistics is based solely on statistical considerations. Monthly analytical accounts of the CBI and the DMBs, as well as the monetary survey, are produced within 21-23 days after the end of the reference month.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

An informal mechanism monitors information published by the press. In instances when statistics have been misinterpreted by the media, and if deemed to be significant, the CBI contacts the media and asks for explanation and correction. Such instances are not common.

## **1.2 Transparency**

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

The *CBI Act* explicitly refers to the CBI's rights to collect data and implicitly refers to the CBI's responsibility to compile and disseminate monetary statistics. The *CBI Act* and *CBI Rule 389/2002* discuss confidentiality and penalty for noncompliance of reporting (see 0.1.3 and 0.1.4). These documents are available to the public on the CBI's website. The CBI's website provides a list of publications and carries background information on the CBI.

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<sup>28</sup> Until May 2004, the SD was also collecting savings deposits data from Postgiro to be included as part of M2. The Postgiro does not exist any longer.

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

No-one outside the CBI or within the CBI (departments other than the SD) has access to monetary statistics prior to their release.

*1.2.3 Products of statistical agencies/units are clearly identified as such*

Statistical publications (*Annual Report* and *Monetary Bulletin*) clearly identify the CBI as the publisher. Tables presented in these publications specify the source of information, including other statistical agencies such as the MOF and SI. The tables on monetary statistics do not show the SD (within the CBI) as the source, but the tables presented on the CBI's website explicitly state the source as "Central Bank of Iceland, Statistics Department." The CBI requests attribution when its statistics are used or reproduced.

*1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

Advance notice is not given to the public of major changes in methodology, source data, and statistical techniques. Changes are explained when they are introduced in the form of articles written in the *Annual Report* and *Monetary Bulletin* and on the CBI's website ("Statistics"), either in Icelandic or in English. Changes to data are indicated by footnotes in the tables shown in publications and on the website.

*Recommendation: Provide advance notice of major changes in methodology, source data, and statistical techniques affecting the compilation of the monetary statistics on the CBI's website and/or in the CBI's publications.*

**1.3 Ethical standards**

*1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

Guidelines for staff behavior, covering conflicts of interest, discipline, and ethical issues, are set out in the CBI's *Rules Handbook*, which is regularly updated (the last update was done in January 2005) and is available on the CBI's intranet. These procedures are well established and known to the staff and are strictly enforced. The *CBI's Rule No. 831* lays out rules on treatment of confidential information and on securities and currency trading by employees.<sup>29</sup> New recruits are briefed on the staff regulations and are also required to sign an "Employee's Pledge" as discussed in 0.1.3. All the staff are required to read the *Rules Handbook*. Any issues regarding staff behavior or new rules discussed in the senior staff meetings are passed on to the staff.

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<sup>29</sup> CBI, 2002, *Central Bank of Iceland Rules on Treatment of Confidential Information and on Securities and Currency Trading by Employees, No. 831* (November 28).

## **2. Methodological soundness**

### **2.1 Concepts and definitions**

#### *2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

The concepts and definitions used by the CBI to compile monetary statistics broadly conform to the guidelines outlined in the *Monetary and Financial Statistics Manual (MFSM)*. The monthly monetary survey compiled by the CBI (Accounts of the Banking System)<sup>30</sup> is equivalent to the *MFSM's* Depository Corporations Survey (DCS). It presents measures of liquidity and its counterparts. There are four measures of monetary aggregates—M1, M2, M3, and M4. The authorities term M3 as broad money. M1 is composed of currency in circulation (outside commercial banks and savings banks) plus current accounts in kronur (current accounts are equivalent to transferable deposits). M2 comprises M1 plus savings accounts and sight deposits in kronur and foreign currency accounts. M3 is defined as M2 plus indexed deposits (fixed-term deposits indexed to the CPI), other time deposits, currency-linked deposits (denominated in kronur but linked to euro or SDR), and supplemental pension deposits (restricted for withdrawal until the holder reaches the age of 60). The authorities include deposits of all resident sectors (including central government) and foreign sectors in monetary aggregates. M4 is calculated as M3 plus three types of bonds (currency-linked, indexed, and unindexed). The currency-linked bonds are mostly European Medium-Term Notes (EMTN) issued by the resident banks in Europe and are purchased by nonresidents. These bonds are traded in the secondary markets. The authorities do not have information as to whether the final holders of these bonds are residents or nonresidents. Some of the indexed bonds are also held by nonresidents.

The counterparts of the monetary aggregates are net foreign assets and domestic credit. Domestic credit contains claims on various resident sectors. The claims on *treasury and government institutions* also include those of nonfinancial public corporations. The central government deposits with the DMBs are included as part of monetary aggregates.

The CBI also presents analytical accounts of the central bank (Accounts of the Central Bank) and a balance sheet for other depository corporations (ODCs) (Accounts of DMBs). The Accounts of the Central Bank show foreign assets in net terms, net claims on central government, claims on various resident sectors, and monetary base (called “Base Money” in Iceland). The Accounts of DMBs present balance sheet data by instruments on both asset and liability sides.

*Recommendation: Exclude the deposits of nonresidents and of central government from the definition of monetary aggregates.*

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<sup>30</sup> Parenthetical references are to the tables published on the CBI's website.

*Recommendation: Ascertain the residency of holders of the currency-linked and indexed bonds issued by the resident banks and classify these bonds into domestic/foreign liabilities, as appropriate.*

## **2.2 Scope**

### *2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

For analytical purposes, the *MFSM* defines the ODCs as comprising resident financial corporations (except the central bank) and quasi-corporations mainly engaged in financial intermediation. The liabilities of these institutions consist of deposits or financial instruments considered deposit substitutes included in the definition of broad money. The national definition of broad money is thus fundamental to the methodology of the *MFSM*, in that it determines which units in the financial corporations sector are classified as ODCs. In line with the *MFSM* guidelines, the ODC subsector should include all financial corporations that issue liabilities (accept deposits or issue instruments that are considered as their substitutes) to be included in the national definition of broad money.

The scope of monetary statistics is broadly consistent with guidelines in the *MFSM*. The financial corporations sector in Iceland consists of the CBI, four resident commercial banks, and 24 savings banks. The commercial banks and savings banks are called DMBs and fall under the category of ODCs according to the *MFSM*. These are the only financial institutions that accept deposits in the country.<sup>31</sup> There are also several other credit institutions (140) operating in the country that fall under the *MFSM* category of other financial corporations (OFCs).<sup>32</sup> They include credit undertakings (9), deposit departments of cooperative societies (4), securities companies (6), securities brokers (3), management companies of Undertakings for Collective Investment in Transferable Securities (UCITS) (10), investment funds (15), Icelandic Stock Exchange (ICEX) (1), Central Securities Depositories (1), pension funds (49), insurance companies (15), insurance brokers (17), and Housing Finance Fund and other parties (5). Three of the four commercial banks have branches abroad, and these branches are considered nonresidents and are not included in the coverage.

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<sup>31</sup> The authorities also include the savings accounts of the customers held with four cooperatives. The SD obtains these data from the FME and includes them as part of M2 (as of end-2004, these deposits amounted to about ISK 1 billion, compared to total deposits with DMBs of about ISK 536 billion).

<sup>32</sup> The number presented in parentheses in the rest of the paragraph indicates the number of institutions falling under each category as of end-June 2004 (Source: FME, 2004, *Annual Report*). These institutions are under the supervision of the FME.

## 2.3 *Classification/sectorization*

### 2.3.1 *Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

The CBI has a residency criterion to distinguish between domestic and external accounts for the compilation of monetary statistics,<sup>33</sup> which is in line with the 1993 *SNA* and the fifth edition of the *Balance of Payments Manual (BPM5)*.

The sectoral classification of the resident units, recommended in the *MFSM*, is as follows: (1) central bank; (2) ODCs; (3) OFCs—insurance corporations and pension funds; other financial intermediaries, except insurance corporations and pension funds; and financial auxiliaries; (4) central government; (5) state and local government; (6) public nonfinancial corporations; (7) other nonfinancial corporations; and (8) other resident sectors.

In Iceland, the resident sectors are classified as follows: (1) CBI; (2) commercial banks; (3) savings banks; (4) nonbank financial institutions; (5) treasury and government institutions; (6) municipalities; (7) enterprises; (8) households; (9) foreign sector; and (10) other. Although the terminology is not entirely in conformity, the sectorization of institutional units in Iceland is mostly in line with the *MFSM*. Specifically, ODCs correspond to commercial banks and savings banks; OFCs include nonbank financial institutions; municipalities for local government; and enterprises to represent other nonfinancial corporations. The category of treasury and government institutions contains both central government and nonfinancial public corporations.

The principles underlying the classification of financial instruments in the monetary statistics are broadly consistent with the *MFSM*. The commercial banks and three investment banks conduct repurchase agreement operations (repos) among themselves and with the CBI. Two savings banks conduct repos directly with the CBI. These repos are correctly classified as collateralized loans in the monetary statistics. The repos are conducted using the certificates of deposits issued by the CBI, electronically registered treasury bills, treasury notes, and bonds that are of high quality (as rated by the international ratings agencies such as Moody's, Standard and Poor's, or Fitch) issued by financial institutions and enterprises in kronur.

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<sup>33</sup> As specified in *Capital Movements, Imports and Foreign Investments: Act No. 87/1992 on Foreign Exchange* (available on the Ministries of Industry and Commerce website—<http://eng.idnadarraduneyti.is/laws-and-regulations/nr/1130>).

The practices followed by the CBI in compiling monetary statistics deviate from the recommendations of the *MFSM* in the following aspects:<sup>34</sup>

- In the Accounts of the CBI, fixed assets are expensed in the year of purchase or construction and are not shown on the balance sheet; and
- In the Accounts of DMBs, financial derivatives are classified as off-balance-sheet items, and claims on and deposits of nonfinancial public corporations are indistinguishably included as part of *treasury and government institutions*.

*Recommendation: In the Accounts of the CBI, classify fixed assets on balance sheet.*

*Recommendation: In the Accounts of DMBs, classify (1) claims on the deposits of nonfinancial public corporations separately out of treasury and government institutions, and (2) financial derivatives on balance sheet.*

## **2.4 Basis for recording**

### *2.4.1 Market prices are used to value flows and stocks*

A general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be done on the basis of market prices or market price equivalents (fair values). The valuation of loans is an exception to this principle, and loan values should be based on creditors' outstanding claims without adjustment for expected loan losses. This amount comprises the outstanding principal plus any accrued interest and is referred to as the book value of a loan. Monetary gold and nonmonetary gold should be valued on the basis of the market price of gold. Holding gains and losses arising from changes in market values (or fair values) of financial assets and of outstanding liabilities should be recorded separately in a revaluation account.

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<sup>34</sup> The CBI applies a mix of analytical and accounting presentation of IMF accounts in the monetary statistics. The accounting presentation suggests that the IMF quota be recorded as foreign assets and the IMF No. 1 and 2 accounts be classified as foreign liabilities. The analytical presentation nets out the IMF No.1 and 2 accounts from the IMF quota and records the net amount as reserve tranche position with the IMF, which is classified as foreign assets in the monetary statistics. The CBI records, in the Accounts of the CBI, the reserve tranche position with the IMF as foreign assets, but also records the IMF No. 2 account on the liability side as part of other items net.



The current valuation system for various assets and liabilities of the CBI and the DMBs is as follows.<sup>35</sup>

Financial Instruments	Valuation Methods Followed in the CBI Balance Sheet	Valuation Methods Followed in the DMB Balance Sheets
Monetary gold	Market price; London closing price at the end of the last working day of the month.	Not applicable.
SDRs	Rate fixed by the CBI (fixed daily by the CBI using the same weights as the IMF does at the same time when the official exchange rate is set) as of the last working day of the month.	Not applicable.
Foreign exchange (currency/deposits)	Official exchange rate prevailing on the last working day of the month.	Official exchange rate prevailing on the last working day of the month.
Deposits	Nominal value.	Nominal value.
Loans	Book value.	Book value.
Securities other than shares	Market value.	Market/fair value.
Shares and other equity (asset side) <sup>36</sup>	Nominal value.	Market/fair/historical value.
Shares and other equity (liability side)	Nominal value.	Nominal value.

According to the *MFSM*, all stocks and flows denominated in foreign currency should be converted to national currency values at the market exchange rate prevailing at the time they are entered in the accounts. The midpoint between the buying and selling rates of exchange should be used so that any service charge is excluded. Both the CBI and the DMBs follow this principle.<sup>37</sup> Consistent with the recommendation of the *MFSM*, the loan portfolio on the balance sheets of the CBI and the DMBs is valued at book value (to include the outstanding

<sup>35</sup> Office of the Prime Minister, 2002, *Rules on Central Bank of Iceland Accounting and Annual Financial Statements No. 896* (Reykjavic, December 16) and FME, 2003, *Rules on the Financial Statements of Credit Institutions No. 834* (November 3) contain information on the valuation principles to be followed for items presented on the balance sheets of the CBI and DMBs, respectively.

<sup>36</sup> The amount is very small (ISK 18.8 million as of end of 2003) (see CBI, 2004, *Annual Report 2003*, p. 60).

<sup>37</sup> The CBI sets the official exchange rate at 10:45 a.m. each working day. The rates are computed as the averages of rates prevailing in three commercial banks active in foreign exchange markets. The midpoint between the buying and selling rates of exchange is taken.

principal amount plus accrued interest). All DMBs, except for a couple, present the loans net of provisions on the asset side.<sup>38</sup> Valuation adjustments are not separately shown. Valuation adjustments are realized in the profit/loss account. The DMBs value the securities held for investment purpose on a historical value basis.<sup>39</sup>

The *MFSM* recommends that data be compiled on stocks and on each of the three flows components: *transactions, revaluations, and other changes in the volume of assets*. The CBI and the DMBs do not compile data on flows.

*Recommendation: Show loans gross of provisions on the asset side and present data on provisions as part of other liabilities.*

*Recommendation: Present in the Accounts of DMBs, the value of securities held for investment purposes by the DMBs in terms of market/fair value.*

#### 2.4.2 *Recording is done on an accrual basis*

The *MFSM* recommends the compilation of monetary statistics on an accrual basis. Revenues and expenses should be recognized in the period in which they arise, regardless of when the corresponding cash flow actually occurs. The *MFSM* approach provides an economically meaningful way to obtain an accurate measure of the value of the asset/liability at a given point of time. The value of an instrument at any moment equals the discounted value of the future payments (interest and/or principal). Therefore, an instrument that is valued to include accrued interest reconciles past economic flows with future expected economic flows. In accordance with this principle, the *MFSM* recommends that interest due but not paid on financial instruments be incorporated into the outstanding amount of the financial asset or liability, rather than being treated as part of other accounts receivable/payable (other assets/other liabilities). Monetary statistics in Iceland are compiled on an accrual basis, in line with the recommendations of the *MFSM*.

#### 2.4.3 *Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

In line with the general principles of the *MFSM*, assets and liabilities of the CBI and the DMBs are collected and subsequently compiled on a gross basis. Claims on particular transactors are not netted against liabilities to those transactors.

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<sup>38</sup> This presentation follows the FME, 2003, *Rules on the Financial Statements of Credit Institutions No. 834*.

<sup>39</sup> As per the FME, 2003, *Rules on the Financial Statements of Credit Institutions No. 834*.

While data are compiled and generally available on a gross basis, many categories of monetary data are presented on a net basis in surveys (for instance in the Central Bank Survey and the DCS) and other presentations because of the analytical usefulness of the data in this form (for example, net foreign assets and net claims on central government). The *MFSM* recommends presenting the net claims in the surveys, while including the gross figures. The CBI presents only net foreign assets in the Accounts of the Central Bank (with foreign liabilities being zero). The Accounts of the Banking System show net foreign assets with underlying gross positions in assets and liabilities. In the Accounts of DMBs there is no presentation of net foreign assets, and it is difficult to measure the net foreign assets position from the data presented therein. Data on net claims on central government are not explicitly available in the Accounts of DMBs and of the Banking System.

*Recommendation: Present net foreign assets with the underlying gross figures in the Accounts of the CBI and of DMBs.*

*Recommendation: Present data on net claims on central government with the underlying data on claims on and deposits of the central government in the Accounts of DMBs and of the Banking System.*

### **3. Accuracy and reliability**

#### **3.1 Source data**

##### **3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions**

The source data for compiling the Accounts of the CBI are from data provided by the Accounting Department (AD). They are available on a monthly basis. The AD disseminates the balance sheet of the CBI on the website under “News and Speeches” within four working days after the end of the reference month. Thereafter, it creates another version of the balance sheet with fewer details—Balance Sheet of the Central Bank of Iceland (Main Figures)—and sends it to the SD on the following Monday for posting on the CBI’s website under “Statistics.” The AD also provides the SD with a detailed balance sheet of the CBI with additional sectoral and instrument breakdown for preparing the Accounts of the CBI, which is disseminated within 21-23 days after the end of the reference month.

There are two sources for data on the DMBs—direct submission of “monthly reports” to the SD by all the DMBs, and balance sheets containing data on major aggregates available from the IBDC that the compiler downloads from the IBDC’s computer.<sup>40</sup> The monthly report for each DMB has detailed disaggregation of deposits by instrument and by holder, and of loans by instrument and by borrower, and of marketable securities by instrument and by issuer. The DMBs generally submit data in the form of excel tables e-mailed to the SD. The SD also obtains data on savings accounts with cooperative societies from the FME to be included as part of M2. The report forms contain fairly sufficient detail to classify sectors and instruments in line with the *MFSM* (as further discussed in 3.1.2), although the terminologies differ.

*3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required*

The source data broadly approximate the required definitions, scope, classifications, valuation, and time of recording. No supplementary data sources are used in compiling monetary statistics. One exception is that the source data do not provide positions of financial derivatives because the DMBs treat financial derivatives as off-balance-sheet items. No separate classification exists for nonprofit institutions serving households, which is subsumed under either *treasury and government institutions* or *enterprises*.

Since September 2003, the accuracy of the source data has been enhanced by automating the classification of loans and marketable securities by sector and instrument. Until then, these classifications were done manually (see 3.1.1).<sup>41</sup> The monthly reports containing these additional details are generated by the IBDC. In Iceland, each institution/individual is assigned with an identification number. The Enterprise Register (*Fyrirtakjaskr*), managed by the tax authority, follows a five-digit coding system that can distinguish a company by type of activity and by ownership (public or private). The National Register (*Pjodskra*), managed by SI, has two databases—one for the residents and the other for nonresidents. Both

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<sup>40</sup> The monetary reports mirror the structure recommended in the FME, 2003, *Rules on the Financial Statements of Credit Institutions, No. 834* (November 3) based on the European Union Directive 86/635/EEC (“Council Directive of December 8, 1986 on the Annual Accounts and Consolidated Accounts of Banks and Other Financial Institutions”) but expanded with additional instrument and sector breakdown of a number of asset and liability items as per the instructions from the CBI (see CBI, 2003, *Classification of Claims of Financial Institutions and Deposits of Deposit Money Banks* (October), available only in Icelandic on the CBI’s website). The data that the SD get from the IBDC contain data according to the list of accounting keys in the monthly report.

<sup>41</sup> See CBI, 2004, “Financial Stability: Satisfactory Position but Concerns over Lending, Foreign Debt, and Asset Prices—Box 1 (“Reclassification of Lending and Marketable Securities”),” *Monetary Bulletin*, Vol. 6, No. 1 (March), p. 39.

databases follow a ten-digit identification number system. The DMBs include these identification numbers in the records of their customers. By making use of these numbers and the coding scheme provided by the SD to identify various categories of assets and liabilities as well as sectors of holders and issuers, the IBDC generates monthly reports for the DMBs within four days after the end of the reference month. The IBDC forwards these reports to the respective DMBs, and the DMBs in turn send them to the SD.

*Recommendation: Establish plans to include financial derivatives as on-balance-sheet items to be reported by banks as part of source data to compile monetary statistics.*

### *3.1.3 Source data are timely*

The source data are timely. The AD provides data on the CBI to the SD within 10 days after the end of the reference month. The DMBs are required to submit the monthly reports within 11 days after the end of the reference month. In some cases, banks do not submit the monthly reports within 11 days. In such instances, the compiler contacts the banks for immediate submission, for which the banks comply. The CBI takes about 10 calendar days to compile monetary statistics. Therefore, monetary statistics are usually compiled within 21 or 23 days after the end of the reference month.

## **3.2 Assessment of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes*

Once the DMBs submit the monthly reports, the SD undertakes several steps to validate the accuracy of data. The compiler runs the vertical check that will compare data submitted directly by the DMBs with balance sheet data obtained from the IBDC. Specifically, the vertical checks compare each aggregate of lending, marketable securities, and deposits (as available in the balance sheets of each DMB from the IBDC) the sum of components (sectors) of the respective aggregate (provided by the DMBs in their monthly reports). The compiler also visually checks these reports. If there are any unusual movements in any category, the SD contacts the DMBs for follow-up information and explanation. If any misreporting is noticed, the DMBs are required to correct the mistake and resubmit the electronic version of the monthly reports by e-mail. The compiler then manually inputs these new data into the database and recompiles the statistics.

### **3.3 *Statistical techniques***

#### **3.3.1 *Data compilation employs sound statistical techniques to deal with data sources***

The compilation of monetary statistics is highly automated. Electronic data reporting, data processing, and validation procedures contribute to the production of accurate and timely monetary statistics.

#### **3.3.2 *Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques***

The CBI also includes the savings deposits with cooperative societies in M2. These amounts are small (see 2.2.1). Since these data are available only on a quarterly basis, the CBI carries forward the most recent quarterly data for the following months until the next quarterly data are available. Apart from this, since the DMBs report data on time (with rare occurrences for a slight delay of one or a few days after the prescribed time period for submission) and the data collection program is comprehensive, there is no need to make any adjustments to compile monetary statistics. Seasonal adjustments are not carried out.

### **3.4 *Assessment and validation of intermediate data and statistical outputs***

#### **3.4.1 *Intermediate results are validated against other information where applicable***

The vertical check procedures compare the detailed data reported by the DMBs against balance sheets obtained from the IBDC (see 3.2.1). If the comparison reveals discrepancies, the data are further investigated and errors are corrected.

#### **3.4.2 *Statistical discrepancies in intermediate data are assessed and investigated***

The SD investigates the nature and origin of any statistical discrepancies observed in the intermediate data. In the event any noticeable changes are observed in the data submitted by the DMBs, the compiler contacts the respective DMB immediately and seeks explanation for the sudden movements. If the movements are caused by misreporting, the DMBs are required to resubmit the revised data electronically.

#### **3.4.3 *Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated***

Any reporting errors and out-of-trend reporting by the DMBs are immediately investigated and addressed within a short time (before the data are published).

### **3.5 Revision studies**

*3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)*

Deviations, omissions, misreporting, processing error, and other potential problems in the data are identified, investigated, and eventually corrected, and published as monetary data. Nevertheless, no formal revision studies or documentation exist.

## **4. Serviceability**

### **4.1 Periodicity and timeliness**

*4.1.1 Periodicity follows dissemination standards*

SDDS requires disseminating the analytical accounts of the central bank and the banking sector on a monthly frequency. Iceland meets this requirement.

*4.1.2 Timeliness follows dissemination standards*

The analytical accounts of the CBI are posted on the CBI's website within four working days and of the banking sector no later than 25 calendar days at the end of the reference month. These dissemination practices meet the requirements of the SDDS.

### **4.2 Consistency**

*4.2.1 Statistics are consistent within the dataset*

The monetary statistics presented in the Accounts of the Central Bank and of the DMBs are internally consistent. The claims on the DMBs for the CBI and liabilities to the CBI of the DMBs are very close. Similarly the liabilities to the DMBs of the CBI and claims on the CBI for the DMBs are very close. The minor differences are reconcilable.

*4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

Slight differences exist between data presented in the Accounts of the DMBs and the Accounts of the Banking System against the historical data presented for certain aggregates from the above accounts on the CBI's website. The historical data are available as early as 1960 for some aggregates.

*Recommendation: Disseminate historical data for the Accounts of DMBs and of the Banking System that are consistent with the current data. If breaks in data series occur, indicate these breaks with appropriate explanation.*

#### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

Foreign assets as reported in the Accounts of the CBI do not match exactly the gross reserves presented in the international investment position data. Data on foreign positions of DMBs used for the compilation of the balance of payments and the monetary statistics also differ. Discussion with the CBI staff indicated that the two datasets made use of the same concept of residency, but were obtained separately from the DMBs by units compiling the balance of payments and monetary statistics of the CBI. For the balance of payments statistics, the source data are obtained in the frame of the monetary reports of banks following the 2001 *Foreign Exchange Act*, whereas for monetary statistics, the data are provided by banks based on their balance sheet items. There are material differences between the net claims on central government in monetary statistics against the financing by the banking system in GFS, because in monetary statistics, nonfinancial public corporations are indistinguishably included as part of *treasury and government institutions*.

*Recommendation: Examine the reasons for inconsistency between the monetary statistics and balance of payments as well as government finance statistics, and reconcile the differences through regular bilateral meetings.*

### **4.3 Revision policy and practice**

#### *4.3.1 Revisions follow a regular and transparent schedule*

In practice, revisions are rare and insignificant because monthly reports submitted by the DMBs are usually final. The exception to this rule is that data for December each year may be revised following the external audit of the annual balance sheets of each DMB. The FME makes available to the public these audited annual balance sheets electronically on its website. The compiler uses these data to compare against what was submitted earlier by each DMB. If any differences are noticed, the SD requires the DMBs to resubmit the revised monthly reports for the December and for subsequent months. The revised December data are incorporated and disseminated in the following cycle of data release.

#### *4.3.2 Preliminary and/or revised data are clearly identified*

The tables on monetary statistics presented on the CBI's website and on the publications indicate that the latest figures are preliminary. However, when the tables are revised and are republished on the website, they do not indicate that the data are revised; rather, the new release date is shown in the bottom of the relevant table. As mentioned in 4.3.1, December data for each year are subject to revision until the external audit of the annual balance sheets of the DMBs is concluded. However, no information is posted regarding the possibility of such revision in the publication or on the website.



*Recommendation: Indicate in the CBI's publications and on the CBI's website that the December data of each year are subject to revision until the external audit of the annual balance sheets of the DMBs are conducted.*

*Recommendation: Clearly identify whether the data presented on the Accounts of the CBI, DMBs, and of the Banking System, as well as in the supporting tables, are preliminary, revised, or final.*

#### *4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

No studies and analyses are carried out routinely on the revisions to monetary data. Errors and data shortcomings in the data reported by the DMBs are the focus of internal analysis. However, the public is not informed on the procedures that determine preliminary and revised data. In short, users are not informed of the causes of the revisions.

*Recommendation: Subject to the availability of staff resources, conduct studies and analyses on the level and direction of revisions, possibly on an annual basis and share them with the users.*

## **5. Accessibility**

### **5.1 Data accessibility**

#### *5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

The CBI presents data on analytical accounts of the CBI and the banking system (Accounts of the CBI and Accounts of the Banking System, respectively), as well as balance sheet of the DMBs (Accounts of DMBs) as described in 5.1.2. The CBI also presents tables containing various disaggregation of assets and liabilities by instrument and sectors. In general, the clarity of individual tables is good. However, it is very difficult to derive the Accounts of the Banking System from the data presented in the Accounts of the CBI and the Accounts of the DMBs. In some instances, it is hard to compare data presented in different tables without additional information, which is not described.

*Recommendation: Improve the data presentation in the tables on Accounts of the CBI, DMBs, and the Banking System, as well as in the supporting tables so that (1) data across various tables can be easily compared, and (2) the Accounts of the Banking System can be derived from those of the CBI and DMBs.*

#### *5.1.2 Dissemination media and format are adequate*

Monetary data are available as tables in the CBI's *Annual Report* and *Monetary Bulletin*. These publications are issued in both Icelandic (Ársskýrslu and Peningamál, respectively) and in English. They are available as hardcopies and are posted on the CBI's website to meet

the needs of data users. The *Monetary Bulletin*, released quarterly, contains stock data in levels for only selected variables from the Accounts of the CBI, the DMBs, and the Banking System, and only for the most recent month for which data are available. The *Annual Report* contains annual data for the past seven years (except that the table titled “Balance Sheet of the Central Bank” contains monthly data for the past year and annual data for the previous six years).

The CBI uses its website as the primary vehicle of dissemination of its monetary statistics. The data are presented as excel tables. The website also provides historical data for a number of tables.

### *5.1.3 Statistics are released on a preannounced schedule*

The CBI disseminates on its website two calendars for release statistics—the ARC and the statistics calendar. These calendars indicate release dates for monetary statistics each month for the next 12 months. As specified in 5.1.4, the tables released on these two dates are different, but they are derived from the same source data. Usually, the data are released on time.

### *5.1.4 Statistics are made available to all users at the same time*

The SD makes statistics available as follows: (1) On the dates as specified in the ARC, it sends by e-mail to subscribers a set of aggregated data containing 14 tables (called “Chapter 1”) on the analytical accounts of the CBI and the banking system; the aggregated balance sheet for the DMBs, commercial banks, savings banks, credit cooperatives, and Postgiro; and some breakdown of deposits, lending, and bonds by instrument and sectors for all the DMBs; (2) forwards by mail the next day hard copies of “Chapter 2,” containing data on deposits, loans, and bonds issued by four commercial banks and seven savings banks, to those banks for which data are presented in Chapter 2; and (3) sends by mail the next day detailed balance sheets (called “Chapter 3”) of each of these four commercial banks and seven savings banks. To preserve the confidentiality, each bank gets only its own detailed balance sheet. All these three chapters are available in Icelandic only.

On Monday following the ARC, the SD posts (as per the statistics calendar) on the CBI’s website the standard set of tables usually disseminated on monetary statistics with updated data for the end of the previous month. These tables (Analytical Accounts of the CBI, the DMBs, and the Banking System, and the associated tables containing various disaggregation of data) are derived from the same source data that are used to prepare Chapters 1, 2, and 3. Therefore, statistics are not made available to all users at the same time.

*Recommendation: Synchronize the ARC and statistics calendar so that the monetary statistics are made available to all users at the same time.*

### *5.1.5 Statistics not routinely disseminated are made available upon request*

Unpublished and nonconfidential data are made available upon request to users free of charge. Customized tabulations are not provided to users outside the CBI unless these tabulations require relatively little effort. If substantial work is involved in satisfying the data requests, the respective user is asked to send a formal request, which is then examined. If data are provided, they are made free of charge.

## **5.2 Metadata accessibility**

### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

Very little documentation exists on methodological notes disseminated on monetary statistics. The SD has internal documentation for the use of compilers. The hardcopy publications and the CBI's website contain no documentation on methodological notes. The SDDS metadata posted on the IMF's DSBB website (<http://dsbb.imf.org/Applications/web/dsbbhome/>) provide some information on scope. The CBI's website, however, does not hyperlink to the SDDS metadata.

*Recommendation: Disseminate metadata and summary methodology, explaining the compilation of the monetary statistics, on the CBI's website.*

### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

No brochures have been prepared to inform external users about monetary statistics. In general, virtually no documentation exists that meets the various needs of different users.

## **5.3 Assistance to users**

### *5.3.1 Contact points for each subject field are publicized*

Both the *Annual Report* and *Monetary Bulletin* provide contact information for the CBI that includes e-mail address, telephone number, facsimile number, and the website address for the CBI. The CBI's website presents contact information that includes the e-mail address, telephone number, and facsimile number. The SD staff respond promptly to all users' queries, when received.

### *5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

A list of publications is shown on the CBI's website. The publications are available free of charge.

Table V. DQAF (July 2003): Summary of Results for Monetary Statistics  
*Compiling Agency: Central Bank of Iceland*

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
<b>0. Prerequisites of quality</b>						
0.1 Legal and institutional environment		X	X			Barely enough staff resources to compile monetary statistics; turnover in the staff over the years; beyond on-the-job training, no formal training facilities within the CBI to provide additional training.
0.2 Resources						No user advisory group; no regular user meetings.
0.3 Relevance			X			
0.4 Other quality management		X				
<b>1. Assurances of integrity</b>						
1.1 Professionalism		X	X			Advance notice is not given to the public of major changes in methodology, source data, and statistical techniques.
1.2 Transparency						
1.3 Ethical standards		X				
<b>2. Methodological soundness</b>						
2.1 Concepts and definitions			X			Monetary aggregates include deposits of central government and foreign sectors.
2.2 Scope		X				In the Accounts of the CBI, fixed assets are off balance sheet.
2.3 Classification/sectorization			X			In the Accounts of DMBs, financial derivatives are classified as off-balance-sheet items; and claims on and deposits of nonfinancial public corporations are indistinguishably included as part of <i>treasury and government institutions</i> .
2.4 Basis for recording			X			In the Accounts of DMBs, majority of loans is shown net of provisions; and not all securities are valued in market prices.
<b>3. Accuracy and reliability</b>						
3.1 Source data			X			Monthly reports of DMBs do not provide data on financial derivatives because the DMBs treat financial derivatives as off-balance-sheet items.
3.2 Assessment and validation of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				

Table V. DQAF (July 2003): Summary of Results for Monetary Statistics  
*Compiling Agency: Central Bank of Iceland*

Element		NA	Assessment				Comments
			O	LO	LNO	NO	
<b>4. Serviceability</b>							
4.1	Periodicity and timeliness		X				Historical data on major aggregates from the Accounts of DMBs and of the Banking System are not consistent with the current data disseminated.
4.2	Consistency			X			Data discrepancies exist between monetary statistics and balance of payments statistics (international investment positions) and between monetary statistics and government finance statistics.
4.3	Revision policy and practice			X			There is no formal revision policy. Revised data are not indicated by appropriate footnotes, and the fact that the December data may be subject to revision is not published. No studies and analyses are carried out routinely on the revisions.
<b>5. Accessibility</b>							
5.1	Data accessibility			X			The existing layout of tables does not provide sufficient information to derive Accounts of the Banking System from the Accounts of the CBI and DMBs. The CBI's website shows two calendars for data release—ARC and statistics calendar. Data are sent to a selected group of users on the date specified in the ARC, but are posted on the CBI's website a few days later according to the statistics calendar.
5.2	Metadata accessibility				X		Almost no methodological notes are available to public (although brief documentation exists in the IMF's DSBB in the form of SDDS metadata; but the DSBB is not hyperlinked from the CBI's website).
5.3	Assistance to users		X				There are no information materials to inform users about monetary statistics.

## VI. BALANCE OF PAYMENTS STATISTICS

### 0. Prerequisites of quality

#### 0.1 *Legal and institutional environment*

##### 0.1.1 *The responsibility for collecting, processing, and disseminating the statistics is clearly specified*

Quarterly and annual balance of payments data are compiled and disseminated under the responsibility of the Balance of Payments Division of the CBI.

The compilation and publication of the balance of payments data are based on (1) the terms and conditions of the 2001 *Act on Central Bank of Iceland (Act No. 36/2001)* adopted by the Parliament on May 18, 2001) (*CBI Act*) and (2) *the Exchange Act* (No. 87/1992). The two laws are described below.

The 2001 *CBI Act* clearly stipulates the responsibility of the CBI to collect, compile, and disseminate balance of payments statistics. First, it states that, in order to fulfill its main objectives to maintain price stability (described in Articles 3 and 4), the CBI can directly collect information from (1) institutions engaging in transactions with the CBI, (2) institutions and firms engaged in the payments systems, and (3) other firms or institutions subject to official supervision from the CBI on the basis of the *Act on the Official Supervision of Financial Activities (Act No. 87/1998)*. In other words, the *CBI Act* provides the CBI with the authority to collect balance of payments input data from deposit institutions (commercial banks, savings banks, branches of foreign deposit institutions, and other institutions and companies authorized by law to accept deposits from the public for safe keeping and earning of interest) as well as from other credit institutions and securities companies. Second, Article 30 stipulates that the CBI has the responsibility to produce on a regular basis balance of payments data and forecast. While the law does not specify the frequency and timeliness for disseminating the balance of payments data, there is a sound tradition to disseminate quarterly and annual balance of payments statistics on a regular basis.

As will be explained further in the report, a main data source for the balance of payments statistics is the International Transaction Reporting System (ITRS), which covers crossborder foreign currency transactions involving domestic banks. The framework for providing the CBI with ITRS data is set by the *Exchange Act*. Article 11 obliges domestic entities involved in foreign exchange transaction via domestic banks to report this information to the CBI, via the domestic banks, for statistical purposes. The article also stipulates that the CBI may issue specific regulations to address the coverage of foreign exchange transactions, such as the obligation to register and notify about accounts held by residents with foreign banks. Based on this article, the CBI has issued the *Rules on the Obligation to Provide Information in respect of Foreign Exchange Transactions and Cross-border Capital Movements, No. 13, of January 16, 1995*. This rule stipulates in Article 1 that “In order for the Central Bank of

Iceland to be able to perform its mandatory regulatory functions and compilation of economic statistics, cf. Articles 10 and 11 of *Act No. 87/1992*, on Foreign Exchange, and Articles 44 of the regulation No. 470/1986, on the Central Bank of Iceland, it is obligatory to provide the Bank with all information regarding foreign exchange transactions and other aspects of the balance of payments and external position. In this respect the Central Bank has the same rights as SI and the same penalties apply to nonfulfillment of the obligation to provide information.” Further, Article 4 stipulates that “Individuals and legal persons shall give notification of the opening of accounts with nonresident banks. Legal persons shall submit a monthly statement of balances on such accounts, whereas individuals shall submit an annual statement of balances at the end of the year.”

In its capacity of being the institution in charge of managing the external debt of the government of Iceland, the CBI collects and compiles data on the external borrowing of the government, which are used to compile the related balance of payments financial flows and income accounts.

The MOF disseminates on its website the annual current account statistics compiled by the CBI.

The *Act on Statistics Iceland* No. 24/1913 (amended by *Acts No. 71/1919*, *No. 91/1991*, and *No. 83/1997*) stipulates that SI is the institution responsible for producing data on external trade. Trade data are compiled on the basis of monthly reports from the Customs Administration (CA) on goods crossing the border after they have been cleared by the CA.

#### *0.1.2 Data sharing and coordination among data-producing agencies are adequate*

Although the above legislation does not include formal requirements on the coordination between the CBI, SI, and the CA, informal arrangements are in place to ensure effective sharing of data between the different agencies. Moreover, provisions to ensure coordination between the SI and the CA are set in Article 146 of the *Customs Act No. 96/1987* stating that the minister of commerce must coordinate with SI on the set of information requested in the Customs declaration as well as other records to be provided by the CA. Finally, the CBI and SI have a formal task force on the development of service statistics, and there is a formal agreement on the exchange of raw data for balance of payments purposes.

SI and CA meet monthly to ensure the proper flow of information needed to compile trade statistics. Informal meetings and ongoing contacts between SI and the CBI ensure the timely provision of trade statistics for the compilation of the goods item. SI produces trade statistics according to its own timetable and releases an update and revision calendar to ensure the proper data flow to the CBI on a monthly basis.

#### *0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only*

Article 35 of the 2001 *CBI Act* stipulates that employees of the CBI are bound by secrecy concerning the affairs of the customers of the bank, the affairs of the bank, itself, and other

matters of which they gain knowledge in the course of their work and which should be kept secret according to the law or the nature of the case. The duty secrecy shall be maintained even after the employment ceases.

Article 12 of the *Foreign Exchange Act* stipulates that any persons charged with the implementation of the *Act* shall be bound to secrecy as regards the conditions pertaining to individual clients and other facts of which they may acquire knowledge in the course of performing their duties and which are confidential according to law or the nature of the matter. Again, this provision applies even after the employment relation ceases.

Additional provisions ensuring the confidentiality of the data collected for statistical (and other) purposes is present in the CBI's internal staff regulation and ethical rules. Access to individual data is restricted to the staff working in the balance of payments division. The premise of the CBI is permanently guarded to avoid the entrance of unauthorized persons, and the data production and dissemination environment and databases are secured to avoid unauthorized access and manipulation of individual data. Individual data are regarded as confidential during the complete cycle of the data production process, including updates and revisions, until the individual records are stored with the CBI's archives after the data are considered as final.

The data provided through direct reporting from companies (which may include high-value numbers) are disseminated as part of the balance of payments statistics with the consent of the reporting entity. Confidential information from individual respondents is never disseminated; only aggregate data of balance of payments items are disseminated according to international standards.

#### *0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response*

Both the 2001 *CBI Act* and the *Act on Foreign Exchange* provide legal authority to the CBI to sanction nonreporting, late reporting, or misreporting.

Article 37 of the 2001 *CBI Act* stipulates that the CBI is authorized to impose penalties in the form of per diem sanctions upon parties that neglect to provide information to the bank which the bank is entitled to collect on the basis of the *Act*, or that provide deliberately misleading information to the CBI. The Board of Governors of the CBI lays down rules on these sanctions, which shall be agreed by the Supervisory Board. This provision represents a substantial improvement in terms of the CBI's authority to directly impose sanctions for nonreporting or misreporting compared with the previous version of the *Act*, where the CBI was requested to consult with the MOF.

Similarly, Article 13 of the *Foreign Exchange Act* states that violation of the provisions of the *Act* (including in the field of mandatory data reporting for statistical purposes) may be



punishable with fines or custody. In case of violations on behalf of legal persons, the penalties may be imposed on their management, and the legal person may be fined and its legal right to operate withdrawn. Moreover, violations may be punishable under the *Criminal Act*.

The CBI is granted the legal mandate to impose fines in case of nonresponse from domestic entities involved in crossborder transactions settled in foreign accounts. Nevertheless, the CBI strives to foster a cooperative environment through visits to the major enterprises, frequent phone contact, and a variety of electronic reporting options.

*Recommendation: Measures should be taken to ensure that respondents fully understand the legal framework following which the surveys are conducted including the clear provision for confidentiality. Moreover, the legal authority to collect data for statistical purposes should be recalled upfront in each reporting form, in particular regarding the direct reporting companies.*

## **0.2 Resources**

### *0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs*

Four staff members (including the manager) are allocated to the Balance of Payments Division of the SD of the CBI. All staff have adequate education at the university level, with specializations in an economic field.

These staff members have to deal with a very comprehensive set of external sector statistics, including balance of payments, the international investment position, external debt, and the reserve template on the foreign currency liquidity. As a subscriber of the SDDS and also by virtue of participating in a number of European statistics committees (generating a considerable amount of additional data requests), the division faces a very heavy workload in terms of frequency and timeliness.

On balance, it appears that the division is under considerable stress just to cope with the regular statistical production. Coping with the regular tasks is significantly difficult if any member of the division is unable to participate in the data production cycle (for instance, because he/she attends training courses or is on leave). It has to be considered that the statistical work includes dealing with a considerable number of ITRS reports, in addition to sending, checking, and validating the responses sent by the various direct reporting companies and ad hoc surveys. Moreover, the ITRS system's difficulties to accurately record all crossborder transactions on a gross basis already pose an additional burden in terms of careful checking and follow-up with reporters. The time left to focus on other activities not immediately linked to the daily statistical production is very limited. Moreover, discussion with the SI revealed that the External Trade Department of SI, consisting of five people (including the manager), also faces a very heavy workload due to limited resources.

*Recommendation: Consideration should be given to reassessing the current level of staff resources. Several options are available to strengthen the staff resources available to deal with the balance of payments and trade statistics tasks, including a more effective sharing of the work with other departments within the CBI (in particular the Economic and Monetary Departments) and SI, the increase in staff resources, and the continued participation in international seminars and courses. Addressing the exact balance between these different options should be a priority in the near future.*

In light of the problems faced by the ITRS system to accurately capture the crossborder transactions, a task force was set up in early 2004 to formulate recommendations on a new data collection system, with particular focus on the services account. Although the task force will provide the CBI and SI with very important guidelines that may assist them in changing the data collection system, there are limited resources to be allocated to this project.

All the staff in the SD of the CBI is provided with up-to-date computers, and the Information Department of the CBI maintains a very advanced mainframe system for the electronic data sharing and database management. The salaries are believed to attract high-quality employees.

#### *0.2.2 Measures to ensure efficient use of resources are implemented*

Through the Human Resources Division of the Operations Department, and in liaison with the managers of the SD, the CBI fosters a culture of efficient use of the resources. Staff members are involved in several informal meetings on the procedures and processes in place at the CBI.

Efficient use of the resources is monitored on an ongoing basis through regular meetings before and after the data production cycle to deal with the problems identified in the process of compiling and disseminating data. As a result of the process review, the CBI has started to reflect on changing the ITRS data collection system, which is currently the cornerstone of the balance of payments source data, and designing a new system.

### **0.3 Relevance**

#### *0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored*

No formal users' Advisory Committee has been established to monitor the relevance of the balance of payments statistics or to provide the CBI with guidelines on future developments in terms of new data, breakdowns, frequency and timeliness issues, or consistency. However, the CBI is in constant contact with external users through ongoing requests addressed to the Balance of Payments Department on issues related to data quality and clarifications on the methodology. In the course of this ongoing discussion with users from both the official and private sectors, new needs have been identified, which are difficult to cover by relying on an ITRS system. They include the importance of more accurate data on the service account as well as a greater emphasis on the geographical breakdown by main trading partner. As a

result of this debate, the CBI (together with SI) has decided to launch a dedicated task force that will advise on possible improvements in this area, including a proposal on a new data collection system and a different sharing of work between the CBI and SI.

Moreover, the CBI's SD is a member of a number of European statistics committees and working groups, which exposes the CBI to a wide range of discussions on the perceived needs of users in the field of balance of payments.

*Recommendation: The CBI is encouraged to establish a formal users' group, including representatives of the private and academic sector, which may assist in assessing the evolving needs in terms of balance of payments statistics and define plans and priorities for developing new statistics in this field*

#### **0.4 Other quality management**

##### *0.4.1 Processes are in place to focus on quality*

Management is sensitive to the issue of data quality in the field of balance of payments, and provides the Board of the CBI with useful input to assess the challenges faced by the current data collection system, including information on the level and sign of errors and omissions (E&O) as well as the level and size of revisions. Despite the shared recognition that quality builds trust and thus is a cornerstone of statistical work, more ambitious programs in the field of assessing and improving data quality are severely constrained by the available staff resources.

Against this background, one way the CBI managers deal with quality (in light of the small size of the SD) is by providing the staff with the most up-to-date computer systems and designing quality checking and reporting systems in the information technology (IT) systems used to collect and validate the data online.

##### *0.4.2 Processes are in place to monitor the quality of the statistical program*

The complete data production cycle is monitored, starting from the provision of balance of payments codes by domestic banks in the ITRS system and up to the validation of the final aggregates. Whenever data are obtained from parallel sources (such as the ITRS and direct reporting), the two time series are compared and proper statistical analyses are conducted to check that the source finally used to compile the data provides the best coverage. The consistency with other datasets is monitored occasionally, although in most cases the data sources are the same.

##### *0.4.3 Processes are in place to deal with quality considerations in planning the statistical program*

Despite the constraints in the number of staff resources allocated to the production of balance of payments statistics, the CBI's SD is involved in several formal and informal discussions on improving the current processes and procedures. An important materialization of these

discussions is the launching of the task force on the revision of the balance of payments data collection system (which includes members from the CBI and SI), expected to identify the problems of relying on the ITRS system and suggest a new data collection approach. This internal debate has also led to the implementation of an ad hoc survey of the IT industry's exports.

## **1. Assurances of integrity**

### **1.1 Professionalism**

#### *1.1.1 Statistics are produced on an impartial basis*

The 2001 *CBI Act* stresses the status of the CBI as an independent institution owned by the state whose governance is only subject to the provisions of the *Act*. The CBI is given the authority to issue rules needed for the accomplishment of the tasks it is assigned, which by extension can be understood as covering the statistical needs. However, the 2001 *CBI Act* does not explicitly state that the CBI is independent in compiling the statistics it needs to perform the institutional tasks. Discussions with the staff highlighted that the CBI enjoys total independence from political pressure, and compiles its statistics only on the base of professional considerations.

Staff are recruited and promoted based on relevant aptitude and/or expertise in statistics, and ongoing education is promoted actively.

#### *1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations*

It is understood that the independence granted to the CBI by the 2001 *CBI Act* to accomplish its tasks extends to the statistics it compiles. The CBI has inherited a balance of payments collection system centered on the ITRS due to the exchange control system, which was suspended in 1995. Ever since then, the CBI has designed a number of alternative sources for collecting data, spanning from direct reporting to dedicated surveys. In addition, the CBI, together with SI, has started to consider the necessity to move to a new data collection system, since the ability of the ITRS to cover all crossborder transactions is being challenged by the openness of the economy.

The CBI places considerable importance on allowing all the users to access the data it compiles by posting a comprehensive set of data on the CBI's external website, including the dissemination of historical data.

*1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics*

Staff in the CBI's SD and in other areas put considerable emphasis on monitoring the coverage of statistics by the press, and maintains close relationships with the press community specialized in economic reviews to explain the content and analytical value of the statistics it disseminates. In some instances, the CBI has taken official steps in providing additional comments clarifying the reason behind substantial revisions of the preliminary data.

**1.2 Transparency**

*1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public*

The 2001 *CBI Act* and the 1992 *Foreign Exchange Law*, which include all references to the CBI's responsibility to collect, compile, and disseminate balance of payments statistics, are available at the CBI's external website, including a complete translation in English. The law also specifies the confidentiality regime and the penalties for nonresponse, late response, or misreporting.

In addition, the 2001/3 issue of the *Monetary Bulletin* included dedicated articles specifying the new *CBI Act*, which includes references to its authority to collect data for statistical purposes.

*1.2.2 Internal governmental access to statistics prior to their release is publicly identified*

One day prior to the release, the CBI's Board of Governors is debriefed about the balance of payments data updates and revisions to prepare for the regular meeting with the media on the release day. However, there is no possibility to change the data. Although there is no external government access to the balance of payment statistics compiled by the CBI prior to release, this is not clearly stated in any of the CBI's online or paper publications. All data are released simultaneously to all public and private users on the CBI's external website.

*1.2.3 Products of statistical agencies/units are clearly identified as such*

All statistical publications compiled and disseminated by the CBI are clearly identified as products of the CBI. The CBI's external website and the regular paper publications inform users which data are compiled directly by the CBI itself and which are obtained from external sources. Moreover, the annual balance of payments statistics disseminated by the MOF both online on the external website and as paper publications quote the CBI as the institution in charge of compiling and disseminating data on the external sector.

#### *1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques*

Advance notice to explain major methodological changes is not provided as a rule online or in paper publications. However, the CBI publishes occasionally dedicated articles explaining the reason behind the decision to develop a new data collection approach for certain items in which it includes detailed explanations on the methodology, source data, and statistical techniques. As an example, the CBI has published in the former version of the monthly bulletin (*Hagtölur mánaðarins*) and on the CBI's website a dedicated analysis on the impact of collecting data on exports of IT services through sampling the most important enterprises, and the impact in terms of breaks in the disseminated series.

*Recommendation: Advance notice should be given to the public on methodological changes. The advance notice should include an explanation of the new methodology and of the reasons that have led to adopting it, and an assessment of the likely impact on the data (including the estimation of consistent historic data, if available).*

### **1.3 Ethical standards**

#### *1.3.1 Guidelines for staff behavior are in place and are well known to the staff*

At the inception of the employment, the staff members of the CBI are provided with a set of guidelines and ethical principles governing the conduct of all CBI staff members in performing their tasks. The guidelines and principles cover aspects such as the independence from external influence and the obligation to treat all the information gathered in the course of their tasks under strict confidentiality. The general public regards the CBI as an institution that operates according to the highest professional and ethical standards in the country.

## **2. Methodological soundness**

### **2.1 Concepts and definitions**

#### *2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices*

The balance of payments statement compiled and disseminated by the CBI is generally consistent with the guidelines outlined in the *BPM5*. Current, capital, and financial accounts of the balance of payments are defined according to the *BPM5* guidelines, and transactions in assets and liabilities are recorded separately. Resident institutional units are defined in conformity with *BPM5* as those that have a center of economic interest in Iceland. As a member of the EEA and by virtue of agreements with Eurostat, Iceland additionally implements the European statistical standards.

## **2.2 Scope**

### *2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices*

While the data collection system and legal framework provide for the coverage of all resident-nonresident transactions in principle, reliance on the ITRS poses some practical difficulties to ensure full coverage in all instances. For instance, compensation of employees is net of withholding taxes, and certain settlements reported by domestic entities via the banks include both the goods and services element in the payment, even if the ITRS guidelines specify that reporting should be done on a gross basis. These are challenges commonly faced by any country relying on an ITRS system for the compilation of balance of payments statistics.

All resident institutional units engaged in transactions with nonresidents are covered, including the transactions of domestic fishing fleets operating in domestic and international waters. Proper regulations ensure that in principle domestic agents involved in crossborder transactions and operating bank accounts abroad are also included, although this may be difficult to verify in all circumstances.

The foreign direct investments include all short- and long-term intercompany claims and liabilities on a directional basis.

## **2.3 Classification/sectorization**

### *2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices*

The classification and sectorization used in collecting and compiling the balance of payments statistics are in line with the *BPM5*, but not published in full detail on the CBI's website.

Within the income item, dividends are not shown separately for income on direct investments and income on portfolio investments.

Contrary to *BPM5* guidelines, loan transactions of the banking sector are not classified separately from the currency and deposit transactions of this sector.

*Recommendation: Direct investment income on equity and portfolio investments should be shown separately in the income account. The mission also recommends that loans be shown separately from currency, and deposits.*

In line with the *BPM5* standards, the financial derivatives item is shown separately from the portfolio investments, but it is shown on a net basis and, on the basis of other data disseminated by the CBI on net purchase of foreign securities, it appears that the actual values are included under portfolio investments.

## **2.4 Basis for recording**

### *2.4.1 Market prices are used to value flows and stocks*

In general, Iceland's balance of payments transactions are valued at market prices.

Monetary gold and financial instruments' stock and flows are valued at market prices, except, for the latter, when they involve nontradable financial instruments (in which case they are valued at nominal value).

In line with the *BPM5* standards, SI compiles data on merchandise trade exports and imports (which are used to compile the trade in goods item in the balance of payments) on a f.o.b. basis. SI receives the data from the CA, which converts the trade denominated in foreign currency into national currency using the selling rate for imports and the purchase rate for exports. The CBI adjusts the data by using the buying rate for both imports and exports, using the monthly average exchange rate or the shortest period applicable.

The stock of foreign direct investments abroad and in the reporting economy is valued at book value. The CBI staff views the market value as very difficult to apply in the case of inward foreign direct investments (FDI) (there are relatively few FDI Icelandic listed companies) and not desirable in case of volatility of the market.

### *2.4.2 Recording is done on an accrual basis*

While recording on an accrual basis is the general principle guiding the collection and compilation of the balance of payments data in Iceland, reliance on the ITRS and other data sources limits the compilers' ability to fully implement this principle.

Trade in goods is compiled on the basis of the trade statistics provided by SI. SI records the transactions when the goods are cleared by the CA, which is only a proxy of the timing when the goods are actually recorded in the importer's books.

In the current data collection system more than 50 percent of the trade in services data are collected through the ITRS, which recognizes the transactions when the settlement is done rather than when the services are delivered or received. Anecdotal evidence points to a frequent time lag between the two, which also results in underestimating trade credits.

Interest payments on short- and long-term debt are calculated on a due-for-payment basis, including when occurring between affiliated enterprises. As noted in the remaining part of this document, the CBI maintains a detailed database on external debt, with complete information on each loan and debt securities borrowing. This would allow the CBI to calculate interest payments on external debt on an accrual basis, at least for the long-term debt. The CBI is planning to include the recording of interest payments on an accrual basis towards the end of 2005. On the contrary, interest receipts from holdings in foreign securities are compiled on an accrual basis and are based on the stock data.



Data on domestic banks financial flows and related income are calculated on an accrual basis from monthly reports on the banks' external assets and liabilities, broken down by instrument and currency of denomination of the underlying instrument.

*The mission welcomes the CBI's plans to compile income payments on external liabilities (debt securities, within portfolio investments, and other investments) on an accrual basis. Moving towards full compliance with the BPM5 in this aspect is facilitated by the fact that the CBI maintains a comprehensive database on external debt with original maturity of more than one year.*

*2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices*

Grossing and netting procedures are consistent with *BPM5*. The current and capital account transactions are recorded on a gross basis while the financial account transactions are recorded on a net basis, separately for the individual assets and liabilities component. The only exception is the item financial derivatives, which is presented as net between change in assets and liabilities within the financial account.

In line with *BPM5* guidelines, processing for goods is recorded on a gross basis, and goods for repairs are recorded on a net basis.

### **3. Accuracy and reliability**

#### **3.1 Source data**

*3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions*

The balance of payments data collection system in Iceland is based on a number of sources. The ITRS is a main data source for the trade in services (more than 50 percent of data collected); direct reporting from large companies provides information on transport, travel, and other services. Other current account items (goods, income, and transfers) are collected based on direct reporting from SI, commercial banks, and central government. The ITRS and direct reports are used to compute preliminary estimates for the financial account, which are substituted with the results of annual surveys for FDI, CPIS, and foreign long-term borrowing. More detailed descriptions of the data collection for each item are provided below.

Merchandise trade data are collected by SI based on monthly reports of the CA.

Data on exports and imports of transportation services are directly collected from quarterly reports filled by the two major domestic shipping companies and one airline company. These reports include a breakdown between freight and passengers, other

(than transportation) services, and stock of foreign assets and liabilities broken down by instrument and original maturity.

Data on exports and imports of travel services are provided on a monthly basis by the two credit card companies operating in Iceland.

Data on exports of IT services are provided by the (recognized) IT companies on an annual basis.

Data on the operations of the military base in Iceland are provided on a quarterly basis by the Ministry of Foreign Affairs, and are used to calculate the exports of services and compensation to Icelandic employees.

Investment income data are collected on the basis of quarterly direct reporting from banks, the annual survey of FDI companies abroad and in the reporting economy, the annual survey on the main portfolio investors, the annual survey on external borrowers (private and public), and the monthly reports on the level and composition of the CBI's reserve assets and other balance sheet items.

Data on the operations of embassies and other diplomatic bodies abroad are provided by the MOF on a quarterly basis.

Foreign direct investments abroad and in Iceland are collected annually through separate surveys. The forms are sent to a list of companies that is based on a business register that is updated on the basis of the ITRS records, the information stored at the Ministry of Commerce on new foreign direct investors,<sup>42</sup> and the media. A similar form is sent to the three major domestic banks and includes a special field to distinguish the permanent debt stocks and flows.

Data on crossborder transactions in domestic securities are collected on a monthly basis from domestic securities dealers.<sup>43</sup> Data on the issuance of domestic securities abroad bought by nonresidents in the primary market are collected through the annual survey on external debt. Because relying on domestic sources cannot ensure full coverage of the (secondary market) transactions of domestic securities, the CBI uses the results of the IMF's Coordinated Portfolio Investment Survey (CPIS) to assess the

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<sup>42</sup> By law, new investors in Iceland must provide the Ministry of Commerce with information on the investment and the sector and must describe their plans on future investments.

<sup>43</sup> During the early 1990s it was compulsory that domestic securities should be traded through domestic dealers. This limitation was abolished in 1995.

accuracy of the data compiled on the basis of the securities' dealers report and the ITRS.<sup>44</sup>

Data on transactions of domestic entities in foreign securities are collected on a monthly basis whereas data on the stock of foreign securities are collected on a yearly basis in the frame of the CPIS. Both surveys address the same list of domestic entities (mainly banks, mutual funds, pension funds, insurance, and nonfinancial companies) provided by the CBI's Financial Stability Department.

Annual data on the external borrowing of domestic public and private entities with original maturity exceeding one year are collected on a loan-by-loan and debt security-by-debt security basis by the CBI.

Domestic banks report on the stock of external assets and liabilities on a monthly basis. This information is provided with a breakdown by instrument and currency, which is used to calculate the financial flows and related income receipts (on an accrual basis).

Data on the level and composition of reserve assets and other balance sheet items are reported on a monthly basis by the Accounting Department of the CBI.

To reduce the ITRS reporting burden, the CBI has introduced a simplification threshold for transactions below ISK 400,000 in 1995 that was raised to 700,000 in 1998. The average amount of transactions below the simplification threshold during the period 1998–2004 has been 0.7 percent of the total balance of payments transactions. The domestic banks are required to request from clients an identification number, issued by the immigration and census office to any person living in Iceland. New clients without this number would be immediately issued a new number. Foreign citizens staying in Iceland for more than one year would need a permanent address in Iceland and have an Icelandic identification number. In case of nonpermanent resident clients, the banks would request information on the legal address, which would be used as a proxy to define the residence/nonresidence status of the account holder.

Discussions with the staff indicated that the data derived from the ITRS system may suffer from the recurrent problems that are experienced in collecting balance of payments data based on domestic bank settlements. These problems include the misclassification of items by banks, the netting of transactions by enterprises that have transactions in both directions,

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<sup>44</sup> It is important to note that the survey form sent to domestic dealers refers to the secondary market transaction according to directional principle, e.g., transaction in securities issued in Iceland. Therefore, CBI compilers need to deduct the nonresidents' holdings of securities issued by nonresidents in Iceland in the balance of payments compilation.

and the netting in the reports of companies that deduct the withholding tax from the wages and salaries paid to nonresident workers (so that only the payment net of the tax is recorded).

The ITRS system was designed in the context of the (discontinued) foreign exchange control system. Ever since this system was abolished, and even more in recent years, the Icelandic economy has undergone dramatic structural transformation. A number of developments point to this, such as the liberalization of international transactions in securities, the consequent globalization of the financial market, the impetus experienced in foreign direct investments abroad and in Iceland (which make it more convenient for affiliated enterprises to merge the treasury management by using common accounts in foreign banks and execute settlements after netting intra-group claims and liabilities), and the sizeable development of the services industry (which cannot easily rely on the custom as a data source).

Although anecdotal evidence, based on partial ITRS data and discussion with the business community, suggests that domestic companies still have a strong preference for using domestic banks, the CBI staff expects that the transformation of the economy may pose considerable challenges to the ITRS in the near future.<sup>45 46</sup> To assess the impact of this problem on the accuracy and coverage of the ITRS, identify possible vulnerabilities, and suggest new approaches to collect the balance of payments data, a Task Force on Services and the Future of the Balance of Payments Collection System (Task Force) has been established between the CBI and SI. The Task Force is expected to provide its recommendations by the end of 2005. Another argument that provides stimulus in this reflection on redesigning the data collection system is the increased demand from users for compiling a breakdown of foreign transactions into main trading partners as well as a more detailed breakdown of the services account, both of which are very difficult to obtain from the ITRS unless parallel sources are developed or the ITRS itself is revised.

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<sup>45</sup> As described earlier, the Balance of Payments Division of the CBI monitors on a regular basis the evolution of the E&O in the balance of payments, and informs the CBI's Board about their evolution. Compared to other industrial countries, the absolute level of E&O in percentage of the GDP in Iceland, of about 1.1 percent, is not high. However, discussions with CBI staff indicated that in the aftermath of the abolition of the foreign exchange controls, there was a sizeable build-up of unrecorded domestic holdings in foreign banks, in particular in international financial centers (such as Luxembourg), which gave origin to important reverse transactions afterwards.

<sup>46</sup> One has to bear in mind that a consequence of the increase in crossborder transactions is that considerable processing costs are imposed on the banks in an ITRS system which result in a likely decline in the accuracy of the reports due to incorrect codification or the use of residual codes. While this problem is common to all economies running an ITRS, it is particularly evident in times of structural transformation in and opening of the economy.

*3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required*

The source data are broadly consistent with the definitions, scope, and classification recommended in the *BPM5*.

Data provided through the ITRS are compiled according to a simplified breakdown into services, and do not distinguish direct versus portfolio investments in equity stock. Moreover, the ITRS data do not distinguish between debt security interest and debt security repayment. Banks are provided with comprehensive instructions on how to compile the ITRS.

Trade statistics invoiced in foreign currencies, which are used to compile the goods item in the balance of payments, use the selling exchange rate for imports and the buying exchange rate for exports. The Balance of Payments Division adjusts the data by using the buying exchange rate for both, instead of the midpoint exchange rate between buying and selling rates, as recommended by the *BPM5*.

A major shortcoming in the current data source is that domestic banks do not classify the (value of the) holdings in financial derivative instruments as an on-balance sheet item. As the CBI staff is aware that domestic banks are heavily involved in currency swaps and other financial derivatives, recording these contracts as off-balance sheet items results in a total lack of data at the balance of payments level.

Moreover, domestic currency deposits held by nonbank nonresidents in domestic banks are not included in the monthly reports provided by banks in the frame of the *2001 Foreign Exchange Act* data reporting obligations.

Finally, contrary to *BPM5* recommendations, data on foreign direct investments do not identify permanent debt (i.e., subordinated capital loan) between affiliated banks separately from other claims and liabilities.

*Recommendation: Plans should be established for the inclusion of financial derivatives as on-balance sheet items to be reported by banks for balance of payments purposes. The CBI should monitor on an ongoing basis the evolution of the financial market and identify if the nonbank sector engages in transactions in financial derivatives. The mission also strongly encourages the CBI to classify deposits held by nonresident nonbanks in domestic currency with domestic banks as external liabilities. Finally, the mission recommends that data on permanent debt between affiliated banks be collected and included as part of the foreign direct investments.*

*3.1.3 Source data are timely*

While the data collected for balance of payments compilation purposes are in general timely, one exception refers to the data obtained from the annual surveys on foreign direct

investments abroad and in Iceland. In a number of instances, data related to major players have been late, which resulted in sizeable revisions on both yearly and related quarterly data. In addition to being vulnerable to the late reporting of a few major players, CBI staff indicated that the amount of processing required to meet the publicized deadlines results in considerable stress and has led in some instances to disseminating wrong data.

*Recommendation: Efforts should be made to improve the timeliness for reporting balance of payments data.*

### **3.2 Assessment and validation of source data**

*3.2.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes*

The raw trade data, sent by the CA to the SI, are subject to thorough validation and consistency checks, both automatic and manual. Data compiled on the basis of the ITRS are highly automated, and data collection and processing include validation checks at all stages of the reporting, including error messages requesting that the wrong data be corrected. The ITRS algorithm includes the identification of outliers, which are checked with respondents, and the assessment of temporal consistency. The ITRS and the parallel data sources are contrasted to check for internal and external consistency. Implausible codes are flagged for possible follow up.

### **3.3 Statistical techniques**

*3.3.1 Data compilation employs sound statistical techniques to deal with data sources*

All the excel spreadsheets and the relational databases used to compile the balance of payments statistics utilize the IMF standard codes and descriptors to minimize problems in the classification of the various items. In case the ITRS source data indicate an evident misrecording problem, CBI staff revises the data before actually compiling the aggregates. In case of nonresponse or late response from some important player, estimation techniques based on the previously reported value are used.

*3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques*

The CA collects and compiles trade input data both on a f.o.b./f.o.b. and a cost, insurance, and freight (c.i.f.)/f.o.b. basis. No adjustments are done to calculate the tax withheld on the income payments from foreign bonds held by residents. Shuttle trade is not believed to be significant and is not estimated. Some reconciliation of the foreign direct investments data has been done on an occasional basis by comparing bilateral data presented in the context of the regular meeting of the balance of payments compilers of the Nordic countries.

### **3.4 Assessment and validation of intermediate data and statistical outputs**

#### *3.4.1 Intermediate results are validated against other information where applicable*

Data on foreign direct investments abroad and in Iceland compiled on the basis of the annual survey are routinely checked against the information disseminated by the specialized press. In case of new transactions, which identify an entity not included in the Foreign Direct Investment Business Register, the staff of the CBI's Balance of Payments Division immediately contacts the entity and updates the business register accordingly. The same monitoring occurs regarding the verification of the coverage of the External Borrowing Business Register. CBI staff believes that, given the size of the country and the availability of public information on the economic developments in Iceland, the business registers have very good coverage.

#### *3.4.2 Statistical discrepancies in intermediate data are assessed and investigated*

Data on financial transactions, stocks, and related income are routinely assessed, possibly in the original currency. For instance, if the difference between change in stocks and financial flows exceeds 10 percent of the last period stock for large numbers, the problem is assessed thoroughly. If this occurs on aggregate for one item of the balance of payments and international investment positions, the problem may be brought to the attention of the CBI Board, together with an explanation on the possible sources for the observed difference between change in stocks and financial flows.

#### *3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated*

The CBI's Balance of Payments Division monitors regularly the size, sign, and dynamics of the E&O. The results of the regular investigation on this item are provided to the CBI's Board. Also, the difference between the ITRS data and the data collected from any parallel source (direct reporting and surveys) is monitored to assess possible problems in coverage, valuation, or timing. Detailed reports on these assessments are maintained at the CBI's Balance of Payments Division, including very clear charts and graphs.

### **3.5 Revision studies**

#### *3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3)*

Revisions are assessed regularly, with special focus on the annual surveys on foreign direct investments as they impact the quarterly financial and income account for the reference year. However, most of revisions are due to late responses or misreporting, and the analysis of the reason behind revisions is confined to assess the understanding of the reporters of his/her obligation to report data for statistical purposes as well as whether new respondents have replaced the previous one in the reporting company.

When the new survey on exports and imports of IT services was introduced, a detailed analysis of the revision in the services account was conducted. This led to the decision to define some methodology to backcast the data.

#### **4. Serviceability**

##### **4.1 *Periodicity and timeliness***

###### *4.1.1 Periodicity follows dissemination standards*

The CBI disseminates the balance of payments statistics on a quarterly basis, which is in line with the requirements of the SDDS.

###### *4.1.2 Timeliness follows dissemination standards*

Quarterly balance of payments data are disseminated within 10 weeks after the end of the reference quarter. This is well within the deadline prescribed by the SDDS, which is 12 weeks.

#### **4.2 Consistency**

##### *4.2.1 Statistics are consistent within the dataset*

Quarterly and annual balance of payments statistics are produced following the same concepts, definitions, and classifications. The sum of quarterly data statistics and the annual statistics are consistent. The absolute level of the E&O as a percentage of the GDP has been within acceptable levels, at about 1.1 percent, and in line with other European countries.

No table is disseminated on a regular basis providing for reconciliation between change in stocks, transactions, exchange rate adjustments, price, and other changes.

##### *4.2.2 Statistics are consistent or reconcilable over a reasonable period of time*

Quarterly and annual balance of payments statistics are disseminated on a consistent basis from the year 1990 onwards for the main aggregates. Consistent data for detailed balance of payments categories are available upon request from the contact person from the year 1990. When a change in methodology has occurred (such as the introduction of the various direct reporting and the survey on IT exports) historical data have been estimated. Hence, there is no methodological break in the time series data disseminated by the CBI.

If important changes in the trends occur in the data released, the *Monetary Bulletin* disseminating balance of payments statistics provides complete information on the reasons explaining the changes (such as the exchange rate effect or an increase in competitiveness).



#### *4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks*

The CBI compares the balance of payments data with other datasets to check for consistency. The trade data provided by SI provide for a full reconciliation between trade statistics and the goods item in the balance of payments (after data on goods procured in ports by carrier, provided directly to the CBI, are included).

Data on the government external debt used to compile the balance of payments and GFS are obtained from the database on external debt maintained by the CBI. However, there are some inconsistencies in the external debt data of the general government disseminated by the CBI and the MOF and no explanation or reconciliation table is provided.

A revision of the source data revealed that the data on the external assets and liabilities (loans and deposits) of the banks vis-à-vis the nondomestic nonbanks sector is not consistent between balance of payments and monetary statistics. The balance of payments data appear to be sizably larger on the asset side and smaller on the liabilities side compared to monetary statistics. Discussion with CBI staff confirmed that the two datasets use the same concept of residence and the same financial instrument classification. However, these data are obtained separately from two datasets. In the case of balance of payments statistics, the input data are obtained in the frame of the monthly reports of banks following the 2001 *Foreign Exchange Act*, whereas in the case of monetary statistics the data are provided by banks based on their balance sheet items.

*Recommendation: An in-depth investigation should be made to disclose the reason for the inconsistency between the two datasets. Some discussions suggested that there may be a different definition of deposits, possibly including in the case of balance of payments statistics (and contrary to the BPM5 standards) some tradable certificates of deposit, which should be included under portfolio investments.*

### **4.3 Revision policy and practice**

#### *4.3.1 Revisions follow a regular and transparent schedule*

Revisions are introduced in the balance of payments statistics on an ongoing basis and can affect observations related to the last two or three years. In particular, revisions due to the late response or misreporting from some major players can affect the data substantially, both in terms of yearly and related quarterly data. Because in some cases manual errors have been detected in data released, the CBI has immediately issued a new press release with the correct figure, but the explanations as to the reason for the revision were unclear to users. This has been the cause of some concern from the public, who have complained about the instability of the time series.

However, this revision policy has not been made known to the public.

*Recommendation: The revision policy should include new (current and historic) data as soon as they arrive and it should be clearly stated in the statistical publications.*

#### *4.3.2 Preliminary and/or revised data are clearly identified*

The disseminated balance of payments data are clearly identified as provisional for the reference year and quarter, but no mark suggests which data may have been revised within the balance payments statements.

*Recommendation: A plan should be established to adapt the data production environment so that the revised data are clearly marked within the balance of payments statement in all statistical publications.*

#### *4.3.3 Studies and analyses of revisions are made public (see also 3.5.1)*

No studies on the size, sign, and developments over time of the revisions, including commentary on the reasons behind the observed changes, have been disseminated to the public.

*Recommendation: Subject to staff resource availability, studies and analyses on the level and direction of revisions should be conducted possibly on an annual basis and shared with the users.*

## **5. Accessibility**

### **5.1 Data accessibility**

#### *5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts)*

The balance of payments statistics are disseminated on the CBI's external website through very comprehensive, clear, and user-friendly excel tables, including consistent historical data from the year 1990 onwards. The CBI's website includes additional tables with the international investment position for the economy, the international investment position of the CBI, and the foreign position of the domestic deposit banks. It also includes additional detailed data on tourism and foreign direct investment items, with comprehensive geographic breakdown. Finally, it provides the monthly portfolio assets flow and detailed data on the purchase of domestic securities by nonresidents.

The data are also disseminated in very clear tables in the following paper publications: the *Quarterly Balance of Payments Press Release* (including some summary commentary), the *Monetary Bulletin* (including occasionally some detailed analysis), the *Economic Indicators of Iceland*, and the *Annual Report of the CBI* (including more detailed analysis).

Data are not seasonally adjusted.

The tables and explanatory text are available both in Icelandic and in English free of charge.

#### *5.1.2 Dissemination media and format are adequate*

The CBI's external website is the first means for disseminating the data. Given the high proportion of the population in Iceland having Internet access, the accessibility to the data is virtually complete. Moreover, all paper publications mentioned above are available on the CBI's external website.

The paper publications can be obtained on request from the CBI. Users can subscribe and be included in a distribution list to obtain the publications as they are released.

#### *5.1.3 Statistics are released on a preannounced schedule*

An ARC is posted on the CBI's external website, including dissemination dates for the next four quarterly releases. The release dates are qualified as "not later than." One week before the "no later than" release date, a specific date is provided.

#### *5.1.4 Statistics are made available to all users at the same time*

All balance of payments statistics and publications containing the balance of payments data and some explanatory text are released on the CBI's external website, which ensures simultaneous access by all users.

#### *5.1.5 Statistics not routinely disseminated are made available upon request*

Additional detailed balance of payments data are provided to the business community and the academic environment for research purposes. For instance, additional data on the structure and evolution of tourism in Iceland and on the exports of IT services are provided to interested parties on an ongoing basis.

### **5.2 Metadata accessibility**

#### *5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated*

Currently no documentation is available on the sources, methodology, compilation and estimation techniques supporting the collection and dissemination of balance of payments statistics. Some ad hoc information is included in some instances when new methodologies are developed to estimate certain items (for instance the survey on exports of IT services), but there is no publication that summarizes these methodological changes.

However, as an SDDS subscriber, Iceland disseminated a summary methodology on the IMF's external website. Moreover, a summary description of the balance of payments methodology is provided to the IMF, which publishes it in the *Balance of Payments Statistics Yearbook*.

*Recommendation: CBI staff is strongly encouraged to compile a comprehensive document on the data sources and methods followed in collecting and compiling balance of payments data. This document should be posted on the CBI's website and reference to it should be made in all statistical publications presenting balance of payments statistics.*

### *5.2.2 Levels of detail are adapted to the needs of the intended audience*

The balance of payments statistics follow different levels of detail, for instance, statistics of tourism in Iceland and abroad as well as foreign direct investments abroad and in Iceland, and stocks and flows with detailed geographical and sectoral breakdown.

## **5.3 Assistance to users**

### *5.3.1 Contact points for each subject field are publicized*

All publications disseminating balance of payments statistics provide users with an e-mail and telephone number, which can be used to address questions on methodology as well as request additional data. Additionally, the *Quarterly Press Release on the Balance of Payments* and the *Economic Indicators of Iceland* provide users with a contact name.

A CBI internal working arrangement provides guidelines for dealing with users' requests. This guideline stipulates that each request should be dealt with within the subsequent 24 hours. Should a CBI staff member need to consult other colleagues, the users are informed about it.

### *5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available*

There is no paper publications catalog in traditional terms; however, all publications are available online. The CBI's external website provides a full list of publications, including a search engine that can be used to select specific publications on balance of payments statistics.

Table VI. DQAF (July 2003): Summary of Results for Balance of Payments Statistics  
*Compiling Agency: Central Bank of Iceland*

Element		NA	Assessment				Comments
			O	LO	LNO	NO	
<b>0. Prerequisites of quality</b>							
0.1	Legal and institutional environment		X	X			Staff resources are barely sufficient to cope with the regular data production. There is no formal advisory group, but users' needs are monitored on an informal basis.
0.2	Resources			X			
0.3	Relevance			X			
0.4	Other quality management		X				
<b>1. Assurances of integrity</b>							
1.1	Professionalism		X				Methodological changes are commented after they occur.
1.2	Transparency			X			
1.3	Ethical standards		X				
<b>2. Methodological soundness</b>							
2.1	Concepts and definitions		X				Income on direct investment, equity investment, and portfolio investment are included in one item. Loans are not classified separately from currency and deposits.
2.2	Scope		X				
2.3	Classification/sectorization			X			
2.4	Basis for recording		X				
<b>3. Accuracy and reliability</b>							
3.1	Source data			X			Data on financial derivatives held by banks are not available as on-balance sheet item. External assets and liabilities between banks and nonbanks exclude domestic currency positions. Permanent debt between affiliated banks is not identified. Late responses are frequent in the direct reporting population.
3.2	Assessment and validation of source data		X				Data on the external assets and liabilities of banks with nonbanks are not consistent. Revisions occur as new data are provided, but no information on this practice is given to the public. Revised data within the preliminary dataset are not identifiable. Revisions studies are not shared with the public, partly because of staff resource constraints.
3.3	Statistical techniques		X				
3.4	Assessment and validation of intermediate data and statistical outputs		X				
3.5	Revision studies		X				
<b>4. Serviceability</b>							
4.1	Periodicity and timeliness		X				Data on the external assets and liabilities of banks with nonbanks are not consistent. Revisions occur as new data are provided, but no information on this practice is given to the public. Revised data within the preliminary dataset are not identifiable. Revisions studies are not shared with the public, partly because of staff resource constraints.
4.2	Consistency			X			
4.3	Revision policy and practice			X			
<b>5. Accessibility</b>							
5.1	Data accessibility		X				No metadata available to users, apart from the IMF SDDS metadata, and the <i>Balance of Payments Yearbook</i> .
5.2	Metadata accessibility				X		
5.3	Assistance to users		X				

### **Summary of the Special Data Dissemination Standard (SDDS)**

The SDDS prescribes the following practices under each of the identified dimensions:

#### **Data dimension** (coverage, periodicity, and timeliness)

- the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

#### **Access dimension**

- the dissemination of advance release calendars providing at least one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

#### **Integrity dimension**

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

#### **Quality dimension**

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to:

- post descriptions of their data dissemination practices (metadata) on the IMF's DSBB. Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and

- maintain an Internet website, referred to as the NSDP, which contains the actual data described in the metadata and to which the DSBB is electronically linked.

The IMF staff is monitoring observance of the standard through NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

*Source: <http://dsbb.imf.org>*

**DATA QUALITY ASSESSMENT FRAMEWORK—GENERIC FRAMEWORK  
(JULY 2003 FRAMEWORK)**

Quality Dimensions	Elements	Indicators
<p><b>0. Prerequisites of quality</b></p>	<p><b>0.1 Legal and institutional environment</b>—<i>The environment is supportive of statistics</i></p> <p><b>0.2 Resources</b>—<i>Resources are commensurate with needs of statistical programs.</i></p> <p><b>0.3 Relevance</b>—<i>Statistics cover relevant information on the subject field.</i></p> <p><b>0.4 Other quality management</b>—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</p> <p>0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.</p> <p>0.4.1 Processes are in place to focus on quality.</p> <p>0.4.2 Processes are in place to monitor the quality of the statistical program.</p> <p>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</p>
<p><b>1. Assurances of integrity</b></p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p><b>1.1 Professionalism</b>—<i>Statistical policies and practices are guided by professional principles.</i></p> <p><b>1.2 Transparency</b>—<i>Statistical policies and practices are transparent.</i></p> <p><b>1.3 Ethical standards</b>—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are produced on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>



Quality Dimensions	Elements	Indicators
<p><b>2. Methodological soundness</b></p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p><b>2.1 Concepts and definitions</b>—<i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p><b>2.2 Scope</b>—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p><b>2.3 Classification/sectorization</b>—<i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p><b>2.4 Basis for recording</b>—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.4.1 Market prices are used to value flows and stocks.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>
<p><b>3. Accuracy and reliability</b></p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality</i></p>	<p><b>3.1 Source data</b> – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p><b>3.2 Assessment and validation of source data</b>—<i>Source data are regularly assessed.</i></p> <p><b>3.3 Statistical techniques</b>—<i>Statistical techniques employed conform to sound statistical procedures</i></p> <p><b>3.4 Assessment and validation of intermediate data and statistical outputs</b>—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p><b>3.5 Revision studies</b>—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.</p> <p>3.3.1 Data compilation employs sound statistical techniques to deal with data sources.</p> <p>3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.4.1 Intermediate results are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).</p>

Quality Dimensions	Elements	Indicators
<p><b>4. Serviceability</b>  <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p>	<p><b>4.1 Periodicity and timeliness</b>— <i>Periodicity and timeliness follow internationally accepted dissemination standards.</i></p> <p><b>4.2 Consistency</b>— <i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p><b>4.3 Revision policy and practice</b>—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 Periodicity follows dissemination standards.                      4.1.2 Timeliness follows dissemination standards.</p> <p>4.2.1 Statistics are consistent within the dataset.                      4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.                      4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>4.3.1 Revisions follow a regular and transparent schedule.                      4.3.2 Preliminary and/or revised data are clearly identified.                      4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).</p>
<p><b>5. Accessibility</b>  <i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p><b>5.1 Data accessibility</b>— <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p><b>5.2 Metadata accessibility</b>— <i>Up-to-date and pertinent metadata are made available.</i></p> <p><b>5.3 Assistance to users</b>— <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).                      5.1.2 Dissemination media and format are adequate.                      5.1.3 Statistics are released on a preannounced schedule.                      5.1.4 Statistics are made available to all users at the same time.                      5.1.5 Statistics not routinely disseminated are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.                      5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact points for each subject field are publicized.                      5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</p>

### Results of User Survey

General Information about Uses of Official Macroeconomic Statistics of Iceland	
	Number of Responses
1. Which official statistics do you use regularly?	
a. National accounts (NA)	21
b. Prices	17
c. Government finance statistics (GFS)	14
d. Monetary statistics (Monetary)	13
e. Balance of payments (BOP)	10
f. Other:	
• Production indices	8
• Labor market	10
• Merchandise trade	12
• International reserves and foreign currency liquidity	6
• External debt	8
• International investment position	9
• Other	2
2. Where do you obtain the official statistics?	
a. Official press releases and publications on macroeconomic statistics	21
b. Private sector summaries and analyses	7
c. Official policy papers	15
d. Publications from international organizations about the country	12
e. Other sources	0
3. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?	
• Yes	9
• No	11
4. For what purposes do you use the official statistics?	
a. Analysis of current developments for short-term decision making	11
b. Analysis of trends for longer-term policy formulation?	15
c. Econometric model building and forecasting	9
d. Economic research	13
e. Comparison with economic developments in other countries	17
f. General economic background	17
g. Other	0

General Information about Uses of Official Macroeconomic Statistics of Iceland						
	NA	Prices	GFS	Monetary	BOP	Other
5. Coverage and detail						
5.1 In general, are you satisfied with the coverage of official statistics?						
• Yes	17	18	13	18	14	4
• No	5	2	3	1	2	2
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?						
• Yes	13	17	12	19	15	4
• No	9	3	4	0	1	3
6. Periodicity and timeliness						
6.1 Are you satisfied with the frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly, annual)?						
• Yes	18	17	13	19	14	4
• No	3	3	3	0	2	1
6.2 In general, do you consider that the official statistics are disseminated with the appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)?						
• Yes	16	15	9	16	9	4
• No	5	2	6	1	6	1
7. Other dissemination practices						
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dates on which the various official statistics will be disseminated?						
• Yes	15	14	9	14	13	2
• No	5	4	8	2	3	2
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?						
• Yes	15	16	9	15	12	3
• No	1	1	1	1	2	1
7.3 Is there enough information about revisions to official statistics?						
• Yes	14	13	11	12	11	4
• No	4	1	4	3	4	1
8. Accessibility						
8.1 Can you easily access the official statistics?						
• Yes	22	19	16	19	17	6
• No	0	0	1	1	0	0
8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, methodological						

General Information about Uses of Official Macroeconomic Statistics of Iceland						
	NA	Prices	GFS	Monetary	BOP	Other
descriptions, reference concerning concepts, classification, statistical practice)?						
• Yes	15	14	11	11	9	1
• No	1	1	3	2	5	0
	Yes			No		
8.3 Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you?	14			4		
8.4 How do you get access to official statistics?						
• Official releases	11					
• Hard copy publications	10					
• Data specifically requested	9					
• Official website	22					
• Other	2					
• E-mail requests	12					
	NA	Prices	GFS	Monetary	BOP	Other
9. Overall assessment						
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?						
• Yes	19	17	15	18	16	4
• No	2	1	2	0	1	2
9.2 In general, do you consider the official statistics to be unbiased and accurate?						
• Yes	18	16	15	16	16	3
• No	1	2	1	1	0	1
9.3 How would you compare the quality of official statistics of the country with those of other countries in the region?						
• Better	1	4	1	1	0	0
• Same	14	11	10	15	12	2
• Worse	3	1	4	0	2	1
9.4 How do you assess the overall quality of the official statistics? (1 rated as poor and 5 as excellent)	3.9	4.3	3.6	4.3	4.0	

NA = National Accounts; Prices refers to: CPI (Consumer Price Index) and PPI (Producer Price Index);  
GFS = Government Finance Statistics; Monetary = Monetary Statistics; and BOP = Balance of Payments Statistics

## ICELAND: COMMENTS BY USERS OF MACROECONOMIC STATISTICS

### *Prerequisites of Quality*

- Confusion between Ministry and National Audit Office.

### *Methodological Soundness*

- Lack of social and economic statistics (including labor) at the regional level.
- NA: Income Account. Monetary: Flow of Funds not available.
- There is a need for better labor market information (especially accurate information on the changing size of the labor force, activity rates, etc.)
- I would like to see a regional division for as many of the statistics as possible. There is a great need for this in all kinds of fields, i.e. planning, research, and education.
- The lack of regional statistics creates problems in international cooperation.
- We need more regional information on occupations, wages, unemployment, education, and regional support and services.
- Total lack of useful information about commerce e.g., volume, profit, etc. So much that we have set up our own research unit which is about to start work.

### *Accuracy and Reliability*

- Monetary statistics are unbiased but I am not convinced about accuracy.
- I do not consider the statistics to be biased, but fear inaccuracy.

### *Serviceability*

- Volume of poorly classified branches of trade based on VAT returns covers two month period and is published too late to be useful.
- Latest statistics at regional level (Municipal) from 1997.

### *Accessibility*

- Steep deterioration in reporting sectoral progress in recent years.

- Abolishing the NEI was a mistake that has reduced the accessibility of some statistics.
- In general there is lack of information describing the official statistics.
- Balance of payments lacks methodological description.
- Official websites (CBI, SI, and MOF) have improved a great deal, but certain statistics compiled by the NEI were more useful and more accessible.
- A calendar of release dates for GFS and a more clear and reliable release calendar for monetary and BOP. Better methodological descriptions for all official statistics.
- Can you easily access official statistics?
  - Yes, but too often by conversation instead of by reading official documents.
  - Most often yes, but not always.