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**Data Quality Assessment Framework (DQAF)  
for  
Government Finance Statistics  
and  
Public Sector Debt Statistics**

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## DATA QUALITY ASSESSMENT FRAMEWORK (DQAF) FOR GOVERNMENT FINANCE STATISTICS

### Introduction

#### A. Purpose of the Framework

The main purpose of the Framework is to provide a flexible structure for the qualitative assessment of the government finance statistics (referred to as the statistics throughout the Framework).

The Framework could be used in a variety of contexts, including the following:

- reviews performed in the context of IMF country work, e.g., the data module of the Reports on the Observance of Standards and Codes (ROSCs), technical assistance, and surveillance;
- self-assessments performed by national statistical offices, central banks, and other data producing agencies; and
- assessments by other groups of data users, such as financial market participants.

#### B. Structure of the Framework

The DQAF comprehensively covers the various quality aspects of data collection, processing, and dissemination. The Framework is organized in a cascading structure that progresses from the abstract/general to the more concrete/specific details.

The first level covers the **prerequisites** of quality and five **dimensions** of quality; assurances of integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility. For each of these prerequisites and five dimensions, there are **elements** (two-digit level) and **indicators** (three-digit level).<sup>1</sup>

At the next level, **focal issues** that are specific to the compilation of government finance statistics are addressed. Below each focal issue, **key points** identify quality features that may be considered in addressing the focal issues. The key points are meant to be suggestive, not exhaustive. The Guidance Notes in the Appendix provide more detail on countries' practices in producing government finance statistics as well as guidance for assessing the quality of these statistics.

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<sup>1</sup> The first three levels are common with other Data Quality Assessment Frameworks that have been developed to assess datasets. This design was implemented to ensure a common and systematic assessment across datasets. To date, frameworks have been developed for national accounts statistics, consumer price index, producer price index, government finance statistics, monetary statistics, balance of payments statistics, and income poverty statistics.

Box A provides a view of the cascading structure employed in the Framework.

### **C. Content of the Framework**

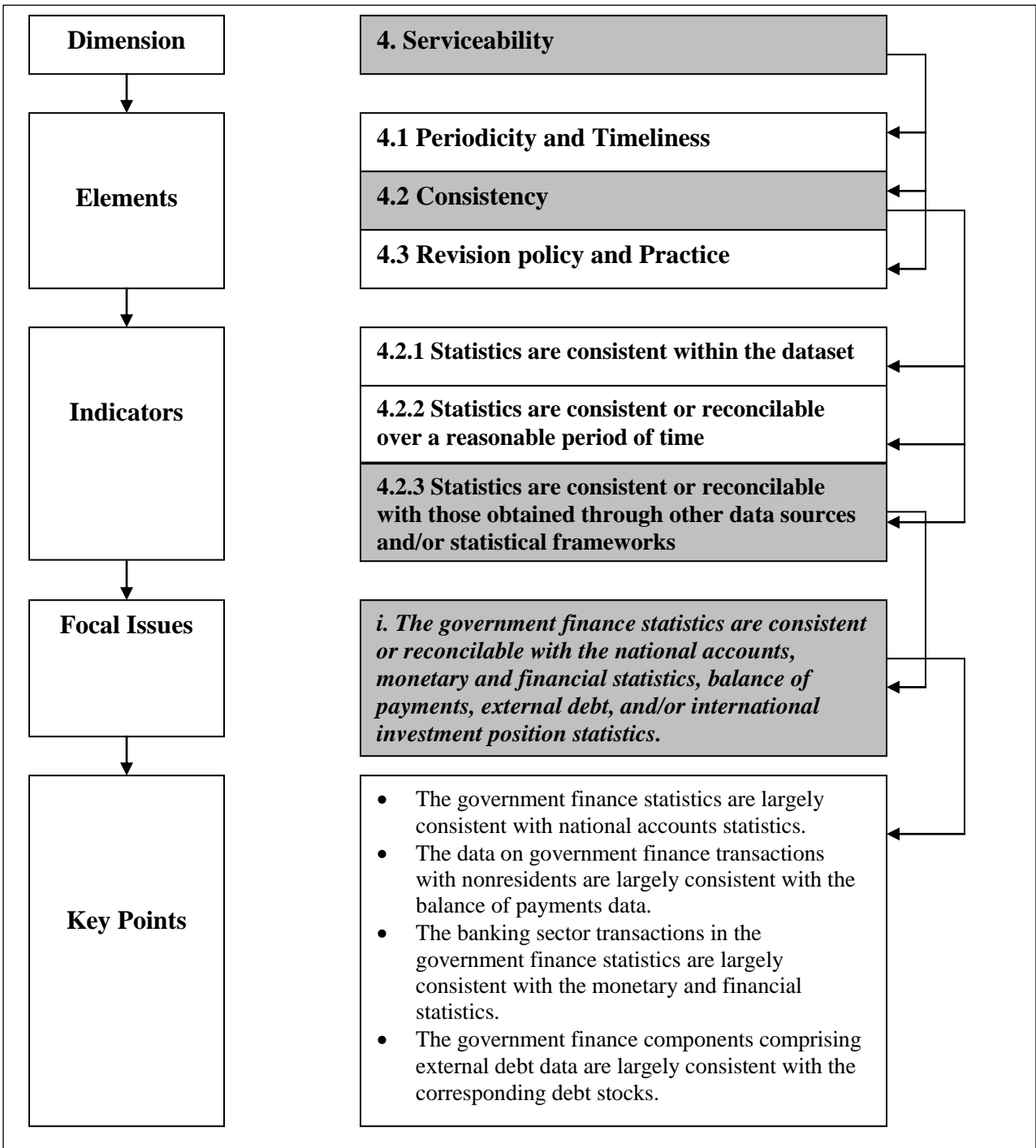
The elements and indicators within their respective dimensions are described below.

- 0. Prerequisites of quality:** Although not itself a dimension of quality, this group of “pointers to quality” includes elements and indicators that have an overarching role as prerequisites, or institutional preconditions, for quality of statistics. Note that the focus is on the agency, such as a national statistical office, central bank, or a ministry/department. These prerequisites cover the following elements:
  - 0.1 legal and institutional environment,
  - 0.2 resources available for the statistical program,
  - 0.3 relevance, and
  - 0.4 other quality management.
  
- 1. Assurances of integrity:** This dimension relates to the adherence to the principle of objectivity in the collection, compilation, and dissemination of statistics. The dimension encompasses institutional arrangements that ensure professionalism in statistical policies and practices, transparency, and ethical standards. The three elements for this dimension of quality are the following:
  - 1.1 Institutional Integrity,
  - 1.2 transparency, and
  - 1.3 ethical standards.
  
- 2. Methodological soundness:** This dimension covers the idea that the methodological basis for the production of statistics should be sound and that this can be attained by following internationally accepted standards, guidelines, or good practices. This dimension is necessarily dataset-specific, reflecting different methodologies for different datasets. This dimension has four elements, namely:
  - 2.1 concepts and definitions,
  - 2.2 scope,
  - 2.3 classification/sectorization, and
  - 2.4 basis for recording.
  
- 3. Accuracy and reliability:** This dimension covers the idea that statistical outputs sufficiently portray the reality of the economy. This dimension is also data specific, reflecting the sources used and their processing. The five elements of this dimension cover the following:
  - 3.1 source data,
  - 3.2 assessment of source data,
  - 3.3 statistical techniques,
  - 3.4 assessment and validation of intermediate data and statistical outputs, and
  - 3.5 revision studies.

4. **Serviceability:** This dimension relates to the need that statistics are disseminated with an appropriate periodicity in a timely fashion, are consistent internally and with other major datasets, and follow a regular revision policy. The three elements for this dimension are as follows:
  - 4.1 periodicity and timeliness,
  - 4.2 consistency, and
  - 4.3 revision policy and practice.
  
5. **Accessibility:** This dimension relates to the need for data and metadata to be presented in a clear and understandable manner on an easily available and impartial basis, that metadata are up-to-date and pertinent, and that a prompt and knowledgeable support service is available. This dimension has three elements, namely:
  - 5.1 data accessibility,
  - 5.2 metadata accessibility, and
  - 5.3 assistance to users.

**Box A: The Cascading Structure of the Data Quality Assessment Framework, DQAF May 2012, for the Government Finance Statistics: An Example**

*Using serviceability as the example of a dimension of quality, the box below shows how the framework identifies three elements that point toward quality. Within consistency, one of those elements, the framework next identifies three indicators. Specifically, for each indicator, focal issues are addressed through key points that may be considered in identifying quality.*



(\*) Consult the Guidance Notes number in the Appendix

## **0. Prerequisites of Quality**

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

— *The environment is supportive of statistics.*

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

*i. The primary responsibility for collecting, processing, and disseminating the statistics is clearly established.*

- A law, such as a statistical law, or other formal provision (e.g., inter-agency protocol or executive decree, supranational legislation) assigns primary responsibility as well as the authority to an agency (agencies) for the collection, processing, and dissemination of the statistics.
- Working arrangements are consistent with this assignment of responsibility.
- If more than one data producing agency is involved in producing parts of the statistics, arrangements are in place to promote consistency of methods and results.
- Conflicts or potential conflicts between the legal authority to produce the statistics and other laws or provisions (e.g., access to information law or bank secrecy laws) have been successfully resolved or reconciled with no major impairment to the data production.
- Oversight of the institution(s) responsible for collecting, reporting and disseminating statistics is conducted in order to ensure that statistical work accords with the laws or other provisions governing such work.

#### **0.1.2 Data sharing and coordination among data-producing agencies are adequate. (\*)**

*i. Arrangements or procedures exist to facilitate data sharing and coordination between the agency (agencies) with the primary responsibility for compiling the statistics and other data producing agencies.*

- Procedures are in place to provide for the effective and timely flow of source data (e.g., administrative data as well as survey data) to the data-producing agency (agencies).
- Contacts (e.g., regular meetings and workshops) are maintained with other data producing agencies to promote a proper understanding of data requirements, to avoid

duplication of effort, and to take into account reporting burden (e.g., by discussing changes to administrative processes before they take place.)

**0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only. (\*)**

*i. The confidentiality of individual reporters' data is guaranteed and that guarantee is widely known.*

- A law or other formal provision clearly states that individual data are to be treated as confidential, and shall not be disclosed or used for other than statistical purposes unless disclosure is agreed to in writing.
- In surveys and other statistical inquiries, respondents are informed of their rights and obligations with regard to the provision of information, and they are informed that the information they provide will be used for the purpose of producing statistics.

*ii. Procedures are in place to prevent disclosure of individual reporters' data.*

- Rules and regulations to prevent disclosure include penalties against staff who disclose confidential data.
- Access to individual data is restricted to staff who require the information in the performance of their statistical duties.
- Special aggregation rules are used to prevent residual disclosure when aggregations of survey or other confidential data are disseminated.
- Staff review all data prepared for dissemination for possible indirect disclosure of individual data and design tables and outputs in a way that prevents disclosure.
- Where unit records are made available (e.g., for research purposes), the confidentiality of the individual data is protected (e.g., by making all records anonymous, or ensuring that access to data is bound by confidentiality provisions).
- Confidentiality of data is appropriately guarded during storage and during the process of the destruction of records.
- Steps are taken to secure the premises of the data producing agency and its computer systems to prevent unauthorized access to individual data.

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

*i. A law or other formal provision provides for the reporting of information needed to compile the statistics.*



- The data producing agency has the legal authority to collect data required to compile the statistics.
  - Collection activity is consistent with the legal authority.
  - If reporting is mandatory, penalties for noncompliance (including misreporting) act as effective deterrent, even if such provisions rarely need to be employed.
- ii. Other mechanisms are in place to provide for adequate reporting of data for compiling the statistics.*
- The data producing agency considers carefully response burden (e.g., by actively pursuing alternative avenues to obtain data, adapting questions to reporters' terminology and record-keeping systems, carefully designing new surveys, closely monitoring response burden, and periodically evaluating existing surveys).
  - The data producing agency provides assistance to respondents in completing and submitting forms (e.g., by providing a point of contact).
  - The data producing agency seeks to secure cooperation by creating goodwill (e.g., by registering and dealing with respondents' complaints, indicating the purpose of the data collection, informing of measures to limit response burden, raising awareness of the importance of good quality statistics, and providing respondents with data upon request).

## **0.2 Resources**

— *Resources are commensurate with needs of statistical programs.*

### **0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs. (\*)**

- i. Staff resources for compiling the statistics are adequate to perform required tasks.*
- Overall, the number of staff is adequate to perform the required tasks.
  - The qualifications of the staff are adequate, with their skills maintained and developed to perform the required tasks.
  - A core staff with adequate training is maintained and staff turnover is manageable.
  - Salary levels are adequate for the nature of the work and competitive with public administration conditions in the country.

*ii. Computing resources for compiling the statistics are adequate to perform required tasks.*

- Overall, sufficient resources are allocated and best efforts are made to exploit the full potential of effective computing technology for compiling and analyzing the statistical series.
- Software utilized for compiling and analyzing the statistical series is effective, periodically updated, and well adapted to perform existing and emerging tasks.
- Hardware is distributed adequately to facilitate the efficient collection and processing of data, and management of databases.
- Adequate protection is provided for computer resources, including through provision of emergency back-up systems for retrieval of statistical series and updates in the event of natural disasters, accidents, and other unusual events.

*iii. Physical facilities and other resources are adequate to perform required tasks.*

- Office buildings provide adequate working facilities (e.g., lighting, heat, and cooling).
- Office furniture and equipment (e.g., desks, chairs, filing cabinets, telephones, and related equipment) are adequate to perform required tasks.
- Transportation arrangements (e.g., for data collection) are adequate.

*iv. Funding for compiling the statistics is adequate to perform required tasks.*

- Funding is reasonably secure for the identified needs of the statistical program.
- Budgeting practices provide clear information to financing authorities (e.g., when reviewing priorities for improvements, cutbacks, or increase in certain elements of programs).
- The funding horizon is amenable to planning for statistical developments (e.g., over a two-to-three year period).

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

*i. Management ensures that resources are used efficiently.*

- Periodic reviews of staff performance are conducted.
- Efficiencies are sought through periodic reviews of work processes, e.g., seeking cost effectiveness of survey design in relation to objectives, and encouraging consistent concepts, classification and other methodologies across datasets.

- When necessary, the data producing agency seeks outside expert assistance to evaluate statistical methodologies and compilation systems.
- ii. Costing and budgeting practices are in place and provide sufficient information to management to make appropriate decisions.*
- Resources used to compile the statistics are measured periodically (costing) and compared to other statistical programs.
- Budgeting procedures are used to help allocate resources.

### **0.3 Relevance**

— *Statistics cover relevant information on the subject field*

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

- i. Specific actions are taken to ensure that current statistics meet needs of data users.*
- Data users are consulted and/or kept informed on specific aspects of current data (e.g., usefulness in terms of detail, periodicity, and timeliness) through surveys, newsletters or seminars, with their feedback actively sought (e.g., e-mail address provided).
- ii. Mechanisms are in place to identify new and emerging data requirements.*
- A structured and periodic process of consultation (e.g., users' advisory committee or working groups) takes place with policy departments/ministries and other principal data users, which include academia, the press, and/or other private sector representatives, to review the usefulness of existing statistics and to identify emerging data requirements.
- The data producing agency regularly participates in statistical meetings and seminars organized by international and regional organizations and by professional organizations (e.g., International Statistical Institute (ISI) and International Association for Official Statistics (IAOS)).
- The data producing agency undertakes studies to help identify new and emerging data requirements.

### **0.4 Other quality management**

— *Quality is a cornerstone of statistical work*

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

*i. There is recognition throughout the organization that quality builds trust and thus is a cornerstone of statistical work.*

- Management is sensitive to all dimensions of data quality, and promotes a shared concern for quality throughout the organization (e.g., mission statement emphasizes importance of quality, managers are held accountable for achieving quality).
- Staff training programs emphasize the importance of quality and give staff an understanding as to how quality may be achieved.
- The organization provides an infrastructure for quality by recognizing trade-offs, economies of scale, and interrelations between datasets.
- The organization has implemented externally recognized processes or activities that focus on quality (e.g., Total Quality Management, ISO 9000, quality initiatives within the European Statistical System, and independent evaluations).
- Information is publicly available on the organization's commitment to quality, including information about trade-offs affecting the statistical work program.

**0.4.2 Processes are in place to monitor the quality during the planning and implementation of the statistical program.**

*i. Measures are in place for a systematic monitoring and review of quality.*

- Monitoring processes are in place to inform managers on the quality achieved for ongoing statistical activities (e.g., response rates, editing rates, revisions history, timeliness evaluations).
- Compiling areas have access to expert guidance on the quality of their statistics and on strategies for improving data production.
- Periodic reviews are undertaken to identify steps necessary to maintain quality requirements.

**1. Assurances of Integrity**

*The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.*

**1.1 Institutional Integrity**

*— Statistical policies and practices are guided by professional principles.*

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

*i. The terms or conditions under which the statistics are produced are in accordance with professional independence.*

- A law or other formal provision supports professional independence by, for example:
  - addressing the general need for the professional independence of the data-producing agency (e.g., the importance of professional independence in carrying statistical functions is clearly stated and recognized);
  - prohibiting interference from others, including other government agencies, in the compilation and/or dissemination of statistical information; and
  - ensuring that the choice, tenure, and reporting arrangements of the agency's head are supportive of the professional independence of the statistical agency (e.g., tenure does not usually coincide with that of current government; appointment and removal of head result from transparent processes with emphasis on professional qualifications and performance).
- If there is no law or formal provision to support professional independence,
  - traditions or cultures of professionalism are clearly recognized as essential to the credibility of statistical results (e.g., others, including other government agencies, understand the importance of noninterference); and
  - the choice, tenure, and reporting arrangements of the agency's head are supportive of the professional independence of the agency.

*ii. Professionalism is actively promoted and supported within the organization.*

- Recruitment and promotion are based on relevant aptitude and/or expertise in statistics (e.g., in the subject matter area).
- Formal (using internal and outside experts) and on-the-job training in the methodology and compilation methods is provided, including participation in seminars, courses, and workshops arranged by regional and international organizations to further knowledge of statistical practices and providing easy access to professional literature.
- Processes and activities in the workplace promote a culture of professionalism (e.g., by professional accreditation of staff, peer review of statistical work, recognition of authors of methodological papers, organization of lectures and conferences, and the institutional support of professional bodies).
- Research and analysis (including rationale for the choice of methodologies) are encouraged and published subject to internal review and other processes to maintain the agency's reputation for professionalism.

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

*i. The choices of data sources and statistical techniques are informed solely by statistical considerations.*

- The choice of source data (e.g., among surveys, between surveys and administrative records, or between collected data and administrative records) is based on measurement objectives and data requirements.

*ii. Decisions about dissemination are informed solely by statistical considerations.*

- Decisions to disseminate data are based solely on statistical considerations.
- Decisions about the timing, media, and other aspects of dissemination are based solely on statistical considerations.

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

*i. The data producing agency comments when its statistics are misinterpreted or misused.*

- The data producing agency seeks to prevent misinterpretation or misuse of statistics by providing explanatory materials and briefings (e.g., to the media).
- There is a formal policy or well-established custom to deal with data misinterpretations or misuse of statistics.
- The data producing agency
  - monitors media coverage of its data (“clipping service”), and
  - comments publicly and in a timely manner on erroneous interpretations or misuse of the statistics in the media and in other fora.

**1.2 Transparency**

— *Statistical policies and practices are transparent.*

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

*i. Information is available to the public about the terms and conditions under which the statistical series are compiled and disseminated, including the obligation to compile and disseminate the statistics, the confidentiality of individual reporters’ data, and other key features.*

- Agency publications and/or websites reproduce material from the statistical law and other relevant documents about the terms and conditions under which official statistics are compiled and disseminated. These terms and conditions may refer to the obligation to compile and disseminate the statistics, the confidentiality of individual

reporters' data, and other key features (e.g., the codes of conduct under which official statistics are compiled and disseminated, the approval process for data dissemination, the procedures to hire and remove the head of the data producing agency).

- In public speeches and other gatherings, the agency makes an active and ongoing effort to inform about the terms and conditions under which it operates.
- Statistical publications identify where more information about the data producing agency and its products can be found.

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

*i. The public is made aware of internal government access to statistics prior to their release to the public.*

- Internal government access to statistics prior to release is made public in terms of who has access, and how long before the dissemination access is given.

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

*i. Statistical products are clearly identified so that the public is aware of what the data producing agency takes responsibility for.*

- Data released to the public are clearly identified as the data producing agency's product (e.g., by name, logo, and insignia).
- In the case of joint publications, the part attributable to the data producing agency is identified (e.g., statistics are clearly distinguished from policy interpretation).
- The data producing agency requests attribution when its statistics are used for reproduced.

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

*i. Users of statistics are made aware in advance of major changes in methodology, source data, and statistical techniques.*

- Advance notice is given to the public (e.g., articles in bulletins, briefings, or news releases) when major changes are introduced in methodology, sources, and statistical techniques.

## **1.3 Ethical standards**

— *Policies and practices are guided by ethical standards.*

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

#### *i. A clear set of ethical standards has been prepared.*

- There are clear guidelines outlining correct behavior when the agency or its staff are confronted with potential conflict of interest situations.
- There are clear guidelines that make the connection between ethics and staff work (e.g., with respect to guarding against misuse and misrepresentation of statistics (see also 1.1.3)).
- A strong culture for maintaining ethical standards discourages political interference.

#### *ii. Staff are made aware of the ethical standards.*

- Management acknowledges its status as a role model and is vigilant in following the standards.
- New staff are made aware of the standards when they join the organization.
- Staff are reminded periodically of the standards (e.g., in staff training, announcements to staff, or by requiring staff to periodically reaffirm ethical practices or adhere to conflict of interest policy).

## **2. Methodological Soundness**

*The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.*

The methodological soundness dimension is assessed against the guidelines outlined in the *Government Finance Statistics Manual 2001 (GFSM 2001)* and the *Public Debt Statistics: Guide for Compilers and Users (PSDSG)*. (The *GFSM 2001* and the *PSDSG* are available on the Fund website <http://www.imf.org/external/pubs/ft/gfs/manual/index.htm>). Where a country is still using the methodology of *A Manual on Government Finance Statistics 1986 (GFSM 1986)* and has yet to adopt the *GFSM 2001*, plans should be in place to migrate to the guidelines of the *GFSM 2001*. Adherence to other internationally accepted good practices (e.g., *European System of Accounts 1995 (1995 ESA)* and its companion guidelines, such as the *ESA 95 Manual on Government Deficit and Debt*, or other compatible regional standards) will be taken into account in the assessment.

### **2.1 Concepts and definitions**

*— Concepts and definitions used are in accord with internationally accepted statistical frameworks.*



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

*i. Concepts and definitions used to compile the statistics are in broad conformity with guidelines outlined in the GFSM 2001.*

- GFS compilation and dissemination are based on the recommendations of the *GFSM 2001*, or
- An appropriate “migration path” from the GFS framework based on *GFSM 1986* to the *GFSM 2001* framework has been adopted, and is being implemented.
- Nationally/regionally developed concepts and definitions are followed that are similar to *GFSM 2001* (i.e., there is transparent and straightforward linkage with the international standards), or

## **2.2 Scope**

— *The scope is in accord with internationally accepted standards, guidelines, or good practices.*

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

*i. The scope of the statistics is broadly consistent with guidelines outlined in the GFSM 2001.*

- GFS covers the complete general government (GG) sector, as relevant.
- Either all material general government activity is carried out by general government units or, if not, the coverage of GFS is extended to include the units which carry out quasi-fiscal activity.
- Data of the various levels of government units are available.
- Preliminary GFS data (e.g., based on partial coverage of the GG sector) are replaced by data based on full coverage as soon as practicable.

*ii. GFS covers all economic stocks and flows of units within its scope—at least to the standard specified in the following tables in GFSM 2001 (see also GFSM 2001 Appendix 4):*

- Statement of Government Operations (Table 4.1)
- Statement of Sources and Uses of Cash (Table 4.2)

- Statement of Other Economic Flows (Table 4.3)
- Balance Sheet and detailed components (Tables 7.1, 7.2, 7.3, and 7.4)

### **2.3 Classification/Sectorization**

— *Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices*

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

*i Classification and sectorization used for the statistics are in broad conformity with guidelines outlined in the GFSM 2001.*

- Institutional sectors are defined in accordance with the *System of National Accounts 2008 (or 1993)*.
- The sectors/subsectors for which GFS are produced are defined in accordance with the *GFSM 2001*.
- Where non-GG agencies are included in GFS, statistics are available for the GG sector separately, as well as for the non-GG sectors, and the consolidated public sector/subsectors.
- GFS is provided separately for the budget execution, the consolidated central government, state or provincial governments (if present), and local governments, and for consolidated general government.

*ii Revenue, expense, nonfinancial assets, financial assets and liabilities, and stocks and flows are classified using the methodology set out in the GFSM 2001 and the Public Sector Debt Statistics Guide.*

- Classification of Revenue (Table 5.1),
- Economic Classification of Expense (Table 6.1),
- Classification of Expenditure by Function of Government (Table 6.2),
- Classification of Transactions in Nonfinancial Assets (Table 8.1),
- Transactions in Financial Assets Classified by Financial Instrument (Table 9.1),
- Transactions in Liabilities Classified by Financial Instrument (Table 9.1), and

- Transactions in Financial Assets and Liabilities Classified by Sector of the Counterparty to the Financial Instrument (Table 9.2).

## **2.4 Basis for recording**

— *Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.*

### **2.4.1 Market prices are used to value flows and stocks. (\*)**

*i Valuation rules used for recording transactions follow the principle of market valuation outlined in the GFSM 2001.*

- All stocks and flows are valued on a current market basis, or nearest equivalent.
- Transactions in foreign currency are converted to local currency using the mid-point exchange rate prevailing in the market at the moment they take place.

### **2.4.2 Recording is done on an accrual basis. (\*)**

*i Transactions are recorded on an accrual basis.*

- All transactions are recorded when economic value is created, transformed, exchanged, transferred, or extinguished (i.e., economic accrual basis), or
- A move to an accrual accounting/budgeting basis, consistent with GFS standards is being progressively implemented.
- Where cash (or mixed) recording is used, arrangements are in place to convert from a cash to accrual basis.

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

*i The recording of transactions follows guidelines of the GFSM 2001.*

- All transactions are shown on a gross basis, except for borrowing/amortization.
- Corrective transactions (e.g., refunds of taxation or of overpaid expenses) are netted against the original transactions.

## **3. Accuracy and Reliability**

*Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.*

### **3.1 Source data**

— *Source data available provide an adequate basis to compile statistics.*

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

##### ***i. The data collection programs employed to compile government finance statistics are adequate.***

- Data sources are complete to allow the compilation of government finance statistics (administrative records, budget information, charts of accounts, financial statements, banking records, and the underlying accounting data, etc.) for the general government and its subsectors, as relevant.
- A comprehensive register of individual general government and public sector units is available. Register maintenance and update procedures are adequate, e.g., addition of new units, deletion of units, accounting for mergers, nationalization or privatization, and other changes.
- Institutional and geographical coverage is complete or, if not, exclusions are based on criteria that do not reduce the representativeness and usefulness of government finance statistics.
- In cases where compilers cannot rely on administrative records, financial statements, and banking records, the statistical system allows the collection of supplementary information (e.g., sampling estimates for local government data, and creditor reports on foreign financing).
- The necessary report forms developed for data collection have been field tested and are reviewed periodically to take account of changed circumstances and needs.
- GFS codes are embedded in the chart of accounts, or appropriate bridge tables have been constructed, to facilitate the compilation of government finance statistics from the underlying accounting information.
- Qualitative information on the data sources (e.g., feedback from users' surveys, mandate and function of agencies, etc.) is collected to monitor their adequacy.

##### ***ii. The data collection programs are sufficiently open and flexible to provide for new developments in sources.***

- The data sources are kept under regular review to ensure that the data collection system remains comprehensive. Problems due to material gaps in coverage and/or completeness of data collection are identified and addressed.

- International standards, guidelines, and practices are monitored for changes that need to be taken into account in the compilation system for government finance statistics.
- The compiling agency consults with the data supplying agencies on changes in source data (e.g., updates in the chart of accounts and changes in the presentation of financial statements for government units) that may affect the statistics.

**3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required. (\*)**

*i. Source data reasonably approximate internationally accepted good practices for compiling government finance statistics.*

- Source data are consistent with guidelines on the definitions, scope, sectorization, classifications, time of recording, and valuation of flows and stocks as outlined in *GFSM 2001* and the *PSDSG*. For example, the chart of accounts for budgetary and extra-budgetary central government align with GFS classifications.
- The source data used to compile financial flows and stocks statistics for the general government and its subsectors are sufficiently detailed to allow classification as outlined in *GFSM 2001* and the *PSDSG*.
- Data sources provide sufficient detail to consolidate the various levels of government as well as the general government.

*ii. Information is available on how the supplementary data sources differ from those of internationally accepted good practices. (\*)*

- Compilers are aware of the differences in practices in supplementary data sources and those outlined in *GFSM 2001* and the *PSDSG* (e.g., differences in classification and valuation methods).
- Information on deviations of the source data from the requirements of the government finance statistics is sufficiently detailed to ensure the appropriate adjustment process.

**3.1.3 Source data are timely.**

*i. The data collection systems provide timely data.*

- Source data (updates) are provided with sufficient timeliness and periodicity from reporting units to meet timely compilation and dissemination of statistics for general government and its subsectors.
- Reporting units are made aware of the deadlines set for reporting.

- The data producing agencies employ follow-up procedures to ensure the timely delivery of source data (e.g., by maintaining regular contact with the reporting units).

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

— *Source data are regularly assessed.*

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

##### ***i. Accuracy of the source data from reporting government units and other supplementary sources is routinely assessed.***

- Automated procedures are used to facilitate the monitoring of the accuracy of data reported by individual government sector units and the budget. The automated procedures test the internal consistency of each institutional unit's data (e.g., cross-checks). Data inconsistencies and out-of-trend values are confirmed with reporting units, and documented.
- The source data are routinely analyzed, in particular to check for temporal consistency and consistency with other related data sources.
- Data compilers address questions concerning the accuracy of source data through direct contacts with general government sector units that report data.
- The effects of changes to report forms are assessed.

##### ***ii. Appropriate measures are taken to assess the source data.***

- Source data are assessed by checking across different sources (e.g., payables by one part of the general government are equal to receivables by another, checking independent creditor and debtor sources, and domestic bank financing records compared with banking records).

### **3.3 Statistical techniques**

— *Statistical techniques employed conform to sound statistical procedures.*

#### **3.3.1 Data compilation employs sound statistical techniques to deal with data sources. (\*)**

##### ***i. Data compilation procedures are sound.***

- Compilation procedures minimize processing errors such as coding, editing, and tabulation errors.

- Sound techniques are in place to estimate missing data, when relevant (to deal with coverage problems).
- Procedures for imputation and adjustment for nonresponse, when relevant, are soundly based.
- Preliminary data are subsequently replaced by final (audited) data, for each period. However, compilers attempt to achieve an appropriate balance between accuracy and timeliness.
- All data are corrected when more accurate data become available, if there are material differences.
- Compilation procedures are fully documented and updated periodically.
- Any discrepancy between the sum of the subannual data and annual data is removed through benchmarking procedures, and discrepancies between flows and stocks are identified and corrected.

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

*i. Sound adjustments are employed to make source data consistent with government finance statistics requirements.*

- Appropriate bridge tables have been constructed, when necessary, to facilitate adjustments to the source data.
- When data are not available that reasonably approximate underlying concepts and definitions, scope, and recording principles for government finance statistics, specific procedures are used to adjust data from various sources to improve coverage and classification, and conform to guidelines in international statistical manuals.

*ii. Data adjustments and transformations are made using sound techniques.*

- Data adjustments and transformations use appropriate techniques when, for example, grossing up, reclassifying, time adjustment, valuation adjustment, data imputations, consolidation adjustments, etc.

**3.4 Assessment and validation of intermediate data and statistical outputs**  
— *Intermediate results and statistical outputs are regularly assessed and validated.*

**3.4.1 Intermediate results are validated against other information where applicable. (\*)**

*i. Intermediate results are validated against other independent data sources.*

- Intermediate results are checked across a wide range of data.

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

*i. The behavior of series is cross-checked with related series/indicators.*

- Reported financial flow data (transactions and other economic flows) on nonfinancial and financial assets and liabilities are reconciled with changes in the corresponding stock data.
- Procedures are in place to investigate classification/sectorization errors or omissions as a source of fluctuations or discrepancies.

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

*i. Statistical discrepancies are monitored.*

- Statistical outputs are checked horizontally and vertically to reduce discrepancies, e.g., the integration of stocks and flows are checked, especially the reasonableness of other economic flows (holding gains and losses, and other changes in the volume of assets). Values that are not within expected ranges are identified and investigated.
- Fiscal data discrepancies among national compilers of those data (ministries of finance, central banks, statistical institutes, etc.) are compared (and resolved or reconciled).

*ii. Bilateral comparisons/reconciliations are conducted with data of other countries and international organizations.*

- Bilateral data reconciliations are routinely conducted with donors and significant discrepancies are investigated. Differences in concepts and compilation methods are identified and are taken into account in the data comparisons.
- Data on selected external public debt stocks and related flows are compared with creditor information.



### **3.5 Revision studies**

— *Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.*

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

##### ***i. Revisions to the government finance statistics are periodically assessed.***

- Statistics are regularly archived, and can be retrieved for revision studies.
- Studies assess both the preliminary and final data over a given period of time to determine the reliability of the data. They include (a) studies of scale (frequency of revision and number of time series revised), and (b) studies of direction and magnitude of revisions.
- Studies investigate the sources of errors, omissions, and fluctuations in the data, and explain the methods of revising the data.

##### ***ii. Measures are undertaken to incorporate the findings from revision studies to improve data compilation.***

- Findings from revision studies (such as the pattern of availability of major data sources) are used to define the optimal revision cycle.
- Findings from revision studies are used to refine preliminary data and data collection programs for the subsequent periods.
- Findings of persistent bias in reporting from government agencies are routinely analyzed and used in internal quality control exercises.
- Adequate documentation on revisions is maintained, including (a) identification of the main aspects of the source data leading to the revisions; (b) the reasons for the revisions; and (c) the direction and magnitude of the revisions.

## **4. Serviceability**

*Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.*

#### **4.1 Periodicity and timeliness(\*)**

— *Periodicity and timeliness follow internationally accepted dissemination standards.*

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

*i. The periodicity of the statistics follows the IMF data dissemination standards (SDDS or GDDS).*

- Statistics for general government operations are disseminated annually (SDDS).
- Statistics for budgetary or consolidated central government operations are disseminated monthly (SDDS).
- Statistics for central government debt are disseminated quarterly (SDDS).
- Statistics for central government budgetary operations are disseminated quarterly (GDDS).
- Statistics for central government debt are disseminated annually (GDDS).

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

*i. The timeliness of the statistical series follows the IMF data dissemination standards (SDDS or GDDS).*

- Annual statistics for general government operations are disseminated within six months (SDDS).
- Monthly statistics for budgetary or consolidated central government operations are disseminated within one month (SDDS).
- Quarterly statistics for central government debt are disseminated within one quarter (SDDS).
- Quarterly statistics for central government budgetary operations are disseminated within one quarter (GDDS).
- Annual statistics for central government debt are disseminated within two quarters (GDDS).

## **4.2 Consistency**

— *Statistics are consistent within a dataset, over time, and with major datasets.*

### **4.2.1 Statistics are consistent within the dataset. (\*)**

#### *i. The statistics are internally consistent.*

- Concepts, definitions, and classifications for producing subannual and annual government finance statistics are the same.
- The sum of quarterly statistics reasonably approximates the annual statistics.
- Over long time-periods, the statistical discrepancies have not been large.
- Flow data (transactions and other economic flows) on nonfinancial and financial assets and liabilities are reconcilable with changes in the stocks of these assets and liabilities, and a table explaining the reconciliation (e.g., transactions, holding gains/losses and other volume changes) is disseminated on a regular basis.

### **4.2.2 Statistics are consistent or reconcilable over a reasonable period of time. (\*)**

#### *i. The statistics are consistent over time.*

- Consistent time series are available for an adequate period of time (at least five years).
- When changes in source data, methodology, or techniques are introduced, historical series are reconstructed as far back as reasonably possible.
- Detailed methodological notes identify and explain the main breaks and discontinuities in the component time series, their causes, and adjustments made to maintain consistency over time.
- Unusual changes in economic trends are explained in the commentary included in the publication and in the database accessible by users.

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

#### *i. The government finance statistics are consistent or reconcilable with the national accounts, monetary and financial statistics, balance of payments, external debt, public sector debt, and/or international investment position statistics.*

- The government finance statistics are largely consistent with national accounts statistics.

- The data on government finance transactions with nonresidents are largely consistent with the balance of payments data.
- The banking sector transactions in the government finance statistics are largely consistent with the monetary and financial statistics.
- The government finance components comprising external debt data are largely consistent with the corresponding debt stocks.

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

— *Data revisions follow a regular and publicized procedure(\*)*

##### **4.3.1 Revisions and/or updates follow a regular and transparent schedule.**

- i. The practice of revisions (e.g., from provisional estimates, for weight updates, for changes in methodology) follows a predictable pattern of which users of statistics are informed.*
- The revision cycle is predetermined and reasonably stable from year to year.
- The revision cycle is made known to the public.
- The reasons underlying the cycle (e.g., the availability of source data, the timing of revisions with related datasets, the timing for preparing important economic policy documents) are explained.
- Adequate documentation of revisions is included in the publication of the statistical series and in the database accessible to users.
- When revisions outside the regular cycle are called for (e.g., by the discovery of new source data, errors), they are made known to the public.

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

- i. Users are informed about the preliminary nature of the data.*
- At the time of data dissemination, users are informed whenever data are preliminary.
- ii. Users are informed about the revised nature of the data.*
- At the time of data dissemination, users are informed whenever data are revised.

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

- i. Users are informed of results and studies of the revisions to the statistics.*

- Revisions are measured, assessed, and explained in the statistical publication and in the database accessible by users.
- Analysis of differences between the revised and preliminary data is published for major aggregates to allow an assessment of the reliability of the preliminary data.

## **5. Accessibility**

*Data and metadata are easily available and assistance to users is adequate.*

### **5.1 Data accessibility**

*— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.*

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

*i. The presentation of the statistics is commensurate with users' needs.*

- The government finance statistics are disseminated according to the standard components of the *GFSM 2001*, and with time series.
- Additional series are disseminated to meet a range of users' needs with various levels of detail (disaggregation).
- The statistics are disseminated in a clear manner, with charts and/or tables to facilitate analysis.
- Commentaries on current-period developments are included, where relevant.
- Government finance statistics time series subject to seasonality are disseminated in a seasonally adjusted form, where relevant.

#### **5.1.2 Dissemination media and format are adequate. (\*)**

*i. Statistics are disseminated in formats to suit users' needs.*

- Statistics are disseminated in ways that facilitate re-dissemination in the media (e.g., information releases in electronic format).
- More comprehensive and/or detailed statistics are also disseminated in electronic formats.
- Current statistics and longer time series can be accessed (perhaps for a fee) through an electronic database maintained by or on behalf of the data producing agency.

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

#### *i. Statistics are released on the preannounced schedule.*

- A schedule announces in advance the dates the statistics are to be released.
- The statistics are released punctually, that is, according to the pre-announced schedule.

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

#### *i. The statistics are made available to all users of statistics at the same time.*

- The public is informed of the statistics being released, and of the procedures to access them (e.g., Internet, publications).
- The statistics are made available to all interested users simultaneously.
- If the press is briefed in advance, embargoes are imposed to prevent early public disclosure.

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

#### *i. Statistics not routinely disseminated are made available to users upon request.*

- In addition to the statistics that are routinely disseminated, other relevant statistics are made available upon request.
- Customized tabulations can be provided (perhaps for a fee) to meet specific requests.
- The availability of additional statistics and of the procedures for obtaining them are made known.

## **5.2 Metadata accessibility**

— *Up-to-date and pertinent metadata are made available.*

### **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.**

#### *i. The metadata give adequate information about the meaning of the data and about the methodology used to collect and process them.*

- A comprehensive sources and methods document is published and updated regularly, and it includes the following:

- information on concepts, definitions, classifications, data sources, compilation methods, statistical techniques, and other relevant methodological aspects and procedures;
  - departures from internationally accepted standards, guidelines, or good practices;
  - information on survey sources, such as survey characteristics (response rates, survey monitoring and studies of nonsampling errors) and other survey features (method, sample frame, sample design, and selection, estimation and imputation techniques, etc.), and on the nature of administrative data sources; and main linkages with related major data systems.
- The SDDS/GDDS metadata, SDDS summary methodologies, and other related descriptions are reviewed and updated regularly.
  - The metadata are readily accessible (e.g., websites, statistical publications) and their availability is cross-referenced in data releases, and otherwise well publicized (e.g., in catalogs).

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

##### *i. Different levels of metadata detail are made available to meet users' requirements.*

- General use information (e.g., a brochure) about the government finance and other public sector statistics (e.g., how to locate the data) is available and made public.
- More specialized use information (e.g., background papers, working documents) is available and made public.

### **5.3 Assistance to users**

— *Prompt and knowledgeable support service is available.*

#### **5.3.1 Contact points are publicized.**

##### *i. Adequate assistance is given to users of statistics.*

- Prompt and knowledgeable service and support are available to users of statistics.
- All statistical releases identify contact points for enquiries by mail, telephone, facsimile, or by e-mail.
- Material to raise awareness on the use of statistics is available (e.g., for schools and research).
- Access points for clients to obtain statistical information are well advertised.

- Assistance to users is monitored and reviewed periodically (e.g., time of response to e-mail requests).

**5.3.2 Publications, documents, and other services, including information on any charges, are widely available.**

*i. Publications and other services are available to users of statistics.*

- Publications, documents, and other services to users are available, and updated regularly (e.g., each year if needed).
- The prices of the statistical products and services are clearly disclosed and assistance is provided in placing orders.



## **Guidance Notes for the GFS DQAF (May 2012)**

The one-, two-, three-digit numbers are from the generic DQAF May 2012. The text provides further guide for the assessment.

### **0. PRE-REQUISITES OF QUALITY**

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

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

- The Ministry of Finance (MoF), or equivalent, is usually best placed to compile GFS, and also to integrate the production and use of GFS into the budget process. The other agencies commonly given responsibility for GFS are the central bank and the statistics agency. The central bank is usually poorly placed to compile GFS, being separated from most of the data required, and being responsible for monetary rather than fiscal policy. Statistical agencies are also usually less well placed than the MoF to obtain budget data, which is usually the main component of GFS, although they may be better placed to obtain data from nonbudget agencies and other levels of government. Statistical agencies may have the advantage of being independent of the pressures of policy formulation, which leads to greater trust in the statistics.
- GFS is intended for use in fiscal policy formulation and monitoring, and therefore there should be close liaison between the unit/agency responsible for GFS and the budget policy areas.

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

- It is essential that close liaison is maintained (e.g., by a standing committee that meets regularly) between GFS and monetary data compilers to reconcile GFS and banking sector financing data wherever significant government financing is obtained from the banking sector. Where financing data are not directly compiled by the GFS system, it is important to ensure that financing data are consistent with 'above the line' (i.e., revenue and expenditure data) in the GFS system.
- GFS data should be used as the source of most national accounting data relating to the general government (GG) sector. Not only does GFS provide the most reliable and authoritative source of government data, but the use of common sources simplifies comparison of GFS and national accounts aggregates and provides greater confidence in the use of national accounts data in the budget policy process.
- Even if national accounts are compiled using other data sources, close liaison between national accounts and GFS compilers should be maintained to ensure that the data used and statistics compiled are consistent.

- The ideal method of GFS compilation is to have the GFS derivation links built into the financial information management system used for budgeting and accounting purposes.

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

- Confidentiality of the data is not normally applicable to general government units, but is relevant to data collected from public corporations where GFS is applied to the wider public sector.

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

- The compiling agency must have the legal right to access data from all government agencies before it is audited and/or published. Note that while MoF usually has ready access to budget data, it may need special legislative and/or administrative powers to access data for nonbudget agencies and/or other levels of government.
- All arrangements for access to data should either specify delivery of data within a timeframe consistent with GFS requirements, or allow the compiling agency to compel provision of data in accordance with a reasonable timetable.

**0.2 Resources**

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

- Compilation of GFS on a part time basis is unlikely to yield good results. It is particularly important that resources are available, and arrangements are in place to train successors to current GFS compilers, and that staffing numbers and turnover allow a "critical mass" of staff to be maintained so that expertise is not lost (including an appropriate incentive structure to retain trained staff). The staff compensation arrangements should also be sufficient to encourage expert staff to remain in the area.
- GFS staff should:
  - have sufficient knowledge of GFS concepts and practice
  - undergo internal training in GFS methodology
  - participate in international training courses/seminars/workshops
  - ensure that broad knowledge of GFS concepts and methodology is widely disseminated among staff involved in determining and monitoring fiscal policy.

- Effective compilation of GFS entails access to modern computer systems and availability of source data for all government agencies in a standard computer readable form. The link between accounting/budgeting source data and GFS aggregates (bridge or derivation tables) should be stored electronically in a form that makes it easy to access and update.

### **0.3 Relevance**

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

Users are mainly policymakers. GFS should be seen as an integral part of the budget process, and should be used by authorities, Fund staff, and others conducting surveillance to assess fiscal policy. If GFS is not available in time, or is otherwise not used for fiscal policy, the statistics are of very limited usefulness. There should be a process for users to provide feedback to GFS compilers on perceived problems with GFS data quality, or usefulness for fiscal policy purposes.

### **1. ASSURANCES OF INTEGRITY**

#### **1.1 Professionalism**

- Compilers of GFS should be free of pressures to produce statistics which are slanted towards (or against) government policy. Similarly, the selection of statistics for publication or other dissemination should not be biased towards inclusion/exclusion of data so as to distort the view of government policy. These pressures can be exacerbated if the GFS compiling unit is controlled by the budget policy development area.
- Inclusion of legislative backing for the use of the IMF standard (or an adaptation of the Fund standard) in compiling GFS would help in ensuring professional application of concepts and classifications. Likewise the requirement for publication or other dissemination within a stated time frame would reduce the pressure to sit on bad news.
- The unit responsible for GFS should have control over the dissemination process, and the output of this unit should not be able to be altered or suppressed by areas responsible for policy development.

### **2. METHODOLOGICAL SOUNDNESS**

Countries assessed on a *GFSM 1986* basis should have a migration plan for implementation of the *GFSM 2001*. Therefore, assessments during the migration period should take into account *GFSM 1986* compliance and steps initiated to implement *GFSM 2001*. In the early phases of the migration, there may be trade-offs between continued *GFSM 1986* compliance

and *GFSM 2001* implementation. Full implementation of the *GFSM 2001* will take several years. For countries being assessed on a *GFSM 2001* basis, assessments should take into account progress to date with the implementation of migration plans (for example, adoption of *GFSM 2001* statements and tables, and classifications), plans for further implementation, and the timetable for those plans.

## 2.2 Scope (*GFSM 2001 guidelines*)

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

- GFS annual data should cover all agencies (budget and nonbudget) and all levels of government. Subannual data may have to be restricted to central government, but should cover all material budget and nonbudget central government agencies.
- Partial coverage (e.g., only budget sector, or central government) not only provides an incomplete view of government finances, but is also likely to lead to pressure to shift government expenditure and debt to agencies that are not covered in the statistics, or to starve noncovered agencies by, for example, reducing transfers from central to local governments.
- The requirement for full coverage is frequently in conflict with other considerations, such as timeliness, or data accuracy. Where coverage is restricted as a trade-off with other considerations, it is important that GFS based on partial coverage be benchmarked to GFS based on full coverage on a regular (at least annual) basis, and that information be provided with the partial coverage GFS on the effect of such benchmarking.
- General government (quasi fiscal) activity can be carried out by commercial or semi-commercial public sector units, or by the central bank. Examples include noncommercial or highly concessionary lending, application of multiple exchange rates, and provision of noncommercial services (without direct subsidies). These activities are treated in current Fund practice by incorporating the units that are involved in material quasi fiscal activities in the coverage of fiscal statistics. The new GFS system operates strictly on an institutional sector basis, and therefore the core system reports should not incorporate any units that do not belong to the general government sector. However, the GFS system allows for supplementary data on quasi fiscal activity to be provided so that analysts can assess the overall fiscal position of the government. Alternatively, the scope of GFS can be extended to take in non GG sectors, and to provide views of (parts of) the consolidated public sector—provided the GG institutional sector boundary is preserved in the core statistics.
- Further detailed information on the GG sector is given in chapter 2 of the *GFSM 2001*.

## **2.3 Sectorization (*GFSM 2001 guidelines*)**

### **2.3.1 Sectorization systems used are broadly consistent with internationally accepted standards, guidelines or good practices.**

To facilitate international comparisons, the *GFSM 2001* emphasizes the presentation of fiscal data for the general government sector, which should be uniformly defined across countries consistent with the *System of National Accounts 1993* definition of the general government sector.

The government of a country consists of the public authorities and their agencies, which are entities established through political processes that exercise legislative, judicial, and executive authority within a territorial area. The term “government” is used here as a collective of all entities in a country that satisfy this definition. More often, reference will be made to the various individual governments of a country. For example, a country may have one central government; several state, provincial, or regional governments; and many local governments.

The institutional units that make up the general government sector should be presented in accordance with the tables and definitions of items set out in Chapter 2 of the *GFSM 2001*, and should cover all entities that materially affect fiscal policies.

- a) Government units are institutional units that carry out the functions of government as their primary activity. That is, they have legislative, judicial, or executive authority over other institutional units within a given area; they assume responsibility for the provision of goods and services to the community as a whole or to individual households on a nonmarket basis; they make transfer payments to redistribute income and wealth; and they finance their activities, directly or indirectly, mainly by means of taxes and other compulsory transfers from units in other sectors. All government units are members of the general government sector.
- b) Depending on the complexity of a government’s organization, the identification of government units may be difficult. Most of the ministries, departments, agencies, boards, commissions, judicial authorities, legislative bodies, and other entities that make up a government are not institutional units because they generally do not have the authority to own assets, incur liabilities, or engage in transactions in their own right. In general, all entities funded by appropriations made in accordance with a budget controlled by the legislature must be amalgamated into a single institutional unit.
- c) It is often necessary or desirable for analytic reasons to disaggregate the statistics of the general government sector. Depending on the administrative and legal arrangements, there may be more than one level of government within a country, and statistics should be compiled for each level. In the GFS system, provision is made for three levels of government: central; state, provincial, or regional; and local. Not all

countries will have all three levels; some may have only a central government or a central government and one lower level. Other countries may have more than three levels. In that case, the various units should all be classified as one of the three levels suggested here. In addition to levels of government, the existence of social security funds and their role in fiscal policy may require that statistics for all social security funds be compiled as a separate subsector of the general government sector. The general structure of the statistical tables prescribed by the *GFSM 2001* is as follows:

General Government								
Central Government					State Governments (6)	Local Governments (7)	Consolidation Column (8)	General Government <sup>b/</sup> (9)
Budgetary (1)	Extrabudgetary (2)	Social Security Funds (3)	Consolidation Column (4)	Central Government <sup>a/</sup> (5)				

a/ Consolidation of budgetary, extrabudgetary, and social security funds (columns 1, 2, 3).

b/ Consolidation of central government, state governments, and local governments (columns 5, 6, 7).

## 2.4 Classification (*GFSM 2001 guidelines*)

### 2.4.1 Classification systems used are broadly consistent with internationally accepted standards, guidelines or good practices.

Data should be classified in accordance with the tables and definitions of items set out in the *GFSM 2001*, and should be provided at least to the same level of detail, where the values involved are material.

- a) The Statement of Government Operations summarizes government transactions in the reference period. (Table 4.1)

This table can be considered as comprising 3 sections: revenue and expense; net acquisition of nonfinancial assets (capital investment); and net acquisition of financial assets and liabilities (financing). The balance of revenue and expense (net operating balance) provides a measure of the sustainability of government fiscal policy. The balance of revenue, less expense, and less net acquisition of nonfinancial assets measures the financing requirement to carry out the governments operating and capital investment programs.

- b) The Statement of Sources and Uses of Cash summarizes the changes in the government's liquidity position as the result of cash transactions in the reference period. (Table 4.2)
- c) The Statement of Other Economic Flows shows the changes to the government's asset and liability position due to flows other than transactions. These include changes due to price increases and decreases, and other changes to the volume of

assets—for example changes due to natural disasters, war, and discovery or depletion of resources (Table 4.3). This statement will take time to implement.

- d) The Classification of Revenue table provides a detailed view of the major tax categories, and also any other major sources of revenue. (Table 5.1)
- e) The Economic Classification of Expense table provides a view of government expenses in terms of their economic character, as required for macro-economic analysis. (Table 6.1)
- f) The Classification of Expenditure by Function table presents government expenditure (expense plus the net acquisition of nonfinancial assets) in terms of the functions or policies that they are intended to promote. This view is required to assess government fiscal policy in terms of social and economic objectives. (Table 6.2)
- g) The Balance Sheet is a key part of the new GFS system. It records the cumulative effect of past government fiscal policies, indicates the resources that the government has available to carry out its policies, and the liabilities that may impose limits on the government's freedom of action in future; and completes the integrated system of stocks and flows. (Tables 7.1, 7.2, 7.3, and 7.4).

NOTE: The development of complete balance sheets will be a difficult process for most countries, particularly the inclusion and valuation of infrastructure assets such as roads, bridges, and dams. For this reason it is likely that balance sheets will initially only partially cover the assets of governments. However it should be possible for governments to produce balance sheets that include most financial assets and liabilities at an early stage on the migration path from the current to the new system.

- h) The Classification of Transactions in Nonfinancial Assets table measures the acquisitions less disposals of nonfinancial assets, and the consumption of fixed assets, by detailed asset type. (Table 8.1)
- i) The Transactions in Financial Assets Classified by Type of Financial Instrument table provides information on the ways in which the government manages its liquidity holdings, and its acquisition/disposal of financial assets held for policy purposes. (Table 9.1).
- j) The Transactions in Liabilities Classified by Financial Instrument table indicates the ways in which the government obtains financial resources, and the economic impact of this activity on other sectors of the economy. (Table 9.1)

The Transactions in Financial Assets and Liabilities Classified by Sector of the Counterparty to the Financial Instrument table complements the tables on financing classified by instrument, and provides information on the sectors from which

government obtains financial resources (or to which it provides financial resources). (Table 9.2)

NOTE: Obtaining data on financing from some sectors (e.g., non bank domestic sector) and for some types of financial instruments (e.g., securities) from government sources is problematic. However it is still possible to provide financing information by sector from government sources in the case of direct loans and other nonnegotiable instruments. Sectoral information on other instruments may be available from other statistical collections, or can be derived. It is especially important for GFS to identify financing from the domestic banking sector (including the central bank), and from foreign sources.

## **2.4 Basis of recording (*GFSM 2001 guidelines*)**

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

- Flows should be valued at the prices current on the date at which they occur. Stocks should be recorded at the values current at the balance date. Transactions expressed in monetary values are presumed to be at current market value. Values of other flows, and stocks, are estimated using the closest market information available. Where suitably close markets cannot be found, it may be necessary to use cost data, but this must be modified to take account of price movements and accrued transactions (such as interest and depreciation). Points to note:
  - the nominal (or face) value of securities is not a reliable guide to their current market value; where a close market price cannot be established, the issue price plus any accrued interest should be used;
  - nominal values can be used for financial assets and liabilities that are not traded (such as loans), provided all interest is paid in periodic installments;
  - historical cost valuations of real assets are not suitable as a guide to market value; where a close market price cannot be established, the current written down cost should be used;
  - nonmarket equity valuation should be estimated at the residual value of corporations/quasi-corporations;
  - infra-structure assets, such as roads, bridges, and power and water systems, cannot usually be valued by reference to functioning markets, and should be valued at replacement cost (i.e., written down cost of replacing asset with an equivalent asset);
  - prices for land, buildings, and equipment should be valued using data from similar commercial assets;



- heritage assets are particularly difficult to value, and for economic analysis a notional value may be used (e.g., \$1).

For further information, see *GFSM 2001* paragraphs 3.73–3.79.

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

- Accrual revenues/expenses are recorded at the time that an event occurs that results in a flow of economic benefits to or from the government, or that makes it probable that such a flow will occur in future—provided that the monetary value of the flow can be measured reliably. Note that taxes receivable should be recorded when tax documentation (such as income tax assessments), which enables reliable estimation of probably future tax receipts, becomes available. Transactions in nonfinancial assets are recorded when legal ownership changes, or when government gains control over the assets. For further information see *GFSM 2001* paragraphs 3.37–3.71.
- Nearly all governments currently operate on a cash accounting basis. While a number of steps can be taken towards implementation of the new system using cash or mixed cash/accrual data, the full implementation of the new GFS system will require the adoption of accrual accounting (and preferably budgeting) systems. Assessment under this category should take account of the current status of accounting and budgeting systems, and the expected pace of development of new systems.
- Cash data can be used as a proxy for accrual data, provided the cash data are adjusted to an approximate accrual basis where such adjustments make a significant difference. Data on a due for payment basis are preferable to cash flow data as a proxy for accrual data. Users of GFS should be advised of any significant adjustments made to cash data, and also of categories for which adjustments could not be made.

The main categories where adjustments are likely to be necessary are:

Interest paid	(include interest accrued due to discounts/premia)
Government pension contributions	(actuarially determined amount necessary to fund pension benefits accrued, due to service in the current period)
Consumption of fixed capital	(may be possible to use consumption of fixed capital for GG sector from national accounts)
Changes to inventories	(usually only significant for strategic inventories)
Holdings of nonfinancial assets	(data generally not available)

Accounts payable (especially if there are arrears in payment)

The following cash data can generally be used to approximate accrual data:

Tax revenue (caution—possible timing problems with income tax)

Social contributions  
Sales of goods and services  
Rent

Dividends

Fines and penalties

Grants received

Wages and salaries—excluding own account capital work (if no arrears and if compensation in kind is not material)

Purchase (usage) of goods and services (if no arrears, changes in inventories not material)

Subsidies

Social benefits

Grants paid

Acquisition/disposal of nonfinancial assets

Acquisition/disposal of financial assets (except for accounts payable/receivable and liabilities)

Holdings of financial assets (caution—securities may not be on market valuation)

Holdings of liabilities (caution—securities may not be on market valuation)

- Cash flow data remains an essential component of accrual recording. Cash data are required to at least the level of detail required to compile Table 4.2 (*GFSM 2001*). This includes information reconciling cash flow and accrual aggregates.

### 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.

- Data for extra-budgetary agencies are not normally available through centralized budget/financial management systems, and also are likely to have specialized account codes. The agency responsible for compiling GFS must have the authority to collect data of sufficient quality and detail, and have systems capable of handling the

combined data. Procedures are required to report on the status of extra-budgetary data receipt and processing, and to follow up or (if necessary) estimate missing data.

- Data for state/provincial, and local governments must be available at least annually with equivalent detail (where relevant) to central government data to allow consolidated general government GFS to be produced at the same level of classification.
- Data on intragovernmental transactions and financial positions must be available to eliminate the transactions and positions between the various units of each government subsectors (central, state and local governments). Conceptually, consolidation requires information on all transactions and financial asset and liability holdings among the government units that are being consolidated. In practice only those that materially affect consolidated data need be identified. In particular, information should be provided for:

Grants	}	
Interest	}	- between government units
Taxes	}	
Financial assets/liabilities	}	

More specifically the statistical sources should contain:

- (i) Data covering the full range of economic stocks and flows from administrative systems (possibly supplemented from other sources) for central and state/provincial governments (where present).
- (ii) Data consolidated for the central government sector, or information to allow such consolidation.
- (iii) Data are available to allow consolidation of data for different levels of government.
- (iv) Data for local government units with sufficient detail and timeliness. If such data for these units are not available, procedures are in place and data are collected by survey for inclusion in GFS.

**3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required to compile government finance statistics.**

- The charts of accounts define the items that will be supported by the accounting systems. These should be sufficiently detailed for GFS purposes, and preferably structured in such a way that it is easy to map from the account codes to GFS codes. Ideally, GFS codes are included on the chart of accounts next to the corresponding account codes. However, it may be best not to attempt to use the same code for GFS

and accounting purposes, as this may impose unnecessary restrictions on the use of GFS codes.

**NOTE:** A particular problem often arises in the case of functional (COFOG) categories, which are usually derived from administrative categories, such as departments, agencies, and bureau, and/or program/project categories. If administrative categories are used, they must be sufficiently homogeneous and aligned with COFOG categories to allow all expenditures for that category to be assigned to the appropriate functional classification. The needs of GFS should be taken into account in defining programs and projects.

- The ideal way of producing GFS is from a Financial Management Information Management System (FMIS), which integrates the preparation of budget policy data, accounting reports, and GFS. Compilation of GFS as a secondary exercise, from accounting reports, makes it unlikely that it will be produced in time for fiscal policy decision making, or that it will be seen as a mainstream fiscal reporting activity.

More specifically:

- (i) Budget and extra-budgetary charts of accounts align with GFS categories.
- (ii) Budget management systems include provision for automatic derivation of GFS items from budget items.
- (iii) The timing of recording, and valuation, of source data are consistent with GFS concepts.
- (iv) Compilers are aware of any differences between source data and GFS concepts.
- (v) Information published under financial accountability arrangements (e.g., publicly available data on budget outcomes) has the same scope as GFS, and can be reconciled to GFS.

### **3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required to compile government finance statistics.**

*i. Information is available on the extent to which supplementary data sources differ from those of internationally accepted good practices.*

- Supplementary data may not be relevant for government finance statistics.

## **3.3 Statistical Techniques**

### **3.3.1 Data compilation employs sound statistical techniques to adjust data sources.**

- All transactions and debt holdings between the budgetary and extra-budgetary agencies needs to be eliminated from the consolidated statistics, preferably by

including offsetting adjustments to the transactions and financial asset/liability holdings that need to be consolidated.

- Conceptually, consolidation requires information on all transactions and financial asset holdings among the government units that are being consolidated. In practice only those that materially affect consolidated data need be identified. In particular, information should be provided for:

grants	}	
interest	}	- between government units
taxes	}	
financial assets/liabilities	}	

The system used to compile GFS must allow for estimation of missing data to avoid either:

- a) significant undercounting when agencies do not report in time for GFS deadlines, or
- b) unnecessary delay in producing GFS due to a small number of nonreporting agencies.
- Where estimated data are used it should be clearly identified and replaced when actual data become available.

**3.4.1 Intermediate results are validated against other information where available.**

- Intermediate data may not be relevant for government finance statistics.

**4. SERVICEABILITY**

**4.1 Periodicity and timeliness**

- Following a 12-month transition period that began in July 2003, under the SDDS subscribers can use a targeted flexibility option for the timeliness of monthly central government operations data, if they disseminate quarterly general government data according to the *GFSM 2001* or an equivalent guideline with a one-quarter lag. The targeted flexibility option would be allowed for the last month of the fiscal year (up to three months) and the first month of the new fiscal year (up to two months). During the transition period those eligible subscribers can disseminate fiscal data on a “best effort” basis.

**4.2 Consistency**

**4.2.1 Statistics are consistent within the dataset (*GFSM 2001 guidelines*).**

- (i) The difference between the opening and closing balance sheets, for each asset/liability category, equals the sum of transactions, net holding gains and losses, and other changes to the volume of assets for that category.
- (ii) If consistency as defined in (i) above is achieved by deriving any component residually, then an annotation to this effect is published.
- (iii) Net operating balance less net acquisition of nonfinancial assets equals net lending/borrowing.
- (iv) Net lending/borrowing derived from revenue less expenses less net acquisition of nonfinancial assets equals financing.
- (v) Components of revenue, expenses, net acquisition of nonfinancial assets, and financing add to aggregates.
- (vi) Detailed revenue, expenses, net acquisition of nonfinancial assets, and financing table data agree with the aggregates in the government operations table.
- (vii) Transfers paid = transfers received between levels/subsectors of government.
- (viii) Cash deficit/surplus is consistent with the accrual “policy balance” (net lending/borrowing less net acquisition of financial assets for policy purposes), after excluding changes to accounts payable/receivable, accrued interest, and depreciation.
- (ix) Procedures are in place to benchmark monthly and quarterly data to annual data.
- (x) Revisions due to annual benchmarking are within acceptable limits.
- (xi) Information on revisions due to benchmarking is provided to users.
- (xii) The sum of GFS aggregates for component levels of government, or other sub-sectors of GFS, equal aggregates for the consolidated combination of those subsectors, less consolidation adjustments. Note that the net operating balance, net lending/borrowing, change in net worth, and net worth, should add across all sub-sectors of GFS.

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

- Explanations should be provided for significant departures from past trends. For example, significant increases in tax revenue (adjusted for inflation) should be explainable by reference to changes in tax rates and/or economic conditions that caused the increase. Similarly, major changes in expenditures should be explainable in terms of changes to fiscal policies and/or increases in demand for government services or transfers. Unchanged trends in revenue or expenditure, despite known changes to fiscal policies and/or economic conditions, also require explanation.
- To ensure consistent time series, any changes to classification or methodological treatment should be applied to the GFS time series, where this has material impact on the statistics.

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

- National accounts data for the GG sector should be based on GFS data, although supplementary data may need to be added. Therefore it should be possible to reconcile major aggregates such as net lending/borrowing between the two systems, allowing for known differences in treatment. Where the national accounts draw on different data sources, a complete reconciliation cannot be achieved, but significant differences between corresponding aggregates indicate problems with one or both sets of data.
- Monetary accounts data provides the counterpart to GFS domestic bank financing, and interest flows, and should be used to check corresponding GFS data. This check is especially important, since fiscal financing data are often imputed from monetary data by Fund missions, and for program evaluations. Financing from the central bank, and the banking sector excluding the central bank, is particularly important for economic analysis, and reliable data for the banking sector should be available from the central bank and/or monetary surveys. Financing from nonbank corporations and the household sector is likely to be less readily available and reliable.
  - Banking sector data (usually compiled by the Central Bank) is often used as the preferred fiscal measure, especially sub-annually. If the two sets of numbers are materially different, the reasons for the difference must be ascertained, and documentation provided on the size and reason(s) for the discrepancy.
  - Nonbank sector domestic financing is usually done through issue of securities, and GFS counterpart financing data are likely to be unreliable if a secondary securities market exists. However if data on nonbank domestic government financing is available from financial surveys, this data should be compared to GFS nonbank domestic financing derived as a residual by subtracting banking and external sector financing from total financing.
  - Foreign financing in the form of direct loans from foreign governments and international institutions should be readily available from the main GFS data sources (e.g., budget and/or accounting systems). Similarly, securities issued externally should be provided from the fiscal agency. These data should be routinely reconciled with data from Balance of Payments and related surveys. Foreign financing of investment projects, in particular, is an area where GFS data has proven to be deficient in the past.

NOTE: The coverage of government units is likely to be the main structural cause of differences between GFS and BoP or banking data, and the reconciliation process should include a process to compare coverage and classification of government units. Also, domestically issued securities may be taken up by agents of overseas residents, and therefore external financing in GFS should be adjusted to agree with BoP data.

- Where governments issue tradable securities, the sector holding such securities can usually only be determined by surveying the ultimate purchases of such securities (since the issuer has no knowledge of subsequent transactions). In these cases GFS data on financing and debt stocks by sector of debt holder must be obtained from monetary and balance of payments data.
- Monetary data will not provide information on accounts payable/receivable, or equity assets. Monetary data are conceptually on an accrual basis, but GFS compilers need to check that accrual principles are applied consistently between the two systems.
- GFS data on foreign grants, other revenue, external project financed capital expenditure, external financing, and external debt should be reconciled with balance of payments data. Foreign purchase of securities should be derived from BoP data.

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

The revision policy and practice must be clearly specified to the public:

- The system used to compile GFS must generally allow for estimation of missing data to avoid either significant undercounting when agencies do not report in time for GFS deadlines, or unnecessary delay in producing GFS due to a small number of nonreporting agencies. Once these data become available, the data will need to be revised.
- Upon first release, some administrative source records may contain provisional data (provisional accounts), and the data will become “final” only once they are audited (finalized accounts)
- The use of estimated data needed should be clearly identified, and the data should be replaced when revised or finalized administrative data become available.

## **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).**

- Seasonal adjustments may not be relevant for GFS.

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

- A publication does not necessarily have to be hard copy (for example, data can be also disseminated electronically via the web or CD-ROM products, etc). However,



disseminated data should cover a full set of GFS data with supporting explanatory information, should be made widely available on a regular basis with reasonably stable content and format, and should be accepted as the official statement of GFS. There is a need for a dedicated publication program for the GFS data, and simply issuing a press release, or posting data on a website, is not a satisfactory way of disseminating GFS.