

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

This Report on the Observance of Standards and Codes on the Data Module for **Zambia** was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **January 18, 2005**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of **Zambia** or the Executive Board of the IMF.

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

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ZAMBIA

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

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January 18, 2005

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

The datasets covered in this report are national accounts, consumer price index, government finance, monetary and balance of payments statistics. The agencies that compile the datasets assessed in this report are the Ministry of Finance and National Planning (MOFNP), the Bank of Zambia (BOZ), and the Central Statistical Office (CSO).

Zambia has participated in the General Data Dissemination System (GDDS) since November 2001. Most of the data disseminated follow the GDDS recommendations for periodicity and timeliness.

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

BOZ: <http://www.boz.zm>

CSO: <http://www.zamstats.gov.zm>

This report is based on information provided prior to and during a staff mission from May 18–June 3, 2004 and publicly available information. The mission team from the IMF comprised Ms. Wipada Soonthornsima (Head), Messrs Alexander, Hagino, Hoesoo and Venter (All STA), Mr. Manninen (Expert) and Ms. Allotey Addo (STA Administrative Assistant).

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ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>BPM5</i>	<i>Balance of Payments Statistics Manual</i> , fifth edition
BOZ	Bank of Zambia
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
CSO	Central Statistical Office
DQAF	Data Quality Assessment Framework
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HBS	Household Budget Survey
IMF	International Monetary Fund
IT	Information Technology
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOFNP	Ministry of Finance and National Planning
PCF	Private Capital Flows Project
ROSC	Report on the Observance of Standards and Codes
STA	IMF Statistics Department
ZRA	Zambia Revenue Authority

I. OVERALL ASSESSMENT

1. The data module of the Report on the Observance of Standards and Codes (ROSC) for Zambia assesses three statistical agencies responsible for compiling and disseminating macroeconomic datasets. The agencies are the Central Statistical Office (CSO) for national accounts and the consumer price index (CPI), the Bank of Zambia (BOZ) for monetary and balance of payments (BOP) statistics, and the Ministry of Finance and National Planning (MOFNP) for government finance statistics (GFS).¹ A largely sufficient legal framework supports the compilation and dissemination of the statistics by these agencies except for national accounts and BOP statistics. The Statistics Act of the CSO allows the Minister of MOFNP to disclose individual information to the Department of Agriculture that potentially undermines confidentiality of source data. The CSO has a clear mandate to compile and disseminates national accounts and the CPI, but it has delegated unofficially to the BOZ the responsibility for compiling and disseminating BOP statistics. Over a number of years, BOZ has been the only agency that compiles and disseminates BOP statistics but without official authorization, the collection of source data for BOP could be undermined. Given the prolonged difficult economic environment, the CSO faces serious resource limitations that have affected the production of statistics for quite some time. While some progress is being made in reversing this declining trend of services, the CSO remains under-resourced and overly dependent on donors' uncertain support for its operations. At the national level, data sharing and coordination of the overall statistical system are not adequately in place; coordination is on a limited basis. Statistics are compiled broadly on the basis of internationally accepted standard methodologies, except for the GFS and national accounts. Compilation of fiscal data using *GFSM 2001* methodology would facilitate policy analysis. While accessibility and serviceability have improved, for most datasets more extensive dissemination is needed to meet broader groups of users.

2. Zambia has participated in the General Data Dissemination System (GDDS) since November 2001. Most of the data disseminated follow the GDDS recommendations for periodicity and timeliness (see Appendix I Table 4). The exception is the external sector where public and publicly guaranteed external debt data are on a semi-annual rather than a quarterly basis.

3. Based on the IMF's Data Quality Assessment Framework (DQAF) (www.dsbb.imf.org), the mission arrived at the main conclusions below.

4. **Prerequisites of quality and assurances of integrity:**

¹ At the moment, no agency disseminates GFS according to the international standards of the IMF's *A Manual on Government Finance Statistics (GFSM 1986)* or *Government Finance Statistics Manual 2001 (GFSM 2001)*. The only publicly available data are fiscal data in the Zambian budgetary format; therefore, this report assesses the fiscal data.

Overall, the lack of effective coordination among all statistical producing agencies and users impedes the quality and transparency of statistics. In addition, no systematic program to assess users' needs is in place. All agencies have limited practices in informing the public of internal government access to statistics before wider data dissemination.

- The Central Statistical Office operates under an adequate legal framework for statistical operations with provision for confidentiality and assurance of responses. However, in practice, the safeguarding of confidentiality could be improved in the transfer of information from the provincial offices. Despite being a department under the MOFNP where the Minister could give directives on collection of statistics, the CSO has adequate operational independence to carry out its work program. The CSO faces resource limitations and uncertain resource allocations that seriously affect its annual work program implementation. In particular, resources for compilation of national accounts have reached a risky and critical level. There is no realistic prioritized work program based on CSO's own resources and taking into account users' needs, the CSO faces uncertainty of resource allocation to implement its work programs. In practice, CSO staff is independent in deciding on choices of sources and statistical techniques based solely on statistical considerations. The CSO recognizes the importance of improving the quality of statistics. It has solicited, and is currently receiving, technical assistance in many areas, including national accounts and GFS.
- The Ministry of Finance and National Planning provides an adequate institutional environment for compiling data on domestic budgetary operations but not for consolidated central government and general government operations. Data coordination needs strengthening to capture extrabudgetary operations, which are significant. Resources are adequate for current operations but could place limitations for the implementation of the GFS methodology. Training in GFS methodology is needed. The decisions on choice and mode of dissemination of fiscal data could be strengthened. The Government of Zambia, in its Public Sector Reform Strategy (PSRS), has identified the need for ongoing reforms in the area of Public Expenditure Management. The proposed Public Expenditure Management and Financial Accountability Program (PEMFA) has the overall objective to improve efficiency and accountability throughout the public sector. This initiative will contribute to, and facilitate the full implementation of the *GFSM 2001*.
- The Bank of Zambia has sufficient legal provision and institutional set-up to compile monetary statistics, but the legal or administrative arrangement needs clearer authorization for compiling balance of payments statistics. Staff resources for the compilation of balance of payments statistics and for information technology (IT) need strengthening. Quality of data is carefully monitored based on the *Computation*

and Compilation Guidelines. The BOZ has a strong culture of professionalism, and the management has a strategic plan in place to achieve the organization's vision. Cross-agency coordination with a focus on statistics could be strengthened. The BOZ management emphasizes the efficient use of resources and service to customers.

5. **Methodological soundness** is broadly adhered to with regard to international standards for national accounts, CPI and monetary statistics. Some deviations from international standards exist in the concepts and definitions, scope, and sectorization of most datasets. Fiscal and balance of payments data have serious deficiencies in scope and classification. Regarding scope of balance of payments statistics, significant gaps remain, such as the reinvestment of earnings and trade credits. To better adhere to international standards, the CSO has begun a phased implementation of the *System of National Accounts 1993 (1993 SNA)*, and the BOZ has begun the implementation of the *Monetary and Financial Statistics Manual (MFSM)*. In addition, the Private Capital Flows (PCF) project has provided the BOZ a sound basis on which to conduct large surveys of enterprises on a regular basis. Since the standards of the *GFSM 1986* have not been adopted, fiscal data as disseminated by the MOFNP do not have appropriate sectorization.
6. **Accuracy and reliability** are adequate for monetary statistics but are weak for other datasets. Except for monetary statistics, source data are not comprehensive. In particular, source data for national accounts are seriously out of date while statistical techniques need strengthening. Source data for GFS are limited to domestic budgetary central government operations. Lack of sufficient coverage of activities and establishments reduces the accuracy of the national accounts and the balance of payments statistics. Statistical techniques for balance of payments rely on limited surveys and out-of-date estimation methods. The assessment and validation of source data are not done systematically and regularly except for monetary statistics and GFS. Furthermore, statistical discrepancies are not investigated for national accounts and the CPI. Most datasets have timely source data.
7. **Serviceability** of dissemination of the five datasets meets the GDDS recommendations in terms of periodicity and timeliness. Consistency of data both within and across datasets is largely met for most datasets. However, with respect to GFS, sectoral consistency is limited to domestic budgetary central government operations. Monetary statistics have discrepancies in interbank positions. Revisions are normally undertaken in a regular, timely manner though the schedule is not publicized. Revision studies are not publicized.
8. **Accessibility** of macroeconomic statistics and metadata are generally weak. Dissemination media and formats, especially for national accounts and balance of payments, are not adequate. For these data, users rely on publications of the MOFNP for more timely data series than could be obtained from the producing agencies. However, the lack of a

MOFNP website and more extensive dissemination of hardcopy publications create serious limitations for users outside Lusaka. National statistical agencies do not disseminate metadata but hyperlink to the GDDS website of the International Monetary Fund (IMF). No advance release calendar is in place. The CPI is released to all users at the same time through monthly press conferences. However, such practices are not carried out by producers of other datasets. Limited contact information is available for users for most datasets. For all datasets, agencies are conscious to improve accessibility.

9. Section II of this report provides a summary assessment of data quality by agency and dataset. This is followed by staff's recommendations in Section III. The authorities' response to this report and a volume of detailed assessments are presented in separate documents.

II. ASSESSMENT BY AGENCY AND DATASET

10. An assessment of the quality of five macroeconomic datasets—national accounts, consumer price index, government finance, monetary, and balance of payments statistics—was conducted using the Data Quality Assessment Framework (DQAF July 2003). The DQAF covers the various dimensions of data quality. For each data producing agency, prerequisites that are fundamental to data quality, and the assurances of integrity (Dimensions “0” and “1” of the DQAF) are presented in Tables 2a–c. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF) are shown in Tables 3a–e.

Table 1. Republic of Zambia: Data Quality Assessment Framework July 2003—Summary Results

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

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

Table 2a. Republic of Zambia Assessment of Data Quality—Dimensions 0 and 1—Central Statistical Office

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment: The <i>Census and Statistics Act 1964</i> establishes the legal basis for the CSO to compile official statistics. The <i>Statistics Act</i> mandates the Director to organize a coordinated scheme of social and economic statistics relating to Zambia. However, there is no systematic program to coordinate the production of official statistics. In practice, coordination is undertaken primarily on a bilateral basis with other government agencies. The <i>Act</i> stipulates that individual reporters' data be kept confidential and establishes penalties for the breach of confidentiality by CSO staff. However, the <i>Act</i> allows the Minister to authorize the disclosure of individual information to the Departments of Agriculture or Veterinary Services. Further, the current process of transferring information from the provincial offices could result in an inadvertent breach of confidentiality as questionnaires could be lost or misplaced during transportation. The <i>Act</i> provides a legal mandate to the CSO for collecting information, but weak survey practices have reduced the agency's ability to collect data from establishments.</p> <p>Resources: Staff and computing resources are not adequate for compiling a coherent set of timely national accounts statistics. The CSO's ability to recruit and retain staff is weak due to the uncompetitiveness of the remuneration and the unavailability of financing. Funding for the statistical program has not been secure and has weakened the agency's ability to undertake planned activities.</p> <p>The CSO devotes sufficient staff resources to compile the CPI but the software used is outdated and this could hinder the CSO's ability to improve the data collection and validation processes.</p> <p>Relevance: The CSO works with the Southern Africa Development Community (SADC) to implement international standards that should better serve users' needs. The CSO invites comments on the statistics during meetings with users, such as the monthly press conferences. However, the relevance of the statistics to users in the private sector is not assessed in a systematic manner.</p> <p>Other quality management: The CSO's mission statement recognizes quality as the cornerstone of the agency's activities. However, resource constraints have limited its ability to conduct evaluations of timeliness and revisions.</p>	<p>Professionalism: The recruitment and promotion of staff follow the regulations of the public service. Staff are appointed, and can only be dismissed, by the Public Service Commission. The constitution of Zambia prohibits public servants from active participation in political activity. Given that the CSO is a department of the MOFNP, the <i>Census and Statistics Act</i> stipulates that the Director shall collect statistics whenever the Minister directs, which implies that the Director may not have complete independence on statistical matters given the <i>Statistics Act</i> states that the Director shall collect statistics whenever the Minister directs. However, in practice, the CSO operates independently. The CSO has the authority to comment on erroneous interpretations of its data. Decisions on sources of data, statistical techniques, and dissemination are determined solely by statistical considerations.</p> <p>Transparency: The terms and conditions for compiling the statistics are contained primarily in the <i>Statistics Act</i>; however, the <i>Act</i> is not widely available to the public. CSO does not inform the users where a copy of the <i>Act</i> could be obtained. Nevertheless, respondents are well informed of the conditions under which the data are collected as the <i>Act</i> is cited in the survey forms. Internal government access to the national accounts statistics is identified only in the IMF's GDDS metadata. There is no prior government access to the CPI.</p> <p>Ethical standards: Staff behavior is guided by the General Orders of the Public Service. Staff are required to familiarize themselves with the regulations upon employment and a copy is maintained in the CSO. The <i>Census and Statistics Act</i> provides additional guidelines for staff engaged in compiling statistics for the CSO.</p>

Table 2b. Republic of Zambia: Assessment of Data Quality—Dimensions 0 and 1—Ministry of Finance and National Planning

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment The responsiveness to compile government finance statistics (GFS) in accordance with international standards is not explicitly assigned in any law. The CSO has assumed the responsibility to compile GFS, but has not disseminated any GFS. Instead, the MOFNP disseminates fiscal data. The MOFNP legal and institutional environment is strong, with clear responsibilities for collecting, compiling, and disseminating data on domestic central budgetary fiscal operations. Data are shared among the agencies involved in fiscal data compilation and dissemination but could be improved to obtain wider data coverage. Zambian fiscal data cover only domestic budgetary central government operations, and data are obtained from administrative public records as a by-product of the budget system. Therefore measures to ensure confidentiality or encourage response are not required.</p> <p>Resources In the Budget Office Department, staff, facilities, computing and financial resources are sufficient for producing the current reports on the domestic operations of the budgetary central government. The International Debt Management Department of the MOFNP does experience problems with computing resources and capacity. In both departments, staff need training to compile GFS.</p> <p>Relevance The MOFNP welcomes feedback from internal users, no arrangements are in place to obtain feedback from users of fiscal statistics outside the government.</p> <p>Other quality management All participants in the process of compiling fiscal data on the domestic budgetary central government operations are focused on the quality of information available and strive to improve quality. Data are produced from actual records in the accounting system of government for which clear rules and a code of conduct exists. However, in realizing the limited scope of data that affected the usefulness of the statistics, MOFNP begins to take some steps to improve data sources from extrabudgetary operations but not yet from other levels of government operations.</p>	<p>1. Assurances of integrity</p> <p>Professionalism The accounting system regulations issued by the MOFNP provide for the strict application of accounting principles and control mechanisms. Fiscal data are compiled on an impartial basis using available sources. Staff of the MOFNP are understood to be free from political or other influence in choosing the most appropriate sources and methods for compiling budget execution data. Compilers of fiscal statistics have full access to domestic budget execution data and the available data on off-budget operations. Staff are encouraged and assisted to further their studies and on-the-job training are provided. Staff are also afforded the opportunity to attend seminars, workshops and courses. However, none of the staff working in the Budget Office Department have had the opportunity to receive formal training in the compilation of GFS.</p> <p>Transparency No information on the terms and conditions applying to fiscal data is made public (apart from the laws governing the operation of the MOFNP and metadata on the IMF website). The government and the BOZ have internal access to statistics prior to their release to the public, but no information concerning this access is made public.</p> <p>Ethical standards All government employees are subject to the General Orders of the Public Service. The document describes the conditions of employment of civil servants, the code of conduct, and disciplinary procedures that will be followed in cases of misconduct. In addition to these general ethical standards set for staff, the <i>Finance (Control and Management) Act of 1969</i> and Treasury Instructions also governs the code of conduct of accounting officers.</p>
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Table 2c. Republic of Zambia: Assessment of Data Quality—Dimensions 0 and 1—Bank of Zambia

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment. The responsibility of the Bank of Zambia to produce monetary statistics is clearly established in the <i>BOZ Act 1996</i> and <i>Banking and Financial Services Act 1994</i>. In contrast, the BOZ's responsibility to compile balance of payments statistics is not based on a legal act, as the CSO is legally responsible for compiling the balance of payments under the <i>Census and Statistics Act 1964</i>. Arrangements within the BOZ for the compilation of monetary statistics enable smooth and effective data sharing, whereas arrangements with the government agencies participating in the production of balance of payments statistics are not strong enough to ensure the timely data transfer to the BOZ. The <i>BOZ Act</i> and applicable legislation protect confidentiality of individual responses.</p> <p>Resources. Staff and financing resources are adequate for monetary statistics, but inadequate for the balance of payments to meet the need to develop source data through large surveys on a regular basis. In addition, the BOZ is short of IT experts to implement a new database to be used for compiling monetary and balance of payments statistics. The efficient use of existing resources is promoted through the BOZ's Strategic Plan 2004–07, which requires each department of the BOZ to prepare quarterly progress reports and conduct annual reviews. Efficiency is ensured by a cost-effective annual budget consistent with the strategic plan and by preparation of daily time-sheet by compilers of monetary and balance of payments statistics.</p> <p>Relevance. The BOZ monitors the needs for monetary and balance of payments statistics in committees and seminars in which major users participate, or from reporters of the BOZ's <i>Quarterly Survey of Business Opinions and Expectations</i> as well as other users in the private sector. However, no regular user surveys or meetings are conducted by the BOZ.</p> <p>Other quality management. Processes are in place for monitoring quality and making continuing improvements to monetary and balance of payments statistics. Over the last few years, efforts have been made by the BOZ to adhere to international standards, namely the <i>Monetary and Financial Statistics Manual (MFSM)</i> and the <i>Balance of Payments Manual</i>, fifth edition (BPM5). The improvement of quality of monetary and balance of payments statistics is to be assessed through the review of implementation of the BOZ's Strategic Plan 2004–07. To ensure the quality of data, the Economics Department has prepared and updated the <i>Economics Department Manual: Computation and Compilation Guidelines</i>.</p>	<p>1. Assurances of integrity</p> <p>Professionalism. The BOZ has a strong culture of professionalism of the staff, which is ensured through the recruitment process, as well as by the assignment structure. The BOZ's Strategic Plan clearly indicates that key tasks of the Economics Department are to conduct and disseminate research work. The BOZ considers that such research work starts with preparing accurate statistics. The choice of data sources and statistical techniques for the compilation of monetary and balance of payments statistics is based solely on statistical considerations. The BOZ is entitled to comment when there is erroneous interpretation or misuse of the statistics.</p> <p>Transparency. The <i>BOZ Act 1996</i> and the <i>Banking and Financial Service Act 1994</i> are accessible on the BOZ website. However, detailed terms and conditions for the compilation of monetary and balance of payments statistics are not available to users. Internal government access is not clearly identified to users. Monetary and balance of payments data released by the BOZ are clearly identified as its product. The BOZ has given advanced notice of major changes in methodology and source data for monetary statistics, whereas such practices have not been introduced for balance of payments statistics.</p> <p>Ethical standards. All BOZ staff are required to abide by the Code of Conduct of the BOZ, updated and spelled out in the <i>Staff Handbook</i>, circulated by the Human Resource Department. Whenever the Code of Conduct is revised, directors of departments are supposed to remind their staff of the revision. A departmental code of conduct has been prepared to accommodate working circumstances peculiar to each department. The BOZ staff are fully aware of the motto that staff need to be honest and sincere in its dealings with the BOZ, colleagues, and customers.</p>
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Table 3a. Republic of Zambia: Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions: The accounts are compiled broadly according to the concepts and definitions of the 1968 <i>SNA</i>, instead of the 1993 <i>SNA</i>.</p> <p>Scope: The CSO compiles the accounts and tables that form the basis for developing a coherent set of national accounts statistics. However, they do not constitute the minimum requirements established by the Inter-Secretariat Working Group on National Accounts for implementing the 1993 <i>SNA</i>. The measures of output on assets broadly include all the items that constitute the production and assets boundaries, respectively.</p> <p>Classifications: Internationally recommended classifications are broadly used. However, classifications of consumption are not used as private final consumption is not estimated or disaggregated.</p> <p>Basis of Recording: Transactions are recorded on an accrual basis, except for government transactions, which are recorded on a cash basis. For most activities, the valuation of intermediate consumption excludes value added taxes.</p>	<p>Source data: The data collection program is not comprehensive and the source data are outdated. The program does not cover economic activities that have been introduced within the past ten years. Establishment/enterprise data are not collected on a regular basis and the Household Budget Survey (HBS) data are 10 years old. The price statistics are based on outdated weights. Data on local government or extrabudgetary activities are not available.</p> <p>Assessment of source data: Surveys, when they are conducted, are assessed for sampling errors and response errors. Editing procedures identify inconsistencies and outliers.</p> <p>Statistical techniques: The statistical techniques are weak. The base year is outdated. The CPI and wholesale price index are widely used to derive current price estimates by reflating the volume estimates extrapolated from the base year. Nonobserved activities are not covered.</p> <p>Assessment and validation of intermediate data and statistical outputs: The extent of the statistical discrepancy in the production accounts is not known. A supply and use framework is not used to assess the discrepancies in the accounts.</p> <p>Revision studies: Revision studies are not conducted in a systematic manner and on a regular basis.</p>	<p>Periodicity and timeliness: The periodicity and timeliness is in line with the GDDS recommendations.</p> <p>Consistency: Private final consumption expenditure at current prices is estimated as a residual; therefore, the production and expenditure accounts are consistent. Consistent series are available from 1994. The data are consistent with the balance of payments. However, the CSO compiles its own estimates on local government operations to derive estimates of general government from the MOFNP's data on central government budgetary operations.</p> <p>Revision policy and practice: The revision schedule has remained stable over time; however, it is not available to the public. CSO publications clearly identify preliminary and revised data. Studies and analyses of revisions are not available.</p>	<p>Data accessibility: The statistics are disseminated in detailed publications (when available) and in summary documents. However, the detailed publications are not produced on a regular, timely basis. The last national accounts publication was produced in 2001. The statistics are not released to all users at the same time and policymakers in the MOFNP and the BOZ may have access to the data before the public. An advance release calendar is not available. The CSO provides users with additional non-published data on request.</p> <p>Metadata accessibility: The sources and methods used to compile the statistics are documented in four volumes. Limited metadata are also available in the <i>National Accounts Bulletin</i>. The CSO website provides a link to the GDDS metadata.</p> <p>Assistance to users: The publications provide contact information for the CSO; however, specific information on contacting national accounts staff is not available. The CSO disseminates brochures listing the price and availability of publications. The list is also presented on the website.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions used are consistent with the 1993 SNA and the draft CPI Manual. The level of detail for both goods and services is good and all collected prices as well as the expenditure data are based on cash purchase prices.</p> <p>Scope. The CPI covers the consumption of all types of households regardless of size and income, both urban and rural. Three separate CPIs are compiled for urban low income, urban high income, and rural households. The net weighting concept for housing and durable good acquisitions is not used.</p> <p>Classification. The CPI is tabulated on national classification that closely follows Classification of Individual Consumption by Purpose (COICOP), which is the recommended international standard. The CSO plans to implement the COICOP in full. The composite index does not represent the national average expenditure.</p> <p>Basis for recording. Both prices and weights are determined on an accrual basis using market transaction values. However, sales of durable goods are not netted out from purchases for the calculation of market basket weights and the detail in characteristics is not always sufficient to identify the variety of an item.</p>	<p>Source data. The detail of source data for the CPI weights is good and the price collection program comprehensive. However, the price data relies only on the primary collection, scientific sampling methods are not used and new goods are not added to the index. In addition, the frequency of the Household Budget Survey (HBS) is not sufficient to react to changes in consumer expenditure structure in a timely basis.</p> <p>Assessment of source data. While good practices are used to assess the weight data for the CPI, the price data are not thoroughly validated against other data sources.</p> <p>Statistical techniques. Although the basic methods used with the CPI software are good, it leaves the compiler short of tools to alter compilation and adjustment methods. This also restricts supplementary data collection.</p> <p>Assessment and validation of intermediate data and statistical outputs. The quality of the CPI relies on the validity of individual price observations. No other validation rules are implemented and investigations on intermediate data or discrepancies in statistical output are not carried out.</p> <p>Revision studies. The CPI data are final as released. No formal studies are prepared and published except for those on the general HBS results that are used for estimating the CPI market basket weights. The effects of weight changes derived from more up to date HBS on the CPI are not studied.</p>	<p>Periodicity and timeliness of the CPI are good. The monthly CPI is published during the last week of the reference month, thereby meeting GDDS recommendations for periodicity and timeliness.</p> <p>Consistency. The CPI uses a consistent and internationally accepted major group classification. The CSO also links old index series together in order to obtain a consistent historical CPI time series.</p> <p>Revision policy and practice. The CPI is final when they are first released. The weight revisions do not have a regular or well established schedule. Instead, the revisions are made only when a new comprehensive HBS is conducted.</p>	<p>Data accessibility. The CPI is disseminated in a number of different media including a press release, a monthly bulletin <i>The Monthly</i>, and on the internet. Recent improvements in the publication format have helped the public to understand the contributions to long term price changes. Information is released simultaneously to all users. However, there is no advance release calendar.</p> <p>Metadata accessibility. The CSO has produced good material on the CPI metadata. However, very little has been made available to the users.</p> <p>Assistance to users. In general, assistance to users is well handled. The Dissemination Branch coordinates with other CSO branches and data users. However, only general contact points are given, and a large part of disseminated data is provided to users on the basis of a written request.</p>

Table 3c. Republic of Zambia: Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions Concepts and definitions of fiscal data for Zambia are loosely based on the recommendations of <i>GFSM 1986</i>. There are no plans at present in the MOFNP to migrate the basis of compilation to the new GFS standards based on the <i>GFSM 2001</i>. The CSO is, however, planning to migrate to the <i>GFSM 2001</i>.</p> <p>Scope The scope of disseminated fiscal data covers the domestic revenue, expenditure and financing of all budgetary central government units and excludes foreign grants received and the expenditure of such grants, extrabudgetary units and local authorities. Therefore, data on general government operations are not compiled. Data are presented and disseminated according to a national analytical framework.</p> <p>Classification/sectorization Although the classification of domestic revenue, expenditure and financing loosely follows the analytical framework of the <i>GFSM 1986</i>, concepts and definitions of revenue, expenditure, and net lending differ from the international standard in significant ways.</p> <p>Basis for recording Revenue transactions are recorded at time of deposit and expenditure is recorded when transfers to spending agencies takes place and not at the time of actual expenditure.</p>	<p>Source data Data collection programs to compile source data are ample for data on the domestic operations of the budgetary central government. Fiscal data lack foreign grants and related expenditure which is significant. Data collection programs to obtain source data from statutory agencies and local governments are not available.</p> <p>Assessment of source data No automated procedures are in place to facilitate the monitoring of the accuracy of data reported by the Zambian Revenue Authority (ZRA) or any line ministry. Regular meetings are held between the MOFNP and the BOZ and the ZRA to reconcile the data.</p> <p>Statistical techniques Fiscal data compilation covering the domestic operations of budgetary central government is based on administrative records with no need to employ any statistical techniques in the compilation process.</p> <p>Assessment and validation of intermediate data and statistical outputs Fiscal data from the MOFNP and monetary statistics from the BOZ are compared and reconciled for domestic budgetary operations only.</p> <p>Revision studies No revisions studies are conducted by the MOFNP and the disseminated data are not revised.</p>	<p>Periodicity and timeliness The periodicity and timeliness of fiscal data for domestic budgetary central government operations and domestic and foreign debt meet or exceed GDDS recommendations.</p> <p>Consistency The same concepts and classifications are used for monthly and annual fiscal data. Consistent time series are available since 1990. Due to a lack of a comprehensive set of GFS tables, it is impossible to assess the consistency of GFS with corresponding statistics for other sectors.</p> <p>Revision policy and practice No formal revision policy exists and revisions are performed only in cases where an amount was incorrectly disseminated. These types of revisions are accompanied by a footnote to the table. No revisions are made to replace preliminary data with final data.</p>	<p>Data accessibility Fiscal data for the domestic operations of budgetary central government are presented in the monthly, semi-annual, and annual reports of the MOFNP. The layout and classification of the data follow budget guidelines rather than the international accepted standard, which hampers international comparability. Fiscal data on the domestic operations of the budgetary central government are only disseminated in a hard copy format. The fiscal data are not released to all users at the same time; some official users outside MOFNP get information before the public.</p> <p>Metadata accessibility The MOFNP does not disseminate metadata. Metadata describing the central government operations and the central government debt can be accessed through a hyperlink from the CSO website to the GDDS website. These metadata contain brief descriptions of concepts and classifications in use, and broadly describe differences with international practice.</p> <p>Assistance to users There is no easy access regarding information on contact persons. Names of contact persons are disseminated only on the GDDS metadata pages. The monthly <i>Macroeconomic Indicators</i> publication identifies a general contact point for further information.</p>

Table 3d. Republic of Zambia: Assessment of Data Quality—Dimensions 2 to 5—Monetary Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions are broadly consistent with the <i>MFSM</i> recommendations. However, the terms and concepts of the monetary survey still follow older guidelines.</p> <p>Scope is broadly consistent with the <i>MFSM</i> recommendations. However, the monetary survey does not include the Building Societies, the National Savings and Credit Bank, and all banks in liquidation.</p> <p>Classification/sectorization are broadly consistent with the <i>MFSM</i> recommendations. However, local governments are not classified as money holders. In addition, residents and nonresidents are classified on a legal status rather than on the criteria of center of economic interest. Categories of shares and other equity, insurance technical reserves, and financial derivatives are not separately identified.</p> <p>Basis for recording is broadly consistent with the <i>MFSM</i> recommendations. However, securities are valued at cost and accrued interests are not added to underlying instruments.</p>	<p>Source data are collected on a timely basis and broadly provide the information needed for monetary statistics. However, simple rules are used to distinguish between residents and nonresidents deposits in commercial bank returns, and repos are not identified separately in the BOZ trial balance.</p> <p>Assessment of source data. The source data for the monetary statistics are based entirely on the trial balance of the BOZ and commercial bank returns. They are routinely reviewed and assessed to ensure accuracy and reliability.</p> <p>Statistical techniques. Monetary statistics rely on balance sheet data. Hence, no adjustments or transformations of data are used.</p> <p>Assessment and validation of intermediate data and statistical outputs are conducted routinely. Major aggregates of the monetary survey are validated against other financial data available in the BOZ, e.g., data of Zambia’s settlement system and government securities issues. Causes of discrepancies are investigated within the BOZ and with government agencies.</p> <p>Revisions studies. The causes of revisions are identified with a view to improve statistical processes.</p>	<p>Periodicity and timeliness meet the GDDS recommendations.</p> <p>Consistency. Monetary survey data are broadly consistent. However, interbank positions tend to be augmented due to the insufficient coverage of banks. Breaks in time series are not fully explained in the BOZ’s dissemination media. Although monetary data are reconcilable with data on the domestic central government budget, there are no consistency checks of other levels of government operations and monetary data.</p> <p>Revision policy and practice. Revisions are carried out whenever necessary. This policy is not made public. The last three months’ data are preliminary and, accordingly, the status of the data is identified with “Prel.” in the <i>Statistics Fortnightly</i>. However, the status of data is not identified in all monetary data tables.</p>	<p>Data accessibility. The BOZ publishes monetary data clearly with charts and tables through a variety of publications. However, the BOZ does not disseminate an advance release calendar to the public. In the absence of embargo on data release between the first release and the general dissemination, monetary data are not made available to all users at the same time. More detailed data are available upon request, but this fact is not made public.</p> <p>Metadata accessibility is adequate, as the BOZ website is hyperlinked to the IMF GDDS website, where there is a clear reference that users can access metadata.</p> <p>Assistance to users is readily available. The Assistant Director (Information and Statistics Division) of the Economics Department is identified as a contact person and the telephone and fax numbers are indicated. A catalog of publications and press releases is available on the BOZ website.</p>

Table 3e. Republic of Zambia: Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments Statistics

<p>2. Methodological soundness</p> <p>The conceptual framework is broadly consistent with <i>BPM5</i>. An exception is the definition of direct investment where the definition of ten percent or more of ordinary shares or voting power is not applied. The definition of resident and nonresident relies on physical addresses rather than the center of economic interest concept as recommended by the <i>BPM5</i>. The definition of residency for construction activities is also not applied.</p> <p>Scope</p> <p>Significant gaps such as the reinvestment of earnings, trade credits, and changes in export proceeds held abroad by mining enterprises and nontraditional exporters underlie the inadequacy of the scope of the balance of payments.</p> <p>Classification/sectorization</p> <p>Numerous transactions such as interest received on foreign assets of commercial banks and subscriptions to international organizations are misclassified.</p> <p>Basis for recording</p> <p>Transactions are valued at market prices where they are available and at face value for debt instruments. Proxy values are used if no actual values are available. Interest is recorded on a due basis.</p>	<p>3. Accuracy and Reliability</p> <p>Source data are generally adequate in timeliness, but deficient in coverage. Because source data are insufficient to compile adequate data, estimation methods are used. The PCF project did result in comprehensive data suitable for the balance of payments but no follow-up survey has been conducted.</p> <p>Assessment of source data</p> <p>New source data are assessed for reliability and accuracy. There are procedures for checks for internal consistency, comparisons with other data sources, and queries of large transactions.</p> <p>Statistical techniques</p> <p>Outdated estimation methods have remained in use unchanged for many years. Verification of data pertains to editing, tabulation, consistency within reported data, and signaling of deviations from historical patterns.</p> <p>Assessment and validation of intermediate data and statistical outputs</p> <p>Except for copper exports, few intermediate results are validated against other information.</p> <p>Revision studies</p> <p>No studies or analysis of revisions are undertaken. Investigations are limited to big revisions.</p>	<p>4. Serviceability</p> <p>Periodicity and timeliness</p> <p>Periodicity and timeliness is in line with the GDDS recommendations.</p> <p>Consistency</p> <p>Data are internally consistent and consistent over time. They are consistent with the national accounts, the monetary statistics, and the external debt statistics. However, they are not consistent with government accounts in the areas of grants and government services paid abroad.</p> <p>Revision policy and practice</p> <p>Revisions are made when new data have become available. The public is not informed of revision policy. Preliminary and revised data are not clearly identified.</p>	<p>5. Accessibility</p> <p>Data accessibility</p> <p>Data are disseminated in an analytic presentation only with a brief commentary, but without supporting tables. Data are presented in an aggregated format and no distinction is made between foreign assets and liabilities in the financial account. No notes to the tables are provided. Short-term financial flows are lumped together with the net errors and omissions item. Additional data are available on request. Data are not released to all users simultaneously and there is no advance release calendar. Data are not made available on the BOZ website.</p> <p>Metadata accessibility</p> <p>The booklet on methodology describing the compilation of the balance of payments is not disseminated to the public.</p> <p>Assistance to users</p> <p>The <i>Quarterly Financial and Statistics Review</i> and the <i>Annual Report</i> published by the BOZ provide points of contact with e-mail addresses. A contact point specifically for the balance of payments is not provided, except on the GDDS website, which can be accessed through the BOZ website. A catalog of publications and press releases is also available on the BOZ website. These products are free of charge.</p>
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III. STAFF'S RECOMMENDATIONS

11. Based on the review of Zambia's statistical practices, discussions with the data producing agencies, and responses from data users (see Appendix III of the Detailed Assessments volume), the mission has a set of recommendations. They are designed to increase further Zambia's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Zambia's statistics. Some additional technical suggestions are included in the Detailed Assessments volume. The highest priorities in terms of recommendations as listed below are: for national accounts and balance of payments, the staff resources should be increased; for CPI, conduct HSB more frequently in order to revise the CPI weights to better reflect the consumer expenditure structure; and for GFS, expand the scope of fiscal data to cover at least consolidated central government operations.

Cross-cutting Recommendations

- Improve coordination and data-sharing among data producing agencies, for example through the creation of a national statistics committee. For general government operations, coordinate activities among data producing agencies to expand source data that will allow timely compilation and broader coverage of GFS.
- Conduct exercises to assess the relevance of data to meet the needs of users, not limiting to government users. This may include user surveys conducted via the agency websites or via questionnaires distributed with the publications.
- Disseminate the terms and conditions under which the statistics are compiled. Inform users on how they could access these terms and conditions. Provide information on internal access of data before general release to the public.
- Conduct and disseminate studies on the revisions to the statistics.
- Improve dissemination practices. Conduct and disseminate studies on the revisions to the statistics. Disseminate advanced release calendars for all datasets. Establish a practice of simultaneous release of data by using an embargo period. In addition, revision policy should be publicized.

National Accounts

- Increase staff and computing resources for national accounts compilation and dissemination.
- Formulate programs to increase the response rates for surveys:
 - conduct public awareness programs that highlight the usefulness of the information;
 - provide assistance to respondents in completing questionnaires;
 - simplify questionnaires;
 - conduct more intensive follow-up exercises.

- Compile regular (preferably annual) supply and use tables that could be used to conduct consistency checks on the estimates.
- Undertake regular (preferably annual) enterprise/establishments surveys to take account of all formal activities not adequately covered by administrative statistics.
- Improve the techniques used to compile volume estimates of GDP:
 - Update the base year of the estimates and formulate plans for regular update of the base year (with a minimum frequency of five years).
 - Discontinue the use of price statistics with outdated base years and develop more appropriate price indices, such as, producer price index.

Price Statistics

- Implement a regular HBS (preferably every three–five years) to be used for estimating the CPI weights. If a more frequent HBS is not feasible, consider conducting regular small surveys for that purpose.
- Update the CPI software to allow better statistical methods and additional data sources to be implemented into the compilation of CPI.
- Investigate and implement further means to verify data accuracy at various levels of CPI compilation. For example, use of systematic cross-regional checks for sub-aggregate series. Also, search and prepare for additional or complementing data collection methods and sources such as price data from newspapers and magazines, or from the internet.
- Implement procedures for the introduction of new products into the market basket between the index revisions.

Government Finance Statistics

- Officially assign the responsibility and resources to compile and disseminate timely GFS in accordance with international standards to an institution.
- Expand the coverage of fiscal data on government operations to, at least, consolidated central government that includes all extrabudgetary operations and complete financing data.
- Fully adopt the concepts and definitions of the *GFSM 2001* and train staff in compilation of GFS.
- Continue with the implementation of the Integrated Financial Management Information System and ensure that the compilers of GFS obtain relevant information on a timely basis for the GFS compilation.

- Expand the modes of dissemination to increase accessibility to broader group of users, such as establishing a website for the MOFNP to disseminate timely fiscal data and GFS.
- Revise the preliminary data with the actual data of government operations in the disseminated tables. At least, data should be revised when audited data are available.

Monetary Statistics

- Allocate IT expertise to the Economics Department so that AREMOS database can be implemented smoothly.
- Publish the depository corporations survey, by the inclusion of the Building Societies and the National Savings and Credit Bank, as well as all banks in liquidation, and reduce the discrepancies in the interbank positions.
- Reclassify local governments as money holders and apply stricter rules to determine the residency on the basis of center of economic interest.
- Expand the reconciliation exercise for monetary and fiscal data to include fiscal data on extrabudgetary central government operations. Enhance the accuracy of commercial bank data on government ministries' accounts relating to direct donor financed projects that are outside the MOFNP budget.

Balance of Payments Statistics

- Clarify and make more official the arrangement that gives the BOZ the mandate to compile balance of payments and the obligation to disseminate data.
- Increase staff resources to develop new methodologies and strengthen data sources.
- Disseminate balance of payments data more extensively and regularly, e.g., including quarterly balance of payments data in the *Quarterly Financial and Statistical Review* and on the BOZ website.
- Initiate an annual enterprise survey based on the groundwork laid by the PCF project. Also, initiate smaller enterprise survey of only the largest enterprises on a quarterly basis.
- Initiate efforts to revitalize the reporting of external transactions settled through banks, the International Transactions Reporting System.

Table 4. Republic of Zambia: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Macroeconomic Data Compared to the General Data Dissemination System

GDDS Data Category	Coverage (meets GDDS)	Periodicity		Timeliness	
		GDDS	Zambia	GDDS	Zambia
COMPREHENSIVE FRAMEWORK					
Real sector: National Accounts	Yes	A	A	10–14 months	4,8,20
Fiscal sector: Central govt. operations	No	A	A	6–9 months	24 months
General govt. operations	No	A	<i>Not applicable</i>	6–9 months	<i>Not applicable</i>
Central govt. debt	No	A	Semi-annual	6–9 months	1 month
Financial sector: Depository Corporations Survey	No	M	M	2–3 months	6 weeks
External sector: Balance of payments	Yes	A	A	6–9 months	3 months
International Investment Position (IIP)	No	A	<i>Not applicable</i>	6–9 months	<i>Not applicable</i>
DATA CATEGORIES AND INDICATORS					
Real Sector					
National accounts aggregates:					
GDP (nominal and real)	Yes	A (Q)	A	6–9 months	4,8,20
Gross national income, capital formation, saving	Yes	A	A	6–9 months	4,8,20
Production index/indices					
Manufacturing or industrial production index/indices	Yes	M	Q	6–12 weeks	variable
Primary commodity, agricultural, or other indices, as relevant	No	As relevant	<i>Not applicable</i>	6–12 weeks	<i>Not applicable</i>
Price indices:					
Consumer price index	Yes	M	M	1–2 months	1 week
Producer price index	No	M	<i>Not applicable</i>	1–2 months	<i>Not applicable</i>
Labor market indicators:					
Employment	Yes	A	Q	6–9 months	12 weeks
Unemployment	Yes	A	A	6–9 months	1 year
Wages/earnings (all sectors)	Yes	A	Q	6–9 months	12 weeks
Fiscal Sector					
Central government aggregates:					
Central govt. budgetary aggregates: revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency)	No	Q	M	1 quarter	1 month
Interest payments	No	Q	M	1 quarter	1 month
Central government debt:					
Central govt. debt: domestic and foreign debt, as relevant, with appropriate breakdowns (debt holder, instrument, currency)	No	A (Q)	Semi-annual	1–2 quarters	1 month
Government guaranteed debt	No	A (Q)	<i>Not applicable</i>	1–2 quarters	<i>Not applicable</i>
Financial Sector					
Broad money and credit aggregates	Yes	M	M	1–3 months	6 weeks
Central bank aggregates	Yes	M	D	1–2 months	Within 3 weeks
Interest rates:					
Short- and long-term govt. security rates, policy variable rate	Yes	M	W, M	1/	Within 2 weeks
Money or interbank market rates and a range of deposit and lending rates	Yes	M	W, M	1/	Within 2 weeks
Stock market:					
Share price index, as relevant	Yes	M	D	1/	D
External Sector					
Balance of payments aggregates	Yes	A (Q)	Q	6 months	3 months
Public and publicly guaranteed external debt outstanding, with maturity breakdown	Yes	Q	A	1–2 quarters	1 month
Public and publicly guaranteed debt service schedule	No	6 M	<i>Not applicable</i>	3–6 months	<i>Not applicable</i>
Private external debt not publicly guaranteed	No	A	<i>Not applicable</i>	6–9 months	<i>Not applicable</i>
International reserves:					
Gross official reserves denominated in U.S. dollars	Yes	M	D	1–4 months	Within 3 weeks
Reserve-related liabilities	No	M	<i>Not applicable</i>	1–4 months	<i>Not applicable</i>
Merchandise trade:					
Total exports and total imports	Yes	M	M	8 wks–3 mths	6 weeks
Major commodity breakdowns with longer time lapse	Yes	M	M	8 wks–3 mths	variable
Exchange rates: spot rates	Yes	D	D; D	1/	Within 3 weeks

Italics indicate encouraged categories.

1/ Dissemination as part of a high-frequency (e.g., monthly) publication.

INTERNATIONAL MONETARY FUND

ZAMBIA

Report on the Observance of Standards and Codes (ROSC)

Response by the Authorities

January 18, 2005

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I. COMMENTS FROM THE FISCAL AUTHORITIES (MOFNP)

The report is a fair statement of facts about the existing status of compiling timely Government Finance Statistics (GFS) in Zambia. The shortcomings highlighted by the IMF ROSC Mission remain challenges for the further development of GFS in Zambia. Resources allowing, GRZ agreed to improve GFS to conform to the internationally accepted standards and codes.

Specific comments on Government Finance Statistics

- Officially assign the responsibility and resources to compile and disseminate timely GFS in accordance with international standards to an institution.

The MOFNP and the CSO will coordinate the responsibility for the compilation and dissemination of GFS. The CSO as the institution responsible for all official statistics will continue to compile the final GFS by making use of the Auditor General's Accounts. The MOFNP, for policy and monitoring purposes, will start to compile preliminary GFS, using the Budget Office and Accountant General's departments' data. Both agencies will also disseminate GFS to the public the Monthly Macroeconomic Indicators and Financial Reports respectively.

- Expand the coverage of fiscal data on government operations to include foreign grants received by the central government and the subsequent expenditure of these funds, extrabudgetary institutions, and local governments.

Immediate Action Taken

The Office of the Accountant General has already directed ministries to report on all foreign grants received and the expenditure of such grants. Regular meetings are taking place between the MOFNP, department of Economic and Technical Cooperation (ETC) in particular and donor agencies to reconcile the amounts reported by the line ministries with the information provided by the donor agencies.

The MOFNP has also started to expand the coverage of the central government to include extrabudgetary institutions/statutory bodies.

Future Action

The long -term plan is to expand coverage of the fiscal data to local government especially the Decentralization Policy has been launched.

Fully adopt the concepts and definitions of the *GFSM 2001* and train staff in the compilation of GFS.

As part of the PEMFA program, the Office of the Accountant General has adopted the new chart of accounts. This chart conforms to the International Monetary Funds Government Finance Statistics (GFS) of 2001 in terms of classification of government functions, economic classifications of expense, revenue classification and the grouping of assets and liabilities.

The chart also complies with International Public Sector Accounting Standards (IPSAS) issued by the International Federation of Accountants, (IFAC) where applicable.

The Chart of Accounts is embedded in the Programmes and Activity Based Budgeting system.

An Activity Based Budgeting System User Manual has been published which has components on Classification of Functions of Government and Chart of Accounts.

Continue with the implementation of the Integrated Financial Management Information System (IFMIS).

The Government will continue with the implementation of IFMIS. The computer-based financial management system has been extended across all government ministries and provinces.

Revise the preliminary data with the actual data of government operations in the disseminated tables. At least, data should be revised when audited data are available.

The MOFNP will revise the currently disseminated government finance data, which are based on issues to line ministries, with data on the actual expenditure of line ministries, obtained from the Office of the Accountant General, as soon as it becomes available. The MOFNP will also disseminate studies and analysis of any large revisions.

Expand the modes of dissemination to increase accessibility to broader group of users, such as establishing a website for the MOFNP to disseminate timely fiscal data and GFS.

To increase the accessibility of GFS to a broader group of users, especially users outside Lusaka, the MOFNP will set up a website. The MOFNP will also use this website to provide a link to the GFS metadata published on the IMF website.

II. COMMENTS FROM THE CENTRAL STATISTICAL OFFICE

Table 1: National Accounts

Element	Assessment—IMF	Comments on Assessment— Central Statistical Office
0.1 Legal and institutional environment	<p>No formalized program for data-sharing and coordination. Technical committees are non-functional.</p> <p>Statistical reporting weak despite legal mandate. Poor survey follow-up has rendered establishments surveys useless.</p>	<p>The Statistics Act mandates the Director to organize a coordinated scheme of social and economic statistics relating to Zambia. However, coordination with other government agencies and institutions is done in form of meetings with key government agencies and institutions. The CSO conducts regular meetings with the Ministry of Finance and National Planning (MOFNP) to discuss the statistical plans and programs. The CSO also participates in meetings with the Macroeconomic department of Bank of Zambia (BOZ) and MOFNP to review National accounts statistics. The CSO meets with Export Board of Zambia to review estimates of non traditional exports. The CSO also conducts joint surveys with other government agencies for instance the crop forecast and post harvest surveys are jointly conducted with ministry of agriculture and cooperatives, the education and health surveys are carried out in collaboration with ministries of education and health respectively.</p> <p>Existence of a statistics coordinating committee is not provided for in the current statistical act. Until the current statistical act is repealed the current bilateral coordination structure seems to be working well and where there are areas of improvement it can be strengthened.</p> <p>There have been vigorous follow-ups in the recent past establishments and cooperation is building up especially from the manufacturing and large scale farming sectors that have been a source of high non-response rates in the past.</p>
0.2 Resources	<p>Staff resources cannot support compilation of a minimum set of updated accounts on a regular basis. Shortage of staff in Dissemination Branch has affected the production of publications.</p>	<p>Like any government department, the CSO activities depend on resource allocation from the general treasury and hence sometimes it is faced with resource constraints which affect implementation of certain statistical programs including recommendations for improvement.</p>

Element	Assessment—IMF	Comments on Assessment— Central Statistical Office
0.3 Relevance	The relevance of statistics to users in the private sector not monitored in a systematic manner.	Private sector user surveys are not conducted due to resources constraints. However, user perceptions are monitored through the monthly statistical releases where users from all sectors of the society are invited and given an opportunity to ask or make suggestions and opinions on the various statistics the office produces and how they meeting their data needs. Further, the website and survey instruments provide contact information through which users can provide their views on the quality or relevance of the statistics. In addition, users in the public sector are encouraged to provide their views on the statistics through the bilateral statistics coordinating groups that convene on an occasional basis.
2.1 Concepts and definitions 2.2 Scope 2.3 Classification/sectorization 2.4 Basis for recording	The <i>1968 SNA</i> is used as the framework for the accounts. The scope of the accounts does not fulfill the minimum requirements for implementing the <i>1993 SNA</i> . Not all economic activities are covered. COICOP or other consumption classifications not used as final consumption expenditure not disaggregated. Recording of government transactions done on a cash basis.	Parts of <i>1993 SNA</i> implemented up to Phase I and parts of Phase II following Milestone approach of UNSD. The remaining Phases II –VI will be fully implemented after revising benchmarks and compilation of institutional sector accounts. Parts of <i>1993 SNA</i> implemented up to Phase I and parts of Phase II following Milestone approach of UNSD. The remaining Phases II – VI will be fully implemented after revising benchmarks and compilation of institutional sector accounts. In the Zambia compilation of national accounts, this is item is obtained as residue and as such is not disaggregated. The process of full implementation of the GFS system is still on going and transaction obtained from the fiscal table are based on a cash basis in terms of revenue and expenditure.

Element	Assessment-IMF	Comments on Assessment-Central Statistical Office
3.1 Source data	Business register outdated. Register last updated in 1998. HBS not conducted on a regular basis. Establishment surveys not conducted on regular basis. Data on local government and extra-budgetary activities not available.	The planned broad enterprise enterprise/establishments surveys (economic census) will provide benchmark data for revising the estimates. HBS was conducted in 2002/3 and part of the Integrated Household Budget Survey through the Living Conditions Monitoring Survey of 2002/3.
3.2 Assessment of source data	Results from assessments of survey data not always made public.	Assessment of source data is availed to technical stakeholder for further advise and common understanding on methodology and data limitations
3.3 Statistical techniques	Base year outdated. Widespread use of benchmarks (used to estimate most activities). Benchmarks outdated (1994). Deflation techniques weak.	The planned broad enterprise enterprise/establishments surveys (economic census) will provide benchmark data for revising the estimates
3.4 Assessment and validation of inter-mediate data and statistical outputs	Statistical discrepancies not investigated. Supply and use framework not used.	Supply and use framework to be implemented by early 2005. Consultant being sought through GDDS to help in establishing the framework
3.5 Revision studies	Studies and analyses of revisions not conducted routinely.	Comprehensive review of the revisions will be done during the next rebasing exercise.
4.3 Revision policy and practice	Revision schedule not available to the public.	Revision schedule for the public may not be accurate and would be difficult to sustain because of the relocation of statistical schedules based on resource availability. Resource disbursements are not predictable due to resource constraints at the Treasury.
5.1 Data accessibility	Detailed publications are not produced in a regular, timely manner. Advance release calendar not available.	Data available in soft copy format but efforts and resources are being mobilized to increase statistical publications. Advance release calendar would be difficult to maintain due to inconsistent disbursements of resources from the Treasury.
5.2 Assistance to users	Contact points not precise in publications. Subject-specific contact information available in GDDS metadata, which is linked to CSO website.	The official contact person is the head of department (Director of Census and Statistics) who may delegate to a relevant subject matter specialist were required.

Table 2: Consumer Price Index

Element	Assessment—IMF	Comments on Assessment—Central Statistical Office
0.2 Resources	Computer software and IT infrastructure are not up to date. Production and dissemination of statistics is dependent on key persons.	Plans are in place to implement the new CPI based on different software. IMF and ADB/ICP have both developed CPI softwares to be used by National Statistical Offices before December 2004.
1.2 Transparency	No advance notice is given for major changes in the index.	An advance notice of the implementation of the new CPI will be published in the ‘Monthly’.
2.2 Scope	Gross weights are used for housing and durable goods acquisitions.	The HBS data will be analysed to provide net weights for housing and durable goods before September 2004
2.4 Basis for recording	Sales of durable consumer goods are not netted out of for the CPI weights.	The HBS data will be analysed to reflect net weights for durable consumer goods before September 2004.
3.1 Source data	New goods are not added to the index and scientific sampling methods are not used. The weight data are outdated	In future, new goods would be added to the index in between revisions. New weights for the CPI would be developed by September 2004.
3.2 Assessment of source data	Validation processes could be improved.	The use of different computer software is going to improve the validation process. Before December 2004.
3.3 Statistical techniques	Index formula could be changed and methods to account for quality changes and missing price should be investigated.	Some methodological changes would be implemented in the new CPI. By September 2004
3.4 Assessment and validation of intermediate data and statistical outputs	There is no systematic process to validate intermediate data or discrepancies in statistical outputs.	The new computer software would facilitate the process of validating intermediate data by December 2004

Table 3: Government Finance Statistics

Element	Assessment - IMF	Comments on Assessment - Central Statistical Office
2.1 Concepts and definitions	National developed concepts and definitions are followed which loosely follows internationally accepted standards, guidelines, or good practices.	CSO does not follow National developed concepts but rather follows the IMF manual concepts. For example, Privatisation fund is taken as revenue in the financial report, obtained from the Auditor General's office. CSO reclassify this as part of financing, i.e. reduction in shares and other equity, the counterpart being an increase in cash/deposits.
2.2 Scope	The scope is not consistent with internationally accepted standards, guidelines, or good practices. Information is restricted to domestic operations of the budgetary central government.	CSO is in the process of compiling Local Government financial statistics and statistics pertaining to Statutory bodies. Consolidated Central Government and General Government financial statistics will be ready by January, 2005.
2.3 Classification/sectorization	Classification differs significantly from internationally accepted standards, guidelines, or good practices.	CSO does not follow the financial report from the Auditor General's office layout. We reclassify the information according to the IMF GFS 2001 manual.
5.1 Data accessibility	Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons for budgetary purposes, but not for international comparisons. An advance release calendar does not exist. The fact that additional information can be obtained is not made public.	CSO follows the GFS manual in the compilation of financial statistics. However, information from the source document (The financial report) especially on financing is not adequate. GFS, though at the moment only data for budgetary central government is available, will be released to the public through the 'Monthly' as from August 2004. Plans are also in place to avail data to the public on CSO's internet website.

III. COMMENTS FROM THE BANK OF ZAMBIA

COMMENTS ON THE RECOMMENDATIONS OF THE REPORT ON THE OBSERVANCE OF STANDARDS AND CODES (IMF ROSC MISSION)

The report is a fair assessment of standards and codes observed by the Bank of Zambia (BoZ) in its compilation of the monetary and Balance of Payments statistics. The shortcomings that have been highlighted by the IMF ROSC Mission have been recognized as challenges. Resources permitting, the authorities have made a commitment to making improvements in the near future to conform to the internationally accepted standards and codes.

Cross-cutting Recommendations:

- **On Transparency: Disseminate the terms and conditions for the compilation of monetary and balance of payments statistics and access to these terms and conditions:**

We have provided a clear link to the IMF website carrying the metadata for the compilation of the statistics. We are in the process of finalizing the compilation manual, which will then be provided to the users upon request.

A. Comments on the Section on Monetary Statistics

- **Allocate IT expertise to the Economics Department so that AREMOS database can be implemented smoothly.**

The AREMOS project is part of our strategic plan in the Economics Department and is fundamental to the building of a centralized database for the BoZ. So far a lot of work has been done such as arranging data into AREMOS format, creating mnemonics for data coding, filling in holiday and other data gaps, data updates backwards and current. Work in the Economics department on updating the data and filling in the gaps is ongoing. Other departments such as Financial Markets and Bank Supervision have reached advanced stages of the AREMOS data preparations. The data that have been worked on so far are still in the Excel spread sheets. The Information Technology (IT) expert from the IT department in the BoZ would be utilized to enhance the uploading of the data into the AREMOS software. Training in the day-to-day use of the AREMOS software to analyze data and produce reports is already underway within the BoZ.

- **Publish the depository corporations' survey, by the inclusion of the Building Societies and the National Savings and Credit Bank, as well as all banks in liquidation, and reduce the discrepancies in the interbank positions.**

The Monetary and Financial Statistics Mission (June 26–July 9, 2003) recommended several changes in the way monetary statistics are currently being compiled by the BoZ. In this regard, a recommendation was made to migrate to a depository corporations survey by revising data from December 2001 to date based on the new template. A lot of progress has been made in this area. Data has been revised from January 2003 to date. We are currently looking at ways of uploading data from December 2001 to December 2003 as these data is only on hard copy and not on the accounting system because of the change from the Fourgen system of accounting to the Sun system of accounting in 2003. This was discussed with the IMF Statistics Mission and in the new survey the data has been revised to include building societies and the National Savings and Credit bank from December 2001 to date. A new reporting form was designed to capture the inter-bank positions covering all depository corporations. In the short term, reconciliation is being done to check any inconsistencies in the inter-bank positions.

- **Reclassify local governments as money holders and apply stricter rules to determine the residency of on the basis of center of economic interest.**

This was discussed with the IMF Statistics Mission and in the new survey the data has been reclassified as per IMF recommendation from December 2001 to date. The classification of entities in both the new and old survey is based strictly on the definition supplied in the BPM5 and repos in the BoZ Trial Balance are clearly identified and mapped accordingly

- **Expand the reconciliation exercise for monetary and fiscal data to include fiscal data on extra budgetary central government operations. Enhance the accuracy of commercial bank data on government ministries' accounts relating to direct donor-financed projects that are outside the MOFNP budget.**

The current reconciliation exercise fully takes into account fiscal data on extra budgetary operations as these could only be channeled through Government accounts. Commercial banks' data on donors' funds is accurately captured as all commercial banks holding Government accounts are required to provide a separate schedule of all Government accounts (in Kwacha and/or US dollar)

B. Comments on the Section on Balance of Payments

The report is a fair statement of facts about the existing status of the Balance of Payments statistics compilation in Zambia. The shortcomings that have been highlighted by the IMF ROSC Mission remain challenges for the further development of BOP statistics in Zambia.

Some of the recommended improvements are already in the BOP Unit's plans for improvement in the near future.

The recommendations can be a solid foundation for discussions regarding steps required to improve the compilation of Balance of Payments in Zambia and the ratings are quite enlightening on outstanding needs for improvement.

INTERNATIONAL MONETARY FUND

ZAMBIA

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Abdoulaye Bio-Tchané

January 18, 2005

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

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ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
BOPSC	Balance of Payments Statistics Committee
<i>BPM5</i>	<i>Balance of Payments Statistics Manual</i> , fifth edition
BOZ	Bank of Zambia
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
CSO	Central Statistical Office
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
EBZ	Export Board of Zambia
ERMD	External Resources Mobilization Department
ETC	Economic and Technical Cooperation Department
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HBS	Household Budget Survey
IDM	Investment and Debt Management Department
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
ISWGNA	Inter-Secretariat Working Group on National Accounts
IT	Information Technology
ITRS	International Transactions Reporting System
LCMS	Living Conditions Monitoring Survey
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MMMD	Ministry of Mines and Mineral Development
MOFNP	Ministry of Finance and National Planning
NGO	Non Government Organizations
PCF	Private Capital Flows Project
PEMFA	Public Expenditure Management and Financial Accountability Program
PFCE	Private Final Consumption Expenditure
PFSB	Public Finance Statistics Branch
PSB	Price Statistics Branch of the Central Statistical Office
PSC	Public Service Commission
ROSC	Report on the Observance of Standards and Codes
SADC	Southern Africa Development Committee

SDDS	Special Data Dissemination Standard
STA	IMF Statistics Department
UNDP	United Nations Development Program
UN	United Nations
UNSD	United Nations Statistics Division
WPI	Wholesale Price Index
ZESCO	Zambia Electricity Supply Company
ZIC	Zambia Investment Center
ZPA	Zambia Privatization Agency
ZRA	Zambia Revenue Authority

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

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

I. NATIONAL ACCOUNTS STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The *Census and Statistics Act* Chapter 127 of the *Laws of Zambia 1964* establishes the legal authority for the collection, processing, and dissemination of official statistics in Zambia. The *Census and Statistics Act* provides specific authority to the Director of Census and Statistics, appointed by the Public Service Commission, to perform the tasks relating to the compilation of official statistics. The Director is empowered to appoint authorized persons to undertake the duties under the *Census and Statistics Act* and is authorized to delegate the power of appointing authorized officers to any other person. The Director of Census and Statistics heads the Central Statistical Office (CSO), which is a department of the Ministry of Finance and National Planning (MOFNP).

Section 14 of the *Census and Statistics Act* contains regulations for collecting statistics on specific sectors as approved by various statutory instruments or government regulations. The Statistics (National Accounts and Balance of Payments) Regulations, established by Statutory Instrument No. 258 of 1966, provides specific authority for the production of national accounts and balance of payments statistics. The regulations prescribe the specific types of data that the Director may solicit for compiling these datasets and outline the responsibilities of the respondent in that regard. However, the regulations cover only establishments/enterprises and other institutional units are not covered. The prescribed particulars include information on: (i) the profit and loss account; (ii) operating income and expenditure; (iii) fixed capital formation; and (iv) the balance sheet.

Other regulations under section 14 also give the CSO the authority to collect information that it may then use to compile national accounts statistics. These are as follows: The Statistics (Agriculture) Regulations, The Statistics (Creamery Products) Regulations, the Statistics (Meat) Regulations, The Statistics (Distribution) Regulations, The Statistics (Employment)

Regulations, and The Statistics (Industrial Production) Regulations.

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

The *Census and Statistics Act* mandates the Director to organize a coordinated scheme of social and economic statistics relating to Zambia. However, there is no systematic program to coordinate the production of official statistics. In practice, coordination of the national statistical system is undertaken primarily on a bilateral basis with other government agencies. The CSO conducts regular meetings with the MOFNP to discuss the statistical plans and programs when issues arise. The national accounts staff also participate in meetings with the Macro-Economics Department of the Bank of Zambia (BOZ) to review the national accounts statistics and provide feedback. The CSO also meets with the Export Board of Zambia (EBZ) quarterly to review estimates of non-traditional exports, which are used to develop estimates of value added for agriculture.

The agency also conducts joint surveys with other government agencies. An annual crop forecast survey is conducted in collaboration with the Ministry of Agriculture to derive estimates of crop production (see also 3.1.1).

The CSO has established a National Accounts Technical Committee comprising representatives of the BOZ, the MOFNP, and other government agencies, to advise the agency on national accounts. However, the Committee has been dormant for the past two to three years and regular meetings have not been conducted.

Recommendation: Create a national statistical committee, in cooperation with the BOZ and MOFNP, and enhance the coordination.

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

Section 1 of the *Census and Statistics Act* stipulates that no individual return or information provided to the CSO or its agents under the *Act* shall be disclosed to any person not covered by the *Act* without the prior written permission of the respondent.

However, the *Census and Statistics Act* makes the following two exemptions to this provision:

- (i) Disclosures may be made for the purposes of prosecution in contravention of the *Act*; and
- (ii) The Minister responsible for the CSO may authorize the disclosure of individual information in response to questions posed by officials employed by the Ministry of Agriculture or in the Department of Veterinary Services.

The second exemption represents a weakness of the statistics law as it provides an authority outside of the CSO with the power to divulge individual information without the prior consent of the respondent.

The CSO has instituted measures to safeguard the information provided by respondents. The questionnaires advise respondents that information is kept confidential and identifies the relevant section of the *Census and Statistics Act* that stipulates the confidentiality of responses. Computers used for data-entry and storage are password protected; however, there are some weaknesses in the data transmittal process that may result in the breach of confidentiality. The mechanism for the electronic transfer of information between the provincial offices and the CSO headquarters does not exist. The provincial offices submit questionnaires to the CSO headquarters by mail or regular surface transport and some material may be lost or misplaced during transmittal.

The CSO follows the civil service regulations on the storage and disposal of official documentation. Questionnaires may be stored for up to ten years and are disposed of by incineration on the compound of the civil service. However, the process is not supervised by an official of the CSO and the destruction of the material is left to persons who are not covered by the *Census and Statistics Act*.

All CSO employees must take an oath of secrecy swearing that they will not, unless with lawful authority, disseminate any information acquired by them during the course of their employment (see also 1.3.1). The *Census and Statistics Act* stipulates a penalty equivalent to 3,000 penalty units² or one year of imprisonment for staff found guilty of this offense.

Recommendation: Improve procedures to ensure that data are kept confidential. To minimize the possibility of inadvertent disclosure, questionnaires should be edited and entered in the field. Otherwise, procedures should be developed to safeguard the confidentiality of information during the transportation of questionnaires.

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

Section 9 of the *Census and Statistics Act* provides the legal mandate for the collection of statistics. The *Act* stipulates that any person, who is required to provide information to the Director or his authorized agent, must provide the information in the format requested and in a timely manner. In addition, section 14 of the *Census and Statistics Act*, which provides the legal framework for the national accounts statistics, outlines specific guidelines for statistical reporting.

Section 12 of the *Census and Statistics Act* establishes penalties for noncompliance. Persons who fail to comply with a request to supply information to the CSO is guilty of an offence and liable to a fine not exceeding 1500 penalty units or to imprisonment for a period not exceeding six months.

² A penalty unit is equivalent to 5 kwachas.

However, despite the existence of a legal mandate to ensure reporting the response rate for surveys for national accounts statistics is low and some surveys have been discontinued as a result. The CSO attributes the low response rates to respondent apathy and the technical difficulty of the questionnaires. In addition, the agency has had difficulty conducting survey follow-up exercises because of the unavailability of survey staff and national accounts compilers. The agency has not conducted public awareness programs to improve survey response and has depended primarily on the effectiveness of data collectors during the preliminary rounds of the survey exercise.

During the planning of the annual work program, the CSO attempts to organize survey to reduce respondent burden. Thus, surveys targeting the same units are normally conducted at the same time when the respondent may be presented with two questionnaires thus eliminating the need for multiple visits to the same respondent during a short period. Where feasible, questionnaires are merged and the information for multiple surveys would be included in one questionnaire.

Recommendation: Formulate programs to increase the response rates for surveys, including the following:

- *conduct public awareness programs that highlight the usefulness of the information;*
- *provide assistance to respondents in completing questionnaires;*
- *simplify questionnaires; and*
- *Conduct more intensive follow-up exercises.*

0.2 Resources

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

The resources available to compile the national accounts statistics are not sufficient for the production of a coherent set of basic statistics. The National Accounts Branch of the CSO has five staff. Only two of the staff possess university level qualifications; both have received formal training in national accounts statistics. The number of professional staff represents less than half of what the NAB requires. The non-professional staff lack training in national accounts statistics and are therefore not capable of undertaking many of the tasks associated with the compilation process.

The Research and Dissemination Branch is responsible for preparing publications and disseminating all the statistics produced by the CSO. The branch has four professional staff; however, the staff complement is not sufficient to undertake all the dissemination activities of the agency and this has caused delays in the production of key publications (see also 5.1.2).

Computing resources are inadequate. The nonprofessional staff shares one computer thus severely restricting their productivity. The division does not have access to a computer network facility and data transfer among staff is undertaken through soft copy exchanges, which in many cases, could be a time-consuming process.

The CSO submits an annual budget for approval to the MOFNP based on its work objectives. However, though the Ministry may approve the budget, funding during the year may not be secure. The release of Funds by the Ministry is based on the revenue collections of the central government and the disbursement of funds may not always coincide with the CSO's work program. Thus, on many occasions, the CSO has had to abandon or reduce planned programs due to the shortfall in funding from the central government.

The CSO has received funding from international organizations for statistical development; however, these funds are generally project related and are not normally available for the agency's regular statistical programs.

The physical facilities could be improved in many areas. The number of telephone lines available to staff is limited and it is sometimes difficult for users to contact the agency.

Recommendation: Increase staff and computing resources for national accounts compilation and dissemination.

0.2.2 Measures to ensure efficient use of resources are implemented

The regulations of the public service require periodic reviews of staff performance; however, they are not normally conducted for regular staff. Performance of field staff is assessed for every survey and staff remuneration is associated with productivity. The CSO assesses available resources against its work program at the beginning of each year and attempts to allocate the available resources to maximize its output under the work program. Thus, surveys may be streamlined where feasible by merging survey instruments (see also 0.1.4). In addition, staff may be shifted across departments to ensure that the priority areas of the work program are addressed. However, uncertainty over annual budgetary funding severely limits the efficient execution of the work program and resource allocation.

0.3 Relevance

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

The CSO has not conducted any recent user surveys or other systematic measures to monitor the relevance of its statistics to users. However, the website and survey instruments provide contact information through which users can provide their views on the quality or relevance of the statistics. In addition, users in the public sector are encouraged to provide their views on the statistics through the bilateral statistics coordinating groups that convene on an occasional basis.

Recommendation: Conduct exercises to assess the relevance of data to meeting the needs of users in the private sector. This may include brief user surveys via the CSO website or via questionnaires distributed with the monthly publication.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The mission statement of the CSO identifies quality as the cornerstone of its activities. The mission of the CSO is “...to provide for a comprehensive national statistical database yielding high quality statistical information for use by the government, private sector and the wider national and international community....”

The CSO organizes training programs for enumerators before every survey to familiarize persons with the peculiarities of the specific questionnaires. These programs are quite useful in minimizing errors during fieldwork.

The Director conducts regular meetings with senior staff to review the work program and assess performance. The CSO does not provide information on the trade-offs in quality and its effects on the work program.

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

The CSO compiles records of editing and processing that are used to assess the performance of survey staff. However, information on the process of revisions and the timeliness of output is not available.

The agency has access to international experts and may consult them on technical issues. However, the CSO is limited in its ability to implement many of the recommendations from international experts.

0.4.3 Processes are in place to deal with quality considerations in planning the statistical programs

The CSO is unable to address, in a systematic manner, feedback from users on the quality of the statistics. Further, the agency is unable to incorporate the emerging data requirements in developing the statistical program for the national accounts. Thus, new activities that have emerged over the past ten years have not been incorporated in the statistical process.

Resource availability is actively considered in the work program planning process and resources are normally shifted to the statistical priority areas. However, the CSO is limited in its ability to incorporate substantive quality improvements in its work program due to the paucity of the financial resources.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Section 7 of the *Census and Statistics Act* states that the Director shall, whenever the Minister directs, collect statistics with respect to such a matter that the Minister may prescribe. Further, the Director shall not collect any statistics unless regulations have been made specifying the particulars regarding the statistics to be collected. This section of the Act implies that the Director may not have independence in making decisions regarding the compilation of the statistics. However, the CSO notes that this section of the Act is not normally enforced and, by tradition, the Director is the final authority on the compilation of national statistics.

The recruitment and promotion of staff follow the regulations of the public service. Staff is appointed by the Public Service Commission (PSC) and must meet the basic criteria established for all public servants. The PSC has established 'sector specific' criteria for recruitment staff whereby persons must possess specific qualifications depending upon the Department to which they will be assigned and the tasks they will be expected to perform.

The *Constitution of Zambia* prohibits public servants from participating in political activities. Article 65 (7) f of the *Constitution* advises that persons who actively participate in political activities by standing for political office are deemed to have vacated their public service employment.

Recommendation: Amend the Census and Statistics Act to make the CSO the final authority on the statistics that the agency may compile.

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

The choices of sources and statistical techniques are influenced solely by statistical considerations. Staff, with the occasional assistance of external experts, decides on the statistical techniques, methodology and data sources to be employed based solely on the need to implement international recommendations.

The Director is solely responsible for disseminating the statistics. The data presented by the compilers are reviewed for consistency with other aggregates and indicators. Once the Director is satisfied, the data are approved for release. The data are not presented to any other authority within the MOFNP for review and approval before release.

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

The Director of the CSO has commented in the press on the erroneous interpretation of the statistics.

1.2 Transparency

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

The terms and conditions for compiling the statistics are contained primarily in the *Census and Statistics Act*. The *Census and Statistics Act* is available as part of the collection of the *Laws of Zambia* that is published on the website of the Parliament of Zambia. The CSO does not distribute copies of the *Census and Statistics Act* and it is not available in print at the office or on the agency's website. Thus, persons requiring copies of the *Act* must request a copy from the government printing office for a fee.

The survey instruments identify the legal authority under which the data are collected. They also provide contact information for respondents with enquires regarding the data collection program.

Recommendation: Make the terms and conditions for compiling the statistics more accessible to the public by placing the Census and Statistics Act on the CSO website or providing a hyperlink to the Laws of Zambia, published on the website of the Parliament of Zambia.

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

The CSO does not provide information regarding internal government access to the statistics. However, the GDDS metadata on the IMF's website notes that the national accounts statistics are submitted to the BOZ and to policymakers in the MOFNP 24 hours before it is disseminated to the public.

Recommendation: Identify internal government access to the statistics on the website and in the Agency's publications.

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

The CSO's publications and its website clearly identify all the agency's products. The logo, address, website, and e-mail address of the CSO is presented on the agency's publications and the agency requests credit for the use of its material.

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

The CSO has not undertaken comprehensive revisions to the statistical methodology or data sources to the national accounts statistics within the past ten years and plans for revising the statistics have not been finalized.

1.3 Ethical standards

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

Staff behavior is guided by the regulations of the public service. Staff is presented with the regulations when recruited into the public service and are encourage familiarizing themselves with the regulations during the early period of their employment. A copy of the regulations is maintained in the Administrative Division of the CSO and is available to staff. The regulations on staff behavior are contained in General Orders of the public service.

The *Census and Statistics Act* provides additional guidelines for staff engaged in the collection of statistics. Staff is obliged to swear to an oath of secrecy that they will not, without lawful authority, communicate any information acquired during the course of the employment (see also 0.1.3).

2. Methodological soundness

2.1 Concepts and definitions

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

The national accounts statistics are compiled broadly according to the recommendations of the *1968 SNA*. The CSO is conducting a phased approach of the *1993 SNA* based on the United Nations Statistics Division's (UNSD) milestones for implementing the *1993 SNA*. To date, the CSO has achieved a limited introduction of phase I of the UNSD's milestones.

2.2 Scope

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

The CSO compiles the following accounts, which are part of the *minimum requirements* established by the Inter-Secretariat Working Group on National Accounts (ISWGNA) for implementing the *1993 SNA*:

- Annual value added and GDP at current and constant prices;

- Annual value added components at current prices by activity; and
- Annual expenditures on GDP at current prices.

This set of accounts does not fulfill the *minimum requirements* established by the ISWGNA for implementing the *1993 SNA*. The CSO does not compile the sequence of accounts for the total economy (up to financial accounts) and rest of the world accounts (until net lending) as required by the ISWGNA.

The CSO does not disseminate any of the accounts and tables that the ISWGNA has determined as *recommended* for implementing the *1993 SNA*. The CSO has compiled annual supply and use tables for 1994–1999 but the estimates have not been disseminated.

The accounts cover the total economic territory of Zambia. In particular, the accounts cover:

- The activities of embassies and territorial enclaves in the rest of the world;
- Bonded warehouses; and
- Workers who work part of the year in another country.

The following items are included in the scope for measuring output:

- Own-account production for all goods for own final consumption;
- Output of goods for own-account fixed capital formation; and
- Mineral exploration.

However, the following items are not included in the scope for output measurement:

- Production of entertainment, literary, and artistic originals;
- Production of computer software; and
- Illegal output sold to willing buyers.

Production of these items (except illegal output) is not considered significant in Zambia.

The assets boundary is not in accordance with the *1993 SNA* as the following items are not in the scope for measuring assets:

Among tangible assets:

- Defense related assets that could be used for civilian purposes;
- Valuables and historical monuments; and
- Agricultural work-in-progress.

Among intangible assets:

- Systems and standard applications computer software and databases;
- Entertainment, literary, or artistic originals;
- Patented entities; and
- Leases and other transferable contracts (such as purchased goodwill).

2.3 Classification/sectorization

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

The following internationally recommended classification systems are used in the compilation of the national accounts:

- International Standard Industrial Classification (ISIC rev 2) is used to classify the principal activity of enterprises;
- The Standard International Trade Classification (SITC) is used to classify commodity trade; and
- No consistent international classification of consumption is currently used as private consumption is not disaggregated or estimated. The CSO plans to use the Classification of Individual Consumption by Purpose (COICOP) used to classify the data on household consumption derived from the 2002/03 household budget survey.

The classification of transactions and flows is in line with the *1968 SNA*.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The valuation rules used for recording flows and stocks are partially in accordance with the *1993 SNA*. In particular, the following valuation rules are followed:

- Total imports and exports are valued on an f.o.b. basis and an estimate of insurance and freight is available.

However, the following valuation rules deviate from the recommendations of the *1993 SNA*:

- Market output is valued at factor cost and not at basic or producer prices; and
- Intermediate consumption excludes value added tax.

2.4.2 Recording is done on an accrual basis

Recording of transactions is on an accruals basis, except for government transactions, which are recorded on a cash basis.

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

The CSO collects data on the establishment level therefore the data are recorded on a gross basis.

3. Accuracy and reliability

3.1 Source data

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

The source data used to compile the statistics are weak. The data are collected from a limited program and are not sufficient to compile a coherent set of updated statistics. The compilation process is based largely on outdated data and benchmarks. The CSO is planning to conduct a broad enterprise/establishment survey 2005 that would provide benchmark data for revising the estimates.

Enterprise/establishments statistics

The CSO possesses a business register, which contains about 25,000 entries of establishments and enterprises. However, the register has not been updated since 1998 and is therefore outdated. Since that time some new activities, such as cellular phone services, and major enterprises have commenced operations in Zambia. Establishment/enterprise statistics are not collected on a regular basis as the CSO does not have a program of annual surveys of business units. The national accounts compilation process therefore uses data derived from two major establishment surveys, the National Income Inquiry and the Census of Industrial Production, which were conducted about ten years ago.

National Income Inquiry

The CSO conducted this survey between September 1995 and September 1996 and requested information for the 1994 calendar year. The survey covered distribution, transport, and other services and the business register was used as the sample frame. Enterprises were classified according to size based on the number of employees as follows:

- Large enterprises—At least 100 employees;
- Medium-sized enterprises—Less than 100 employees but greater than 10 employees;
- Small Enterprises—Less than 10 employees.

The survey covered all large enterprises, about 2000, and a 10 percent sample of medium-sized enterprises.

The survey achieved a 67 percent response rate.

Census of Industrial Production

The CSO conducted a census of industrial production to cover activities of mining, manufacturing, electricity, and water. The census was last conducted in 1994.

Household Budget Survey

Household budget survey (HBS) data used in the compilation process was derived from a 1994 HBS. The CSO conducted a new HBS during November 2002 to October 2003 and expects to use the information to revise the national accounts estimates.

The HBS covered 10,000 households, which represented about 0.5 percent of the total number of households in Zambia. The sample consisted of 520 clusters spread equally between rural and urban areas. Rural clusters consisted of 15 households and urban clusters consisted of 25 households.

The urban households were classified according to income levels: low income, middle income, and high income. The information on income levels were obtained from the local government authorities and were defined by the broad region/village level rather than by individual households. Thus, it was possible that the survey would classify a household as high income because of its region, when in actuality the household may belong to a different income group.

Rural households were classified according to the size of the farm holdings as follows: small-scale farming, medium-scale farming, and large-scale farming. A fourth classification was included to cover non-farmers.

The CSO indicated that the survey recorded close to a 100 percent response rate as an effective program for household replacement was included in the survey exercise.

The final report should be available during June 2004.

Other Surveys

Agriculture

The CSO, in conjunction with the Ministry of Agriculture, conducts crop forecast surveys to project agricultural output. The survey is conducted in three phases:

- i. Preliminary phase during crop planting;
- ii. Intermediate phase conducted during crop growing; and
- iii. Final phase conducted at the time of harvesting.

The national accounts compilation process uses the data compiled primarily during the third phase.

The CSO and the Ministry of Agriculture also conduct a post harvest survey, which provides data that are more comprehensive than the crop forecast surveys. However, the post harvest survey is time consuming and the data are not timely, therefore the data are not normally

available in time for the national accounts compilation process. The survey for 2002/2003 is currently in the field.

Industrial Production

The CSO conducts a quarterly survey of industrial production to collect aggregate data on the volume of mining and manufacturing output from key producers. The survey collects no data on revenue or expenditure.

Other data sources

Comprehensive government finance statistics are not available. The CSO receives aggregate data on central government operations from the Budget Unit of MOFNP; however, no data are available on local government operations or extra-budgetary transactions. Data on defense-related transactions are only available on a highly aggregated level. The Public Finance Branch of the CSO compiled government finance statistics up to 1999; however, the CSO has since discontinued this exercise.

Merchandise trade statistics are available in electronic format on a monthly basis from the Revenue Authority.

The CSO's Price Statistics Branch (PSB) compiles the consumer price index used by the national accounts compilers. The PSB also compiled a wholesale price index;³ however, the index was discontinued in 1998, as it had become seriously outdated. The index was computed using weights derived in 1966.

Recommendation: Undertake regular (preferably annual) enterprise/establishments surveys to take account of all formal activities not adequately covered by administrative statistics.

Recommendation: Explore the possibility of using data from the records of the VAT to compile the national accounts estimates.

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

Source data reasonably approximate the definitions, scope, classifications, and time of recording required. However, the data collection program does not provide adequate coverage of economic activities. The program does not include many new activities that have been introduced in the Zambian economy over the past 10 years, such as the activities of cellular phone companies and the increase in the mining of precious metals.

³ The national accounts compilers have continued to use the index by substituting products from the CPI basket.

3.1.3 Source data are timely

Data from administrative sources are generally received on a timely basis; however, data from surveys are outdated. The post harvest survey is normally conducted too late for the data to be used in the national accounts compilation process (*see also 3.1.1*).

3.2 Assessment of source data

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

Survey data are routinely assessed for sampling error, response error, and non-sampling error. The survey staff at the provincial offices and at the CSO headquarters review the survey results and may refer errors to the field staff for verification. The computer programs used for data entry and processing contain automated editing procedures that highlight both survey and data-entry errors. The computerized program sequence and the data entry checks are detailed in the publication *Documentation of the National Accounts Programs*, produced by the CSO.

The survey staff monitors these errors and may use the information to improve the survey process.

3.3 Statistical techniques

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

Estimates for survey non-response are derived using a grossing factor based on employment. The grossing factor computed as the ratio of estimate of population employment to sample employment. The CSO's Labor and Employment Branch compiled the employment data in separate exercises.

The compilation process does not utilize procedures to obtain exhaustive measures of GDP despite the high level of informal activity (such as small-scale trading and own-account farming), unrecorded cross-border trade, and probable undercover age of the surveys.

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

The use of benchmark data is widespread and the benchmarks are outdated. Benchmark data from 1994 are used to estimate all activities. The benchmarks therefore do not accurately reflect current economic activity or the change in the structure of the economy since 1994. This represents a major weakness in the compilation process. International best practice

recommends that the use of benchmarks should be limited to less than 20 percent of economic activities and that the benchmarks should not be more than five years old.

Specific issues related to the production approach

Owner-occupied dwellings

The output for owner-occupied dwellings is valued as the estimated rentals that tenants would pay for similar accommodation. This practice is in line with international recommendations; however, the benchmark data used are outdated thus leading to biased estimates.

Work-in-progress

Growing crops, standing timber, stocks of fish, and livestock reared for food are not treated as work-in-progress. The total output from these activities is allocated to the period when the harvest occurs or when the livestock is slaughtered.

A commodity flow approach is used to estimate value added and gross capital formation of construction. Therefore, the estimates of value added take account of work-in-progress.

Inventory Valuation Adjustment

Inventories are not adjusted for holding gains/losses. The estimates are deflated using the WPI.

Consumption of fixed capital

The perpetual inventory method is not used to estimate consumption of fixed capital. Estimates of consumption of fixed capital are not included in the national accounts.

Cash vs. accrual

Data on government transactions are available on a cash basis and the CSO does not adjust the data to an accrual basis.

Specific Issues Relating to Volume Measures of GDP

The base year for the constant price estimates is 1994, and this is outdated. The *1993 SNA* recommends that annual chain linking be used to derive the constant price estimates. If not, the base year for the estimates should be updated with a minimum frequency of five years.

Double deflation techniques are not used; rather, the estimation system depends heavily on reflecting the volume estimate to derive the current price estimate.

The consumer price index (CPI) is widely used to deflate the volume estimates. This represents a major weakness in the constant price estimation process as the CPI does not reflect the underlying price changes in most of the economic activities being measured. The WPI is also used for some activities; however, the index is based on weights derived in 1966 and is therefore seriously outdated. Further, both the CPI and the WPI include components that are not part of the expenditure of producers and this distorts the measurement of price changes.

Volume measures of taxes and subsidies on products are estimated by deflating the current estimates using the WPI. This is contrary to recommended international practice. The *1993 SNA* recommends that volume measures of taxes and subsidies on products be estimated by applying base-year tax rates to the volume of transactions subject to the tax or subsidy. Alternatively, the volume measure could be obtained by extrapolating the base-year tax/subsidy using a volume extrapolator of transactions subject to the tax/subsidy.

Expenditure approach procedures

The estimate of private final consumption expenditure (PFCE) is derived as a residual. The CSO has compiled experimental estimates of PFCE using data from the 1994 HBS; however, the estimates are deficient and have not been introduced into the official national accounts.

Government final consumption expenditure is estimated at the one digit level of the Classification of Functions of Government (COFOG). Constant price estimates are derived using a wage index for the compensation of employees and wholesale price index for other goods and services.

Estimates of Gross Fixed Capital Formation (GFCF) are not derived by type of economic activity or by type of asset because of the deficiencies in the source data. Thus, the CSO derives an aggregate estimate of GFCF using data on merchandise imports.

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

- Government final expenditure excludes incidental sales;
- Expenditure of residents abroad is included in estimates of imports;
- Expenditure of nonresidents in the domestic economy is included in exports; and
- However, valuables are not estimated therefore expenditures on items considered stores of wealth are included in private final consumption expenditure.

Recommendation: Improve the techniques used to compile volume estimates of GDP:

- *Update the base year of the estimates and formulate plans for regular update of the base year (with a minimum frequency of every five years); and*
- *Discontinue the use of price statistics with outdated base years and develop more appropriate price indices.*

Recommendation: Minimize the use of benchmark data and update the benchmarks on a regular basis.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The estimates of value added for manufacturing and mining are compared with the data on exports of manufactured goods and raw materials.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Assessments of intermediate data are conducted when warranted.

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

The CSO is unable to determine the extent of the statistical discrepancy in the GDP estimates at current prices as not all the components of GDP are estimated independently. PFCE is derived as the difference between the GDP by type of activity and by category of expenditure. The estimates at constant prices produce a statistical discrepancy; however, this is because PFCE, which implicitly contains a discrepancy, is deflated. The CSO conducted a series of supply and use tables for 1994 to 1999 but the data are not used to investigate the possibility or extent of a discrepancy in the accounts.

Unofficial estimates of GDP are not widely available and the CSO has not conducted comparisons of its estimates with other unofficial estimates.

Recommendation: Investigate discrepancies in the data using a Supply and Use Table (SUT) framework.

3.5 Revision studies

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

Studies and analyses of revisions have not been conducted in a systematic manner. However, the CSO, with the help of an external expert recently undertook a review of the compilation process to determine the weaknesses of compilation techniques and data sources and assess the extent of underestimation of value added.

Recommendation: Conduct a comprehensive review of the revisions following the next rebasing exercise.

4. Serviceability

4.1 *Periodicity and timeliness*

4.1.1 Periodicity follows dissemination standards

The CSO compiles the GDP estimates on an annual basis. This practice is in line with the recommendations of the GDDS.

4.1.2 Timeliness follows dissemination standards

The CSO disseminates the first set of preliminary GDP estimates within three months following the end of the reference year. The precise date of dissemination varies; however, the period of dissemination is within the guidelines recommended by the GDDS.

4.2 *Consistency*

4.2.1 Statistics are consistent within the dataset

PFCE is derived as a residual; therefore, the statistical discrepancy between the estimates by type of activity and by category of expenditure is not derived explicitly. Thus, in effect, the statistics are internally consistent.

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

Consistent series of estimates of GDP by type of activity and category of expenditure are available from 1994 at current and constant prices.

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

The national accounts statistics is consistent with the balance of payments statistics and merchandise trade statistics. CSO compiles its own estimates on local government activities, to derive general government estimates. MOFNP compiles estimates for central government only; therefore, the data are not reconcilable.

4.3 *Revision policy and practice*

4.3.1 Revisions follow a regular and transparent schedule

Revisions follow a regular schedule; however, the schedule and the reasons underlying the cycle are not made known to the public. The CSO compiles provisional GDP estimates before the end of the reference year based on data for the first nine months of the year. Preliminary data on GDP are disseminated within three months of the end of the reference year. The data are revised six months after the end of the reference period.

Recommendation: Disseminate the revision schedule on the CSO website and in publications.

4.3.2 Preliminary and/or revised data are clearly identified

Preliminary data are clearly identified in the publications and press releases. Users are informed that preliminary data as identified, are subject to revision.

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

The CSO has not conducted an analysis of the revision of the national accounts statistics.

5. Accessibility

5.1 Data accessibility

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

The national accounts data are published in a clear manner; charts and tables are disseminated with the data to facilitate the analysis. The publications include notes on methodology as well as a brief analysis economic activity.

Datasets are published with varying levels of detail in different publications. The agency produced a national accounts publication, *The National Accounts Statistical Bulletin*; however, the last publication containing data for 1964–2000, was published in June 2001⁴. They also present data on industry sub-groups. Summary publications such as the *Bulletin of Social and Economic Indicators* provide aggregate data by broad economic groups.

5.1.2 Dissemination media and format are adequate

The CSO does not have an established procedure for disseminating the national accounts statistics. The annual estimates of GDP are disseminated in a monthly publication of the CSO, *The Monthly*. This publication presents broad estimates of GDP by type of activity for the 14 major industry groups. Estimates of GDP by category of expenditure are not disseminated in the publication.

5.1.3 Statistics are released on a preannounced schedule

The national accounts statistics are not released according to a preannounced schedule. The CSO does not have a schedule for the release of the data and the time of dissemination varies as annual compilation and processing depend on available resources.

⁴ *National Accounts Statistical Bulletin No. 8, 1964–2000.*

Recommendation: Develop an advance release calendar and disseminate to users.

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

The national accounts statistics are not made available to all users at the same time. The preliminary data are presented to policymakers in the MOFNP before they are disseminated to the public. There is no systematic process for disseminating the national accounts and the data generally become available to users on request, usually 24 hours after being submitted to the MOFNP.

5.1.5 Statistics not routinely disseminated are made available upon request

The Research and Dissemination Branch provides unpublished information to users on request. All requests must be made in writing to the Director of the CSO and are prioritized based on the time of receipt and the difficulty of meeting the request.

5.2 Metadata accessibility

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

The CSO has compiled a four volume series documenting the sources and methods used to compile the statistics as follows:

- Volume I Sources and Methods—provides the sources and methods used to compile the benchmark estimates;
- Volume II Sources and Methods—provides details of the series for 1992–1996, including a brief analysis of the results;
- Volume III Sources and Methods—provides the sources of data and methods used to compile preliminary estimates of GDP; and
- Volume IV Sources and Methods—presents the computer programs used to capture, process and analyze the national accounts source data.

In addition, summary metadata are presented in the *National Accounts Bulletin*. Metadata are also available on the GDDS Dissemination Standards Bulletin Board (DSBB).

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

The metadata are presented in varying levels of detail to meet the needs of varying groups of users. The national accounts publications provide summary metadata for users who may not be interested in the technical details of the compilation process. The documents on sources and methods provide detailed technical notes on data collection procedures, processing (including validity checks) and on the compilation process.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The national accounts publication lists the street address, facsimile, and telephone numbers of the agency. The agency has produced brochures encouraging users to contact the Research and Dissemination Branch to obtain publications prepared by the CSO.

Recommendation: Publicize the contact point for the national accounts statistics by identifying the responsible Branch that could be contacted if data are required.

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

The Research and Dissemination Branch of the CSO produces a catalog of publications that it makes available to users. The catalog lists the publications, price, and availability of publications produced by the CSO. It also provides information on how users, including international users, may obtain the publications. The catalog is also presented on the CSO website. However, several publications are out of print.

Table 1. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts Statistics
Compiling Agency: Central Statistical Organization

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment				X		No formalized program for data-sharing and coordination. Technical committees are non-functional. Statistical reporting weak despite legal mandate. Poor survey follow-up has rendered establishments surveys useless.	
0.2 Resources				X		Staff resources cannot support compilation of a minimum set of updated accounts on a regular basis. Shortage of staff in Dissemination Branch has affected the production of publications.	
0.3 Relevance			X			The relevance of statistics to users in the private sector not monitored in a systematic manner.	
0.4 Other quality management			X			Evaluations of timeliness and revisions not conducted.	
I. Assurances of integrity							
1.1 Professionalism			X			The <i>Census and Statistics Act</i> gives an individual outside the agency (the Minister) the authority to decide the statistics that the agency may compile.	
1.2 Transparency			X			Internal government access identified only in the IMF GDDS metadata.	
1.3 Ethical standards			X				

Table 1. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts Statistics
Compiling Agency: Central Statistical Organization

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
2. Methodological soundness							
2.1 Concepts and definitions			X			The 1968 SNA is used as the framework for the accounts.	Construct SUT and input-output tables for 2000 to 2002.
2.2 Scope			X			The scope of the accounts does not fulfill the minimum requirements for implementing the 1993 SNA. Not all economic activities are covered.	
2.3 Classification/sectorization			X			COICOP or other consumption classifications not used as final consumption expenditure not disaggregated.	Implement the International Standard Industrial Classification (ISIC rev.3) in all surveys and tabulations.
2.4 Basis for recording			X			Recording of government transactions done on a cash basis.	
3. Accuracy and reliability							
3.1 Source data				X		Business register outdated. Register last updated in 1998. HBS not conducted on a regular basis. Establishment surveys not conducted on regular basis. Data on local government and extra-budgetary activities not available.	Update the register of establishments using administrative records especially VAT records from the Zambia Revenue Authority. Review the sample frames for economic surveys—in the light of the economic census enumeration results.
3.2 Assessment of source data			X			Results from assessments of survey data not always made public. Base year outdated.	
3.3 Statistical techniques				X		Widespread use of benchmarks (used to estimate most activities). Benchmarks outdated (1994). Deflation techniques weak.	Obtain independent estimates of private final consumption expenditure using results from the 2003 LCMS. Re-base the GDP estimates to 2000 based on the results of the SUT.
3.4 Assessment and validation of intermediate data and statistical outputs				X		Statistical discrepancies not investigated. Supply and use framework not used.	
3.5 Revision studies				X		Studies and analyses of revisions not conducted routinely.	

Table 1. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts Statistics
Compiling Agency: Central Statistical Organization

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
4. Serviceability							
4.1 Periodicity and timeliness		X					
4.2 Consistency		X					
4.3 Revision policy and practice			X			Revision schedule not available to the public.	
5. Accessibility							
5.1 Data accessibility				X		Detailed publications are not produced in a regular, timely manner. Advance release calendar not available.	
5.2 Metadata accessibility		X				Contact points not precise in publications. Subject-specific contact information available in GDDS metadata, which is linked to CSO website.	
5.3 Assistance to users			X				

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

0. Prerequisites of Quality

0.1 *Legal and institutional environment*

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

The consumer price index (CPI) are compiled and disseminated by the Department of Census and Statistics, generally known as the Central Statistical Office (CSO) of Zambia. The *Census and Statistics Act* Chapter 425 of the *Laws of Zambia 1964* establishes the legal authority for the collection, processing, and dissemination of official statistics in Zambia. The Director of Census and Statistics heads the CSO which is a department of the Ministry of Finance and National Planning (MOFNP). The *Census and Statistics Act* provides specific authority to the Director, appointed by the Public Service Commission, to perform the tasks relating to the compilation of official statistics. The Director is empowered to appoint authorized persons to undertake the duties under the *Census and Statistics Act* and is authorized to delegate the power of appointing authorized officers to any other person.

Section 14 of the *Census and Statistics Act* contains regulations for collecting statistics on specific sectors as approved by various statutory instruments or government regulations. The regulations prescribe the specific types of data that the Director may solicit for compiling these datasets and outline the responsibilities of the respondent in that regard. The regulations under Section 14 give the CSO the authority to collect specific information for compiling national statistics. The *Census and Statistics Act* does not explicitly name the CPI as part of the CSO work. Despite this, it is commonly known and not questioned that the CSO is the sole agency responsible for compilation and dissemination of the CPI.

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

The *Census and Statistics Act* mandates the Director to organize a coordinated scheme of social and economic statistics relating to Zambia. However, there is no systematic program to comprehensively coordinate the production of official statistics. In practice, coordination of the national statistical system is undertaken primarily on a bilateral basis with other government agencies. The CSO conducts ad hoc meetings with the MOFNP to discuss the statistical plans and programs when issues arise.

All data used in the compilation of the CPI is collected and processed by the CSO and the data sharing within the Economic and Financial Statistics Division is generally adequate. Household Budget Survey (HBS) of 1993/1994, the main source of data for the current CPI weights, was carried out by the same division responsible for price collection and compilation.

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

Section 1 of the *Census and Statistics Act* stipulates that no individual return or information provided to the CSO or its agents under the *Act* shall be disclosed to any person not covered by the *Act* without the prior written permission of the respondent.

All CSO employees must take an oath of secrecy swearing that they will not, unless with lawful authority, disseminate any information acquired by them during the course of their employment (see also 1.3.1). The *Census and Statistics Act* stipulates a penalty equivalent to 3,000 penalty units⁵ or one year of imprisonment for staff found guilty of this offense. The questionnaires advise respondents that information is kept confidential and identifies the relevant section of the *Census and Statistics Act* that stipulates the confidentiality of responses.

The CSO has instituted measures to safeguard the information provided by respondents. Computers used for data-entry and storage are password protected. The CSO collects the questionnaires from the provincial offices and data are kept confidential. The mechanism for the electronic transfer of information between the provincial offices and the CSO headquarters does not exist. The provincial offices submit questionnaires to the CSO headquarters by mail or regular surface transport and some material may be lost or misplaced during transmittal.

The CSO follows the civil service regulations on the storage and disposal of official documentation. Questionnaires may be stored for up to 10 years and are disposed by incineration on the compound of the civil service. However, the process is not supervised by an official of the CSO and the destruction of the material is left to persons who are not covered by the *Act*.

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

Section 9 of the *Census and Statistics Act* provides the legal mandate for the collection of statistics. The *Census and Statistics Act* stipulates that any person, who is required to provide information to the Director or his authorized agent, must provide the information in the format requested and in a timely manner.

Section 12 of the *Census and Statistics Act* establishes penalties for noncompliance. Persons who fail to comply with a request to supply information to the CSO is guilty of an offence and liable to a fine not exceeding 1,500 penalty units or to imprisonment for a period not exceeding six months.

⁵ A penalty unit is equivalent to 5 kwachas.

There have not been problems with compliance in collection of price data for the CPI. Complementary to the legal requirement, the CSO has fostered a spirit of voluntary cooperation for the collection of CPI data and has not needed to formally apply the mandatory reporting law.

During the planning of the work program, the CSO attempts to organize survey to reduce respondent burden. Thus, surveys targeting the same units are normally conducted at the same time when the respondent may be presented with two questionnaires thus eliminating the need for multiple visits to the same respondent during a short period. Where feasible, questionnaires are merged and the information for multiple surveys would be included in one questionnaire.

0.2 Resources

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

With the restructuring of the CSO, part of the Public Sector Reform Program, the overall staff has decreased from over 1,300 in year 2000 to its current around 650. This drop came mainly as the staff previously employed by the CSO but located in other ministries and institutions were mainly transferred under the management of institution in question. Due to lack of funding some vital surveys and statistics have had to be postponed (Economic census, Household Budget Survey) or even discontinued (Wholesale Price Index).

Staff resources are adequate to perform the monthly compilation of the CPI. There are nine persons at the CSO central office working on the CPI, and 32 enumerators and seven supervisors assigned to the CPI price collection at the regional offices. Three persons at the central office have college degrees and no professional vacancies are currently unfilled. Despite that turnover rate is not seen as a problem, the CPI program still rests on few senior staff members. Additionally, the training system within the CSO has been discontinued and only one staff member has participated in an international training seminar on compiling price indices, one sponsored by the IMF in Pretoria, South Africa in 2002.

The management also feels a need to raise the competence level in the CSO by hiring qualified staff with more attractive competitive salaries. The comparatively low salaries in the public sector may be a deterrent to the recruitment and retention of young professionals which is indicated by the fact that some 20 percent of CSO professional vacancies are not filled.

Computing resources are not sufficient to improve the compilation and validation processes of the CPI. There are only three computers and the over ten years old DOS based software running in DBase and used for the tabulation is outdated and inflexible. The software, although appropriate by the standards of 15 years ago, makes it hard to implement or explore any changes in collection methods, alternative data sources, or validation processes.

Additionally, the potential of information technology, even in small inexpensive scale, are not fully exploited; there is no central database or network connection even between the work stations. The source price data are stored on CDs when hard disk space is about to run out. Emergency back-ups are not made regularly.

Access to the CSO facilities is restricted to authorized persons and office blocks are secured outside office hours. The building and equipment provide the necessary facilities to perform the work. However, both central and provincial infrastructure is seen by the management to hinder efficient utilization of resources and modern technology.

The CSO submits an annual budget for approval to the MOFNP based on its work objectives. However, though the Ministry may approve budget, funding during the year may not be secure. The release of funds by the Ministry is based on the revenue collections of the central government and the disbursement of funds may not always coincide with the CSO's work program. Thus, on many occasions, the CSO has had to abandon or streamline planned programs due to the shortfall in funding from the central government. However, being a top priority statistics at the CSO, monthly compilation of the CPI has not been seriously affected by financial constraints. Other price programs, including the HBS and the discontinued PPI, however, do suffer from lack of sufficient funding.

The CSO has received funding from international organizations for statistical development; however, these funds are generally project related and are not normally available for the agency's regular statistical programs.

Recommendation: Update the CPI software when revising the weights next time. This is likely to increase requirements for overall IT infrastructure as well as to allow data to be shared more efficiently at least within the CPI branch staff.

0.2.2 Measures to ensure efficient use of resources are implemented

The regulations of the public service require periodic reviews of staff performance; however, these are not normally conducted for regular staff. Performance of field staff is assessed for every major survey and staff remuneration is associated with productivity. The CSO assesses available resources against its work program at the beginning of each year and attempts to allocate the available resources to maximize its output under the work program. Thus, surveys may be streamlined where feasible by merging survey instruments (see also 0.1.4). In addition, staff may be shifted across Departments to ensure that the priority areas of the work program are addressed.

0.3 Relevance

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

The CSO has not conducted any recent user surveys or other systematic measures to monitor the relevance of its statistics to users. However, the website and survey instruments provide contact information through which users can provide their views on the quality or relevance of the statistics. In addition, users in the public sector are encouraged to provide their views on the statistics through the bilateral statistics coordinating groups that convene on an occasional basis, and the Research, Dissemination and Data Processing Division is planning to conduct a user need assessment during the year 2004. In international context, especially cooperation within the SADC and international organizations brings international needs into management's knowledge.

During the planning and execution of large surveys, ad-hoc and user workshops are formed including representatives from institutions related to the subject matter in question. For example, the Living Conditions Monitoring Survey (LCMS) establishes a standing steering committee consisting of representatives from government and international agencies, academia, and the private sector.

Recommendation: Carry on planned user need assessments and consider targeting users of subject statistics to better identify current and emerging data needs.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The CSO mission sets "timely, relevant and high quality statistical information" as its goal. However, the CSO does not have a systematic and credible program for quality review taking into consideration all dimensions of quality. The tradeoffs are seen between financial availability and ability to carry out surveys critical for quality of statistical programs.

The CSO organizes training programs for enumerators before every survey to familiarize persons with the peculiarities of specific questionnaires. These programs are quite useful in minimizing errors during fieldwork.

The Director conducts regular meetings with senior staff to review the work program and assess performance.

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

To adhere to the quality of statistical programs, the management seeks to share the knowledge within the CSO by internal committees consisting of key persons of different

subject areas. There are no periodic reviews to evaluate quality in statistics. However, sometimes the CSO also receives technical assistance from donor agencies to evaluate quality of its current statistical programs.

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

The CSO does not address, in a systematic manner, feedback from users on the quality of the statistics. Emerging data requirements are not considered in developing the statistical program for the CPI. Thus, new activities that have emerged over the past ten years are not considered.

Resource availability is actively considered in the work program planning process and resources may be shifted to the statistical priority areas.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

As a department of MOFNP, section 7 of the *Census and Statistics Act* states that the Director shall, whenever the Minister directs, collect statistics with respect to such a matter that the Minister may prescribe. Further, the Director shall not collect any statistics unless regulations have been made specifying the particulars regarding the statistics to be collected. This section of the *Census and Statistics Act* implies that the Director may not have independence in making decisions regarding the compilation of the statistics. However, the CSO notes that this section of the *Census and Statistics Act* is not normally enforced and, by tradition, the Director is the final authority on the compilation of the statistics.

The recruitment and promotion of staff follow the regulations of the public service. Staff is appointed by the Public Service Commission (PSC) and must meet the basic criteria established for all public servants. The PSC has established 'sector specific' criteria for recruitment staff whereby persons must possess specific qualifications depending upon the Division where to which they will be assigned and the tasks they will be expected to perform.

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

The choices of sources and statistical techniques are determined solely by statistical considerations. Staff, with the occasional assistance of external experts, decides on the statistical techniques, methodology and data sources to be employed based solely on the need to adhere to international standards. Financial availability, both budgetary and from other sources, does affect the choice of which surveys and statistics are carried out and

disseminated but it does not hinder the professional independence within the statistics once decision of their production is made.

The Director is solely responsible for disseminating the statistics. The data are not presented to any other authority within the Ministry of Finance for review or approval before release.

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

Director of the CSO is entitled to and has commented on misinterpretation and misuse of the statistics in the press. Explanations are also provided during press conferences and meetings with users.

1.2 Transparency

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

References to the *Census and Statistics Act* are provided in the questionnaires employed by the CSO in its data collection programs. The terms and conditions for compiling the statistics are contained primarily in the *Act*. The *Census and Statistics Act* is available as part of the collection of the *Laws of Zambia* that is published on the website of the Parliament of Zambia. However, the CSO does not distribute copies of the *Census and Statistics Act* nor does it makes reference to the Parliament's website.

The survey questionnaires identify the legal authority under which the data are collected. They also provide contact information for respondents with enquires regarding the data collection program.

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

There is no internal governmental access to CPI data prior to their release to the public. This policy is also explained to the public in press conferences.

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

All publications and the website of the CSO are clearly identified by the name and contact information of the institution. Additionally, press releases are signed by the Director and the CSO requests attribution when its data are reproduced by others.

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

There have been no advance notices given to users of major changes in the index. The CPI market basket and weights have not been revised or methodology changed during the last ten

years. Changes put in place then were explained in an unpublished methodological paper after the introduction of the new index.

Recommendation: Publish information on methodological changes e.g., on the CSO website.

1.3 Ethical standards

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

Staff behavior is guided by the regulations of the public service. Staff is presented with the regulations when recruited into the public service and are encourage familiarizing themselves with the regulations during the early period of their employment. A copy of the regulations is maintained in the Administrative Division of the CSO and is available to staff.

The *Act* provides additional guidelines for staff engaged in the collection of statistics. Staffs are obliged to swear to an oath of secrecy that they will not, without lawful authority, communicate any information acquired during the course of the employment (see also 0.1.3).

2. Methodological Soundness

2.1 Concepts and definitions

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

In general, the specification of CPI market basket items and the corresponding weights are based on concepts and definitions of household consumption that are consistent with the *1993 SNA* and the new *Consumer Price Index Manual*. All collected prices as well as the expenditure data are based on cash purchase prices.

Expenditure data on both goods and services are collected and compiled in sufficient in detail to permit derivation of item level weights and to facilitate analysis at different levels of detail.

2.2 Scope

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

The weights for the CPI market basket are appropriately based on expenditure data from the HBS. The HBS covers all types of households regardless of size and income, both urban and rural. Separate CPI data, or major sub-aggregates, are compiled for urban low and high income households and rural households. Households whose major economic activities are unincorporated business or farming are included.

The CPI market basket items and their corresponding weights are determined based on solely monetary market transactions corresponding to purchases of goods and services for consumption. Housing services in this CPI are treated so that the weights include rental and gross acquisition expenditure on housing but exclude imputed rent on owner occupied housing. The difference between acquisitions and disposals of owner-occupied housing is not reflected in the CPI weights (see also 2.4.3). Price collection covers only rents. Own account production of food items and services for consumption and illegal market goods and services are excluded.

2.3 Classification/sectorization

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

Households and transactions are treated broadly consistently with the *1993 SNA*. The tabulation and publication of the CPI is based on the national product classification, which closely follows COICOP. Because of close cooperation with SADC countries and the African Development Bank in creating harmonized CPIs. International classifications are being implemented; e.g., a plan to move to full COICOP together with other SADC countries is in place.

A special character of the Zambian CPI is a combined income level and geographical classification. The overall CPI is calculated from three sub-aggregates: Metropolitan High Income, Metropolitan Low Income and Non-Metropolitan. Although the idea of having a measure for different income groups was seen important, few issues in the practical application should be noted. First, as the market baskets differ for high and low income households, so may do the outlets and actual prices paid for same goods. Using same price data for both household groups may level down possible differences between the two. Second, the rural index includes both high and low income households and the composite index, calculated as a population weighted average of the three aggregates.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Both market basket weights and monthly prices used in the compilation of the CPI are based on market prices including taxes, trade and transportation margins. Regarding to some goods, informal discounts, e.g., from bargaining, can not be included. However, this problem is shared by most statistical agencies. The detail of characteristics is sometimes vague since goods may be defined as “low price” or “medium price” but best effort is used to follow the same specification in time. With cash pricing, transaction characteristics may not be fully considered but their effect is believed to be insignificant.

Recommendation: Pay more attention to the item specification so that the item variants are not unambiguous.

2.4.2 Recording is done on an accrual basis

Both the expenditure data from the HBS and the price data for the monthly price survey are recorded on an accrual basis.

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

No netting procedures are used since the scope is considered to cover gross transactions. Disposals of durable goods are hence not accounted for in the weights, although the HBS would allow for this. (See also 2.2.1)

Recommendation: Calculate the weight as the total value of purchases less sales for durable good as well as purchases of housing.

3. Accuracy and Reliability

3.1 Source data

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

The weight structure for the CPI market basket is derived solely from the 1993/1994 HBS. This HBS provided a reasonable, comprehensive, and detailed frame for the construction of the CPI market basket.

The frequency of HBS is not high enough to capture changes in consumption patterns as large structural changes may have taken place since the last HBS was conducted. The last two HBSs were conducted in 1975 and 1993/1994. Currently, the 2002/2003 LCMS survey is being analyzed and the results will be used to revise the weights for the CPI during 2004.

The survey techniques used to conduct the 1993/1994 HBS were sound. International donors assisted in planning and implementation of the survey and international standards and best practices were followed. The HBS was also based on three income groups: Metropolitan High Income, Metropolitan Low Income and Non-Metropolitan. The metropolitan high income households were defined *a priori* as the top 20 percent and the rest as low income. All rural households, regardless of their income, were classified as non-metropolitan group. The three major sub-aggregate CPIs, in turn, refer to these domains with distinct weights and market baskets.

The monthly price survey is conducted using a variety of outlet types, including supermarkets, open markets, department stores, general stores, specialized shops, and

appropriate government entities covering all provinces of Zambia. New individual outlets are added to the data collection when they increase local market share significantly. Currently approximately 15,000 monthly price quotations are collected from over 1,500 outlets for 357 product items in the CPI market basket. In addition to these price data, a separate rental survey is carried for estimation of rents in metropolitan areas. This consists of a sample of 100 housing units per province (300 for Lusaka and Copper belt).

Sampling methods are a combination of cut-off sampling and judgmental selection for all items, areas, outlets, and product specifications. However, broad principles for selection are given to ensure that the samples are representative. New outlets are added to the collection but new goods are not introduced between the index revisions. Item specifications are generally sufficiently detailed and the enumerators report possible changes in specifications if matching items are not found.

No ad-hoc surveys are conducted in order to get additional data outside the regular monthly survey. These additional data could be used either for compilation or for validation purposes.

Recommendation 1: Implement a clear cycle of household budget surveys to capture the changes in consumer expenditure structure.

Recommendation 2: Investigate possibilities to move towards scientific sampling.

Recommendation 3: Search and prepare for additional or complementing data collection methods and sources. This may in turn call for changes in compilation and validation processes and the software used for compilation.

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

The source data are broadly consistent with the needs of the CPI program with regard to scope, classification, valuation, and time of recording. However, if *within-month* price fluctuations are significant for some CPI basket items, as weekly prices collected by the BOZ slightly suggest, the guiding principle of one mid-month price should be reconsidered. This may be a problem only for a limited number of certain products, mainly agricultural products.

Recommendation: Investigate the significance of within the reference month price fluctuations and their implications for the monthly CPI.

3.1.3 Source data are timely

The monthly price data are collected and processed on a timely basis. Field enumerators collect the data personally from the respondents and central office staff is sent to the provincial offices to collect the questionnaires and to make an initial assessment of the validity of each individual price collection form. This makes a quick follow-up possible and

facilitates an early validation process. The price data are ready for the CPI compilation in less than two weeks from the collection.

The HBS expenditure data, however, are outdated and no steps have been taken to supplement the data between the revisions from other sources. Once carried out, the processing of the HBS results is reasonably timely.

Recommendation: Increase the frequency of HBS and make it a permanent, regular survey to be used for estimation of the CPI weights, for compilation of the NA, and for other indicators.

3.2 Assessment of source data

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

There exists good information and reporting on the accuracy of the 1993/1994 HBS, as presented in a series of publications about the HBS. Although sample errors are not presented in tabulations, statistical rigor is used throughout the HBS survey and appropriate error adjustments are carried out.

Sample variation or estimates of other sources of error are not regularly monitored for the monthly price collection. Instead, elementary price data are monitored for extreme changes and other types of processing errors. Visiting CSO central office staff makes the first round of manual inspection and confirms suspect cases with the enumerator and, if necessary, with the responding outlet. These are useful methods of verification but, in context of over 15 percent annual inflation and lack of any further systematic assessment processes, these means fall short of the high standards promoted by international best practices. Currently, the quality of the CPI is almost solely dependent on the accuracy of individual price quotations. This may miss, or leave unexplained some temporary or systematic market developments.

Recommendation: Investigate further means of data accuracy verifications, also related to the intermediate data. This may include cross-regional checks, or consistency checks between enumerators

3.3 Statistical techniques

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

After the data entry stage the CPI software prompts the user for unusual changes from previous month and changes have to be either accepted or the base price changed. The only adjustment method is an automated recalculation of the base price, which is used with temporary missing prices, item substitutions (with overlap method and at introduction of a

substitute item), and expected quality change. The method imputes the base prices for January 1993 based on either the items own price history (substitute overlap) or on average price movement of other varieties of the same item (substitute no overlap). No other information may be used to adjust the prices. Although this method is generally accepted and based on good practice it would be good to have other options at hand as well. Another shortcoming in the use of the adjustment method is that the information on replacements is not systematically investigated to guide the compilation process.

Seasonal products do not constitute a serious problem since all CPI market basket items are available throughout the year, even though large seasonal changes in quantities occur. More serious problem, given the time span of 10 years, is that no new goods or services may enter the market basket. Although permanently unavailable varieties are replaced with similar ones, this may cause bias if the relative prices between the items in the basket and in the market differ. CSO is aware of the problem of not having some goods that are already widely consumed by households. In presence of large relative price differences this introduces bias into the index, first through the inaccurate expenditure shares and second from lack of representative items in the market basket.

For quality adjustments the same base price adjustment is made as for variety substitutions. Either the quality is assumed to remain the same or the new observation is treated as a new variety. Since the limiting values of monthly price change have to be relatively high, incidents where quality changes are accompanied with small relative price change may go undetected. Also, extensive use of recalculation of base price based on relative of average prices between now and January 1993 has potential problems, since during that period the average prices have increased ten to twenty fold. Using the average of long term price relatives in the index calculation together with automated base price adjustment over a long period, and at the same time having relatively high overall inflation rate, may make the index sensitive to the adjustment method. The further the base price period goes in time, the more possible bias is expected.

Recommendation 1: Implement procedures for using other available data for adjusting quality changes and item changes. This may require a replacement of the CPI software with more flexible one.

Recommendation 2: Implement procedures for the introduction of new products into the market basket between the index revisions.

Recommendation 3: Update the price reference period and the index reference periods more frequently.

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

The CPI uses averages of long-term price relatives as the elementary aggregate formula. The aggregation of each CPI market basket item uses arithmetic averages of elementary aggregate

price relatives over districts and provinces for each three major sub-aggregate. For national level item group and overall aggregation, the calculation uses the modified Laspeyres formula. The formula uses fixed expenditure shares from 1993/1994 HBS for the basket items for each three sub-indices. The price reference period refers to January 1993; expenditure shares are inflated by the CPI of that time to January 1994 prices, and the index reference period is year 1994. In the context of over 30 percent overall annual inflation during the last ten years, large differences in relative price changes can be expected. Without price updating, differences in relative price changes of items and/or item groups may lead the fixed expenditure shares to become unrepresentative of the true expenditure shares. This problem is made more serious by not having the weights revised at all during the last 10 years.

Recommendation 1: Use geometric averages for the elementary aggregate formula.

Recommendation 2: Either revise the index more often or adjust the weights frequently to better reflect the weight structure of consumer behavior. If more frequent, comprehensive HBS are not feasible, conduct regular small scale surveys to update the weights.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Currently, the CPI estimates are not systematically validated against any other data. However, the CPI series could be compared for consistency with international market prices, price data from the Export Board of Zambia (EBZ), data the BOZ compiles for *Weekly Price Survey*, or use other countries data as benchmark.

Recommendation: Implement systematic validation checks e.g., few an agricultural products.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Only immediate source data is validated. Lack of intermediate data assessment may occur e.g., regional special market conditions may go undetected.

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

Differences between the three major sub-aggregate indices are not regularly investigated. It is surprising that these aggregate indices that loosely refer to household income groups move very closely together.

3.5 Revision studies

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

Since CPI data are final upon release, there are no revision studies of published index data. However, analysis for the weight revisions are conducted at the time new HBS is carried out and the results of these studies are published.

Recommendation: Investigate, primarily for internal use, how updating the weights in historic price data affect the item group and overall index aggregates.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The CPI is compiled and published monthly, thus meeting GDDS recommendations.

4.1.2 Timeliness follows dissemination standards

The timeliness of the monthly CPI is better than the GDDS recommendation of one to two months after the reference period. The CPI data are published on the last Thursday of reference month, coinciding with the publication of a monthly publication *The Monthly*.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The three major sub-aggregate CPIs are calculated from item and product class indices over districts and provinces so that no regional aggregates are calculated. This way each of the three series is consistent across geography. The composite CPI is calculated as a weighted average of the three sub-aggregate indices using expenditure weights for each domain. For all lower level aggregates, the same weights are used as well.

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

In order to obtain a consistent historical series, the CSO links the current 1994 = 100 index to the previous index with a base year of 1985 by using January 1993 value of the old index as a link. Using the same linking method, main series are also calculated from year 1975. During the last revision in 1994, a new index calculation methodology was implemented, including a change in the elementary aggregate formula. Long historical index series were also recalculated backward using new weights.

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

The CPI estimates are used in the national accounts compilation and in BOZ's internal weekly inflation indicator. Other relating price statistics programs within the CSO have been discontinued since 1998.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The monthly CPI is not revised, and this policy is not explicitly stated. There is no clear schedule for revising the CPI market basket items and corresponding weights. Instead, the revisions are made only when new comprehensive HBS are conducted and occurrence of these surveys has been dependant on donor financial and technical assistance.

Plans for conducting the HBS every three to five years have been proposed but decisions have not been made yet. The CPI central office staff has begun work on the CPI revision using the 2002/2003 HBS results and should complete the revision during year 2004. The new index reference will be 2004.

Recommendation: Implement credible plan for revising the CPI coinciding with the HBS schedule.

4.3.2 Preliminary and/or revised data are clearly identified

The CPI data are final upon released and no preliminary data are published.

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

There are no CPI revision studies that are made public. However, the effects of changes in the CPI market basket weights to the index would be useful information even if the CPI data themselves are not revised.

5. Accessibility

5.1 Data accessibility

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

The CPI is first disseminated as a press release and an accompanying more detailed monthly CPI publication. The press release includes the essential information showing the annual inflation rate as a chart and short descriptive text listing major changes and contributions of major item groups to overall price changes. Accompanying data present long index series and

monthly and annual inflation rates for last three years for the three major aggregates; Metropolitan Low and High Income and Non Metropolitan, as well as the composite.

The charts in the actual CPI publication are presented just for previous 12 months with no long-term trends. Previously, the presentation gave too much weight on short term price fluctuations and all charts were presented in changes of annual inflation rates instead of rates themselves. Recent improvements in the publication format have made it easier for the public to determine changes in long-term trends. Annual inflation rates are presented in all the charts. Educated users can easily find the short term fluctuations from the accompanying tables.

The presentation of three main sub-aggregates is provided in various levels of aggregation. Food and non-food price changes and their contribution to the overall inflation as well as eight major groups are presented separately. Apart from food price changes, with a list of food items which prices have increased or decreased, the text only describes the index movements without any more explanatory detail. Seasonally adjusted series are not calculated for composite nor any sub-aggregate level. As noted by a user and discussed with CSO price statistics staff, the use of the term “inflation” to refer to all price changes in CSO publications may be confusing to the public.

5.1.2 Dissemination media and format are adequate

The press release is disseminated at a press conference and the same release is posted on the CSO website. A hardcopy of the publication, *Consumer Price Index*, is available from the CSO. Unpublished detailed series are available upon request. On the day that the CPI data are released, the CSO also publishes a free publication, *The Monthly*, which includes the composite CPI and some average prices. A quarterly publication, *Quarterly Digest*, which including the CPI estimates was discontinued in 2001 and data are release only monthly.

5.1.3 Statistics are released on a pre-announced schedule

There is no pre-announced schedule although, since April 2003, the CPI has always been disseminated on last the Thursday of the reference month and this schedule has been strictly followed. The CSO plans to publish a release schedule on its website. Selected major users are sent letters of invitation for the CPI press conference one week before the CPI press release.

Recommendation: Publish a release calendar for the CPI.

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

The CSO states that the CPI data are released to all users simultaneously at the monthly press conference. The management has emphasized the importance of not releasing the CPI data in advance; however, no specific steps are taken to embargo the press release or the CPI

publication before the release date. The release of sensitive data without authorization is prohibited by the *Census and Statistics Act*.

5.1.5 Statistics not routinely disseminated are made available upon request

More detailed breakdowns of the CPI data are not released but long time series and some average price data are made available to users upon written request to the dissemination unit of the CSO. Although the CPI publication includes contact information, availability of more information has not been made publicly known.

5.2 Metadata accessibility

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

A comprehensive manual, *Methods and Procedures for the Compilation of the Consumer Price Index* provides detailed documentation of the CPI. This documentation includes a description of both the price collection and index tabulation process. It also provides information on the source data, the weighting structure, imputation methods, and the techniques used to calculate elementary aggregates are explained. In addition, publication on the HBS methodology is published, although not cross referenced. The aggregation formula is also explained but alternative weighting patterns are discussed. This may leave the reader unclear as to which method is actually used. A comprehensive step-by-step example of index calculation as well as a price collection form is included.

However, this manual is not available to the public. Only a short description of the GDDS metadata is available on IMF's website.

Recommendation: Use the existing material to disseminate more metadata on various levels of detail e.g., with the publication or on the CSO website (Same for 5.2.2).

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

Only the above mentioned CPI manual is prepared but no information is disseminated. The press release and monthly publication only include the Metropolitan city list and the index reference year and states that the prices refer to mid-month prices. To educate different users on the methodology and compilation of the CPI, the CSO could provide simple examples of calculation and use of the CPI and its methodology.

5.3 *Assistance to users*

5.3.1 *Contact points for each subject field are publicized*

All statistical products of the CSO include the telephone number, facsimile number (all of the directors of the CSO), mailing address, and a general CSO info e-mail address and address to the CSO website. The CSO policy is that all contacts are handled centrally by the dissemination unit which also manages the CSO website and dissemination of all publications. Hence, each subject field does not have specific contact information. Each enquiry is asked in writing and passed on to the appropriate person responsible for the given statistics. Unpublished data are available only upon written request to the Information Department.

Assistance to users is not monitored or information from the requests explored but the Dissemination unit records all request.

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

A catalog of CSO publications, including sale prices for the products, is available from the CSO library or the Dissemination unit. Many of the publication are, however, out of print and insufficient number of e.g., CPI publications is printed.

Recommendation: Exploit the internet as a cost-effective distribution channel of CSO publications and other information.

Table 2. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Consumer Price Index
(Compiling Agency: Central Statistical Office)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
0. Prerequisites of quality								
0.1	Legal and institutional environment			X			There is no formal and systematic program for data-sharing and coordination in place.	Design a new CPI system based on Microsoft SQL 2000 and SAS. Currently the CPI system is operated in Dbase IV.
0.2	Resources			X		Computer software and IT infrastructure are not up to date. Production and dissemination of statistics is dependent on key persons.		
0.3	Relevance			X		User surveys are not conducted.		
0.4	Other quality management			X		There are no periodic reviews to evaluate quality in statistics.		
1. Assurances of integrity								
1.1	Professionalism			X			The Census and Statistics Act gives an individual outside agency the authority to decide on the statistics the agency may compile.	
1.2	Transparency			X			No advance notice is given for major changes in the index.	
1.3	Ethical standards		X					
2. Methodological soundness								
2.1	Concepts and definitions		X				Gross weights are used for housing and durable goods acquisitions.	
2.2	Scope			X			Sales of durable consumer goods are not netted out of for the CPI weights.	
2.3	Classification/sectorization		X					
2.4	Basis for recording			X				
3. Accuracy and reliability								
3.1	Source data				X		New goods are not added to the index and scientific sampling methods are partially used. The weight data are outdated.	
3.2	Assessment of source data			X			Validation processes could be improved.	

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Table 2. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Consumer Price Index
(Compiling Agency: Central Statistical Office)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3.3 Statistical techniques			X			Index formula could be changed and methods to account for quality changes and missing price should be investigated.	Develop a new CPI, based on the results of the 2002/2003 LCMS to revise the weights, product/outlet samples, and the base period.
3.4 Assessment and validation of intermediate data and statistical outputs				X		There is no systematic process to validate intermediate data or discrepancies in statistical outputs.	
3.5 Revision studies			X			No studies are prepared except for the HBS results.	
4. Serviceability							
4.1 Periodicity and timeliness		X					
4.2 Consistency		X					
4.3 Revision policy and practice			X			General HBS studies are published but not ones specific to the CPI.	
5. Accessibility							
5.1 Data accessibility			X			No advance release calendar.	
5.2 Metadata accessibility				X		Apart from the GDDS website, very little information is made publicly available.	
5.3 Assistance to users			X			Only general contact point is given.	

III. GOVERNMENT FINANCE STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The responsibility to compile government finance statistics (GFS) in accordance with international standards, as described in the *A Manual on Government Finance Statistics 1986 (GFSM 1986)* or *Government Finance Statistics Manual 2001 (GFSM 2001)*, is not explicitly assigned in any law. However, as the institution responsible for all official statistics, the Central Statistical Office (CSO) accepts the responsibility for the compilation of GFS in accordance with international standards. The CSO did compile GFS for the budgetary central government up to the year 2000⁶ and is in the process of compiling GFS for the years 2001 and 2002. The CSO, however, does not disseminate GFS to the public. The Ministry of Finance and National Planning (MOFNP), on the other hand, does disseminate budgetary fiscal data on a monthly and annual basis. Therefore, because the MOFNP is the institution that disseminates fiscal data to the public, the ROSC assesses the information released by the MOFNP.

The *Finance (Control and Management) Act of 1969*, Chapter 347, Volume 20 of the *Laws of Zambia* assigns the responsibility to the Minister of Finance and National Planning for producing the *Financial Report* of the central government. In addition, the *Constitution of Zambia* stipulates in Article 118 that the Minister of Finance and National Planning shall lay before the National Assembly a financial report not later than nine months after the end of each financial year in respect of that year. The *Constitution* also states in Article 121 that the Auditor-General shall submit a report to the President within twelve months after the end of each financial year in respect of that financial year. The President shall, not later than seven days after the first sitting of the National Assembly, after he receives the report, cause the report to be laid before the National Assembly.

The Office of the Accountant General of the MOFNP compiles the *Financial Report* (Report on the Accounts and Finances of the Government of Zambia) for the budgetary central government, based on data received from the different line ministries and the Zambia

⁶ The fiscal year for the government ends December 31st. The CSO also provided the mission with an internal copy of the GFS; however, the CSO data excludes information on the financing of the deficit and outstanding government debt.

Revenue Authority (ZRA). The government uses the fiscal data⁷, in the *Financial Report*, for reporting on the budgetary outcome, fiscal analysis and policy purposes.

The MOFNP also publishes monthly and annual fiscal data on the domestic operations of the budgetary central government in its other publications—monthly data in the monthly *Macroeconomic Indicators*⁸ and annual data in the *Economic Report* and the *Auditor-General's Report*.

In the *Economic Report*, which is published in July and January of each year, the Investment and Debt Management Department (IDM) of the MOFNP compiles and disseminates the outstanding amounts of domestic and foreign debt at the end of June and December. The total government debt data comprising domestic and foreign debts are not disseminated. The disseminated domestic debt consists of securities and bonds issued by the government as well as arrears, while the foreign debt is disseminated by type of creditor in millions of U.S. dollars. The IDM uses the Debt Management Financial Analysis System Version 4.1 of the United Nations Conference on Trade and Development (UNCTAD) to administer the external debt.

Recommendation: Officially assign the responsibility and resources to compile and disseminate timely GFS in accordance with international standards.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Systematic data coordination is limited to a narrow scope of domestic budgetary central government operations and not to general government operations. Prior to disseminating fiscal data, the MOFNP meets with other data producers. The Data Monitoring Committee, consisting of staff from the MOFNP and the Bank of Zambia (BOZ), meets twice a week to discuss government revenue, expenditure, and financing and to reconcile the bank account of the Accountant General. In addition the MOFNP and ZRA meet monthly to discuss and reconcile government revenue collections. The formal meetings between these agencies are also supplemented with regular informal contact and feedback.

The MOFNP also provides information to the CSO on an irregular basis for the compilation of national accounts. It collects and compiles data on the domestic operations of the budgetary central government mainly for internal reporting and for budgetary analysis. The IDM of the MOFNP and the Economic and Financial Market Departments of the BOZ hold regular monthly meetings to reconcile foreign debt service payments. This information is shared by making use of hard-copy documents. However, final expenditure data available

⁷ The assessment of government finance statistics is against the existing international standard, as set out in the IMF's *A Manual on Government Finance Statistics, 1986 (GFSM 1986)*. In this section, "fiscal data" refers to data on government operations in general, and GFS refers to the fiscal data compiled and disseminated in accordance with the *GFSM 1986*.

⁸ Users indicated that they rely on this publication to obtain macroeconomic data.

from the Office of the Accountant General is not used in the compilation of fiscal data for dissemination.

The CSO obtains the source data to compile GFS for the domestic budgetary central government from the Auditor General in hard copy and on a CD. Although the Budget Office Department of the MOFNP receives source data on a timely basis, the lack of data sharing through an electronic network within the MOFNP and between the MOFNP, BOZ, and ZRA may hamper the timely compilation of data on the operations of the domestic budgetary central government. Steps are being taken to improve data coordination. The Zambian Government is planning to implement an Integrated Financial Management Information System (IFMIS) and is expecting to implement the system in pilot line ministries during the current fiscal year.

Recommendation: Implement the IFMIS and ensure that the compilers of GFS obtain the relevant information needed for the timely compilation of GFS.

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

Data on the domestic operations of the budgetary central government are public record and not considered confidential. Data collected on the finances of government are used in policy decision-making. As such, the fiscal authorities are accountable to the National Assembly and the public in general. Official publications containing details of government finance (budget documents, audit reports, parliamentary submissions, etc.) can be obtained from the MOFNP. To the extent that the confidentiality requirement applies, appropriate provisions and operational procedures are in place in the Public Service Regulations.

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

The *Finance (Control and Management) Act*, Chapter 347, Article 14, states that the Permanent Secretary of MOFNP shall have full access to all such accounts, documents, books, and records of any ministry, government department, government agency, or statutory corporation as is necessary for the exercise of his functions under this Act or any other written law. Subsidiary legislation to the *Finance (Control and Management) Act*, Part IV, regulation 23, mandates controlling officers to submit from time to time such returns and reports, as may be required by the Permanent Secretary, of revenue collected by them or funds expended for which they are responsible.

However, in practice, foreign grant financing and the correspondence expenditure are not always reported to the MOFNP insofar as these grants are mostly paid directly to line ministries. The Office of the Accountant General has instructed ministries to start reporting, in 2004, on grants received and the expenditure of such grants. The MOFNP's Economic and Technical Cooperation Department (ETC), through regular meetings with donor agencies, is

also trying to set up a database containing information on foreign grants to line ministries and nongovernmental organizations (NGOs).

Recommendation: Establish the database containing information obtained from donor agencies on foreign grants to line ministries and NGOs and reconcile this information with data reported by line ministries to the Office of the Accountant General.

0.2 Resources

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

In the Budget Office Department of the MOFNP, staff, facilities, computing, and financing resources are regarded as sufficient for producing the current reports on the domestic operations of the budgetary central government on a monthly and annual basis. The current computing system, however, does not allow for the electronic transfer of data, which the staff will need if they have to compile GFS in line with the *GFSM 2001*. Moreover, the staff of the Budget Office Department have not received any formal training in GFS compilation. The MOFNP is regarded by the staff as a preferred work place, mainly owing to professional challenges and high exposure.

The IDM Department experiences problems with computing resources and capacity. The current computers are still making use of Windows98, while they are in need of at least Windows2000 to implement the updated software for debt management. The staff component of the IDM also needs training in government debt management given that most of them were appointed last year.

The Public Finance Statistics Branch (PFSB) of the National Economics Statistics Division of the CSO, which is officially responsible for compiling GFS, consists of five staff members, two professional economists, and three assistants. Of these staff only one has received training (March/April 2004) in the compilation of GFS. The head of the unit indicated that the branch needs one more statistician and better computing equipment in order to do its work properly.

Although all of the employees have access to their own personal computer, most of the source data they receive are still in a hard-copy format. All the above mentioned employees are competent in the use of Excel applications.

0.2.2 Measures to ensure efficient use of resources are implemented

In the MOFNP eight staff is specifically allocated to compile reports on the domestic central budgetary government operations. No separate cost information exists on the compilation of budget execution data. There is no evident sign of inefficient use of resources in the MOFNP. As previously indicated, the PFSB of the National Economics Statistics Division of the CSO

consists of five staff members; however, none of the GFS compiled by this branch are disseminated or shared with any users outside of government.

The government, mainly CSO, is currently receiving technical assistance from the IMF to compile GFS in line with the *GFSM 2001*.

0.3 *Relevance*

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

The MOFNP is open to feedback from internal users. However, no arrangements are in place to obtain feedback from users of fiscal statistics outside the government.

0.4 *Other quality management*

0.4.1 *Processes are in place to focus on quality*

Staff responsible for compiling fiscal data focus on the quality of information available and strive to improve quality. Data are produced from actual records in the accounting system of government for which clear rules and a code of conduct exists. Twice weekly meetings are scheduled between the MOFNP and BOZ to reconcile the data calculated by the MOFNP and the financing data, which are obtained from the BOZ. Monthly meetings also take place between the MOFNP and ZRA to reconcile government revenue collections. Monthly meetings are also scheduled between the MOFNP and the BOZ to reconcile outstanding government debt and interest payments on external government debt.

Information on foreign grants and the expenditure of these grants by line ministries is very limited. The ETC of the MOFNP has implemented quarterly coordinating meetings and annual review meetings between donor agencies and themselves. The ETC is planning to create a database that will include all the information on grant disbursements and expenditure.

The PFSB of CSO uses the long-delayed statements of the Auditor General to compile GFS. For example, the latest data available are for 2001.

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

The quality of government finance data is vested in the accounting system of government, where various processes are in place to monitor the quality of the collection processing and dissemination of the data. In accordance with the *Finance (Control and Management) Act*, the Permanent Secretary of the MOFNP designates a controlling officer for each expenditure vote. This officer is responsible and accountable for all revenue and expenditure of the vote, and the recording of it.

The Auditor-General has the responsibility to perform annual audits, examine financial reports, and report on the outcome. The annual audit reports are submitted to the National Assembly and discussed extensively by the Public Accounts Committee. The audited reports are also available to the public from the Auditor General's Office but only after a long delay.

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

To deal with the quality of data the MOFNP, ZRA and BOZ hold regular meetings. No processes are in place to obtain information from extra budgetary funds, statutory bodies, and local authorities. Therefore, government finance data are limited to the domestic operations of the budgetary central government.

The Budget Office Department of the MOFNP plans to expand the coverage, and has started to take steps, to include all central government operations. This office does not plan the expansion of the coverage of government to include local authorities.

The PFSB of the CSO is planning to expand the coverage of government to include the statutory bodies and the local authorities.

1. Assurance of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The accounting system regulations issued by the MOFNP provide for the strict application of accounting principles and control mechanisms. Fiscal statistics are compiled on an impartial basis using available sources, mainly data generated by the accounting system.

Professionalism is actively promoted and supported within the MOFNP. Staff are encouraged and assisted to further their studies and on-the job training. Staff is also afforded the opportunity to attend seminars, workshops, and courses.

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

Staff of the MOFNP is understood to be free from political or other influence in choosing the most appropriate sources and methods for compiling budget execution data. Compilers of fiscal statistics have full access to domestic budget execution data. No statistical techniques are used in the compilation of the government data, since all the data currently disseminated are obtained from actual accounting records.

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

Comments on the erroneous interpretation and misuse of fiscal data are only addressed through formal channels within the MOFNP. The officials in MOFNP responsible for the provision of government finance data to the other agencies also provide advice and explanations to these agencies for incorporation in the publication.

The dissemination of fiscal data in the *Financial Report* and in the publications of other agencies is accompanied by an analysis of the outcome of government finance that minimizes the possibility of misuse or erroneous interpretation.

1.2 Transparency

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

The *Finance (Control and Management) Act*, as well as the subsidiary legislation to the *Finance (Control and Management) Act*, is available to the public in hard copy and on the Internet (www.parliament.gov.zm). These documents contain the general terms and conditions under which government finance data are compiled and reported. However, no other documentation describing the process of collection, processing, and dissemination is available to the public, either in hard copy or electronically.

Recommendation: Establish a website for the MOFNP and disseminate the general terms and conditions under which government finance data are compiled and reported.

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

Monthly reports on the domestic budgetary central government operations are foremost compiled for use within the government sector for financial management purposes. The BOZ's access to government data prior to the dissemination of the data is not made public.

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

The publications of the MOFNP are clearly identified as such. Information of the MOFNP disseminated in publications of the BOZ is accompanied by a footnote that discloses the MOFNP as the source.

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

No advance notice is given of major changes in methodology, source data, and statistical techniques.

1.3 Ethical standards

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

All government employees are subject to the Public Service Regulations. The document describes the conditions of employment of civil servants, the code of conduct, and disciplinary procedures that will be followed in cases of misconduct. In addition to these general ethical standards set for staff, the *Finance (Control and Management) Act* and Treasury Instructions also govern the code of conduct of accounting officers. These officials, as the custodians of government, are subject to specific regulations on their responsibilities, authority, and accountability.

2. Methodological Soundness

An interim period is provided for countries that have yet to adopt the *GFSM 2001*. Because Zambia has not yet adopted the *GFSM 2001*, the assessment below relates to the GFS guidelines outlined in the *GFSM 1986*.

2.1 Concepts and definitions

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

Zambia uses nationally developed concepts and definitions, adhering loosely to the concepts and definitions of the *GFSM 1986*, to compile and disseminate fiscal data for the domestic operations of the budgetary central government by the MOFNP. Annual and monthly fiscal data in Zambia cover the activities of the domestic operations of the budgetary central government, which include the nine provincial administrations. Provincial administrations are treated as part of the budgetary central government in exactly the same manner as a line ministry. However, the fiscal data disseminated by the MOFNP excludes foreign grants and the related expenditure of such grants.

The MOFNP does not compile GFS and has therefore not adopted a “migration path” from *GFSM 1986* to the *GFSM 2001*. The CSO, on the other hand, with technical assistance from the IMF, is in the process of compiling GFS for the domestic operations of the budgetary central government for 2001 in the framework prescribed in *GFSM 2001*.

The authorities are starting to implement an Integrated Financial Management Information System, which will improve the availability of source data and assist the compilation of GFS.

The distinction between domestic and foreign debt is based on the residency criteria of the IMF’s *BPM5*.

Recommendation: Adopt the concepts and definitions of the GFSM 2001.

2.2 Scope

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

Neither the MOFNP nor the CSO compiles or disseminates GFS for the consolidated central or general government. The scope of disseminated fiscal data is limited to domestic budgetary central government units (including provincial administrations) and excludes foreign grants received and the related expenditure, extra budgetary units, and local authorities.

The data on domestic operations of the budgetary central government are presented and disseminated according to a national analytical framework and do not cover the full scope of data as recommended in the *GFSM 1986*.⁹

Financial information on the receipt and subsequent expenditure of foreign grants by the central government is not available to the compilers of fiscal data. Owing to the lack of this information, the MOFNP cannot disseminate fiscal data or GFS for the consolidated budgetary central government.

No financial information is available on the finances of the statutory agencies and local governments for the compilation of GFS for the consolidated central or general government. Transfers to statutory agencies and local government are treated as a block transfer in the disseminated information on the domestic operations of the budgetary central government.

Recommendation: Broaden the scope of government to general government operations to include foreign grants received by the central government and the subsequent expenditure of these funds, extra budgetary institutions, and local governments.

2.3 Classification/sectorization

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

The data disseminated on the domestic operations of the budgetary central government are not fully consistent with the classification recommended in the international standards of

⁹ The full scope of the *GFSM 1986* recommends the following tables: (1) Summary Table of Major Components (Table III. K.); (2) Government Revenue and Grants (Table A); (3) Classification of the Functions of Government (Table B); (4) Economic Classification of Government Expenditure and Lending minus Repayments (Table C); (5) Financing by Type of Debt Holder (Table D); (6) Financing by Type of Debt Instrument (Table E).

GFSM 1986. As already stated, the nine provincial administrations are treated as part of the budgetary central government in exactly the same manner as a line ministry.

Although the classification of domestic revenue, expenditure, and financing loosely follows the analytical framework of the *GFSM 1986*, concepts and definitions of revenue, expenditure, and lending minus repayments differ from the international standard in significant ways:

Revenue and grants

- Data on domestic revenue distinguish between tax revenue and non-tax revenue. Although tax revenue is classified according to the *GFSM 1986*, non-tax revenue includes capital revenue, privatization receipts, and loans repaid to government.
- Grants received from foreign donor agencies are excluded from disseminated fiscal data.

Expenditure

- Expenditure data are based on releases from the MOFNP to line ministries and do not capture actual expenditure.
- Expenditure on arrears is recorded in line with a cash system of recording; however, the disseminated information does not provide for a division between current and capital expenditure.
- Current expenditure excludes all expenditure made by line ministries from funds received from donor agencies.
- Certain transfers, for example the cost of fertilizers provided to households, are excluded from transfers and incorporated under other current expenditure. Other current expenditure in the disseminated table includes all transactions that are specifically identified for tracking for policy purposes.
- Capital expenditure excludes all expenditure made by line ministries from funds directly received from donor agencies. Disseminated data on capital expenditure do not provide any detail on the type of expenditure.

Net lending

- Loan repayments to government and the proceeds from privatization are not recorded as net lending but included in no tax revenue. The *GFSM 1986* recommends that all government receipts reducing equity be recorded as a repayment of lending for policy purposes.

Financing

- No comprehensive information on the financing of government is disseminated. The monthly publication of the domestic operations of the budgetary central government provides some information on the domestic financing of capital expenditure and interest payments.

Recommendation: Adopt a classification system that is consistent with internationally accepted standards, guidelines, or good practices.

2.4 Basis for recording

2.4.1 Prices used to value flows and stocks reflect actual or expected cash payments

In accordance with the *GFSM 1986*, debt liabilities are recorded at face value (i.e., the amount to be repaid at the end of the contract), rather than market value. Transactions in foreign currencies are converted to Zambian Kwacha (ZK) using the official exchange rate prevailing at the time of the transactions or according to the contract agreement. The stock of foreign debt is converted using the exchange rate prevailing at the end of the period to which it refers, which is in line with the international standard.

2.4.2 Recording is done on a cash basis

The domestic operations of the budgetary central government are largely recorded in accordance with the *GFSM 1986* on a cash basis. Tax and non-tax revenue are recorded when deposits are made at the BOZ. In the analysis of expenditure, disseminated in the publications of the MOFNP, expenditure is; however, recorded when funding or transfer to a line ministry takes place and not at the time of the actual expenditure.

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

Grossing/netting procedures broadly adhere to *GFSM 1986* because all payments and receipts of domestic budgetary central government are correctly treated on a gross basis. Corrective transactions on tax refunds and expenditure recovered are correctly netted against the appropriate class of tax or expenditure. Net lending is, however, not treated in line with internationally accepted standards because repayments of loans to government or privatization receipts are not netted against new loans made by government.

Recommendation: Include the actual expenditure of government in the disseminated tables.

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

Complete source data are not available to allow for the compilation of comprehensive central government and general government operations according to the *GFSM*. Source data are available only for the domestic operations of the budgetary central government. With respect to the current coverage, data collection programs of source data are comprehensive for data on revenue and expenditure of the domestic operations of the budgetary central government accounts. However, the fiscal data lack a significant element of foreign financed operations related to foreign grants. Data collection programs to obtain source data from statutory agencies and local governments are not available. Source data are obtained from administrative records generated by the accounting systems in the MOFNP. The ZRA compiles detailed data on tax revenue from their administrative records.

Data on domestic and foreign debt financing, although not disseminated, are available from the IDM's administrative records, which are kept for the compilation and dissemination of the outstanding government debt.

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

Detailed source data for the revenue and expenditure of the domestic operations of the budgetary central government are largely consistent with the definitions, time of recording, and valuation recommended in the *GFSM 1986*. Although source data on the actual expenditure of line ministries can be obtained from records in the Office of the Accountant General these data are not used in the tables disseminated by the MOFNP.

3.1.3 Source data are timely

The source data on the domestic operations of the budgetary central government are timely, but available only in hard copy. With respect to the compilation of GFS by CSO, the CSO relies on the report of the Auditor General that becomes available 18 months after the end of the reference period.

3.2 Assessment of source data

3.2.1 Source data- including censuses, sample surveys and administrative records- are routinely assessed, e.g., for coverage, sample error, response error, and no sampling error; the results of the assessment are monitored and made available to guide statistical processes

No automated procedures are in place to facilitate the monitoring of the accuracy of data reported by the ZRA or any line ministries. The MOFNP, the BOZ and the ZRA regularly meet to reconcile the data received by the MOFNP with the data in the records of the other agencies. The MOFNP also reconciles the balance in the Accountant General's account for the domestic operations of the budgetary central government with the record of the BOZ.

3.3 Statistical techniques

3.3.1 Data compilation employs sound statistical techniques to adjust data sources

Fiscal data compilation covering the domestic operations of budgetary central government is based on administrative records with no need to employ any statistical techniques in the compilation process. However, monthly and annual data, as disseminated in the *Macroeconomic Indicators* publication of the MOFNP, are not replaced when final expenditure data become available.

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

No other statistical procedures or statistical techniques are employed to make source data consistent with GFS, and no bridge tables were constructed linking the national chart of accounts with GFS classification.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

As the source data used in the reports on the domestic operations of the budgetary central government are normally not available elsewhere, they cannot be validated from secondary sources. The fact that the reports are based on actual administrative records minimizes the likelihood of inconsistencies. The only validations that do take place are the reconciliation of the balance of the Accountant General's bank account in the books of the government and in the books of the BOZ, as well as interest payments on foreign debt.

3.4.2 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

Reconciliations between information provided by the MOFNP, the BOZ, and ZRA are routinely conducted, and discrepancies are investigated before fiscal data are disseminated.

3.5 Revision studies

3.5.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes

No revisions studies are conducted by the MOFNP, and the disseminated monthly and annual data are not revised, even when the audited accounts become available.

Recommendation: Implement revision studies and replace preliminary data with actual data when these data become available.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity is monthly and annual for the selected aggregates of revenue, expenditure, and domestic financing disseminated to the public on the domestic operations of the budgetary central government. This exceeds the GDDS recommendation to disseminate quarterly data on budgetary central government operations.

Zambia meets the GDDS periodicity recommendation for central government debt, since it publishes outstanding domestic debt according to instrument and foreign debt according to holder semiannually. The GDDS recommended practice is to publish annual data with appropriate breakdowns (currency, maturity, debt holder, and instrument) as relevant.

4.1.2 Timeliness follows dissemination standards

The domestic budgetary central government operations data are disseminated one month after the end of the reference period, exceeding the GDDS recommendation on timeliness of one quarter.

The timeliness of central government domestic and foreign debt data published in the *Economic Report* of the MOFNP is within one month after the reference period. This exceeds the GDDS recommendation of timeliness of one-two quarters after the end of the reference period.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

Monthly and annual fiscal data on the domestic operations of the budgetary central government in the publications are consistent within the dataset. However, owing to a lack of a comprehensive set of GFS tables, it is impossible to assess the consistency of GFS.

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

Many annual time series exist in the *Macroeconomic Indicators* publication of the MOFNP. These time series cover the period 1990–2003. There is no evidence of any changes in methodology or source data to indicate that these time series are not consistent over this time period.

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

The dataset on budgetary central government operations serves as input into the national accounts estimates for the government sector compiled by the CSO. Data for national accounts are also supplemented with information on statutory agencies and local government finances obtained from other sources.

The dataset for domestic budgetary central government operations and the monetary survey cannot be reconciled, owing to broader coverage of government in the monetary survey. The monetary survey includes all the central government accounts in their claims against the government. However, the MOFNP does reconcile the balance in the Accountant General's bank account for the domestic operations of the budgetary central government with the Accountant General's account in the books of the BOZ.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

No revisions are made to replace preliminary data with final data. Revisions are performed only in cases where an amount was incorrectly disseminated. These types of revisions are accompanied by a footnote to the table.

4.3.2 Preliminary and/or revised data are clearly identified

Monthly data are clearly identified as preliminary; however, annual data, which are a summation of the monthly data, are not identified as preliminary.

4.3.3 Studies and analyses of revisions are made public

Because preliminary data are not revised, when final data become available, no studies and analysis of revisions are undertaken.

5. Accessibility

5.1 Data accessibility

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

The MOFNP presents fiscal data for the domestic operations of budgetary central government in the monthly, semiannual, and annual reports. The layout and classification of the data follows budget guidelines rather than the international accepted standard, which result in difficulties with international comparability. However, information presented in the budget documents can be compared with information contained in the annual budget of government. Statistics are thus presented in a way suitable for a limited audience for use in monitoring progress made with government finances and policy execution.

5.1.2 Dissemination media and formats are adequate

Fiscal data on the domestic operations of the budgetary central government are only disseminated in a hardcopy format obtainable directly from MOFNP. Monthly, semi-annual, and annual reports published only in a hard copy format by the MOFNP can be obtained from the MOFNP. Such dissemination media seriously limit access to users outside Lusaka.

Recommendation: Increase the venue of data dissemination to ease the accessibility of the information by the public, such as, through a website.

5.1.3 Statistics are released on a preannounced schedule

Annual data on government finances are released at the time of the Minister of Finance's budget speech to parliament. The date of the budget speech is pre-announced and would normally be presented to parliament on the last Friday in January of each year. However, monthly data, which are released in a publication of the MOFNP, are not released according to a preannounced schedule.

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

Data on domestic budgetary central government operations are not released to all users at the same time, because these data are discussed in the Data Monitoring Committee and the Monetary Policy Committee, which can take place before the release of the publications. The fact that this information is not released to all users at the same time is not explicitly made public.

5.1.5 Statistics not routinely disseminated are made available upon request

Non-published (but nonconfidential) data are made available upon request. However, this service is not publicized.

5.2 Metadata accessibility

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

MOFNP does not disseminate metadata. Metadata describing the central government operations and the central government debt are only disseminated on the Dissemination Standards Bulletin Board (DSBB) of the IMF. This metadata can be accessed through a hyperlink on the CSO website. These metadata contain brief descriptions of concepts and classifications in use and broadly describe differences with international practice. Metadata revisions, in principle, follow the annual cycle mandated by the GDDS, but there are delays.

Recommendation: Publish the metadata describing the central government operations and the central government debt.

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

No detailed technical descriptions of the methodology and compilation practices, other than those disseminated on the DSBB, are available to the public.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The monthly *Macroeconomic Indicators* publication identifies a general contact point for further information. The contact persons for central government operations and debt data are disseminated only on the metadata pages of the DSBB.

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

Although a catalog is not available of MOFNP publications, information on documents and other services, including information on any charges, can be obtained by contacting the MOFNP.

Table 3. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Ministry of Finance and National Planning*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			Responsibility for GFS is not explicitly assigned. Data sharing between agencies can be improved. Staff needs training in GFS and upgraded computer software. No measures are in place to obtain feedback especially from nongovernmental users. No processes are currently in place to obtain full information on grants and related expenditure and other levels of government.	
0.2 Resources			X				
0.3 Relevance			X				
0.4 Other quality management			X				
1. Assurances of integrity							
1.1 Professionalism						No documents except laws are available to the public. Access to additional information and the preaccess to data are not made public. No advance notice is given of any changes.	
1.2 Transparency		X					
1.3 Ethical standards			X				

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Table 3. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Ministry of Finance and National Planning*)

Element	NA	Assessment				Plans for Improvement and Target Dates
		O	LO	LNO	NO	
2. Methodological soundness						
2.1 Concepts and definitions			X			Introduce the analytical framework of <i>GFSM2001</i>
2.2 Scope			X			Expand the scope of government to include Foreign grants received and its expenditure, extra budgetary institutions, and local government operations.
2.3 Classification/sectorization				X		Nationally developed concepts and definitions are followed, which loosely follow internationally accepted standards, guidelines, or good practices. The scope is not consistent with internationally accepted standards, guidelines, or good practices. Information is restricted to domestic operations of the budgetary central government. Classification differs significantly from internationally accepted standards, guidelines, or good practices.
2.4 Basis for recording				X		Expenditure data are not recorded on a cash basis. Grossing/netting procedures are not always followed, especially for net lending.

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Table 3. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Ministry of Finance and National Planning*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3. Accuracy and reliability							
3.1 Source data				X		Source data do not include all the relevant information. Source data largely approximate the definitions, classifications, valuation, and time of recording, while the scope of the source data is inadequate.	Implement the FMIS; consolidates the accounting records of all government ministries, departments, provinces and other implementing agencies. Include grants and foreign financed capital expenditure and interest payments on foreign debt in disseminated tables.
3.2 Assessment of source data			X			No automated procedures are in place to assess source data. Assessment must be made by using hardcopy documents.	
3.3 Statistical techniques		X					
3.4 Assessment and validation of inter-mediate data and statistical outputs		X					
3.5 Revision studies				X		No revisions are done to preliminary data. Only data that are disseminated incorrectly are revised; therefore, no studies and analyses of revisions are carried out.	
4. Serviceability							
4.1 Periodicity and timeliness		X					
4.2 Consistency			X			Data are not reconcilable with data in other sector data sets.	
4.3 Revision policy and practice				X		No revisions for final data are done regularly. No studies or analyses of changes to data are made public.	

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

Table 3. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Ministry of Finance and National Planning*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
5. Accessibility							
5.1 Data accessibility				X		Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons for budgetary purposes but not for international comparisons. An advance release calendar does not exist. The fact that additional information can be obtained is not made public.	Dissemination of data to be broadens by creating a website for the MOFNP. Disseminate a statement on the methodology used for the compilation of fiscal data.
5.2 Metadata accessibility			X			Metadata can only be accessed on an IMF web site through a hyperlink.	
5.3 Assistance to users				X		Names of contact persons can be obtained only on the IMF's website except for general queries on domestic publications. The public has to contact MOFNP to obtain information on publications.	

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria

IV. MONETARY STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The *Bank of Zambia Act, 1996* specifies, in Section 4 (1) that the Bank of Zambia (BOZ) shall formulate and implement monetary and supervisory policies that will ensure the maintenance of price and financial systems stability so to promote balance macro-economic development. By implication for implementing monetary policy, the *Bank of Zambia Act* authorizes the BOZ to collect monetary data from financial entities for the purpose of compiling and publishing monetary statistics. Section 54 (1) of the *Bank of Zambia Act* states that, for the purpose of carrying out its functions under this *Act*, the BOZ may require any person to provide such information as it may specify. The *Banking and Financial Services Act of 1994* stipulates, in Section 60 (1) (b), that every bank or financial institution shall deliver to the BOZ an assets and liabilities statement in such form and within such time after the end of each calendar month as may be prescribed by the BOZ. Also, according to Section 121A (1) of the *Banking and Financial Services Act*, the BOZ may publish in whole or in part, at such times as it may determine, any information or data furnished under this Act if the BOZ considers the publication to be in public interest.

Responsibility for compilation and dissemination of monetary statistics rests with Information and Statistics Division situated within the Economics Department of the BOZ.

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

Arrangements are in place to ensure the efficient and timely flow of source data within those BOZ departments that are involved with the collection, compilation and dissemination of monetary statistics and among other data-producing agencies. The BOZ adopts a unified reporting system for monetary data, whereby commercial banks report balance sheet data for both monetary statistics and bank supervision purposes. Based on the authority stipulated in Section 54 (1) of the *Bank of Zambia Act* and Section (1) (b) of the *Banking and Financial Services Act*, the BOZ's Banks Supervision Department collects monthly assets and liabilities statement from all commercial banks and nonbank financial institutions (including the Building Societies and the National Savings and Credit Bank), and one copy of the data is transferred to the Economics Department for the compilation and dissemination of monetary statistics. Central bank accounts are prepared by BOZ's Finance Department and shared with the Economics Department. The weekly Monetary Policy Committee is held between core departments of the BOZ (Economics, Finance, Financial Market, Bank Supervision, and Nonbank Supervision Departments) to ensure the use of proper concepts on a consistent basis.

The BOZ shares monetary data with the Central Statistical Office (CSO) and/or Ministry of Finance and National Planning (MOFNP) by organizing inter-governmental committee (the weekly Data Monitoring Committee and the monthly Monetary Policy Committee) or attending such committee (the fortnightly Economic Monitoring Committee organized by the MOFNP). However, the coordination has been weakened by the lack of a national statistics committee, in which all data-producing agencies participate.

Recommendation: Create a national statistical committee, in cooperation with the CSO and MOFNP, and enhance the coordination.

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

Sufficient measures are in place to ensure the confidentiality of individual reporters' data. Monetary statistics do not disclose data on individual banks. All BOZ staff is required to abide by the appropriate rules and regulations to prevent disclosure of information of confidential nature. Thus, Section 22 of the *Bank of Zambia Act* stipulates that BOZ staff take and subscribe to the oath of secrecy when they join the BOZ. The staff who are found to have violated the oath shall be guilty of an offence and liable to fine or imprisonment.

In the BOZ, access to individual data is restricted to the staff who requires the information in the performance of their duties, and passwords have been built into the software programs to prevent unauthorized access to individual data.

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

Section 54 (1) of the *Bank of Zambia Act* and Section (1) (b) of the *Banking and Financial Services Act* give mandate to BOZ to collect statistics and encourage response. Data reporting is ensured by severe penalties for non-compliance (e.g., exclusion from the clearing process), which are stipulated in BOZ administrative circulars. Under the unified data reporting system, data collection for monetary statistics compilation is strengthened by BOZ's supervisory authority to require any bank or nonbank financial institution to furnish information as the BOZ may deem necessary.

Response burden is considered carefully by the BOZ. In introducing new data reporting forms to commercial banks and nonbank financial institutions, the Economics Department, in cooperation with the Bank Supervision and Nonbank Supervision Departments, carefully consults the respondents about the feasibility and cost of the data reporting in the new forms.

0.2 Resources

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

Currently, two economists and one statistical assistant are assigned to the regular compilation of the monetary survey. The number of assigned staff is adequate for the Information and Statistics Division to perform this task. However, staff resources are stretched to prepare studies of monetary data.

The Economics Department recruits staff on a highly competitive basis. All staff is encouraged to attend courses and seminars organized by international organizations and regional organizations (e.g., MEFMI). In addition, the BOZ encourages the staff to pursue a higher-level degree, and are required to sign a bond that commits them to remain in employment with the BOZ for the period they have spent for the study. To retain the trained staff, BOZ's overall incentives—monetary and fringe benefits—are considered as adequate for minimizing staff turnover. However, senior management has some concerns about grievances of highly educated and experienced staff (e.g., those who have Ph.D) for BOZ's inflexible remuneration structure.

Computing resources, coupled with support services, physical facilities and other resources, and funding provided for compiling monetary statistics are adequate to perform required tasks, but could be improved to enhance the effectiveness of compilation of monetary statistics. The resources are not adequate to set up contingency plans in case of system breakdowns. The Information and Statistics Division does not have an Information Technology (IT) expert within the division, who could support the implementation of a new statistical information system, which is called AREMOS time-series database. Currently, all the IT experts belong to Information Technologies Department of the BOZ and their resources have been stretched as other system development projects are preceded simultaneously. The BOZ's management recognizes the limited IT resources and has planned to address the issues under the BOZ's Strategic Plan, 2004–2007.

Recommendation: Allocate an IT expert to the Economics Department so that AREMOS data base could be implemented smoothly.

0.2.2 Measures to ensure efficient use of resources are implemented

Processes and procedures are in place at the BOZ to ensure that resources are used efficiently. The BOZ's Strategic Plan, 2004–2007 clearly lays out BOZ's vision, mission, and values as well as identifies BOZ's strengths, weaknesses, opportunities, and threats (SWOT). The plan sets strategic objectives, action plans, and critical success factors for the implementation of the plans. Consistent with the plan, all BOZ departments prepare a four-year strategic plan with detailed quarterly action plans. All departments report their progress to the Governor on a quarterly basis identifying any causes of any delays in implementation

of any activities and proposing the necessary actions/resources to solve the problems. The plans are to be reviewed annually and revised as necessary.

To enhance efficient use of resources, BOZ management prepares a cost-effective annual budget consistent with the strategic plan. For the purpose of budget preparation and monitoring, since 2003, all staff of Economics Department submits daily time sheets of their activities to the Department director. In addition, monthly schedule sheets have been prepared by the chief of Information and Statistics Division to monitor the progress of each assignment of the division.

Procedures in place to ensure efficient use of resources include the use of a common data base in the Economics Department for research as well as statistics compilation and publication purposes.

0.3 Relevance

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

The BOZ uses committees or seminars for reviewing the relevance of existing monetary statistics. Regular meetings include the weekly Monetary Policy Committee, the weekly Data Monitoring Committee, the fortnightly Economic Monitoring Committee, the monthly Monetary Policy Committee, and the half-yearly Monetary Policy Advisory Committee (including independent members outside the government). In addition to review of economic developments, these committees provide an important arena to exchange information and assess relevance of statistics. Participants of these committees are from BOZ, CSO, MOFNP, and other government agencies. Also, the BOZ organizes monthly seminars for the chief executives of commercial banks, quarterly seminars for the media and chief executives of nonbank financial institutions, and half-yearly seminar for the Members of Parliament, in which the BOZ monitors needs of users outside the government. However, the BOZ does not hold regular user meetings for monetary statistics.

The BOZ absorbs user needs for monetary data by encouraging respondents of the Quarterly Survey of Business Opinions and Expectations to express their opinion on BOZ's statistical products. Forms of the user survey for the 2004 ROSC mission were sent to those respondents with the answer sheets of the *Quarterly Survey of Business Opinions and Expectations*. However, the BOZ does not conduct regular user surveys for monetary statistics.

In order to identify new and emerging data requirements in the international statistical community, staff of the Information and Statistics Division has participated in the Irving Fisher Committee of the International Statistical Institute since 2000.

Recommendation: Conduct user surveys and meetings on a regular basis.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

Recognizing that its statistics must have the confidence of users, the BOZ seeks to exercise quality control at various stages of data production and dissemination. For improving the quality of monetary statistics, the Economics Department has prepared and updated the Economics Department Manual: Computation and Compilation Guidelines (latest version is September 2003), which cover methodologies used in preparing various statistical tables and explain the source data and the formulae used in the computation. In addition, based on the recommendations of the IMF monetary and financial statistics mission held in June–July 2003, adherence to the methodologies of the *Monetary and Financial Statistics Manual (MFSM)* is being carefully pursued in updating the monetary statistics. The improvement of the quality of monetary statistics is to be assessed through the review of implementation of BOZ's Strategic Plan, 2004-07.

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

The BOZ monitor the quality of the monetary data and their updating program through internal and external meetings (the weekly Monetary Policy Committee, the weekly Data Monitoring Committee, the fortnightly Economic Monitoring Committee, the monthly Monetary Policy Committee, and the half-yearly Monetary Policy Advisory Committee).

In compiling monetary data, source data sent through the data collection system are automatically cross-checked and any discrepancies and/or excessive variations are checked by the Economics Department and Bank Supervision Department. This process involves verifying data sources with reporting institutions. The two departments make sure that the data reporting practices followed by banks are consistent with the guidelines established by the BOZ. Consistency between monetary and other data such as those on cross-border capital flow and public finance is fully checked within the Economics Department. The data releases are reviewed and authorized by the Director of the Economics Department.

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

The BOZ recognizes that there are tradeoffs among the dimensions of quality (for example between timeliness and accuracy/reliability). High priority is assigned to ensuring the timeliness of monetary data. Based on such priority, nonbank financial institutions (the Building Societies and the National Savings and Credit Bank) are excluded from the monetary survey for the reason that they cannot yet meet the monthly reporting requirement to report balance sheet data within ten working days after the reference month. This has delayed the expansion of the monetary survey to include all relevant entities.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The Staff Handbook sufficiently spells out the professional duties of the staff of the BOZ. In addition, a code of conduct of the staff of Economics Department has been prepared. The BOZ has a strong culture of professionalism and the BOZ's Strategic Plan explicitly strives for professional independence.

Professionalism of the staff involved with monetary statistics is ensured through the recruitment process, as well as by the assignment structure. Thus, the recruitment process focuses on staff quality and merit. For example, only those who have at least bachelor degree in economics are qualified for economist position, and the assignment structure encourages the staff to prepare research papers. The BOZ's Strategic Plan clearly indicates that key tasks of the Economics Department are to conduct and disseminate research work. The BOZ considers that such research work starts with preparing accurate monetary statistics.

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

The choice of source data is based on statistical consideration and follows international standards for the compilation of monetary statistics. The monetary survey is compiled from the BOZ's and commercial banks' accounting data. There is no other source from which data are needed. No use of statistical techniques is involved in monetary statistics compilation.

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

The BOZ Public Relations Office regularly monitors media information to ensure that there is no misuse of statistics and to allow timely correction. If misinterpretation of monetary data is found in the newspapers, the BOZ may prepare an appropriate reply, which is sent to the press through the Public Relations Office. In accordance with the Code of Conduct, the BOZ is required to respond within forty-eight hours. The BOZ staff also seeks to prevent misinterpretation or misuse of statistics in the press by educating press staff through seminars for them.

1.2 Transparency

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

The *Bank of Zambia Act* and the *Banking and Financial Services Act*, which authorize the BOZ to collect and publish monetary data and stipulates the obligation to safeguard

confidentiality of individual responses, are accessible on the website. However, detailed terms and conditions under which monetary statistics are collected, compiled and disseminated are not available to users.

Recommendation: Prepare and publish detailed terms and conditions for data collection, compilation, and dissemination.

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

The government, especially the MOFNP, generally has access to monetary data prior to their release in BOZ's publications and on BOZ's website. This is because there is a time lag between the date of approval of data release, when monetary data are provided to the MOFNP and can be provided on demand, and the date of data release to the public. This prior access by the government is not publicly known, or described in the GDDS metadata.

Recommendation: Provide information regarding internal government access policy to the public, including who have prior access and how long before general release to the public.

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

References to the monetary statistics as the statistical products of the BOZ are included in BOZ publications.

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

Advance notices on major changes in methodology, source data and statistical changes have been given by the BOZ. For example, when a separate category for commercial banks' claims on households was created from the data of January 1998 onward, a circular was provided to reporters and the change in the reporting format was announced to the press in December 1997. In addition, the BOZ plans to give advance notice when it converts the monetary survey into the depository corporation's survey in conformity with the methodology of the *MFSM*.

1.3 Ethical standards

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

All BOZ staff are required to abide by the Code of Conduct of the BOZ, updated and spelled out in the Staff Handbook, circulated by the Human Resource Department. Whenever the Code of Conduct is revised, directors of departments are supposed to remind their staff of the revision. A departmental code of conduct has been prepared to accommodate working circumstances peculiar to each department, and submitted to management for approval. In addition, BOZ staff is fully aware of a motto, posted in the premises of the BOZ, that staff

needs to be honest and sincere in its dealings with the BOZ, colleagues, and customers of the BOZ.

2. Methodological soundness

2.1 Concepts and definitions

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

The analytical framework used by the BOZ in compiling the monetary surveys is broadly consistent with the guidelines outlined in the *Monetary and Financial Statistics Manual (MFSM)*. Accordingly, the monetary survey is derived by consolidating the BOZ accounts and commercial banks accounts. Key aggregates identified in the monetary surveys are net foreign assets, net claims to the central government, net claims on public enterprises, claims on private enterprises, claims on households, claims on nongovernmental/nonprofit institutions, claims on nonbank financial institutions, and broad money (currency outside banks and demand deposits, as well as savings, time, and foreign currency deposits). For the central bank, reserve money aggregates are identified, based on the BOZ accounts.

However, the monetary survey refers to the concept recommended in the IMF's draft *Guide to Money and Banking Statistics in International Financial Statistics* of December 1984. For the purpose of presenting consolidated monetary statistics, the term "the depository corporations' survey" and its concept should be used as recommended in the *MFSM*. In conformity with the recommendations of the 2003 monetary and financial statistics mission, the Information and Statistics Division is in the process of shifting from the monetary survey to the depository corporations' survey. The depository corporations' survey has already been compiled and used internally.

Recommendation: Publish the depository corporations' survey, instead of the monetary survey.

2.2 Scope

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

The scope of monetary survey covers a major portion of depository corporation operations, but not completely as recommended by the *MFSM*. The monetary survey currently covers the BOZ and commercial banks. It does not include the Building Societies and the National Savings and Credit Bank, although these nonbank financial institutions accept deposits and therefore should be included in conformity with the recommendation of the *MFSM*.

In addition, the monetary survey does not include all banks in liquidation. Financial instruments, especially deposits, issued by the banks in liquidation continue their economic

existence until liquidated through sale, assumption, repayment or write-off, and therefore all banks in liquidation should be included in the monetary survey.

Recommendation: Include the Building Societies and the National Savings and Credit Bank, as well as all banks in liquidation in the depository corporations' survey.

2.3 Classification/sectorization

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

At present, the sectorization scheme adopted for the monetary survey appropriately distinguishes between nonresident and resident sectors. However, the legal residential status of entities remains the main criteria to distinguish nonresidents from residents, and thus, the concept of residency described in the *Balance of Payments Statistics Manual*, fifth edition (*BPM5*), e.g., center of economic interest, is not strictly applied.

In addition, the subdivision of the resident sector data does not provide sufficient information on the sectoral distribution of domestic credit. Thus, under the present sectorization scheme, the resident sector data are subdivided by (1) central government, (2) public enterprises, (3) private enterprises, (4) households, (5) nongovernmental/nonprofit institutions, (6) banks, and (7) nonbank financial institutions. This means that a separate identification of local government as well as the distinction between depository corporations and other financial corporations are lacking. A project has been undertaken, therefore, to introduce the detailed sectorization scheme prescribed in the *MFSM*.

The delineation among money issuers (which should include the BOZ and other depository corporations), money holders (which should include households, nonprofit institutions serving households, private and public nonfinancial corporations, local governments, and other financial corporations), and central government, is broadly consistent with the *MFSM*. However, in the BOZ's monetary survey, local governments are not classified as money holders and their deposits are excluded from monetary aggregates (netted out from claims on the government).

The classification of financial instruments used for monetary statistics is in broad conformity with the guidelines outlined in the *MFSM*. Thus, the data separately identifies (1) Monetary gold and Special Drawing Rights, (2) Currency and deposits, (3) Securities other than shares, (4) Loans, and (5) Other assets/liabilities. However, the data does not identify (6) Shares and other equity (on the asset side), (7) Insurance technical reserves (on the asset side), and (8) Financial derivatives. In addition, the securities repurchase agreements (repos) are not classified as loans, but are included in other assets/liabilities.

Recommendation: Reclassify local governments as money holders and reclassify repos as loans.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be carried out on the basis of market prices or market price equivalents. The exception to this rule is that loans should be valued at their book values without adjustment for expected losses. These principles are broadly followed in the BOZ's monetary statistics. Thus, (1) monetary gold is valued at market prices; (2) loans are valued at current book value without adjustment for expected loan losses arising from anticipated defaults by borrowers. However, (3) securities other than shares are recorded at issue price despite fluctuations in their market prices.

The conversion of foreign-currency denominated assets and liabilities to domestic currency is carried out at prevailing market exchange rates. For this purpose, the BOZ as well as commercial banks use the end-period mid-point rate. However, Fund accounts are revalued only annually in the BOZ accounts.

The *MFSM* recommends the compilation of stock data and data on three separate flow components—transactions, revaluations, and other changes in the volume of assets—that together account for the period-to-period changes in outstanding stocks. The BOZ does not compile these separate flow components. For example, the effects of exchange rate movements are not identified as revaluations and write-offs of loans are not identified as other changes in volume in the monetary survey.

Recommendation: Value securities at market price or market price equivalents.

2.4.2 Recording is done on an accrual basis

Consistent with the general principle of accrual accounting, accrued interest is identified in the original accounting records of the BOZ and commercial banks. On such accrued interest, the recommendation of the *MFSM* is that it should be added to underlying financial instruments such as deposits, loans, and securities other than shares, and sectorized by the debtor sector (in case of assets) or by the creditor sector (in case of liabilities). The BOZ, however, includes it in other assets and liabilities.

Recommendation: Add accrued interest to the underlying instruments, especially for treasury bills.

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

In line with the general principle of the *MFSM*, assets and liabilities of the BOZ and commercial banks are collected and compiled on a gross basis. Claims on particular transactors are thus not netted against liabilities to those transactors. However, BOZ's

accounts in overdraft, which should be classified as loans extended by the BOZ, are netted against BOZ's deposit liabilities.

For the compilation of the sectoral balance sheet of the BOZ and that of commercial banks, the data on financial assets and liabilities are aggregated into major categories (e.g., claims classified by debtors and deposits classified by creditors). In the monetary surveys, claims on the central government are netted against liabilities to the central government, and foreign assets and liabilities are netted out in line with the methodologies of the *MFSM*. However, as discussed in 2.3.1, such netting is also applied to local governments in Zambia's monetary survey, which is not in line with methodologies of the *MFSM*.

Recommendation: Record overdrafts on a gross basis, without netting out from deposits.

3. Accuracy and reliability

3.1 Source data

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

The source data for compiling the central bank data are the trial balance prepared by the BOZ's Finance Department on a daily basis. The trial balance has a predetermined classification of accounts and is generated by a computerized ledger system based on complete recording.

The source data for commercial banks are the individual returns collected on a monthly basis. The returns come in a report form filled out by every bank and submitted to the BOZ's Bank Supervision Departments and a copy of data is transferred to the Economics Department. This submission takes the form of a hard copy, fax, or electronic mail. The reporting format provides sufficient detail to compile the monetary survey in conformity with guidelines outlined in the *MFSM*.

Monthly returns of the Building Societies and the National Savings and Credit Bank, which have a same format as commercial bank return, are submitted to the Nonbank Supervision Department and a copy of data is transferred to the Economics Department.

There is no need to use supplementary data in compiling the reserve money aggregates and monetary survey. All source data needed for compiling the reserve money aggregates and monetary survey are kept under periodic reviews to ensure that data collection remains comprehensive.

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

Source data for the reserve money aggregates and monetary survey broadly approximate the required definitions, scope, classifications, valuation, and time of recording. However, in

commercial bank returns, when establishing residency or non-residency is difficult, especially in the case of deposits of foreign nationals who started to reside in Zambia, commercial banks are advised to establish a simple rule (e.g., for small deposit accounts, a local address is sufficient for treating deposits as resident), rather than using residency criteria described in the *BPM5*. In addition, the details of classification of financial instruments used in the report form are inadequate as discussed in 2.3.1. For example, repos are included in open market operations liabilities in the BOZ trial balance and are not separately identified for their classification as loans. Financial derivatives (e.g., foreign exchange forward and option contracts) are treated as off-balance sheet transactions in both the BOZ trial balance and commercial bank returns.

Recommendation: Apply more strict rules to determine the residency of entities in the commercial banks return and create a separate category for repos in the BOZ trial balance.

3.1.3 Source data are timely

The accounting records of the BOZ and commercial banks, and the subsequent preparation of balance sheet data, are sufficiently timely to allow for compilation of the reserve money aggregates and monetary survey. The BOZ trial balance is compiled by the Finance Department on a daily basis and components of reserve money aggregates are transferred to the Economics Department with a lag of only one working day. Commercial bank returns (including those for banks in liquidation) are submitted on a monthly basis with a lag of ten working days. This enables the reserve money aggregates to be compiled within five days and the monetary survey to be compiled within one month.

For the compilation of the analytical accounts of the BOZ on a monthly basis, the Economics Department obtains the entire BOZ trial balance sheet ten days after the relevant month to allow the Finance Department to review and revise the end-of-month outstanding amount of each account in the BOZ trial balance.

The Building Societies and the National Savings and Credit Bank are required to submit their monthly returns with a lag of ten working days. However, slippage of several days can occur.

3.2 Assessment of source data

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

The BOZ receives questions on monetary data from several users, for example, the Government of Zambia, the press, the research community, and international organizations. Responses to these questions are prepared by the staff of Economics Department. The Department uses such opportunities to monitor the accuracy of the monetary survey and its source data.

Currently, assessment of out-of-trend possibility in the source data is conducted mainly through eye-ball testing and calculation of growth rates of outstanding stocks. Such data validation procedure will be automated when the AREMOS database comes into use.

3.3 *Statistical techniques*

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

Data compilation procedures minimize processing errors such as coding, editing, and tabulation errors. The report form for commercial banks is designed to encourage computer processing. The computer program in the BOZ processes source data promptly.

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

No data adjustments and transformations are involved in the compilation of the monetary survey.

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

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

Major aggregates of the monetary survey are validated against other financial data available in the BOZ. Data derived from Zambia's settlement system, which is called Globus, and data on the government securities issues are used to check the accuracy of the BOZ's and commercial banks' balance sheets data.

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

The Economics Department identifies statistical discrepancies and, in collaboration with the Finance and Banking Supervision Departments, investigates their sources.

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

Procedures have been established, e.g., in the meetings of Weekly Monetary Policy Committee, for collaboration between the BOZ's core departments (Economics, Finance, Financial Market, Banks Supervision, and Nonbank Supervision Departments) for resolving problems posed by large or unexplained fluctuations in monetary, credit, or reserve money aggregates. In addition, monetary data are checked with other statistical outputs in cooperation with the government, e.g., in the weekly Data Monitoring Committee, the fortnightly Economic Monitoring Committee, the monthly Monetary Policy Committee, and the half-yearly Monetary Policy Advisory Committee.

3.5 Revision studies

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

The reserve money aggregates and monetary survey can be revised, but revisions occur infrequently. The causes of revisions are identified and noted. The results of such investigations are used to improve the statistical processes.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of reserve money aggregates is daily and that of the monetary survey is monthly. This degree of periodicity is fully consistent with the General Data Dissemination System (GDDS), which requires monthly periodicity for both central bank and commercial banks data.

4.1.2 Timeliness follows dissemination standards

The BOZ uses the *Statistics Fortnightly* as its primary vehicle for monetary data dissemination. The timeliness for the publication of reserve money aggregates is within three weeks and that for the publication of the monetary survey is six weeks. This degree of timeliness is fully consistent with the GDDS, which requires (1) that the monthly data on commercial banks should be disseminated within one to three months after the end of the reference month and (2) that the monthly data on the central bank should be disseminated within one to two months after the end of the reference month.

Reserve money as well as monetary and credit aggregates are published on the BOZ' website with the almost same timeliness as their publication in the *Statistics Fortnightly*. The exact date of data releases on the website varies depending on the work schedule of technical staff who is responsible for the BOZ website. Owing to technical reasons, the entire monetary survey is not posted on the BOZ's website.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The monetary survey is compiled in such a manner as to keep internal consistency (e.g., components add up to the total and assets and liabilities balance). However, since the monetary survey does not include all banks in liquidation, discrepancies in the interbank positions tend to be augmented to some extent.

Recommendation: Reduce discrepancies in the interbank positions by covering all depository corporations.

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

The monetary survey is presented in the current format, which has separate category for commercial banks' claims on households, since the data of January 1998. Under this format, the monthly monetary survey data are consistent. Although, for commercial banks' claims on households, a circular was provided to reporters and the change in the reporting format was announced to the press in December 1997, there is no explanation on the break in series in BOZ's dissemination media such as the *Statistics Fortnightly*.

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

The BOZ's monetary survey is broadly consistent with other statistical systems, such as balance of payments statistics and government finance statistics (at the budgetary central government operations). Changes in stock in net foreign assets are calculated from the monetary survey and used in balance of payments statistics for the data of financial accounts. Changes in the budgetary central government position with the BOZ and commercial banks are reconcilable with the central government's domestic financing in government finance statistics. This reconciliation exercises are conducted by the BOZ and MOFNP in the weekly Data Monitoring Committee. However, there are no consistency checks of other levels of government operations and monetary data. Given that extra budgetary central government operations such as direct donor financed project operations, whose funds are deposited with commercial banks, are significant and numerous, the consistency could be a problem.

Recommendation: Expand the reconciliation exercise for monetary and fiscal data to include fiscal data on extra budgetary central government operations. Enhance the accuracy of data on commercial banks' accounts for donors' funds.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

There is no set schedule for revisions. Revisions are to be carried out whenever necessary. This practice is not explicitly made public by the BOZ.

Recommendation: Publish the revision policy for monetary data.

4.3.2 Preliminary and/or revised data are clearly identified

The last three months' data are preliminary, although revisions of preliminary data are rare. Preliminary data are identified with "Prel." in the *Statistics Fortnightly*. However, the mark of "Prel" is also attached to historical final data (e.g., data of December 2002 and December

2003) by mistake, which confuses the users of monetary data. In addition, such marks are not found in the tables of reserve money, monetary, and credit aggregates included in the *Statistics Fortnightly* or posted in the BOZ's website.

Recommendation: Use the mark "Prel" in all monetary data tables and remove "Prel" from historical final data.

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

Causes of revisions in the reserve money aggregates and monetary survey are investigated and explained in the footnotes of the *Statistics Fortnightly*. Since they are infrequent and tend to be of small magnitude, no revision studies are undertaken.

5. Accessibility

5.1 Data accessibility

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

The BOZ publishes the reserve money aggregates and monetary survey in a clear manner. In the *Statistics Fortnightly*, tables of the reserve money aggregates and monetary survey are shown in time-series formats to facilitate the analysis. In the *Quarterly Financial and Statistical Review* of the BOZ, longer-term data series are shown. In the half-yearly *Bank of Zambia Monetary Policy Statement* and the *Bank of Zambia Annual Report*, movements of reserve money, monetary, and credit aggregates are explained with supplementary charts.

5.1.2 Dissemination media and format are adequate

The BOZ releases data through a variety of publications. These are the *Statistics Fortnightly*, *Quarterly Financial and Statistical Review*, half-yearly *Bank of Zambia Monetary Policy Statement*, and the *Bank of Zambia Annual Report*. Reserve money, monetary, and credit aggregates are available on the BOZ's Internet website (<http://www.boz.zm>).

5.1.3 Statistics are released on a preannounced schedule

– Although the BOZ sets a release schedule for the reserve money aggregates and monetary survey internally and follows the schedule strictly, it does not disseminate an advance release calendar to provide an advance notice of the release dates. The BOZ is considering posting a preannounced schedule for the release of monetary data on the BOZ's website.

Recommendation: Post a preannounced schedule for monetary statistics on the BOZ's website as soon as possible.

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

The reserve money aggregates and monetary survey are not made available to all users at the same time. Once the Director of the Economics Department has approved the *Statistics Fortnightly*, which acts as the primary vehicle for the dissemination of the reserve money aggregates and monetary survey, it is sent to the publishers and hardcopies are sent to the subscribers. In addition, major aggregates of the monetary survey and the reserve money aggregates are published on the BOZ website a few days after the approval of the Director of the Economics Department. Although data of the reserve money aggregates and monetary survey are posted on the BOZ website as soon as the approval is given, slippage of posting can occur due to technical reasons. While waiting for the delivery of hardcopies of the *Statistics Fortnightly* and data posting on the website, users can obtain monetary data from the Economics Department on demand. No press release is conducted for the reserve money aggregates and monetary survey. Since there is no embargo on data release between the first release and the general dissemination, some users have advantage in getting information before others. There is also uncertainty as to an allowed maximum time lag between the first release and posting of information on the BOZ website or publication.

Recommendation: Implement simultaneous data release by creating an embargo period after the approval of data release.

5.1.5 Statistics not routinely disseminated are made available upon request

Sub aggregates, which are not published, are made available upon request approved by the Director of the Economics Department. For further detail contact, the Assistant Director (Information and Statistics Division) of the Economics Department is identified in the *Statistics Fortnightly*. However, the fact that sub aggregates are available is not made public.

Recommendation: Make public the fact that sub aggregates of monetary data are available.

5.2 Metadata accessibility

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

All BOZ publications in which monetary statistics are published contain some notes and/or footnotes providing users with information about published data. Detailed metadata on the reserve money aggregates and monetary survey are available from the Dissemination Standards Bulletin Board (DSBB). The DSBB is hyperlinked to the BOZ website (<http://www.boz.zm>), and there is a clear reference that users can access metadata from the DSBB.

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

No attempt is made to develop metadata of the various levels of detail adapted to the needs of the different categories of audience. However, user needs are generally similar in terms of levels of details.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

In the *Statistics Fortnightly*, the Assistant Director (Information and Statistics Division) of the Economics Department is identified as a contact person and the telephone and fax numbers are indicated. When users request assistance to the Public Relations Office of the BOZ in the form of clarification and explanation of monetary data, the request is channeled to the Information and Statistics Division, which prepares an appropriate response. A contact person is also identified in the GDDS metadata, and the DSBB is hyperlinked to the BOZ website.

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

All BOZ publications are free, except that regular subscribers to the *Statistics Fortnightly* are charged 12,000 Zambia Kwacha for mailing costs. The Public Relations Office of the BOZ provides assistance needed to place orders for its publications. A catalog of publications and press release is available on the BOZ's Internet website (<http://www.boz.zm>).

Table 4. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics
(*Compiling Agency: Bank of Zambia*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			The coordination has been weakened by the lack of a national statistics committee.	Cooperate with the CSO for the creation of a national statistics committee (December 2004).
0.2 Resources			X			The Economics Department is short of computer expert to work on AREMOS database.	Send staff of Economics Department to a training in AREMOS. Consider hiring a computer expert from outside the BOZ (December 2004).
0.3 Relevance			X			No user surveys or meetings are conducted.	Prepare the format of regular user survey and consult the next monetary and financial statistics mission (December 2004).
0.4 Other quality management			X				
1. Assurances of integrity							
1.1 Professionalism			X				
1.2 Transparency			X			The BOZ Act and Banking Act are accessible on the website. But detailed terms and conditions are not available to users. Internal governmental access prior to release is not publicly identified.	Publish the <i>Economics Department Manual: Computation and Compilation Guidelines</i> and abolish internal governmental access by implementing the simultaneous data release (September 2004).
1.3 Ethical standards			X				

Table 4. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics
(Compiling Agency: Bank of Zambia)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
2. Methodological soundness								
2.1	Concepts and definitions			X			The framework of the monetary survey, rather than the depository corporations' survey, is used.	Publish the depository corporations survey (June 2004).
2.2	Scope			X			The Building Societies, the National Savings and Credit banks, and banks in liquidation are not covered.	Publish the depository corporations survey, which includes the Building Societies, the National Savings and Credit banks, and all banks in liquidation (June 2004).
2.3	Classification/sectorization			X			Local governments are not separated and not classified as money holders. Legal status, rather than center of economic interest, remains the main criteria to distinguish nonresidents from residents. Categories of shares and other equity (on the asset side), insurance technical reserves (on the asset side), and financial derivatives are not separately identified.	Publish the depository corporations' survey, which classify local governments as money holders (June 2004). Explore the possibility to improve the classification in the trial balance of the BOZ and commercial bank returns (December 2004).
2.4	Basis for recording			X			Securities are valued at cost. Accrued interests are not added to underlying instruments. Overdrafts are netted out from deposits in the BOZ accounts.	Publish the depository corporations' survey, which values securities at market value or equivalent and treats accrued interest and overdraft properly (June 2004).
3. Accuracy and reliability								
3.1	Source data			X			Simple rules are used to distinguish resident and nonresident deposits in commercial bank returns that are not strictly based on the center of economic interest. Repos are not identified separately in the BOZ trial balance.	Explore the possibility to improve the classification in the trial balance of the BOZ and commercial bank returns (December 2004).
3.2	Assessment of source data		X					
3.3	Statistical techniques		X					
3.4	Assessment and validation of intermediate data and statistical outputs		X					
3.5	Revision studies		X					

Table 4. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics
(Compiling Agency: Bank of Zambia)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
4. Serviceability								
4.1	Periodicity and timeliness							
4.2	Consistency		X				Discrepancies are found in the interbank position. There is no explanation on the break in series for commercial banks' claim on households. Monetary data are reconciled with the central government budget data but not with government finance data.	Publish the depository corporations' survey, in which discrepancies in the interbank positions are to be reduced. (June 2004). Prepare explanation on the break in series (June 2004). Investigate the availability of fiscal data for the reconciliation exercise with the wider coverage (September 2004).
4.3	Revision policy and practice			X			Revision policy is not made public. Marks of "Prel." are not attached to all monetary data tables	Attach "Prel." to all monetary data tables and publish the revision policy (September 2004).
5. Accessibility								
5.1	Data accessibility				X		Schedules of data release are not published. Data are available on demand prior to release to the public. The fact that sub aggregates are available is not made public.	Publish an advanced release calendar and implement the simultaneous data release. Explain the publication policy to the public (September 2004).
5.2	Metadata accessibility		X					
5.3	Assistance to users		X					

V. BALANCE OF PAYMENTS STATISTICS

0 Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Balance of Payments and Debt Division (BOPDD) of the Economics Department of the Bank of Zambia (BOZ) has been charged with the responsibility for the compilation of balance of payments statistics, but in accordance with the legal framework in Zambia, the Central Statistical Office (CSO) is legally responsible for compiling the balance of payments. Under the *Census and Statistics Act* in Section 14, the CSO is charged specifically with the compilation of the balance of payments. The legal framework for the BOZ is the *Bank of Zambia Act*. Under this *Act* in section 54 (1), for the purpose of carrying out its functions, the BOZ may require any person to provide such information as it may specify. However, this *Act* does not state explicitly that the BOZ is responsible for the compilation of the balance of payments or that it may obtain information from enterprises. The BOZ has taken over the responsibility for the compilation of the balance of payments in 1996, after it became increasingly clear that the CSO could not meet deadlines to fulfill the need of the government for timely balance of payments data. Finally, the Zambia Investment Centre (ZIC) is mandated under the *Investment Act, 1993* (as amended in 1996) to collect information from all enterprises seeking an investment certificate.

Working arrangements are consistent with the assignment of the responsibility for the balance of payments to BOZ. A Balance of Payments Statistics Committee (BOPSC) is in place, whose members are the BOZ, the CSO, the Zambia Revenue Authority (ZRA), the Ministry of Finance and Planning (MOFNP), the ZIC, the Lusaka Stock Exchange, the Ministry of Tourism, the Zambia Privatization Agency (ZPA), and the Export Board of Zambia (EBZ). BOPSC meets on a monthly basis to promote the harmonization of data collections by the agencies, ensures broad expertise, closer contacts with the private sector to encourage confidence and compliance, and discuss discrepancies in the collected data. The conflict between the policy of liberalizing the financial system and minimizing the loss of information because of this has hampered efforts to improve the quality of the balance of payments data.

Recommendation: In the current situation, clarify the situation that gives BOZ the mandate to compile balance of payments and the obligation to disseminate balance of payments data.

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

No formal procedures are in place for the provision of data to BOZ, but under existing arrangements data producing agencies are aware to provide data under certain deadlines

applicable to them and know the formats, in which data need to be provided to BOZ. However, none of the data producing agencies provide data on their own accord within the specified deadlines and BOZ staff has to take the initiative to collect this information. In general, these deadlines are within two or three weeks after the end of the reference period. Sources of data include the ZRA, the BOZ, the commercial banks, the MOFNP, other government agencies, the United Nations Development Program (UNDP), and other domestic and international agencies. Under the umbrella of BOPSC, contacts are maintained with other data producing agencies to promote a proper understanding of data requirements and to avoid duplication of efforts.

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

Section 22 (1) of the *Bank of Zambia Act* specifically mentions that staff shall take an oath of secrecy as set out in the *Official Oaths Act*. Also, section 23 (1) of the same *Bank of Zambia Act* states that except in compliance with an order of the court of competent jurisdiction or with the written consent given by on behalf of the Board, no person appointed and disclose to any person, otherwise than in the course of that person's duty the contents of any document, communication or information whatsoever. Contravention is, upon conviction, punishable by fines or terms of imprisonment. The amount of the fines is low by today's standards, as the amount has remained unchanged. The *Bank of Zambia Act* does not specify that the collected data are to be used for statistical purposes only. All the survey forms of the BOZ include a clause alerts the respondent that the information provided will be kept strictly confidential and may only be used for statistical purposes. If the number of respondents is two or less, the data provided is either not published or merged indistinguishably in other data. Within the BOZ, the data stored in computer files are password protected and accessible only to balance of payments staff. However, hard copy files are less protected and in principle accessible to non balance of payments BOZ staff.

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

The *Census and Statistics Act* in Section 14 clearly specifies that data can be collected from enterprises and establishments. It also specifies the kind of data that can be collected, which include details of the profit and loss account (income and receipts in Zambia and abroad and non-operating expenditure); operating income and expenditure; appropriation account in Zambia and abroad; balance sheet data (domestic and foreign assets and liabilities); and fixed capital formation. As mentioned before the BOZ has the mandate to call information from persons only. In addition, BOZ collects data through surveys from insurance, communications, and other nonbank sector enterprises. The *Bank of Zambia Act* does not include clearly the penalties to be applicable to nonresponse.

0.2 Resources

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

The balance of payments unit consists of three staff members, out of which one is away on study leave. All staff members are well qualified with advanced degrees and have received training in balance of payments methodology at IMF headquarters. Their skills are maintained and further developed through internal training courses or sent abroad for further studies. Each staff member has a computer. The BOZ has a job rotating policy. In view of the tasks at hand and because of restructuring, there is a shortage of staff to handle the present workload of the compilation of balance of payments data, specifically in the area of surveys. Surveys have to be staggered and the frequency of these surveys has to be reduced, resulting in the creation of longer and more time lags. For instance, during the period in which the Private Capital Flow (PCF) project was conducted, no staff was available to do the routine surveys. At present, the surveys are conducted by the Information and Statistics Division. As a result, the BOP unit has to exert pressure to obtain timely results.

Recommendation: Increase staff resources to meet the need to develop new methodologies and strengthen data sources.

0.2.2 Measures to ensure efficient use of resources are implemented

Measures to ensure efficient use of resources include annual performance reviews and the use of outside experts when necessary. For example, for the PCF project all stages of this project, from its assessment, implementation, and completion, outside expert assistance was at hand to assure its successful completion. Work processes to achieve savings are reviewed ad hoc rather than systematically. For example, cost savings were achieved in the collection of the exchange rates of Zambia's major trading partners through the use of the internet rather than telephone calls to banks in the relevant countries. For new projects, detailed estimates on the costs are prepared so that management can make informed choices. The balance of payments compilation system also makes extensive use of computerizing data sources and collection methods. Also, the BOZ's Strategic Plan, 2004–07 has set strategic objectives, action plans, and critical success factors for the implementation of the plans, identifying the BOZ's strengths as well as its weaknesses and the opportunities and threats in the environment. Within this framework, departments prepare a four-year strategic plan with detailed quarterly action plans.

0.3 Relevance

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

Balance of payments data are presented in an analytic table with commentary providing an overview of external developments during the period under review. Current needs of the main users of balance of payments data, namely government agencies, are continuously

monitored through the BOPSC. No efforts are made to reach out to the main private users, namely NGOs and academic researchers, through surveys and newsletters. However, selected private users are aware that they can make requests in writing or by telephone. This is usually done to obtain additional data. About four months ago, the BOZ conducted a seminar for both producers and users of data, in which users could provide feedback and both parties, could exchange views on how data gathering efforts could be made still more useful. Data requirements are also monitored within the framework of the Southern Africa Development Committee (SADC), where emerging data requirements are often noted. The BOZ conducts studies for internal use only, in which the need to collect additional information is reviewed or whether to change the format in which the data are presented.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The management actively emphasizes data quality through the promotion of data consistency and accuracy. In the Strategic Plan 2004 to 2007 it is explicitly mentioned that expertise and performance of staff are recognized and in the mission statement of the BOZ, integrity is emphasized. The main mechanism to assure the quality of data is the BOPSC, which monitors the accuracy of the data from the various data sources through a process of reconciliation. In addition, it prepares assessments of the underlying compilation issues. The BOZ is keenly aware of the trade-off between timeliness and accuracy of the data. Through its mission statement, users are aware of the BOZ commitment to integrity of data.

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

Divisional meetings are the main avenue for the discussion of the work in progress. During these meetings, various aspects of statistical activities such as updates on the various projects, data discrepancies, revisions, and timeliness of data are discussed. At times, the management is informed if some of these activities show little progress. As the need arises, possibilities of expert guidance are looked into.

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

The management of the BOZ is aware of the tradeoffs between accuracy and timeliness of data. Data need to be reported within a cutoff date, usually within two weeks from the data of the receipt of the survey form. Possibilities for quality improvements are continuously monitored and staff is encouraged to put forward its own ideas. The needs of users and new data requirements, if known, are taken into account when planning the statistical program. For instance, the above seminar for data producers and users revealed a demand for new data. However, meeting user's demands is resource intensive. Some items in demand are difficult to obtain, often requiring the development of new data sources. Depending upon the importance of the users and taking into account the resource constraints, the BOZ tries to meet reasonable user's demand for additional information.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Although not explicitly stated in the *Bank of Zambia Act*, the BOZ is independent with respect to its statistical activities. Also, the BOZ's Strategic Plan, 2004–07 explicitly strives for professional independence. Government officials do not comment on or regulate the release of data by the BOZ when data are made available to the government prior to its public release. This is strengthened by the view in Zambia, widely accepted by the public, that statistics disseminated by the BOZ are produced on an impartial basis. Within the BOZ, professionalism is actively promoted and recognized as a major criterion for the advancement and promotion of staff. Formal and on the job training is provided and staff are encouraged to participate in seminars and courses arranged by regional and international organizations, improve work processes, and undertake research. Staff are encouraged and on occasion paid to attend meetings of professional bodies.

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

The choice of source data is based solely on statistical considerations subject to cost constraints. Source data include surveys, administrative records, reports submitted by enterprises, and estimation models. Processing and validation established are based on statistical considerations. In a similar vein, decisions to disseminate data, including the timing, media, and other aspects of dissemination, are based solely on statistical considerations and cost constraints.

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

There is a well established custom to deal with data misinterpretations or misuse of statistics. The BOZ monitors the responses in the media following upon the release of its data. In accordance with the Code of Conduct, the BOZ is required to respond to the erroneous interpretation within forty-eight hours.

1.2 Transparency

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

The terms and conditions under which statistics are collected, processed, and disseminated are mentioned in all the survey reports forms used by BOZ, where it is stated that the provided information will be kept confidential and be used for statistical purposes only. However, these terms and conditions do not include an indication that the collected data will

be disseminated. Information on the terms and conditions governing the collection of data is also available in the *Bank of Zambia Act*, which is published on the BOZ website. However, this *Act* does not impose the obligation to disseminate data collected for statistical purposes. BOZ disseminates data as a service to the public.

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

Data are made available to the government when requested and thus prior to its release to the public. While this internal government access is not publicly identified, a limited number of users are probably aware that government has access to data prior to its public release.

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

Balance of payments data released by the BOZ are clearly identified as its product as the publications in which these data are disseminated carry the name and logo of the BOZ. In the case of joint publications, the contributions of the participating agencies are clearly acknowledged (see for instance *Foreign Assets, Liabilities, and Investor Perceptions in Zambia*). The BOZ requests attribution when its statistics are used or reproduced. In a similar vein, BOZ acknowledges when it is using statistics compiled by other agencies.

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

Notes to the published tables explain the major changes in methodology or data sources that have occurred at the time of changes. No advance notice is given to the users when major changes in methodology, sources, and statistical techniques are introduced.

1.3 Ethical standards

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

Clear guidelines for staff behavior are outlined in a Code of Conduct, a booklet handed out to every member of staff. In addition, a draft for a departmental code of conduct has been prepared, addressing issues particular to the Economics Department. This draft has been submitted to management for approval. The mission statement emphasizes that staff need to be honest and sincere in its dealings with the BOZ, colleagues, and customers of the BOZ.

2. Methodological Soundness

2.1 Concepts and definitions

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

The framework of Zambia's balance of payments is broadly consistent with the guidelines and recommendations of the fifth edition of the *Balance of Payments Manual (BPM5)*. An important exception is direct investment capital flows where the definition of direct investment as ten percent or more of ordinary shares or voting power is not applied. The directional principle is applied, but in practice has no significance as any claims of foreign direct investment companies on their foreign direct investors are negligible. Resident institutional units are defined in broad conformity with the *BPM5* guidelines, but there is some doubt whether the residency definition in monetary statistics is identical to the residency definition used for balance of payments purposes. In addition, the residency definition on the basis of center of economic interest according to *BPM5* does not apply to construction enterprises, as source data do not permit to apply this definition. The double entry system is applied implicitly as source data are not sufficiently detailed to permit a strict application of the double entry system. For instance, lack of information on grants in kind from the customs data makes it difficult to identify their corresponding counterpart entries.

Recommendation: Implement the BPM5 definition for foreign direct investment and review the residency definition in the monetary statistics.

2.2 Scope

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

The balance of payments covers in principle all transactions of government, enterprises, and individuals resident in Zambia with nonresidents. However, within the current account, there are difficulties in capturing goods that do not come through the Zambia Revenue Authority (ZRA) channels and services that are not recorded in any official documentation. Smuggling by small traders occurs, but no estimates are included in the balance of payments as a systematic study of smuggling activities has not been undertaken. Transactions in computer software, international insurance on goods imports, government services receipts, interest on export proceeds held abroad by mining companies and leases are also not included. In the case of leasing, only the value of the equipment is captured in the merchandise trade statistics. Obtaining information on private current and capital transfers has also proven difficult. Within the financial account, there are difficulties in measuring transactions related to foreign direct investment and other investments by the private sector. For instance, no entries are made for the reinvestment of earnings, export proceeds held abroad, and trade credits. No estimates for other illegal activities and informal trade are included in the balance of payments.

2.3 *Classification/sectorization*

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

The classification and sectorization system in the balance of payments is broadly in accordance with the *BPM5*. The classification system comprises (i) the current account, including the goods, services, income, and current transfers account, (ii) the capital account, and (iii) the financial account, including direct investment, portfolio investment, other investments, and the reserve assets account. Four sectors are identified, namely the monetary authorities, comprising the BOZ, the general government, comprising all government units (ministries), local governments, and statutory reporters, banks comprising all commercial banks including state-owned banks, and other sectors, comprising nonbank financial institutions, enterprises including parastatals, and individuals. Statutory reporters comprise fully independent parastatal units funded by the budget.

Goods: The goods account includes general merchandise, repairs on goods, goods procured in ports, as recommended by *BPM5*. These transactions are all included in general merchandise. Only goods procured in ports are shown separately, while goods for processing and transactions in no monetary gold do not occur. Repairs are not identified separately, while smuggling is not included. Since the flow of goods are compiled on a c.i.f. basis (except for metal exports), the goods account for exports and imports is adjusted to an f.o.b. basis. However, the adjustment factor covers only international freight, excluding international insurance.

Services: This account includes transportation of goods and passengers, travel, and other services, but the information in this account is very limited. International freight includes both freight services performed by residents and nonresidents. Only the latter is appropriate to the balance of payments. With the exception of rail transport, data on transport services by other modes of transportation is not available. The travel account does not include expenditures of expatriate workers staying in Zambia less than one year. Also not available is the breakdown of travel credits into business travel and personal travel. Other services include communications, construction, insurance, financial services, computer and information services, royalties and license fees, other business services, and government services. For construction, no distinction is made between construction activities completed within one year and more than one year. Royalties include subscriptions to international organizations. Transactions in computer software and financial leasing are not included.

Income: This account includes compensation of employees, direct investment income, and other investment income, but similar to the services account, the information in this account is limited. For compensation of employees, no distinction is made between expatriate workers staying less than one year and expatriate workers staying more than one year. As a result, transactions appropriate to current transfers are included here. No direct investment income outflows, including the reinvestment of earnings are reported. Also, the income and losses arising out of mineral exploration are not included. Interest income received on foreign

assets of commercial banks is incorrectly classified as portfolio investment income, while interest income paid on the foreign liabilities of the commercial banks is not included. Other investment income receipts and payments include the interest received on reserve assets, interest payments on the external debt of the government, and the interest received on export proceeds held abroad by the non-traditional exporters. Not included are interest receipts on export proceeds held abroad by the mining companies.

Recommendation: Reclassify from portfolio investment income to other investment income the interest earned by commercial banks on their foreign assets held abroad. Also, review the estimation procedure for compensation of employees to identify transactions appropriate for classification in current transfers.

Current transfers: The only components in this account are general government current transfers, comprising primarily commodity grants, grants disbursed in the form of balance of payments support, and workers' remittances. Private sector cash and noncash grants are not included.

Capital transfers: The only components in this account are debt forgiveness and estimates of project assistance grants.

Financial account: The definition for portfolio investment is in accordance with the guidelines of *BPM5*. However, the *BPM5* definition for direct investment capital flows is not applied.

Direct investment: This account includes estimated expenditures on mining exploration by foreign enterprises, proceeds from the sale of public enterprises to nonresidents, and expenditures on new capital investments.

Portfolio investment: This account covers equity securities purchased by nonresidents.

Other investment: This account covers loan transactions of the general government and the private sector, and the currency and deposit assets and liabilities of the deposit money banks. Data on trade credit foreign assets and liabilities and private sector debt arrears are not available.

Recommendations: Incorporate changes in trade-credits received and extended changes in export proceeds held abroad by mining enterprises and nontraditional exporters, and changes in foreign liabilities of the commercial banks.

Reserve assets: This account covers only the foreign currency and deposits of the BOZ with foreign banks.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The balance of payments is presented in U.S. dollars. Transactions in other currencies are converted to U.S. dollar equivalents at the transaction rate, or if that is not available, at monthly average rates. Flow changes in foreign assets and liabilities of the commercial banks are calculated as the difference in stocks at the beginning and at the end of the period, converted into U.S. dollars at the end of period exchange rate. Transactions are valued at market prices where they are available, and at face value for debt instruments. Exports of goods are valued on an f.o.b. basis and imports of goods, which are valued on a c.i.f. by the customs authorities, are adjusted to an f.o.b. basis. For grants in kind, donor reported values are used. Proxy values are used by the customs authorities if no values are available.

2.4.2 Recording is done on an accrual basis

Goods exports and imports are recorded at the time of crossing the customs border. Services, compensation of employees, and some private transfers are recorded on an actual transactions basis at the time of payment. Investment income and financial account transactions are recorded on an accrual basis. Loan drawings are recorded when disbursed and loan repayments are recorded on an accrual basis. The recording of arrears is also consistent with the *BPM5* methodology.

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

Grossing/netting procedures are broadly in accordance with *BPM5*. Transactions in the current account are recorded on a gross basis and transactions in the financial account are recorded on a net basis, separately for assets and liabilities.

3. Accuracy and Reliability

3.1 Source data

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

The main data sources for the balance of payments are reports from enterprises, and administrative sources provided by the government and its agencies, the BOZ, and international agencies. Estimation methods are used when source data are insufficient to compile adequate data. These estimation methods are based on trends using as base year the period during which foreign exchange control was strict and, as a result, data on external transactions settled through the banking system yielded reliable data. However, with the relaxation of exchange controls, the accuracy and coverage of the data declined and alternative data collection procedures were not in place. Estimation methods are used to

estimate direct investment capital inflows, investment income receipts on export proceeds held abroad by nontraditional exporters, freight and insurance on goods imports, and net worker's remittances. Surveys are done on a regular basis, especially those covering the mining, insurance and telecommunications enterprises. The coverage of the mining enterprises is not complete as small mines do not report. The coverage of the travel survey is limited to tourist spending in provinces situated along the main railways. Tourist spending in outlying areas is excluded. No surveys of transportation enterprises have been conducted.

The major event in the development of data sources has been the PCF project, under which enterprises, including direct investment enterprises were surveyed. Under this project, conducted jointly with the CSO and the ZIC and foreign assistance, 500 enterprises were surveyed, including the largest 200 enterprises. Intensive follow-up activities during the survey period resulted in a response rate of 81.9 percent. The survey yielded valuable information for both the balance of payments and the international investment position. Even though this was a comprehensive project far exceeding balance of payments needs as it included a survey of investor perceptions as well, it has provided the BOZ with a solid basis to conduct enterprise surveys on a regular basis meeting balance of payments needs. At present, the International Transactions Reporting System (ITRS) is not used as data source for the balance of payments, because as noted above, the liberalization of the economy had resulted in noncompliance and a deteriorating coverage. The survey based reporting system is supported by a business register, which was drawn up for the purpose of the PCF project. The list of enterprises in this business register was pulled together from information in enterprise registers maintained by ZIC, the ZPA, the BOZ, and the EBZ. However, the business register has not been maintained since.

Recommendations: Initiate an annual enterprise survey based on the groundwork laid by the PCF project. In addition, smaller enterprise surveys of only the largest enterprises need to be initiated on a quarterly basis in support of the compilation of quarterly balance of payments data. In the interim, the coverage of the survey of external debt of the private sector (currently comprising 60 enterprises) needs to be broadened to an extent guided by the findings of the PCF project. Initiate efforts to revitalize the reporting system of external transactions settled through bank, the International Transactions Reporting System.

Goods: Data on metal exports and electricity exports are based on reports submitted by mining companies and Zambia Electricity Supply Company respectively. Nontraditional exports, excluding electricity, are based on the ZRA Customs Exports Declaration forms which ZRA collects directly from customs ports and processed by BOZ. Data on goods imports are also based on customs declarations, obtained from the ZRA's computerized data base. These goods imports are valued on a c.i.f. basis, but adjusted to an f.o.b. basis, by deducting freight charges estimated at ten percent of good imports c.i.f. The goods account includes goods procured in ports, but no adjustments are made to show these transactions separately.

Transportation: Data on passenger fares are based on historical data with 1994 as a base year. A disaggregation by mode of transportation other than rail transport is not available.

Recommendation: Develop a survey of transportation enterprises. Also, develop a methodology to establish a reliable c.i.f./f.o.b. ratio together with a methodology to estimate the part of international freight and insurance attributable to nonresidents.

Travel: The estimates for travel credit are based on surveys of enterprises involved in providing travel services. The estimates for travel debits are based on government administrative records

Other services: Most data are derived from surveys of construction companies, communication enterprises, and insurance companies. Data for other business services are based on historical data.

Recommendations: Discontinue the survey of Zambian embassies and consulates abroad. Restart a survey of foreign embassies, consulates, and international organizations in Zambia under the auspices of the Ministry of Foreign Affairs. In the interim, initiate efforts to obtain data on the inflows and outflows of accounts held by these nonresidents with the domestic banks.

Income: Data on compensation of employees are reports, submitted by mining companies, on their payments of expatriate emoluments. No data on direct investment income are compiled. Data on portfolio investment income credits are from the monetary survey, estimated at 5 percent of the gross foreign assets of commercial banks. Data sources for other investment income are administrative records from the general government, the BOZ, and for commercial banks, the monetary survey. For the private sector, data are derived from the foreign exchange reports submitted by the mining companies, while for the nonmetal sector, investment income debits are obtained from the private sector debt data base of the Debt Unit within the BOZ's Economic Department.

Transfers: Data on both current and capital transfers of the government are derived from the administrative records of the MOFNP External Resource Mobilization Department (ERMD).

Recommendation: Initiate efforts to compile data on cash and noncash grants received by the private sector, including the NGOs.

Direct investment: Data are derived from the administrative records of ZIC, the ZPA, and the Ministry of Mines and Mineral Development (MMMD). The ZIC reports data new capital investments in the form of equity capital and liabilities to direct investors pledged by direct investors. Surveys are conducted to determine the implementation rates on the initial pledges. The ZPA reports data on the receipt of sales of public enterprises to nonresidents. The MMMD reports data on estimated expenditures on mining exploration by foreign enterprises.

Portfolio investment: Data are obtained from monthly reports compiled by the Lusaka Stock Exchange. In the past, these data were obtained from the ITRS. However, following the economic liberalization, the coverage of the ITRS became incomplete.

Other investment: The source data for loan transactions of the general government, the BOZ, and the private sector are administrative records of the Debt Unit of the BOZ, the MOFNP ERMD, and reports from the mining companies on their disbursements and repayments of loans received.

Reserve assets: The source data are statements of receipts and payments on gross international reserves, reported by the Finance Department of the BOZ.

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

As far as possible, definitions, scope, classifications, valuation, and time of recording in the source data are broadly in line with the recommendations of *BPM5*. In particular, administrative records provide reasonable approximations of the methodological requirements of the balance of payments. Exceptions are source data for direct investment capital flows, nontraditional exports (excluding electricity) and goods imports which are reported on a c.i.f. basis. External debt data provided by the MOFNP are compiled on a due basis. Even though data for interest and repayments are compiled on a cash basis by BOZ, no adjustments are made to incorporate arrears in the preliminary data. These adjustments are made only much later, when data on arrears have become available from the MOFNP. As a result, the preliminary suffer from an incomplete coverage of arrears and a corresponding increase in net errors and omissions.

3.1.3 Source data are timely

Data on metal exports are reported by the mining companies with a timeliness of four weeks. Data on nontraditional exports, excluding electricity, are usually available with a timeliness of two weeks, while data on electricity exports are available with a timeliness of two months. Other data producing agencies also have deadlines to be met by data providers. For instance, ZIC has to produce monthly reports. As noted earlier, respondents are made aware of the need to provide timely data through deadlines specified in the survey forms. However, to actually meet these deadlines considerable, BOZ staff follows up through reminders by telephone, staff visits, or e-mail.

3.2 Assessment of source data

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

New source data are assessed for reliability and accuracy, including an assessment of whether the respondent is likely to continue to report its data. Only after management approval are source data incorporated in the compilation system. Some data producing agencies publish their own data which BOZ tries to reconcile with its own data. For instance,

data on goods exports published by the CSO differ from those published by BOZ and efforts to reconcile these two data series are ongoing within the framework of the BOPSC. For external debt data and goods data, assessments are carried out within the framework of the BOPSC. Results of the assessment of data sources are used to improve the statistical process. Large values are confirmed with respondents.

3.3 *Statistical techniques*

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

Verification of data pertains to editing, tabulation, and consistency checks within the data reported in the survey forms, ensuring the quality and reliability of the information provided. Completed survey forms received are scrutinized and edited. The assessment of the survey results include built-in checks in the processing of data such as signaling of deviations from historical patterns, internal consistencies between prices, volumes, and sales, completeness, and consistency of opening and closing balances. Adjustment for nonresponse is confined to carrying forward of data. Most current forms have been in use for a long period and respondents are well aware of its objectives.

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

The balance of payments compilation system employs a number of adjustments. Most adjustment procedures do not have a sound statistical base. They are also not adjusted to take account of changes in circumstances as these procedures have been in use over many years. These adjustments are:

- A c.i.f./f.o.b ratio to adjust goods imports from a c.i.f basis to an f.o.b basis. A rule of thumb of ten percent is in use which is probably under estimated.
- Data on government services receipts are estimated on the basis of extrapolation. A survey to collect these data has been conducted but the results were very poor.
- Interest receipts on export proceeds held abroad. The estimation procedure has remained unchanged for five years.
- Workers' remittances. These remittances are estimated on a net basis. Under this procedure, the number of foreign employees is combined with an estimated amount for a per capita remittance. The estimated amount is adjusted annually with the GDP growth factor.
- Direct investment in Zambia. The estimation procedure on an implementation ratio applied to the amounts pledged during the reporting period. The implementation rate, which is variable and currently 60 percent, is derived from a survey conducted by ZIC.

Recommendations: The c.i.f/f.o.b ratio needs to be revised, as a rule of thumb to estimate freight and insurance charges on imports would not properly reflect Zambia's position as a landlocked country and the geographical distribution of its trade flows. Data on government receipts should be derived from an analysis of banking records or much improved annual surveys of foreign embassies and international organizations. Surveys should be used to collect data on foreign direct investment, workers' remittances, and interest receipts on export proceeds held abroad.

3.4 Assessment and validation of intermediate results and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Except for copper, few intermediate results are validated against other information. However, information reported in the financial press is used to verify high valued data.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

BOZ plans to assess reported data on investment income receipts and payments in relation to the corresponding stock data. It also plans to reconcile the reported financial flow data with changes in the corresponding stock data for external debt and other items in the international investment position.

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

Investigations are made when net errors and omissions are large. In practice, the net errors and omission item is routinely monitored, since there are no rules on the magnitude of the net errors and omissions item, justifying such an investigation.

3.5 Revision studies

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

No studies or analysis of revisions are conducted, but big revisions are investigated.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

Balance of payments statistics are compiled on a quarterly and annual basis, but are not published on a quarterly basis. Users may request quarterly data from the BOZ. The

periodicity of balance of payments data, i.e. quarterly data, is in line with the GDDS recommendations.

4.1.2 Timeliness follows dissemination standards

BOZ disseminates the quarterly data within two months after the end of the reference period and the annual data with a timeliness of six months. The timeliness of the quarterly data exceeds the recommendations of the GDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The concepts, definitions, and classifications for producing quarterly and annual data are identical and the annual data for each balance of payments component are the sum of the quarterly data.

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

Published data are consistent and reconcilable over a reasonable period of time. Since 1994, balance of payments statistics have been compiled in accordance with methods and procedures recommended in *BPM5*. Unusual changes in economic trends are explained in the commentary accompanying the publication of the data. In case of methodological changes, historical series are reconstructed as far back as possible. In case of source data, new enterprises are included from the data of the start of operations.

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

Balance of payments data are reconcilable with the national accounts, the monetary statistics, and external debt. Reconciliation is possible because the balance of payments data are the source data for the national accounts and the monetary statistics and external debt statistics are the source data for the balance of payments data. For the goods account, goods imports are reconcilable with the international merchandise trade data, while for goods exports attempts are made to achieve full reconciliation between the two sets of data. However, data are not reconciled with government statistics in the areas of foreign grants and payments abroad for government services.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

There is no official policy on when data need to be revised. In general, revisions are made when new data have become available. In practice, revisions are implemented quarterly and data are revised as far back as two years. Minor revisions to data are undertaken as soon as

they are received. Major revisions are implemented after discussion and reaching consensus. Public does not know the schedule of revisions. Users are not informed whenever data are revised nor is adequate documentation provided to the public.

4.3.2 Preliminary and/or revised data are clearly identified

Preliminary and revised data are not clearly identified. In the *BOZ Annual Report*, the annual data are identified as projected data for the most recent period, while data for previous periods are identified as estimations. In the *Economic Report*, annual data are not identified. Users are not informed whenever data are revised.

Recommendations: Discontinue the use of the terms estimations and projections to identify data status. Instead, use the terms preliminary and revised.

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

There are no studies of revisions.

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)

Annual balance of payments data are published by BOZ in U.S. dollars and disseminated in an analytic presentation only. In this analytic presentation, data are presented in an aggregated presentation without any details in the accounts for services, income, and current transfers. In the financial account no clear distinction is made between foreign assets and liabilities. The short-term financial flows are lumped together with the net errors and omissions item. No notes to changes in methodology or source data are provided. This presentation is accompanied by a short commentary facilitating the balance of payments developments during the period under review. In the *Annual Report* of the BOZ only three periods of annual data are published, while in the *Economic Report* of the MOFNP, four periods of annual data are published. Balance of payments data are also disseminated in a standard and analytic presentation in the *Balance of Payments Statistics Yearbook* published by the IMF. Additional data series are not disseminated, but are available at request only. No time series are published on a seasonally adjusted basis.

5.1.2 Dissemination media and formats are adequate

Dissemination media of annual data are limited to the *BOZ Annual Report* once a year and the *MOFNP Economic Report*, also once a year. Annual balance of payments statistics are also reported to the SADC for publication in *Recent Economic Development and Statistics for SADC*. Annual and quarterly data are also available to interested users through the Public

Relations Office of BOZ on demand and when available. No data are available on the website of the BOZ. Balance of payments data are also disseminated in a standard and analytic presentation in the *Balance of Payments Statistics Yearbook* published by the IMF.

Recommendation: Balance of payments data should be published on the BOZ website.

5.1.3 Statistics are released on the preannounced schedule

The balance of payments data are not released on a preannounced schedule. However, some users are aware of the date when the data will be published. For the *Economic Report*, the expected date is around February and for the *Annual Report* the expected date is around May.

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

The public is not informed of balance of payments data being released and data are not released to all users simultaneously. Data are first made available to official users and last to private users. However, private users do get the most current data.

5.1.5 Statistics not routinely disseminated are made available upon request

The availability of unpublished but nonconfidential data is not made known to the public. However, the availability of additional data and of procedures for obtaining them are known to some users. Additional information is provided free of charge.

5.2 Metadata accessibility

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

The statement of the methodology used for the compilation of the balance of payments is not disseminated to the public at present since it is for internal use only. The Economics Department has prepared a methodology documentation including monetary statistics, prices, real sector, balance of payments, and other areas covered by the department. The balance of payments methodology is primarily for internal use. However, the methodology is available to outside users on demand, but the public is not informed about this documentation. Information on methodology is also published in the IMF's *Balance of Payments Statistics Yearbook* and in the GDDS metadata on the IMF website.

Recommendation: Availability of methodology should be publicized.

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

General use of information about the balance of payments is only available on an ad hoc basis. In the past, such information has been prepared on the occasion of the participation of the BOZ in trade-fairs and agricultural shows.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The *Quarterly Financial and Statistics Review* and the *Annual Report* published by BOZ provide points of contacts with e-mail addresses, which users could use to obtain additional information or further clarifications. In the *Economic Report* published by the MOFNP the name of a contact person is provided. The contact point in the BOZ is the Public Relations Department. A contact point specifically for the balance of payments is not available, except on the IMF's GDDS website which can be accessed through a hyperlink from the BOZ website.

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

A catalog of publications and press releases, and key statistics are available on the website of the BOZ, but not in the publications of the BOZ. The products are free of charge.

Table 5. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Zambia)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
0. Prerequisites of quality								
0.1	Legal and institutional environment			X			The BOZ has the responsibility, but the legal framework designates the CSO with balance of payments compilation. CSO agrees for BOZ to compile balance of payments data, but without official designation. Staff resources are inadequate to meet the need of large surveys to strengthen data sources.	
0.2	Resources			X			No systematic users' survey. Users' views are obtained on an ad hoc basis and from limited groups.	
0.3	Relevance			X				
0.4	Other quality management		X					
1. Assurances of integrity								
1.1	Professionalism		X					
1.2	Transparency			X			Survey report forms do not indicate that data provided will be disseminated. Internal government access prior to release of data is not publicly identified.	
1.3	Ethical standards				X			
2. Methodological soundness								
2.1	Concepts and definitions			X			The <i>BPM5</i> foreign direct investment definition is not used. Definition of residency for the balance of payments may not coincide with the monetary statistics. No entries for trade credits received or extended, reinvestment of earnings, merchandise insurance, private sector grants, and export proceeds held abroad are made in the balance of payments.	
2.2	Scope				X			

Table 5. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Zambia)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
2.3 Classification/sectorization				X	Repairs are not identified separately. Interest on foreign assets of commercial banks is classified as portfolio investment income. A subscription to international organizations is misclassified. Travel account does not include expenditures of expatriate workers and construction activities completed in less than one year are not identified.	
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data				X	There is no large survey of large enterprises, including direct investment enterprises. The use of a bank reporting system has been discontinued as a result of the liberalization of the economy. Some report forms need to be modified.	Improve (i) survey of embassies and international organizations and (ii) the survey of foreign direct investment enterprises with the completion of the second phase of the Private Capital Flow project. Start work on the compilation of IIP after completion of the second phase. Initiate travel surveys and surveys of transportation enterprises, agents of nonresident airlines, and major construction companies, as well as work to set up an ITRS system.
3.2 Assessment of source data				X	Present survey forms do not meet balance of payments needs. Estimation methods are not sound and outdated as they have remained in use for many years.	
3.3 Statistical techniques				X	Except for copper, few intermediate results are validated. The BOZ does not assess reported data on investment income receipts and payments and reconcile flow and stock data, but plans to do so.	
3.4 Assessment and validation of intermediate data and statistical outputs				X		

Table 5. Republic of Zambia: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Zambia)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3.5 Revision studies				X		No routine analysis of big revisions, big revisions are investigated.	
4. Serviceability							
4.1 Periodicity and timeliness		X					Compilation and dissemination of quarterly balance of payments data.
4.2 Consistency			X			Data are not reconciled with government statistics in the areas of grants and government services paid abroad.	
4.3 Revision policy and practice			X			Public does not know the schedule of revisions. Data are identified as estimations and projections instead of preliminary and revised. There are no studies of revisions.	
5. Accessibility							
5.1 Data accessibility				X		Data are disseminated without supporting tables. In the financial account there is no clear distinction between foreign assets and liabilities. No notes to the tables are provided. Balance of payments data should be published on the BOZ website. There is no advance release calendar.	
5.2 Metadata accessibility			X			Availability of methodology should be publicized.	
5.3 Assistance to users			X			A contact point specifically for the balance of payments is not available, except on the GDDS website.	

Summary of the General Data Dissemination System (GDDS)

Data coverage, periodicity, and timeliness

Dissemination of reliable, comprehensive, and timely economic, financial, and socio-demographic data is essential to the transparency of macroeconomic performance and policy. The GDDS contains specific recommendations concerning coverage, periodicity, and timeliness for comprehensive frameworks as well as for data categories and indicators.

Quality

Data quality must have a high priority. Data users must be provided with information to assess quality and quality improvements. The GDDS recommends:

- dissemination of documentation on methodology and sources used in preparing statistics; and
- dissemination of component detail, reconciliations with related data, and statistical frameworks that support statistical crosschecks and provide assurance of reasonableness.

Integrity

To fulfill the purpose of providing the public with information, official statistics must have the confidence of their users. In turn, confidence in the statistics ultimately becomes a matter of confidence in the objectivity and professionalism of the agency producing the statistics. Transparency of practices and procedures is a key factor in creating this confidence. The GDDS, therefore, recommends:

- dissemination of the terms and conditions under which official statistics are produced, including those relating to the confidentiality of individually identifiable information;
- identification of internal government access to data before release;
- identification of ministerial commentary on the occasion of statistical releases; and
- provision of information about revision and advance notice of major changes in methodology.

Access to the public

Dissemination of official statistics is an essential feature of statistics as a public good. Ready and equal access by the public are principal requirements. The GDDS recommends; and

- dissemination of advance release calendars; and

- simultaneous release to all interested parties.

Plans for improvement

The GDDS recommends that plans for improvement be developed for all areas in which shortcomings exist and that these plans be disseminated.

The GDDS also recommends that any needs for assistance be identified in the metadata. This may also be helpful for donors and technical assistance providers to prioritize their activities.

For each participating member country, the GDDS metadata provide descriptions of the dimensions listed above, together with plans for improvement and needs for assistance. This information is posted on the DSBB; participating countries are encouraged to also post the metadata on their national websites.

Source: Guide to the GDDS, March 2002: <http://dsbb.imf.org>.

DATA QUALITY ASSESSMENT FRAMEWORK—GENERIC FRAMEWORK (JULY 2003)

Quality Dimensions	Elements	Indicators
<p>0. Prerequisites of quality</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>0.4 Other quality management—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</p> <p>0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.</p> <p>0.4.1 Processes are in place to focus on quality.</p> <p>0.4.2 Processes are in place to monitor the quality of the statistical program.</p> <p>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</p>
<p>1. Assurances of integrity</p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are produced on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advanced notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness</p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions—<i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization—<i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.4.1 Market prices are used to value flows and stocks.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>
<p>3. Accuracy and reliability</p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality</i></p>	<p>3.1 Source data – <i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Assessment of source data—<i>Source data are regularly assessed.</i></p> <p>3.3 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.</p> <p>3.3.1 Data compilation employs sound statistical techniques to deal with data sources.</p> <p>3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.4.1 Intermediate results are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).</p>

Quality Dimensions	Elements	Indicators
<p>4. Serviceability <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p>	<p>4.1 Periodicity and timeliness— <i>Periodicity and timeliness follow internationally accepted dissemination standards.</i></p> <p>4.2 Consistency— <i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.3 Revision policy and practice—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.</p> <p>4.2.1 Statistics are consistent within the dataset. 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>4.3.1 Revisions follow a regular and transparent schedule. 4.3.2 Preliminary and/or revised data are clearly identified. 4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).</p>
<p>5. Accessibility <i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility— <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility— <i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users— <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 5.1.2 Dissemination media and format are adequate. 5.1.3 Statistics are released on a preannounced schedule. 5.1.4 Statistics are made available to all users at the same time. 5.1.5 Statistics not routinely disseminated are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated. 5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact points for each subject field are publicized. 5.3.2 Catalogs of publications, documents, and other services, including information on any changes, are widely available.</p>

Summary of Results of Users' Survey

Summary of results of survey of data users

With the assistance of the authorities and as a complement to the IMF staff's own assessment of the quality of Zambia's macroeconomic statistics, the mission that visited Lusaka during May 18–June 3, 2004 conducted an informal survey of users of macroeconomic statistics. The survey questionnaire was sent to ministries and state agencies, donor agencies and embassies, banks and other financial institutions, and the private sector. The questionnaire was completed by 20 users of the sample of 70 users to whom the questionnaire was sent. The survey asked users to evaluate six specific aspects of national accounts, prices, fiscal, monetary, and balance of payments statistics—namely (1) coverage and detail; (2) periodicity and timeliness; (3) methodological soundness; (4) accuracy and reliability; (5) data revision; and (6) dissemination practices. In addition, the users were asked to provide an overall assessment. Limited follow-up meetings were made with a few users from commercial banks, a university, a media outlet, donors, and international organizations.

The ratings given by survey respondents are summarized in Table 1. The following draws conclusions from these and from supplementary comments that respondents provided in the comment boxes in the survey questionnaire or raised in discussion at the follow-up meetings.

Coverage and detail

Users were broadly satisfied with the coverage of monetary, CPI, and fiscal operations statistics.¹⁰ Users were most critical of national accounts statistics, assigning those the lowest relative rating and monetary statistics the highest. As for the level of detail provided, balance of payments and national accounts statistics again received the lowest relative rating, and monetary statistics and CPI the highest.

Periodicity and timeliness

Users were somewhat satisfied with the periodicity and timeliness of the consumer price index and monetary statistics, and less satisfied with national accounts and balance of payments statistics. Users were dissatisfied with the timeliness of fiscal and balance of payments statistics. In discussions, users indicated strong preference for more timely national accounts and somewhat more timely fiscal data. They also wanted quarterly GDP data. They indicated that, contrary to expectations, data on quarterly government operations were not always published. To address the significant impact on their analysis, selected users preferred to have more timely data for foreign reserves, currently disseminated with a two–three month time lag.

¹⁰ The only information on government operations is fiscal data. Currently, government finance statistics in the format of *GFSM* are not disseminated. Hence, all comments refer to fiscal data rather than GFS.

A serious issue was the lack of a clear schedule of data release. General users do not have information as to when and, in some instances, where the statistics are first released. There is no advance release calendar for any data categories. Well-connected users may use unofficial means to obtain information. This seems to be general practice among local users. Many users rely on other agencies rather than on the official agency primarily responsible for the statistics. Especially for national accounts data, they rely on the Ministry of Finance and National Planning's (MOFNP's) Monthly Economic Indicator rather than on the Central Statistical Office.

Methodological soundness

Users expressed strong reservations about the soundness and appropriateness of the underlying methodology used for balance of payments and CPI, while they somewhat believed that the methodology was sound for fiscal data and monetary data. Consistently, they believed that monetary and fiscal data were more accurate than other data categories. During discussions, some users questioned methodology soundness of national accounts and CPI.

Accuracy and reliability

Monetary data received the highest score in terms of quality, especially accuracy, while national accounts and balance of payments statistics received the lowest score. These rather negative assessments appeared to reflect doubts about the integrity of the data-producing agencies and concerns about deterioration in source data (especially for national accounts and balance of payments statistics). Users perceived source data for national accounts to be problematic, especially because of lack of clear understanding of those agency staff who conducts sample surveys.

Data revision

Users considered that insufficient information is provided about revisions to national accounts, balance of payments statistics, and fiscal data. They were aware that data are frequently revised and for reasons that were largely unexplained. They were not aware of the existence of a revision policy or of published revision studies. Some users expressed concerns that preliminary data are not always clearly indicated. Not only are data sources fragmented for national accounts, but users also have less confidence in the data as to which ones are the latest revisions. Users face a special challenge in obtaining balance of payments data and their revisions because of a limited dissemination venue.

Dissemination practices

Users indicated the limited means of data dissemination to be a serious problem and costly for users. Lack of electronic means of data dissemination not only limited access to users but also seriously prohibited the equal access to information. (The MOFNP does not have a website.) Users were generally dissatisfied with the accessibility of national accounts and

balance of payments statistics. Except for access to national accounts and balance of payments statistics, they have adequate access to information pertaining to official statistics, such as explanatory notes, methodological descriptions, references concerning concepts, classifications, and statistical practices.

In the absence of a publicly disseminated calendar that announces in advance the dates when official statistics are disseminated, users rely on past experience and unofficial channels to indicate when key hardcopy statistical publications are likely to be released, but they noted frequent delays. They were aware that more current data can often be obtained by contacting the data-producing agency directly. To this end, many users have attempted to cultivate personal contacts at these agencies, either directly or by email. Many have found these arrangements burdensome and frequently unsatisfactory. Particular challenges are for national accounts, balance of payments, and fiscal statistics. Users did not have information regarding prior access, but they believe that it happens.

Overall assessment of data quality

Users were asked to rank the overall quality of official statistics on a scale of one to five, with *one* rated as poor and *five* as excellent. On this scale, monetary statistics and CPI were rated relatively well, while national accounts were rated relatively poorly. Users indicated the needs for statistical agencies to provide better access to statistics to nongovernmental users and on a more level playing field

Table 6. Questionnaire Results Analyzed by Type of User

Type of Respondent	Total Sent	Total Received	In percent Received
Financial Institution	19	6	
Government and State-owned agencies	7	3	
Representative Offices	8	5	
Universities (researcher)	3	3	
Media	7	3	
Other Private Enterprises	18	5	
Total	62	25	

Zambia—General Information about Uses of Official Macroeconomic Statistics of Zambia	
	Number of Responses
6. Which official statistics do you use regularly?	
a. National accounts (NA)	14
b. Prices	21
c. Government finance statistics (GFS)	13
d. Monetary statistics (Monetary)	17
e. Balance of payments (BOP)	13
f. Other:	
• Production indices	5
• Labor market	7
• Merchandise trade	5
• International reserves and foreign currency liquidity	4
• External debt	8
• International investment position	5
• Other	1
7. Where do you obtain the official statistics?	
a. Official press releases and publications on macroeconomic statistics	20
b. Private sector summaries and analyses	3
c. Official policy papers	8
d. Publications from international organizations about the country	11
e. Other sources	3
8. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?	
• Yes	17
• No	4
9. For what purposes do you use the official statistics?	
a. Analysis of current developments for short-term decision making	20
b. Analysis of trends for longer-term policy formulation?	ten
c. Econometric model building and forecasting	ten
d. Economic research	11
e. Comparison with economic developments in other countries	ten
f. General economic background	ten
g. Other	17

General Information about Uses of Official Macroeconomic Statistics of Zambia						
	NA	Prices	GFS	Monetary	BOP	Other
10. Coverage and detail						
5.1 In general, are you satisfied with the coverage of official statistics?						
• Yes	6	16	9	16	7	1
• No	6	3	2	1	5	0
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?						
• Yes	8	15	7	13	6	1
• No	3	3	4	1	5	0
11. Periodicity and timeliness						
6.1 Are you satisfied with the frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly, and annual)?						
• Yes	5	12	5	9	5	0
• No	5	5	6	5	5	2
6.2 In general, do you consider that the official statistics are disseminated with the appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)?						
• Yes	5	12	5	9	3	0
• No	6	5	8	7	8	1
12. Other dissemination practices						
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dates on which the various official statistics will be disseminated?						
• Yes	2	6	3	3	2	0
• No	ten	13	11	12	11	2
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?						
• Yes	2	2	2	1	0	0
• No	5	7	3	5	4	0
7.3 Is there enough information about revisions to official statistics?						
• Yes	3	7	4	6	3	0
• No	7	8	7	5	7	1
13. Accessibility						
8.1 Can you easily access the official statistics?						
• Yes	5	18	ten	14	7	0
• No	5	2	2	4	7	0

General Information about Uses of Official Macroeconomic Statistics of Zambia						
	NA	Prices	GFS	Monetary	BOP	Other
8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, methodological descriptions, reference concerning concepts, classification, and statistical practice)?						
• Yes	4	11	6	ten	4	0
• No	9	8	7	7	9	0
					Yes	No
8.3 Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you?					8	4
8.4 How do you get access to official statistics?						
• Official releases						16
• Hard copy publications						19
• Data specifically requested						7
• Official website						11
• Other						1
• E-mail requests						4
	NA	Prices	GFS	Monetary	BOP	Other
14. Overall assessment						
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?						
• Yes	7	8	8	ten	5	1
• No	1	5	1	3	3	0
9.2 In general, do you consider the official statistics to be unbiased and accurate?						
• Yes	5	8	8	11	6	0
• No	4	7	4	4	5	1
9.3 How would you compare the quality of official statistics of the country with those of other countries in the region?						
• Better	0	1	4	4	2	0
• Same	4	8	3	6	3	1
• Worse	3	3	3	2	3	0
9.4 How do you assess the overall quality of the official statistics? (1 rated as poor and 5 as excellent)						
	2.6	3.7	3.5	4.0	3.3	2

NA = National Accounts; Prices refers to: CPI (Consumer Price Index) and PPI (Producer Price Index); GFS = Government Finance Statistics; Monetary = Monetary Statistics; and BOP = Balance of Payments Statistics

Comments by Users of Macroeconomic Statistics June 3, 2004

Additional comments, including areas where you see room for improvement:

Summary of results of survey of data users

Accuracy and Reliability

- Composition of CPI data sources should be enlarged.
- NA data should be updated and coverage improved.

Serviceability

- Published detail should be improved.
- NA should be compiled quarterly.
- CPI should be available weekly.

Accessibility

- Official statistics should be published in the press.
- Copies of economic bulletins should be more widely available.
- There is need to announce dates of release of data and adhere to these dates.
- BOZ may have good quality statistics but this is not readily available; e.g., BOP statistics are not on the website.
- BOZ should put more statistics on the website.
- Publication of price statistics should be more sector-specific.
- Accurate data on public expenditure in agriculture difficult to come by.
- Merchandise data on machinery and agricultural products not available.