

**Mauritius: Report on Observance of Standards and Codes—
Data Module, Response by the Authorities, and Detailed Assessment Using the
Data Quality Assessment Framework (DQAF)**

This Report on the Observance of Standards and Codes on Data Module for Mauritius 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 July 1, 2008. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mauritius or the Executive Board of the IMF.

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

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MAURITIUS

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

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July 1, 2008

The Report on the Observance of Standards and Codes (ROSC)—Data Module provides an assessment of Mauritius's macroeconomic statistics against the *Special Data Dissemination Standard (SDDS)* complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework (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 and producer price indices, government finance, monetary, and balance of payments statistics. The agencies that compile the datasets assessed in this report are the Central Statistics Office and the Bank of Mauritius.

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

Central Statistics Office (<http://www.gov.mu/portal/site/cso>)

Bank of Mauritius (<http://bom.intnet.mu/>)

This report is based on information provided prior to and during a staff mission from November 29–December 7, 2007 and publicly available information. The mission team comprised Claudia Dziobek (mission chief), John Joice, Maria Mantcheva, Silvia Matei, Roman Skarzynski, Louis Venter, and Brett Humburg (Information Management Assistant).

Contents	Page
Acronyms	3
I. Overall Assessment.....	4
II. Assessment by Agency and Dataset	5
III. Staff’s Recommendations	15
 Tables	
1. Data Quality Assessment Framework July 2003—Summary Results.....	6
2a. Assessment of Data Quality—Dimensions 0 and 1—Central Statistics Office	7
2b. Assessment of Data Quality—Dimensions 0 and 1—Bank of Mauritius.....	8
3a. Assessment of Data Quality—Dimensions 2 to 5—National Accounts.....	9
3b. Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index.....	10
3c. Assessment of Data Quality—Dimensions 2 to 5—Producer Price Index.....	11
3d. Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics	12
3e. Assessment of Data Quality—Dimensions 2 to 5—Monetary Statistics.....	13
3f. Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments Statistics	14
 Appendix Table	
1. Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data ..	17

ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
BOM	Bank of Mauritius
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
COICOP	Classification of Individual Consumption by Purpose
CSO	Central Statistics Office
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
FSC	Financial Services Commission
GDDS	General Data Dissemination System
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics</i> , 1986
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HBS	Household Budget Survey
ISIC	International Standard Industrial Classification of Economic Activities
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard

I. OVERALL ASSESSMENT

1. Mauritius has participated in the General Data Dissemination System (GDDS) since September 21, 2000. The authorities have expressed their interest in subscribing to the Special Data Dissemination Standard (SDDS) by the end of 2008. The assessment was therefore conducted against the SDDS. For most of the datasets, Mauritius meets the specifications for coverage, periodicity, and timeliness. Plans are in place to address remaining issues except for offshore financial entities, which are not included in the coverage of the external sector statistics. An action plan will be needed to address this issue. Appendix I provides an overview of Mauritius dissemination practices compared to the SDDS.
2. The quality of the macroeconomic statistics in Mauritius has improved significantly since the previous assessment conducted in 2001. Quarterly national accounts were successfully put in place and the scope of price indices was expanded, in particular for the producer price indices. Work is well advanced to implement the new international methodology for government finance statistics (*Government Finance Statistics Manual 2001 (GFSM 2001)*).
3. In applying the IMF's Data Quality Assessment Framework (DQAF July 2003), the remainder of this section presents the mission's main conclusions. The presentation is done at the level of the DQAF's quality dimensions, by agency for the first two dimensions and across datasets for the remaining five.
4. Concerning the prerequisites of quality, the legal framework for statistics is strong, although the responsibility to compile government finance statistics is not legally assigned. Plans underway to establish an independent statistical agency with a broader mandate may further enhance the system. Resources are not sufficient for the existing statistical program in the Central Statistics Office (CSO) and the Bank of Mauritius (BOM), although the BOM is in the process of filling additional staff positions. Efforts to monitor the relevance of monetary and balance of payments statistics should be stepped up. The authorities are committed to adhering to internationally accepted standards and good practices, as demonstrated by their engagement in subscribing to the SDDS.
5. Concerning assurances of integrity, both the CSO and the BOM staff have a high level of professionalism and internal guidelines to maintain high ethical standards are in place. Advance notice should be given to users when the methodology is changed in monetary and balance of payments statistics. Also, internal access to these data, or approval for their dissemination to the public, by government officials should be publicly identified for government finance and balance of payments statistics.
6. On methodological soundness, national accounts, price, and government finance statistics are generally sound. For monetary and balance of payments statistics, improvements in all elements are recommended, in particular the coverage of resident global license entities for balance of payments statistics and the discontinuation of the outdated analytical framework for compiling and disseminating monetary statistics.

7. On accuracy and reliability, several issues are noted regarding national accounts, producer price, and balance of payments statistics, especially concerning source data and statistical techniques. Revision studies should be undertaken more regularly.
8. On serviceability, the periodicity and timeliness practices do not meet SDDS requirements for the producer prices index and government finance statistics. There is room to improve data consistency across all data sets. Revision policies should be strengthened in all areas except for national accounts.
9. On accessibility of data, improvements are proposed in all areas. Metadata accessibility should be strengthened for producer price, monetary, and balance of payments statistics. Assistance to users is generally strong, but contact information for balance of payments statistics is lacking. Advance release calendars are not available for government finance, monetary, and balance of payments statistics.
10. With the assistance of the Ministry of Finance and Economic Development and to complement the assessment, a survey was conducted among users of macroeconomic statistics. Questionnaires were sent to 150 users; about 70 responses were received from a broad range of users, including government agencies, private and public enterprises, foreign representations, banks, and academic institutions. Users were asked to evaluate the coverage, periodicity, timeliness, dissemination practices, accessibility, and overall quality of the official statistics. A meeting with users was held. Users expressed general satisfaction with the overall quality of the statistics produced by CSO and the BOM. Users felt that the statistics were generally as good as or better than those disseminated by other countries in the region. The users raised some of the issues highlighted in the mission's recommendations.
11. Section II provides a summary assessment by agency and dataset based on a four-part scale. This is followed by staff recommendations in Section III. Practices compared to the SDDS are summarized in Appendix I. The authorities' response to this report and detailed assessments are presented in separate documents.

II. ASSESSMENT BY AGENCY AND DATASET

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

Table 1. Mauritius Data Quality Assessment Framework—Summary Results

Dimensions/Elements		Datasets						
		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics	
0. Prerequisites of quality								
0.1	Legal and institutional environment	O	O	O	LO	O	LO	
0.2	Resources	LO	O	LO	LO	LO	LNO	
0.3	Relevance	O	O	O	O	O	LO	
0.4	Other quality management	O	O	O	O	O	O	
1. Assurances of integrity								
1.1	Professionalism	O	O	O	O	O	O	
1.2	Transparency	O	O	O	LO	LO	LO	
1.3	Ethical standards	O	O	O	O	O	O	
2. Methodological soundness								
2.1	Concepts and definitions	O	O	O	LO	O	O	
2.2	Scope	LO	LO	O	O	LO	LO	
2.3	Classification/sectorization	O	O	O	O	LO	LO	
2.4	Basis for recording	LO	O	O	O	LO	LO	
3. Accuracy and reliability								
3.1	Source data	LO	O	LO	LO	O	LNO	
3.2	Assessment of source data	O	O	O	O	O	LNO	
3.3	Statistical techniques	LNO	O	LO	O	O	LO	
3.4	Assessment and validation of intermediate data and statistical outputs	LO	O	O	O	O	LO	
3.5	Revision studies	O	O	LNO	NO	LO	NO	
4. Serviceability								
4.1	Periodicity and timeliness	O	O	LO	LO	O	O	
4.2	Consistency	LO	O	O	LO	LO	LNO	
4.3	Revision policy and practice	O	LO	LO	LO	LNO	LNO	
5. Accessibility								
5.1	Data accessibility	LO	LO	LO	LO	LO	LO	
5.2	Metadata accessibility	O	O	LNO	O	LO	LNO	
5.3	Assistance to users	O	O	O	O	LO	LO	

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

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

Table 2a. Mauritius Assessment of Data Quality—Dimensions 0 and 1—Central Statistics Office

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment. The Central Statistics Office (CSO) is responsible for compiling and disseminating national accounts (NA) statistics, price statistics, and government finance statistics (GFS). The Statistics Act of November 30, 2000 clearly defines the authority of the CSO for compiling and disseminating NA and price statistics. However, the CSO is not assigned legally the responsibility to produce GFS. The Act also ensures mandatory data reporting and guarantees confidentiality of the individual reporters' data. Data sharing and coordination among the producing agencies are adequate. In addition, the Statistics Advisory Council advises the Minister responsible for statistical matters on coordination of statistical activities in Mauritius.</p> <p>Resources. Staff resources are generally not commensurate with the need to maintain the current statistical programs and to meet international statistical requirements. Besides, staff needs training in international methodological standards. The compilation of NA and price statistics requires additional software facilities.</p> <p>Relevance. The relevance of the statistics is driven by the user needs, which are monitored adequately through periodic user surveys or feedback from users.</p> <p>Other quality management. Quality awareness is evidenced by the mission statement of the CSO, as well as third party audits on quality assessment. Since joining the General Data Dissemination System (GDDS) in 2000, the CSO has undertaken major efforts to improve the quality of its statistics and expand the coverage towards adherence to the Special Data Dissemination System (SDDS).</p>	<p>Professionalism. The legal environment supports the independence of the CSO. The Statistics Act stipulates that statistics are compiled on an impartial basis, and the choices of sources and techniques are based on statistical considerations. The principle of objectivity in data collection, processing, and dissemination is firmly adhered to. There is no external interference in the collection, compilation or dissemination of statistics. The statistical releases are independent of any ministerial commentary that may be given subsequently.</p> <p>Transparency. The Statistics Act defines the terms and conditions under which statistics are produced and disseminated by the CSO. The CSO provides the Minister responsible for statistical matters main highlights of the quarterly publications one day before public release. The provision of such estimates is made known to the public. However, the internal approval process of GFS is not publicized. Products of the CSO are clearly identified as such. The CSO is mentioned as the principal source by the media. Advance notice is given to the users whenever there are major changes in methodology, source data, and statistical techniques.</p> <p>Ethical standards. Staff behavior is guided by the Code of Ethics for public Officers and the Official Secrets Act. The CSO has also published a “<i>Customer Charter</i>” which outlines the commitment of CSO staff towards users.</p>

Table 2b. Mauritius Assessment of Data Quality—Dimensions 0 and 1—Bank of Mauritius

<p>0. Prerequisites of quality</p>	<p>1. Assurances of integrity</p>
<p>Legal and institutional environment. The statistical work of the Bank of Mauritius is governed by the 2004 Bank of Mauritius Act. The BOM’s responsibility for processing and disseminating statistics is clearly specified in Section 5(1)(d) of the Act, which lists among the BOM’s functions the responsibility to collect, compile, and disseminate, on a timely basis, monetary and related financial statistics. To this end, Section 51(1) gives the BOM the power to require information and data from financial institutions. Similarly, Section 51(A) charges the BOM with the responsibility for compiling the balance of payments statistics and gives the BOM the authority to request from any person information and data that are necessary for compiling the balance of payments and external position data. Data sharing and coordination appear to be adequate for monetary statistics. For balance of payments, improvements are necessary for collection of data on Global Business Licence Holders. Confidentiality rules for individual disclosure are not in place.</p> <p>Resources. Staff resources for compiling monetary statistics are broadly adequate, but additional staff are required for balance of payments statistics as more surveys are necessary. Further formal training and on-the-job experience are needed for staff in both monetary statistics and balance of payments. Computing resources and physical facilities are adequate. Measures to ensure efficient use of resources are implemented, although more effort is needed to streamline the reporting arrangements for the depository corporations.</p> <p>Relevance. A number of advisory and oversight bodies have the authority to monitor the accuracy, timeliness, and coverage of monetary and balance of payments statistics, including the Statistics Advisory Council, the Banking Committee, and the BOM’s technical committee on statistics that comprises representatives of all depository corporations. Users’ needs are monitored through surveys and meetings of the technical committee on monetary statistics, but there is no formal monitoring of users’ needs for balance of payments statistics.</p> <p>Other quality management. Management is aware of the need to maintain quality as shown for example by the recent reorganization within the BOM to create a statistics division.</p>	<p>Professionalism. The statutory provisions under which the BOM compiles the monetary statistics and balance of payments are adequate to support its independence in conducting these functions. Specifically, Section 3 (3) of the BOM Act grants the BOM independence in performing its functions. Statistics are compiled on an impartial basis and staff are free to choose the most appropriate data sources and statistical techniques. The professionalism of the staff is promoted through participation in external courses and on-the-job training, although no current members of staff have attended a training course on balance of payments statistics for several years.</p> <p>Transparency. Practices are not always transparent. For example, (i) the public is not always given an advance note of major changes in methodology; and (ii) the balance of payments statistics are not clearly identified as being compiled by the BOM.</p> <p>Ethical standards. The BOM Act provides broad ethical guidelines for employees of the BOM and, in addition, the staff of the BOM are bound by a formal code of conduct promulgated by the Bank. The BOM has the right to comment on erroneous interpretation and misuse of the statistics, although this right is rarely exercised.</p>

Table 3a. Mauritius 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 national accounts (NA) are compiled in accordance with the <i>System of National Accounts 1993 (1993 SNA)</i>.</p> <p>Scope. The CSO compiles and disseminates (i) annual and quarterly GDP at current and constant prices by activity; (ii) annual and quarterly expenditures of GDP at current and constant prices; (iii) components of annual value added by activity; (iv) a sequence of annual accounts for the total economy (up to the capital account); and (v) supply and use tables (SUT) and input/output tables. The production, economic, and the asset boundary are broadly in accordance with the <i>1993 SNA</i>. However, valuables and some intangible assets are not included into the assets boundary.</p> <p>Classification/sectorization. Institutional units, transactions, and other flows are classified according to the <i>1993 SNA</i>. The activity, product, trade, and purpose classifications are consistent with international standards.</p> <p>Basis for recording. Market prices are used for valuation of stocks and flows. Recording is done on an accrual basis, with the exception of some government and balance of payments transactions.</p>	<p>Source data. The NA are compiled from comprehensive annual and quarterly data collection programs based on a statistical register. However, the accuracy of the data is reduced by the different accounting years of the units and the lack of information on valuation of changes in inventories.</p> <p>Assessment of source data. Source data are adequately checked for coverage, sampling, and nonsampling errors.</p> <p>Statistical techniques. Production approach GDP estimates are sufficiently detailed. Expenditure GDP aggregates are compiled independently, except for changes in inventories. Annual NA in constant prices are compiled in average prices of the previous year, while QNA are compiled in 1999 prices. Techniques for deriving volume measures of value added for some activities, taxes, and some expenditure aggregates do not follow international standards.</p> <p>Assessment and validation of intermediate data and statistical output. Statistical discrepancies in intermediate data are assessed and investigated. The GDP estimates at current prices are balanced through supply and use tables only every five years.</p> <p>Revision studies. Studies of revisions are carried out and documented routinely.</p>	<p>Periodicity and timeliness. Periodicity and timeliness of the NA data do not meet SDDS requirements.</p> <p>Consistency. The NA data are consistent with the balance of payments data and the government finance statistics data. However, the statistical discrepancy between the GDP by activity and by the expenditure approach is not shown explicitly, but together with changes in inventories.</p> <p>Revision policy and practice. The revision cycle is predetermined and known by the public. Preliminary data are clearly identified. The revised data are disseminated with analysis explaining the difference with the preliminary data.</p>	<p>Data accessibility. Data are disseminated in hardcopy publications and on the web site of the CSO. National accounts data are presented in a clear manner. However, volume measures of GDP aggregates are available only on request. Seasonally adjusted QNA are not published. The release schedule for the national accounts data is preannounced. National accounts are made available to all users at the same time.</p> <p>Metadata accessibility. Detailed metadata on concepts, definitions, and sources are available in hardcopy publications and on the website. The level of details meets the user requirements.</p> <p>Assistance to users. Catalog of publications and information on the contact person for national accounts is available to the users.</p>

Table 3b. Mauritius 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. Concepts and definitions used in the compilation of the CPI broadly follow international practices and are in line with the recommendations of the Consumer Price Index Manual. CPI concepts include some mixed elements of expenditure under its scope to accommodate users' needs.</p> <p>Scope. The index covers the expenditures of all households having the Mauritian nationality, but excludes the resident foreign workers mainly engaged in the textile industry or construction). Imputed rentals of owner-occupied dwellings are excluded; instead, interest paid on mortgages is included.</p> <p>Classification/sectorization. Classification systems follow international guidelines. The commodities in the CPI are classified according to the Classification of Individual Consumption by Purpose, including 12 divisions, 42 groups, and 84 commodity classes.</p> <p>Basis for recording. Goods and services are generally recorded on an accrual basis, as required by international guidelines.</p>	<p>Source data. Source data for prices and weights are adequate. Weights are derived from the quinquennial household budget survey (HBS), which serves as basis for regular updates of the index. The new CPI series has July 2006-June 2007 as base period and the weights are derived from the 2006/07 HBS. Source data and a timely collection support an early release of the CPI.</p> <p>Assessment of source data. Source data are analyzed in the context of revisions. Prices collected are verified according to established procedures for checking price quotations.</p> <p>Statistical techniques. Statistical techniques are broadly in line with recommended practice. The geometric mean formula is used to compile elementary indices and Laspeyres for the upper-level indices. Treatment of missing prices, disappearance of products, and quality adjustment are adequate. Seasonal adjustment is made for the vegetable group using the 12-month moving average price. The weights emerging from the HBS are adjusted for known underreporting in particular items, such as tobacco or alcoholic beverages.</p> <p>Assessment and validation of intermediate data and statistical outputs. Validation procedures are in place. Relevancy checks of the elementary indices are made and any unusual movements are checked.</p> <p>Revision studies. Revision studies on weight revisions are published.</p>	<p>Periodicity and timeliness. The CPI is published on a monthly basis within five working days after the end of the month, meeting SDDS requirements.</p> <p>Consistency. Consistent time series data are available without break for the periods between successive five-yearly HBSs.</p> <p>Revision policy and practice. The weight revision schedule follows a well-established cycle of five years, known to the public. However, the revision policy is lacking in disseminating comparative series for the period following the introduction of a new base and weights. Chain-linked long-term time series are not prepared.</p>	<p>Data accessibility. The main results of the CPI are disseminated every month on the Internet and in the <i>Government Gazette</i>. However, data for only the 12 divisions are available to the public. Additional analyses are included in the dedicated publication- <i>Economic and Social Indicators</i>. An advance release calendar is posted on the website. Detailed indices are available free of charge upon request at the CSO.</p> <p>Metadata accessibility. Metadata are produced at various levels of detail and are available in print and on the website. Comprehensive descriptions of both the HBS and CPI methodologies are published every five years in the relevant issue of the HBS publication.</p> <p>Assistance to users. Adequate service and support to users is provided upon request. Contact person and coordinates are mentioned in the GDDS metadata and in the CSO's publications.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions. PPIs covering the domestic market are separately prepared for (i) the manufacturing sector (PPI-M), (ii) the agricultural sector (PPI-A), and (iii) the construction sector (PPI-C). The PPI-M and PPI-A are output price indices, as opposed to the PPI-C, which is an input price index. The PPIs covered by this report (PPI-M and PPI-A) broadly follow internationally accepted concepts. For PPI-A, output is priced at the primary wholesaler but adjustments are made to obtain proxies for farm-gate prices.</p> <p>Scope. For the above-referred coverage retained by the country, the scope of the PPIs is broadly consistent with internationally accepted guidelines.</p> <p>Classification/sectorization. The activities and products covered by PPIs are classified according to the National Standard Industrial Classification of Economic Activities (NSIC), which is compatible with ISIC Rev. 3 at the four-digit level.</p> <p>Basis for recording. Recording is broadly consistent with international guidelines. Ex-factory gate prices are collected for the PPI-M and adjusted wholesale prices are used for the PPI-A. (root crops and fresh vegetables).</p>	<p>Source data. Source data generally accord with international guidelines. However, due to the financial year accounting, there is an excessive 12–15-month lag before incorporating the new weights following the revision of the base year that occurs every five years. Also, adjustment to the current period price used for the compilation of sugar cane data (representing over 60 percent of the PPI-A) is not made.</p> <p>Assessment of source data. Standard editing procedures are used to validate the source data. The source data on prices are routinely reviewed by compilers for temporal consistency. Any large discrepancies are subject to verification with the provider.</p> <p>Statistical techniques. A Laspeyres formula is used to aggregate the elementary indices, compiled as weighted averages of price relatives. Weights are not price updated in the PPI-M (2002 weights and 2003 base period). A seasonal-basket concept (12 different baskets targeting seasonal products) is employed to deal with seasonality in the PPI-A. PPI-M are not seasonally adjusted. Treatment of new products also requires reconsideration to align with good practices.</p> <p>Assessment and validation of intermediate data and statistical outputs. Validation procedures are in place. PPIs are compared against other price indices, as applicable.</p> <p>Revision studies. Revision studies of periodic weight/base change are not conducted but internal analyses are made.</p>	<p>Periodicity and timeliness. The periodicity of indices is monthly but due to the frequency of data collection, dissemination is quarterly, which is not in accordance with SDDS requirements. The indices are released 10–12 weeks (PPI-M) or 8–10 weeks (PPI-A) after the reference quarter.</p> <p>Consistency. The PPIs are internally consistent and comparable with related sub-indices of the CPI.</p> <p>Revision policy and practice. The regular revision of provisional PPI-A indices for some products is known to the public and data are clearly identified. The weight revision schedule follows a well-established cycle of five years, known to the public. However, consistent long-time series are not available and series are not linked.</p>	<p>Data accessibility. Dissemination media and format are adequate. Level of detail is satisfactory for PPI-M. An advance release calendar is posted on the website. More details are available free of charge upon request, but this is not publicized.</p> <p>Metadata accessibility. Limited explanatory notes on the methodology are published in the <i>Social and Economic Indicators</i> and also posted on the Internet. However, detailed methodological notes are not yet prepared.</p> <p>Assistance to users. The CSO has a contact person available to provide further assistance if required. The name of contact persons and contact information are indicated in the publications and the GDDS metadata.</p>

Table 3d. Mauritius 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. The methodology for compiling statistics on government operations is consistent with the <i>1986 Manual on Government Finance Statistics (GFSM 1986)</i>. The definition of general government is in line with international standards. A detailed migration path to <i>GFSM 2001</i> is not available.</p> <p>Scope. The data include all general government institutions and their transactions. Published data include budgetary central government, consolidated central government and consolidated general government.</p> <p>Classification/sectorization. The sectorization/classification of government agencies and their transactions are in accordance with the <i>GFSM 1986</i> methodology. GFS data are provided separately for each level of government. Data on central government debt are classified between domestic and foreign and according to debt holder and instrument.</p> <p>Basis for recording. Data are available on a cash basis and foreign currency transactions are converted into local currency using the official foreign currency rate prevailing at the time the payment is effected.</p>	<p>Source data. Data on transactions of budgetary central government and regional governments are based on final accounts. Data on other units of central government are derived from audited/unaudited accounts submitted by social security funds, extrabudgetary units, and local governments. Central government debt data are obtained from the records held by the Debt Management Unit of the MOFED, the Bank of Mauritius, and Accountant-General.</p> <p>Assessment of source data. The source data are analysed for misreporting and checked for temporal consistency and consistency with other related data. Data inconsistencies are queried.</p> <p>Statistical techniques. Where necessary, sound techniques are in place and are based on accepted statistical processes.</p> <p>Assessment and validation of intermediate data and statistical outputs. Expenditure and revenue data are cross-checked for consistency with other ad-hoc data obtained from government institutions, and data from the Mauritius Revenue Authority.</p> <p>Revision studies. No revision studies are conducted.</p>	<p>Periodicity and timeliness. Consolidated general government data are available annually within 9–10 months, which does not meet SDDS requirements. Budgetary central government data are available on a monthly basis within one month. Central government debt data and debt guaranteed by the central government are available quarterly within one quarter.</p> <p>Consistency. Consistent time series are available. The government finance statistics are consistent with national accounts and balance of payments statistics. The government financing components are consistent with corresponding debt stocks. No regular consistency checks or reconciliations are performed between government and monetary statistics.</p> <p>Revision policy and practice. In general, data are not revised; however, this revision policy is not made clear to the public. The status of the data is clearly defined.</p>	<p>Data accessibility. Data are presented in the <i>GFSM 1986</i> analytical framework. Data are presented for revenue, expenditure, lending minus repayments, overall balance (surplus/deficit), and foreign and domestic financing. Separate presentations cover each level of government. Data on central government debt are disseminated according to debt holder, instrument, and maturity as well as debt guaranteed by the central government. Additional series are disseminated to meet a range of users' needs with various levels of details. The data are disseminated in a clear manner with charts and tables to facilitate analysis. An advance release calendar (ARC) is available for the publications of the CSO. However, no ARCs are available for monthly data on central government operations or outstanding central government debt.</p> <p>Metadata accessibility. The "<i>Digest of Public Finance Statistics</i>" includes a description of concepts and definitions of the <i>GFSM</i> methodology. Detailed metadata are available to users through a link to the IMF Website.</p> <p>Assistance to users. Contact persons and their phone numbers are identified in the GFS publications. The Government Gazette contains a list of publicly available publications.</p>

Table 3e. Mauritius 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. The analytical framework for compiling monetary statistics reflects concepts and definitions of the <i>Monetary and Financial Statistics Manual (MFSM)</i>. Sectoral balance sheets and surveys are compiled for the central bank and other depository corporations (ODCs). The central bank survey is consolidated with the ODCs Survey to produce the Depository Corporations Survey (DCS).</p> <p>Scope. Institutional coverage includes: the Bank of Mauritius (BOM), 20 universal banks, and 13 nonbank deposit-taking institutions. However, no information is available at the BOM on mutual funds, some of which may need to be included in the coverage. Also, M1 and M2 aggregates are based on data that exclude non-bank depository corporations.</p> <p>Classification/sectorization are consistent with the <i>MFSM</i>, except for the sectorization of the National Pension Fund, which is included as a financial corporation rather than as a part of the central government subsector.</p> <p>Basis for recording. Valuation principles applied by the BOM and ODCs are in general consistent with the <i>MFSM</i> guidelines. However, M1 and M2 aggregates are compiled on a cash rather than on an accrual basis.</p>	<p>Source data. Data for the BOM and the ODCs are derived from accounting records. Data sources are timely and reasonably approximate the definitions, scope, classifications, valuation, and time of recording required for monetary statistics.</p> <p>Assessment of source data. Source data are checked for intertemporal consistency and, when needed, out-of-trend values are verified in direct contacts with reporting units.</p> <p>Statistical techniques. Compilation procedures are to a great extent automated and minimize processing time and errors (e.g., coding, editing, and tabulating errors).</p> <p>Assessment and validation of intermediate data and statistical outputs. Statistical techniques applied in the compilation are sound and a number of built-in consistency checks and validations are used to ensure data consistency.</p> <p>Revision studies. Monetary statistics are considered final when published and are rarely subject to revisions. Occasional revisions are not formally analyzed.</p>	<p>Periodicity and timeliness. The monetary statistics meet the periodicity and the timeliness requirements of the SDDS.</p> <p>Consistency. The monetary statistics are internally consistent and are consistent with the balance of payments data. Intertemporal consistency of monetary data is adequate. Consistency with the balance of payments data is monitored internally within the BOM. Consistency with the government finance statistics is not routinely monitored and no regular reconciliation of the two datasets is carried out.</p> <p>Revision policy and practice. Data are considered final when first publicly released and are not subject to regular revisions. This revision policy is not publicized in national sources. Also, no commentary is provided to the public on the occasional data revisions.</p>	<p>Data accessibility. The presentation of monetary statistics facilitates the interpretation of the data by the users. The data are released simultaneously to all interested parties. However, the schedule for data release is not publicized. Likewise, the policy of making available unpublished data is not publicized.</p> <p>Metadata accessibility. A summary statement of the methodology underlying the compilation of the depository corporations survey was published in the February 2007 issue of the <i>Monthly Statistical Bulletin (MBS)</i>, which is also posted on the BOM website. The BOM website provides built-in hyperlinks to the GDDS metadata posted by the IMF on the Dissemination Standards Bulletin Board (DSBB). However, no detailed description of methodology is available and the GDDS metadata are not current.</p> <p>Assistance to users. Details of contact persons are included in metadata posted on the DSBB; however, these details are not current. Email address for external users queries is provided on the website and in the BOM publications. Requests for data from users inside and outside the central bank are considered on a case-by-case basis.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions. The concepts and definitions used are generally in line with the methodology set out in <i>BPM5</i>.</p> <p>Scope. While all Mauritian entities, including Global Business Licence Holders (“offshore entities”), are in scope, in practice the GBLs are excluded.</p> <p>Classification/sectorization. The classification is broadly consistent with the main aggregates of the <i>BPM5</i> but some detail is not provided (for example, no sector detail is published for Portfolio Investment, or instrument detail for Other Investment).</p> <p>Basis for recording. Transactions are recorded at market prices and converted at the exchange rates prevailing at the time of transaction, except for merchandise trade data, which use exchange rates fixed on a weekly basis. Contrary to <i>BPM5</i>, data are recorded almost entirely on a cash, rather than accrual, basis. In accordance with international standards, current and capital accounts transactions are largely recorded on a gross basis, and financial account transactions are recorded on a net basis. There are some instances where current and financial account transactions are recorded as a single net settlement in the current account.</p>	<p>Source data. The source data for the balance of payments statistics are deficient in a number of areas, including the transactions of the offshore sector and non-cash financial transactions. Most data are timely.</p> <p>Assessment of source data. The compilation procedures include cross-checks of the data and comparisons with related data, and the source data are assessed for response errors. However, the lack of written compilation procedures may lead to classification and compilation errors.</p> <p>Statistical techniques. Statistical techniques are generally sound but there are some areas where improvements could be made (such as updating the split between freight and insurance in the cif/fob adjustment; adjusting interest for withholding taxes).</p> <p>Assessment and validation of intermediate data and statistical outputs. Intermediate results are explored where alternative information is available, but discrepancies are not systematically investigated.</p> <p>Revision studies. Revision studies and analyses are not carried out.</p>	<p>Periodicity and timeliness. The periodicity and timeliness meet the requirements of the SDDS.</p> <p>Consistency. The balance of payments data are consistent over time, with the government external debt data published by MOF, and with the trade data published by CSO. However, the balance of payments and the IIP are not consistent.</p> <p>Revision policy and practice. There is no revision policy, and the public is not informed of the reasons for revisions.</p>	<p>Data accessibility. The balance of payments statistics are released simultaneously to all interested parties through the publication of a table in the <i>MSB</i>. However, there is no formal advance release calendar. The availability of detailed data on request in writing is not publicized.</p> <p>Metadata accessibility. No documentation on the methodology used to compile the data is published by the BOM. There is a hyperlink from the BOM website to the GDDS metadata on the Fund’s DSBB, which gives information on these aspects, but the existence of this hyperlink is not publicized.</p> <p>Assistance to users. There is no contact person or unit identified in the BOM publications. There is no formal system for monitoring and reviewing queries from users to determine whether the existing data meet user requirements. There is no formal catalogue of BOM publications.</p>

III. STAFF'S RECOMMENDATIONS

13. Based on the review of Mauritius'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 developed a set of recommendations. They are designed to increase further Mauritius's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Mauritius's statistics. Some additional technical suggestions are included in the Detailed Assessments volume.

Cross Cutting Recommendations

- Increase staff resources and training.
- Inform users of revision policy and practices; undertake revision studies on a regular basis.
- Improve internal and inter-sectoral consistency of all macroeconomic statistics.
- Implement advance release calendars for all datasets.
- Disseminate data to suit users' needs more adequately (internet vs. hardcopy, analytical presentation, time series format, etc).

National accounts

- Improve the recording of the national accounts transactions to cover the calendar year and to independently measure changes in inventories.
- Implement sound statistical techniques in accordance with the international guidelines for volume measures of GDP; compile volume measures of QNA in previous year prices benchmarked to the annual estimates; apply proper chain-linking methods to derive quarterly time series.

Price Indices

- Examine the impact of weight updates by comparing data for newly reweighted series with previously published data since the reference period of the updated weights.
- Prepare detailed metadata for the producer price indices.

Government Finance Statistics

- Assign the legal responsibility to compile the data on general government to the CSO (e.g. official memorandum of understanding).

- Prepare a detailed migration path to the methodology of the Government Finance Statistics 2001 (*GFSM 2001*) and obtain official approval.

Monetary Statistics

- Discontinue the compilation and dissemination of the cash-based data on reserve money, M1 and M2. If needed for analytical purposes, derive other monetary aggregates (including M1) from the DCS.
- Conduct a survey of mutual funds to ascertain whether they issue close substitutes for deposits and, therefore, qualify for the inclusion in monetary statistics as depository corporations.
- Reclassify the national pension fund as part of the central government subsector.

Balance of Payment Statistics

- Establish confidentiality rules for indirect disclosure.
- Obtain benchmark data of the assets and liabilities (with appropriate instrument detail) of the Global Business Licence Holders. Conduct a quarterly survey on transactions data of major GBLs and include in balance of payment statistics.
- Conduct an annual survey of positions data, based on the results of benchmark data of the largest and most active GBLs and include in international investment position (IIP) statistics. Also include the results of the Coordinated Portfolio Investment Survey in the IIP.
- Increase the coverage of private sector external debt data (notably, for GBLs and banks).
- Adopt the DCS as a data source for balance of payments statistics.
- Use Statements of Inward and Outward Remittances that include the GBL data until surveys are in place to capture these data; carry these estimates back as far as possible.
- Establish a formal mechanism to obtain users' input.

Appendix Table 1. Mauritius: Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comments
		SDDS	Mauritius	SDDS	Mauritius	
Real Sector						
National accounts		Q	Q	Q	Q	
Production index/indices		M	Q	6W <i>(1M encouraged)</i>	Q	Not met
<i>Forward-looking indicators</i>	<i>(encouraged data category)</i>	<i>M or Q</i>		<i>M or Q</i>		
Employment		Q	Q	Q	Q	
Unemployment		Q	Q	Q	Q	
Wages/earnings		Q	A	Q	7–8M	Not met
Consumer price index		M	M	M	5D	
Producer price index		M	M (but dissem. Q)	M	Q	Timeliness not met
Fiscal Sector						
General government operations		A	A	2Q	3Q	Timeliness not met
Central government operations		M	M	M	M	
Central government debt		Q	Q	Q	Q	
Financial Sector						
Analytical accounts of the banking sector		M	M	M	M	
Analytical accounts of the central bank		M <i>(1W recommended)</i>	M	2W <i>(1W encouraged)</i>	2W	
Interest rates		D	D	D	D	
Stock market: share price index		D	D	D	D	
External Sector						
Balance of payments	Not fully met	Q	Q	Q	Q	
Official reserve assets		M <i>(W recommended)</i>	M	W	W	
Reserves template		M	M	M	M	
Merchandise trade		M	M	8W <i>(4–6W encouraged)</i>	8W	
International investment position	Not fully met	A <i>(Q recommended)</i>	A	3Q <i>(1Q encouraged)</i>	7W	
External debt	Not fully met	Q	Q	Q	Q	
Exchange rates		D	D	...	D	
Addendum: Population		A	A	...		

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

Italics indicate encouraged categories.

INTERNATIONAL MONETARY FUND

MAURITIUS

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

Response by the Authorities

July 1, 2008

This document contains the authorities' response to the IMF's data quality assessment (Volumes I and III).

	Contents	Page
I.	National Accounts	3
II.	Producer Price Index (PPI).....	3
III.	Consumer Price Index (CPI).....	3
IV.	Monetary Statistics	4
V.	Balance of Payments and External Debt Statistics	4
VI.	Government Finance Statistics	5

I. NATIONAL ACCOUNTS

Agricultural Cost of Production Survey (ACOPS)

Work on the review of estimates of value added of the agricultural sector based on updated operation ratios obtained from the 2005 agricultural cost of production survey has already started. The publication of the new series will be done together with the rebasing of National Accounts estimates on the results of the 2007 Census of Economic Activities.

Quarterly National Accounts

The Central Statistics Office is currently receiving technical assistance from the Fund to improve the quality of its real sector statistics. The IMF Regional Statistics Advisor (RSA) who was on a two weeks' mission to the Office in February 2008 has been advising on how to address the shortcomings identified by the ROSC assessment. Among the issues that were looked into were:

- (i) Consistency between annual National Accounts and quarterly National Accounts, and chain linking of the quarterly data;
- (ii) Seasonally adjusted quarterly National Accounts; and
- (iii) Volume measures of value added and expenditure aggregates

A second mission is scheduled for July 2008 to look into the remaining shortcomings. Implementation of the recommendations of the IMF advisor has already started. Seasonally adjusted quarterly National Accounts estimates will be published in June this year while other shortcomings will be addressed by the end of the year.

II. PRODUCER PRICE INDEX (PPI)

Work with respect to the computation and dissemination of consistent long time series on Producer Price Indices (PPI) has already been started, while adjustment to current period price used for the compilation of PPI for sugarcane will be made shortly.

Steps will be taken to ensure that appropriate statistical techniques (use of different year for weights and base period, treatment of new products) and revision studies are implemented while reviewing the weights of the price indices due in 2008/2009.

CSO will also ensure that more detailed methodological notes on the PPI are available to users by the end of the year, and that availability of PPI at more detailed level are publicized.

III. CONSUMER PRICE INDEX (CPI)

Recommendations regarding the extension of the scope of the index to include resident foreign workers will be implemented at the next revision of the Consumer Price Index (CPI) in September/October 2012.

Recommendations on the revision policy and practice have already been implemented. Chain-linked long term time series are now included in the quarterly publication 'Economic and Social Indicators' on the CPI and are also posted on the CSO website.

The data accessibility improvements have also been implemented. The detailed indices by COICOP division, group and class have already been posted on the CSO website.

IV. MONETARY STATISTICS

Pursuant to the recommendations of the IMF ROSC mission, the Bank has already implemented some of the recommendations like the posting on the Bank's website of an Advance Release Calendar and the discontinuation of the dissemination of cash-based reserve money and money supply M1 and M2, which are based on the monetary survey.

In the forthcoming issue of the Monthly Statistical Bulletin, the Bank envisages to implement some of the other recommendations like the identification of the Division responsible for compiling monetary statistics, contact persons, status of data and the derivation of other monetary aggregates (including M1) from the Depository Corporations Survey (DCS) framework.

The Bank plans to implement the remaining recommendations like the survey of mutual funds, revision of Sectoral Balance Sheets to provide for the breakdown into national and foreign currencies for all categories of financial instruments in the foreseeable future.

With regard to the discontinuation of reporting arrangements based on the monetary survey framework, we wish to highlight that these data collection forms, that is, the segmental balance sheets, are used by our Supervision Division for their surveillance functions.

With regard to the classification of data for the National Pensions Fund (NPF), we can report that in the event that the Ministry of Finance and Economic Development includes the NPF resources in the consolidated report on government operations, the Bank is prepared to classify the NPF as central government.

V. BALANCE OF PAYMENTS AND EXTERNAL DEBT STATISTICS

The Bank is currently processing the Foreign Assets and Liabilities Survey (FALS) which it launched towards the end of last year and is also assisting the Financial Services Commission (FSC) to survey Global Business Licence Holders (GBLs). Through the results from these two surveys, the Bank expects to fill major data gaps noted in the quality of Balance of Payments (BoP) and International Investment Position (IIP) statistics.

The Bank will identify the Division that is responsible for compiling BoP statistics and prepare a revision policy for BoP statistics as well as their status when the first quarter 2008 BoP statistics will be released, which will be on 17 June 2008.

The Bank, which intends to release the 2007 IIP on 26 September 2008, will ensure that GBLs data and the results of the CPIS are included therein. We also plan to introduce reconciliation between stocks and flows when IIP data are developed.

Advance notification of major changes in methods will be done and disseminated. Notes regarding enterprise survey and International Investment Position (IIP) will be prepared and disseminated too.

Some of the other surveys requested by the ROSC mission have been earmarked as medium-term plans and they will be carried out during the course of next year.

VI. GOVERNMENT FINANCE STATISTICS

A detailed migration path to the methodology of Government Finance Statistics 2001 (GFSM 2001) will be prepared and approval sought for its implementation.

INTERNATIONAL MONETARY FUND

MAURITIUS

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

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by William E. Alexander and Benedicte Christensen

July 1, 2008

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Mauritius'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.

Contents	Page
Acronyms.....	3
I. National Accounts	5
II. Consumer Price Index	32
III. Price Statistics (Producer Price Index)	50
IV. Government Finance Statistics	68
V. Monetary Statistics.....	87
VI. Balance of Payments Statistics	105
 Tables	
1. Summary of Results for National Accounts	30
2. Summary of Results for Price Statistics (Consumer Price Index)	48
3. Summary of Results for Price Statistics (Producer Price Index)	66
4. Summary of Results for Government Finance Statistics	85
5. Summary of Results for Monetary Statistics	103
6. Summary of Results for Balance of Payments Statistics	124
7. Mauritius: Questionnaire received as of November 20, 2007	132
 Appendixes	
I. Summary of the Special Data Dissemination Standard (SDDS).....	127
II. Data Quality Assessment Framework—Generic Framework.....	129
III. Users’ Survey.....	132

ACRONYMS

<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
BEC	Classification of Broad Economic Categories, United Nations, 1989
BIS	Bank for International Settlements
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
CPI	Consumer price index
DQAF	Data Quality Assessment Framework
ECB	European Central Bank
EU	European Union
GDP	Gross domestic product
GFS	Government finance statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics</i> , 1986
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HICES	Household Income and Consumption Expenditure Survey
HBS	Household Budget Survey
ILO	International Labor Organization
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NACE	Statistical Classification of Economic Activities in the European Communities
NSDB	National Summary Data Page
ODCs	Other depository corporations
OECD	Organization for Economic Cooperation and Development
PPI	Producer price index
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
SIS	State Institute of Statistics
<i>SITC</i>	<i>Standard International Trade Classification</i>
SNA	System of National Accounts
SPO	State Planning Organization
UN	United Nations
VAT	Value-added tax

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, prices, government finance, monetary, and balance of payments statistics was gathered from publicly available documents and information provided by the Mauritian 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 Mauritius' s Report on the Observance of Standards and Codes (ROSC)—Data Module.

I. NATIONAL ACCOUNTS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Statistics Act 2000 of November 30, 2000 proclaimed on April 2, 2001 governs the activities of the Central Statistics Office (CSO), under the administration and control of the Director of Statistics.

The Act gives the Director the authority to take any census in Mauritius; and to collect, compile, analyze, abstract, publish and disseminate statistical information relating to the commercial, industrial, financial, agricultural, social, demographic, economic activities and general conditions of the people of Mauritius.

Although national accounts are not specifically mentioned, the first schedule to the Act, which lists thirty-one matters on which the Director may collect statistical information, makes it clear that the CSO is the agency responsible for compiling national accounts.

The Statistics Act is posted on the CSO's website at <http://statsmauritius.gov.mu>

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

The CSO has set up good working relations with Ministries and agencies that produce source data for the national accounts. As working arrangement, staff of the CSO is posted in line ministries. Duplication of collection, which may have existed in the past, is now removed. It should be noted that by Section 7 of the Statistics Act 2000, every ministry, department and statutory body shall provide the CSO with data at the times, in the manner, and for the periods prescribed by the Director of the CSO.

The Director of Statistics is also authorized to coordinate and monitor statistical activities in all Government Ministries and Departments, local authorities and other statutory bodies with a view to implement sound statistical standards and minimize unnecessary duplication and overlap in the collection and publication of statistical information. In addition, the Statistics Advisory Council advises the Minister responsible for statistical matters on coordination of statistical activities in Mauritius.

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

Section 17 of the Act restricts the disclosure of information relating to an individual person or business but also sets out particular circumstances where exceptions are permitted (e.g. with the written consent of the person or owner of the business, for the purpose of a

prosecution under the Statistics Act). Section 18 allows disclosure of information which is in the public domain while under Section 19, the Director may disclose information in the form of individual statistical records solely for bona fide research or statistical purposes provided that (a) all identifying information such as name and address has been removed; and (b) the information is disclosed in a manner that is not likely to enable the identification of the particular person or undertaking or business to which it relates.

Section 20 of the Statistics Act 2000 stipulates that the CSO should take steps to ensure the security and confidentiality of statistical information in whatever forms it is stored. Statistical work is mostly carried out on spreadsheets that have no external electronic links. Individual data are stored under lock and all computers are password protected.

Furthermore, under Section 21 of the Act, the Director shall account for and destroy under strict supervision all individual census and surveys forms containing names and addresses of a person or undertaking or business, after the data have been processed and validated, but not later than five years after the completion of the census or survey.

Finally, Section 22 of the Statistics Act 2000 prescribes the declaration of secrecy required from every person employed in the execution of the Act. The declaration of secrecy is set out in the third schedule of the Act.

Further protection is provided under the Official Secrets Act 1972, Article 3.2.f.

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

Section 13 of the Statistics Act 2000 gives the CSO the power to obtain particulars in respect of any statistical collection carried out in accordance with the Act. The CSO also has access to public or other records if approval of the Minister has been obtained. However, no person is required to supply information on technical processes or trade secrets. Refusal or neglect to provide information, or making untrue statements are offences and are subject to the payment of a fine and imprisonment. The CSO does not have the right to inspect books and records, premises, and stocks of businesses or persons in case of non-compliance.

The CSO implements various measures to encourage voluntary response. For instance, folders explaining the purposes of major surveys are distributed in the English and French languages. Some questionnaires contain a short introduction on the objectives of the survey. The CSO may also make the main results of the survey available to respondents.

0.2 Resources

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

The CSO has been allocated sufficient resources to compile its regular statistics. The national accounts unit has a staff of 7 of whom 3 are professionals, and they compile both annual and

quarterly national accounts. The national accounts staff is well trained in the concepts and definitions of the *1993 System of National Accounts (1993 SNA)*. However, more advanced training in annual and quarterly national accounts compilation techniques is needed. Adequate hardware is available, but training on programs to support the compilation of the national accounts is required.

0.2.2 Measures to ensure efficient use of resources are implemented.

The CSO does not currently estimate the costs of producing individual statistics. Neither does it collect information on how much the burden laid on respondents is. However, with the setting up of Program-Based Budgeting focus on results and performance as from 2007/2008, and the Performance Management System introduced in 2007 that will enable periodic monitoring of staff performance, the capacity of CSO to better manage resources, improve service delivery and respond more effectively to the needs of users will be enhanced.

It is noted that presently the cost of large censuses and surveys, such as the Establishment and Population Censuses or the Household Budget Survey (HBS), is carefully monitored.

0.3 Relevance

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

Two user surveys on national accounts have been carried out (one in 2002 and another one in 2006) to have feedback on the relevance and utility of published data among users. Steps are taken accordingly to incorporate users' needs. Thus, annual estimates of national accounts, which were published twice a year, previously are now published four times a year. Longer backward series are available on the website.

For large-scale establishment surveys like the 5-yearly Census of Economic Activities (CEA), the needs of government ministries and departments are considered.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

Management is sensitive to all dimensions of data quality and promotes a shared concern for quality throughout the organization (in the mission and vision statements emphasis is placed on the quality of statistics produced).

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

Since joining the General Data Dissemination System (GDDS) in 2001, the CSO has undertaken major efforts to improve the quality of its statistics. It is now working towards adherence to the Special data Dissemination System (SDDS).

Monitoring processes (e.g. several third party audits) are in place to inform management on the quality achieved for ongoing statistical activities. Among indicators that are followed are response rates to surveys, revision history, timeliness evaluation and time lag to implement revised international classifications and systems.

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

During the work program planning, there is trade-off among the dimensions of quality (availability of resources, timeliness and accuracy of data). For example, quarterly estimates which are less accurate are rapidly disseminated to allow users to use them for certain tasks; these are reviewed when more up-to date data become available. Also, for in-depth analysis, detailed final statistics are published less frequently and also after a longer time-lag.

Also, the Statistics Advisory Council has, amongst others, the function of advising the Minister on: (i) the improvement, extension, coordination, and harmonization of statistical activities in Mauritius; (ii) the actual and perceived integrity of, and public confidence and trust in, Mauritius's statistics, and, (iii) the maintenance of independence, accuracy, relevance, integrity, timeliness, and professional standard of statistical information produced in Mauritius.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The CSO compiles the national accounts statistics on an impartial basis. The principle of objectivity in data collection, processing, and dissemination is firmly adhered to. There is no external interference in the collection, compilation and dissemination of national accounts estimates carried by CSO. The statistical releases are independent of any ministerial commentary that be given subsequently.

According to the Statistics Act 2000, the Director of the CSO shall ensure the independence of statistical information produced by that agency. The Act also states that the Director has the sole responsibility for deciding the procedure and method to be employed in the provision, as well as the extent, form, and timing of publication and dissemination of any statistics produced by the CSO.

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

The sources and methodology used for national accounts are based on statistical considerations only. The timeframe to publish National Accounts estimates during a given year are decided at the end of the previous year. Dates for publication are given in an advance calendar available on the website of the CSO. On the rare occasions when there are

changes, advance notice and the reasons are posted on the website. Changes in methodologies and data sources appear in the issues preceding the one with the changes.

It should be noted, the CSO can only start data collection (such as the CEA) when regulations have been made by the Minister prescribing the particulars and information to be furnished for the statistics that are to be collected.

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

In Mauritius, it is not deemed appropriate for the Director of the CSO to comment on erroneous interpretation or the misuse of statistics. However, the Statistics Advisory Council set up under Section 23 of the Statistics Act 2000, issues public statements after consultation with the Ministry or Department or other agency involved.

1.2 Transparency

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

The Statistics Act 2000 defines the terms and conditions under which statistics are produced and disseminated by CSO. The Statistics Act is posted on the CSO's website.

Methodologies used for compilation of national accounts are published together with the statistics in the relevant digest and/or in the *Economic and Social Indicators*. These are available on the CSO's website.

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

All users have simultaneous access to the national accounts data released on the website. However, one day before posting on the website, a letter with the main highlights is sent to the Minister of Finance and Economic Development who is responsible for statistics and the Financial Secretary for their information. This fact is made public through the GDSS metadata.

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

Products of the CSO are clearly identified as such, even though various publications also indicate the name of the parent ministry. The CSO is mentioned as the source by media, Government Ministries and Departments and other users whenever its statistics are commented upon or reported.

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

Advance notice is given to the users whenever there are major changes in methodology, source data, statistical techniques and rebasing through the CSO website and in publications preceding the one dealing with the changes.

1.3 Ethical standards

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

Ethical rules for staff are laid down in the Code of Ethics for Public Officers and the Official Secrets Act; both of which are published. The Statistics Act 2000 contains further provisions concerning the faithful and honest fulfillment of duties of staff and the limitations on disclosure of information that comes to their knowledge by reason of employment. The CSO has also published a “*Customer Charter*” which outlines the commitment of CSO staff towards users. New staff is given an induction course and are made aware of the standards when they join the organization.

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.

Mauritius’s national accounts are based on the concepts and definitions of the *1993 System of National Accounts (1993 SNA)*.

2.2 Scope

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

The national accounts statistics cover all tables and accounts that the Inter-Secretariat Working Group on National Accounts (ISWGNA) has defined as a minimum requirement for implementation of the *1993 SNA*, as well as some of the recommended tables and accounts:

annual value added and gross domestic product (GDP) at current and constant (previous year) prices by activity,
 annual expenditures of GDP at current and constant (previous year) prices,
 annual value added components at current prices by activity,
 sequence of accounts for the total economy (up to the capital account) with an annual frequency,
 quarterly value added and GDP at current and constant (1999) prices by activity,
 quarterly expenditures of GDP at current and constant (1999) prices,

supply and use tables and input/output tables

In addition to these, institutional accounts and capital account for the total economy are compiled on an experimental basis. The national accounts cover the full economic territory of the country, that is, the island of Mauritius and its dependencies, which include the islands of Rodrigues, Agalega, and St. Brandon. The delimitation of the constituent units of the economy is in accordance with the *1993 SNA*. Included as part of the economy are territorial enclaves in the rest of the world, units active in the Freeport, and off-shore companies.

The production boundary is mostly in accordance with the *1993 SNA*. Backyard gardening for own consumption is included in household production (and household final consumption expenditure), but with respect to own-account production of other goods, such as dresses made for family members, no estimates are made.

Own-account research and development is not seen as a separate productive activity. The magnitude of such activity is thought to be very limited in Mauritius. The output of goods for own-account fixed capital formation is included in the estimates, but not the production of entertainment, literary or artistic originals that probably are negligible. As in most countries, outright illegal activities, such as drug trafficking is not included. Producers active in the informal sector, such as street-venders and small business contractors are included.

The assets boundary is broadly in accordance with the *1993 SNA*, although there are some deviations. Valuables are not distinguished from consumption assets and historical monuments are not included in the asset boundary. Among intangible assets, the Mauritius's national accounts do not record any data on entertainment, literary or artistic originals, patented entities, or leases and other transferable contracts. However, purchased systems applications, computer software and databases are included.

2.3 Classification/sectorization

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

The classification systems used for national accounts purposes are consistent with internationally accepted standards, guidelines, and good practices. The *1993 SNA* is followed to classify institutional units and transactions. Activities are classified according to the National Standard Industrial Classification (NSIC), which is according to the International Standard Classification of All Economic Activities, Rev. 3 recommended by the United Nations, extended by one additional digit for national purposes. Products are classified by the Central Product Classification. The Classification of Individual Consumption by Purpose (COICOP) is used to classify household consumption and the Classification of the Functions of the Government (COFOG) for functions of government. The Standard International Trade Classification is used to classify international transactions in goods.

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 in accordance with the *1993 SNA*. Market output is valued at basic prices. Output for own use is valued at equivalent market prices. Intermediate consumption is valued at purchaser's values, that is, including trade and transport margins, taxes on products and non-deductible value added tax (VAT). If the VAT is deductible, it is not included. Corrections are made when transfer prices are detected in external transactions. Total imports and exports are recorded on an f.o.b. basis. Estimates on insurance and freight by commodities for imports are estimated by the Bank of Mauritius (BOM). Goods transactions in foreign currency are converted to rupees using an exchange rate that remains fixed for one week.

2.4.2 Recording is done on an accrual basis.

In principle, all transactions are recorded on an accrual basis in accordance with the recommendations of the *1993 SNA*. The basic data for general government, which are on a cash basis, are adjusted for accrual basis with respect to compensation of employees. All transactions in the Rest of the World account (for which the balance of payments compiled by the BOM is the main source), are recorded on a cash basis except for the transactions related to imports and exports of goods. With the setting up of the Charts of Accounts at the Ministry of Finance and Economic Development taking into account recommendations of the *Government Finance Statistics Manual 2001*, it is expected that government accounts would be on accrual basis in the near future.

Work-in-progress is recorded in the period it is produced.

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

The grossing/netting procedures are in accordance with the *1993 SNA*.

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 CSO maintains a Central Business Register (CBR) based on all business activities which are licensed and/or registered. Economic activities conducted without a license or registration are excluded. The register has been constructed on the basis of administrative records on licenses and registrations from district councils, municipalities, the Ministry of Education, the National Transport Authority, the Registrar of Companies, the Medical Council, and the

Bar Council. Licenses are recorded when paid, and the register therefore contains a considerable number of small dormant units or units that have ceased to exist.

With the setting up of a centralized business registration system as from October 2006, all businesses are being registered with the Registrar of Businesses where they are given a unique identifier. The Office will be taking advantage of the system to build up a sound register that caters for the births and deaths of businesses, as well as any changes in activities. Available administrative data that would indicate start and cessation of operation such as VAT and income tax, and database of employers at the Ministry of Social Security will be tapped, while ad-hoc surveys will be conducted to update the register. It is expected that a sound business register will be available by end of 2008.

Data sources include administrative sources, censuses and surveys. The main economic census carried out by the CSO is the Census of Economic Activities (CEA). The Census is conducted every five years and covers all economic activities, except agriculture, fishery, and forestry. The last CEA was carried out in 2002, and currently the CSO is conducting the 2007 CEA. The CEA data are used as benchmark for the computation of annual national accounts estimates.

The CEA is conducted in two phases. Phase I covers a representative sample of “small” establishments (i.e. with less than 10 workers), and itinerant units; data collection is done by interview method, and is spread evenly over the reference year to take care of seasonality. Phase II covers all large establishments with 10 or more workers. Data are collected by mail questionnaires.

The CSO is presently conducting the first phase of the fifth round of the CEA. A sample of 3500 “small” establishments and itinerant units is being surveyed during the period January to December 2007. Itinerant units comprise taxi operators, street vendors, etc. The establishments in the frame (constructed from CBR records) were stratified according to their main activity. Stratum size and heterogeneity within the stratum were considered in allocating the sample to the strata. This results in different sample ratios by activity group, as shown in the following table:

CEA 2007 - Phase I (Small establishments)

Activity group	Population Size (number of establishments)	Sample fraction (number of establishments in % of total)
Total	64,718	4.9
Manufacturing	3,800	17.6
Construction	721	19.3
Wholesale/retail trade, repair of motor vehicles and household goods	39,771	3.7
Hotels and restaurants	3,050	4.9
Transport, storage and communication	10186	2.2
Financial intermediation	123	17.9
Real estate, renting, and business activities	2634	6.1
Education	1284	7.7
Medical, dental, and health services	859	5.4
Other community, social, and personal service activities	2,290	10.1

The CEA collects detailed data on employment, labor cost, production, intermediate consumption, output, investment, etc. From these, technical coefficients are computed; these are assumed to remain fixed for the small establishments and itinerant units for the next five years.

During the inter-census years, annual surveys on receipts and expenditure covering the “large” establishments are conducted. For some industry groups, a complete coverage of “large establishments” is done while in others, a sample including mostly the main drivers is covered. The data requested are less detailed than the CEA. Quarterly surveys among large establishments are also conducted for the computation of quarterly value added. The quarterly surveys cover a sample of the establishments, mostly the main drivers of the various industries.

Extensive use is made of VAT data; VAT data supplement both the annual and quarterly surveys. Other administrative data include trade statistics, building permits, companies accounts deposited at the Registrar of Companies, production data from relevant authorities, excise data from Customs Department, tourist arrivals data from the Passport and Immigration Office, tourist earnings from the BOM, financial report of government from the Account General Department, etc. Thus, for “Construction”, monthly data on building permits are used together with data from surveys on investment among large establishments. Trade margins are computed based on imports data from Customs Department and production data of manufacturers producing goods for local market from VAT Department. Output of “Hotels and restaurants” is mainly based on tourist arrivals available on a monthly basis, and tourism receipts estimates obtained from the Bank of Mauritius. For government

agencies, detailed information is available from the Accountant General Department and from local authorities on a quarterly and annual basis.

Sources of data for “Agriculture, fishing, and forestry” are the Chamber of Agriculture, the Mauritius Meat Authority, Agricultural Research and Extension Unit, and other bodies. The program includes quarterly and annual data collection, except for own-account production on which data are collected every five years by means of household budget surveys. With a few exceptions, recent information on the input structure for agricultural activities is lacking. The Central Statistics Office carried out for the first time an Agricultural Cost of Production Survey (ACOPS) in 2005 to collect data on inputs used in the cultivation of crops with a view to having accurate measures of unit cost of production and updating operation ratios used in the estimation of value added of the agricultural sector. Data on input structure from ACOPS will be used to review estimates produced so far. The review will be done while rebasing the data on the 2007 CEA.

Labor market indicators supplement production data. In March of each year, the Survey of Employment and Earnings collects employment information for a particular day and earnings for the last pay period. This survey covers about 2,600 large establishments representing 57 percent of total employment. The Survey of Employment, Earnings and Hours of Work is carried out among about 500 establishments employing 10 or more persons in September each year. All industry groups are covered by this survey; stratification is made according to industry and size. A more frequent source of employment data is the Continuous Multi-Purpose Household Survey (CMPHS).

The survey program for household operations covers a five yearly HBS and the CMPHS. The two surveys are well-designed and take socio-economic groups, region, expenditure level, size, and ethnic group into account. Also from a scientific point of view, the samples are sound. Data collected through the HBS include data on purchases of consumption goods, purchases of durable goods and production for own account. Expenditure items from the ongoing CMPHS are in the form of aggregates (food and non-alcoholic beverages, medical care, rent, educational expenses, utility bills, etc.), useful for measurement of quarterly changes. For the purposes of the national accounts, more reliable figures on such expenditures are available from imports and local production data.

For external transactions, the foreign trade statistics compiled by CSO and the balance of payments compiled by the BOM are used.

The price statistics includes monthly Consumer Price Index (CPI), Producer Price Index (PPI) and Construction Price Index; quarterly Import and Export Price Index (IPI and EPI), and an annual wage rate index. The CSO is now working towards producing quarterly wage rate index.

The following data sources are used in the compilation of the QNA:

Production approach:

Sugar Cane - Annual production of sugar and final production accounts of sugar factories from the Chamber of Agriculture; and price of sugar from the Mauritius Sugar Syndicate; Survey of sugar factories for the quarterly cost structure

Tea and Tobacco - Quarterly production and prices of tea from Tea Board; Quarterly production and prices of tobacco leaves from Tobacco Board.

Food crops - Monthly quantities of food crops from Agricultural Research and Extension Unit (AREU).

Flowers and Fruits - Quarterly exports of flowers from Trade Statistics supplemented by an estimate for local sales; Monthly production of some fruits from AREU; Quarterly production of other fruits based on the "1985 Survey of fruit trees in backyard"

Livestock, Poultry and Related Products - Quarterly production of poultry from main breeders; Monthly quantity of livestock slaughtered from the Mauritius Meat Authority (MMA).

Government Agricultural Services - Expenditure of Central Government from the Accountant General Department

Fishing - Quarterly quantities of fish caught from the Albion Fisheries Research Centre

Mining & Quarrying - Quarterly quantities of salt produced and sand extracted, and their prices through surveys of establishments

Sugar Milling - Annual production of sugar and final production accounts of sugar factories from the Chamber of Agriculture; and price of sugar from the Mauritius Sugar Syndicate; Survey of sugar factories for the quarterly cost structure

Manufacturing - Quarterly exports from Customs Statistics; Quarterly turnover from the VAT systems; Production of excisable goods from Customs and Excise Department; Level of stock from quarterly stock surveys

Electricity, Gas & Water Supply – Quarterly production accounts from Central Electricity Board and Central Water Authority; Quarterly production accounts of the Independent Private Producers (IPP) (available with one year lag)

Construction - Monthly building permits from Municipalities and District Councils; Quarterly capital expenditure estimates of General Government from Accountant General Department; Maintenance expenditure by Government based on quarterly output of the Ministry of Public Infrastructure from Accountant General Department; Maintenance expenditure by households from latest HBS

Wholesale & Retail Trade, Repair of Motor Vehicles, Motorcycles, Personal & Household Goods - Quarterly imports from Customs statistics; Local production from Agriculture statistics and Industrial statistics

Hotels & Restaurants - Quarterly tourist arrivals from Tourism statistics; Quarterly tourist earnings from Bank of Mauritius; Expenditure on food and accommodation by tourists from Survey of tourist expenditure

Land Transport - Quarterly production accounts of bus companies from National Transport Authority (NTA); Quarterly licenses of taxi cars from NTA; Taxi fares from monthly consumer price surveys; Quarterly tonnage of goods loaded and unloaded from Civil Aviation Department and Customs Department

Water transport - Quarterly number of passengers from Mauritius Shipping Corporation.

Air transport - Quarterly receipts and expenditure from Air Mauritius Ltd.

Services allied to transport - Quarterly receipts and expenditure from Mauritius Ports Authority (MPA) and Cargo Handling Corporation (CHC); Quarterly indicators such as aircraft landings and take offs, and tourist arrivals and Mauritian traveling abroad.

Telecommunication services - Quarterly receipts and expenditure of Mauritius Telecoms Limited.

Financial Intermediation - Quarterly survey among all offshore and commercial banks, and insurance companies

Ownership of dwellings - Number of housing units from Housing Census updated with building permits; Expenditure by household on rent from household budget survey.

Public Administration & Defense; Compulsory Social Security- Expenditure of Central Government from the Accountant General Department; Survey of local government

Education services- Expenditure of Ministry of Education from the Accountant General Department; Annual data on enrolment from the Ministry of Education; Enrolment and fees charged from private schools and Industrial Vocational Training Board; Fees charged for private tuition obtained through consumer price surveys

Health and Social Work - Expenditure of Ministry of Health from the Accountant General Department; Quarterly data on admissions in clinics and hospitals from the Ministry of Health; Number of private medical practitioners from the Ministry of Health; Fees charged from monthly consumer price surveys.

Sanitary Services -Quarterly production accounts of Waste Water Authority; Quarterly surveys among a sample of private companies.

Amusement and Recreational Activities - Monthly data from the from the VAT systems

Personal Services - Quarterly turnover from the VAT systems, Demographic statistics such as births, deaths and marriages, Tourist arrivals

Private Households with Employed Persons - Number of employees based on number of household with domestic employees as collected in Household Budget Survey (HBS).

Expenditure approach:

Final Consumption Expenditure of Household - the Continuous Multi-Purpose Household Survey (CMPHS) and the HBS

Final Consumption Expenditure of General Government - data from the Accountant General Department; Surveys of local government

Gross Fixed Capital Formation

- Residential Building - data on floor area from building permits (with a lag of 1 quarter), data from National Housing Development Company
- Non-Residential Building and Other Construction Work –data on building permits for non-residential buildings (lag by one quarter), data on Government capital expenditure available from the Accountant General Department; surveys.
- Machinery and Equipment
 - Aircraft - information provided by Air Mauritius Ltd and the Accountant General Department.
 - Marine Vessels - information provided by Mauritius Ports Authority
 - Transport Equipment -data on registered vehicles provided by National Transport Authority classified as final consumption expenditure or investment according to purchasers, imports data.
 - Other Machinery and Equipment – imports (from Customs) brought to purchasers' prices by adding taxes and excise duties (from Customs), landing cost (from Mauritius Ports Authority) and margins; output data of local companies producing capital goods; surveys.
- Exports and Imports of Goods and Services s and Imports of Goods and Services - Balance of Payments Statistics (BOP)

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

The source data usually approximate the definitions, scope, valuation and classifications required in the national accounts, but several sources are subject to problems concerning the timing of recording.

The cash recording in the source for most government operations and for data derived from the balance of payments causes the time allocation problems indicated above. The annual enterprise surveys rely on enterprise accounts that partially do not reflect calendar years and cannot be adjusted to calendar years by the CSO. In some cases, when quarterly accounts are available, the quarterly data are aggregated to the annual estimates; this done mainly for the Banking and Insurance sector. In addition, the five-yearly HBS covers the period July-June rather than a calendar year. Labor market data from the CMPHS is however representative of a calendar year.

Changes in stocks are reported as totals only and at values employed by the enterprises themselves, and the CSO does not have an insight as to what valuation systems are being followed.

3.1.3 Source data are timely.

Most source data are available on a sufficiently timely basis. The timeliness of the merchandise trade data has been significantly improved. Following the signature of a Memorandum of Understanding with the Customs Department, data on external trade are now extracted from the Customs Management System and submitted to CSO within 10 days after the reference month

3.2 Assessment of source data

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

Accuracy of data from various sources, including surveys is routinely assessed, by confrontation among the various sources, either at micro or aggregated levels. The source data are analyzed and corrections for underreporting/misreporting are made.

Random post-enumeration checks are always made while conducting censuses or surveys; a large part of those take place in the field by survey supervisors.

Non-response by enterprises leads to imputation on the basis of other enterprises in the same economic activity, past surveys data and administrative sources. Households selected for the HBS but do not wish to take part in the survey are replaced by selecting other households using the same scientific selection method.

In the early editing stages, data received from enterprises are analyzed by taking ratios of the various variables reported and by looking at the movement of the variables over time. If improbable values are found, the enterprise in question is contacted, either by telephone or by way of personal visits.

3.3 *Statistical techniques*

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

The CSO collects and processes source data from respondents; it also designs data validation program (for checking, coding, editing and tabulation errors) for each survey questionnaire. The data are further validated for processing errors. The individual data are stored in a database.

Imputations and adjustments for non-response and missing observations are performed. For the sample survey, the grossing-up factors are derived scientifically

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

Production approach

Output estimates are compiled at a sufficient industrial detail, namely, at the five digit NSIC. In general, in compiling GDP by activity, the ratios used are not older than five years. The technical coefficients of large enterprises are refreshed every year, and only those of the small enterprises are determined on the basis of the five-yearly CEA. However, for enterprises not covered by the CEA (agriculture, fishing, and forestry), the technical ratios have been presumed unchanged for more than twenty years. The 2005 ACOPS results will be used to update these ratios shortly.

Concerning the techniques used to address specific issues of GDP compilation, the following can be noted:

- Owner-occupied dwellings: output is in principle valued as the estimated rentals that tenants would pay for similar accommodation. The estimation is founded on the stock of buildings according to the housing census updated with approved building permits and rental prices of households obtained from the five-yearly HBS, extrapolated by the rent component of the CPI. It is noted that more than 90% of dwellings are owner-occupied in Mauritius and that the rental prices are assessment made by the households which may be subjective.
- Work in progress: Growing sugar cane and construction works are treated as work-in-progress.
- Inventory valuation adjustment: In the estimates of output, sales are adjusted for changes in inventories. These changes should have the proper valuation and in

particular exclude any holding gains or losses. However, the CSO does not correct the source data for these gains/losses.

- A similar problem exists concerning inventories of supplies to be used as intermediate consumption.
- Consumption of fixed capital: the CSO compiles data on consumption of fixed capital using the perpetual inventory method for the total economy, General Government and Manufacturing. CSO is currently working on capital stock and consumption of fixed capital for the other industries. The data will be available in 2008.
- Cash versus accrual: some cash data are converted to accrual by allocating them to the period to which they relate, in particular for the data on compensation of employees for general government.

The annual and quarterly accounts use almost same methods regarding the estimates at constant prices:

- For compiling volume measures of GDP by activity, the double indicator method is used for sugar production, land transportation, and financial intermediation (banking sector). For all other activities, the single indicator method is used. Extrapolation of value added by volume indices of output is used in agriculture, fishing, mining, manufacturing, electricity, gas and water, hotels and restaurants, transportation, insurance, and market output in education and healthcare. However, for construction, owner occupied dwelling activities, business and personal services, value added is deflated by either an input price index or the total CPI. Volume measures for non-market services are compiled by deflating respective components with appropriate price indices.
- Volume measures of excise duties are estimated through extrapolation using quantity relatives based on production data. However, VAT and import duties are directly deflated by an implicit deflator compiled from VAT rates, exchange rates, and international prices.
- Annually, trade margins are indirectly measured by applying the margin rates obtained from last CEA to the imports and local production sold on the local market. Each component of margin is deflated by a price index (IPI, PPI, and CPI) and the overall volume index derived. The derived volume index is used for extrapolation of gross value added. Quarterly, the total trade margin is deflated by the total CPI and the volume index is used for extrapolating of the gross value added.
- Annual GDP volume change is measured using annual chain indices, while quarterly GDP estimates are compiled in prices of 1999.

Expenditure approach

The GDP estimates by expenditure components are not all derived independently. Household final consumption expenditure is available every five years through the Supply and Use Table (SUT) compiled using CEA, HBS, external trade data, etc. Yearly estimates of household final consumption expenditure are derived by updating the benchmark using results of the CMPHS. The computation of yearly SUT is envisaged; this will help to improve the yearly estimates of household final consumption expenditure.

It is noted that although in principle the five-yearly HBS and the CMPHS generate an independent estimate, the unadjusted level from the grossed-up source data is lower than the one resulting from the commodity flow approach, about half of which is due to conceptual differences (see 3.4.3).

Concerning the detail at which GDP estimates are compiled, the following can be said:

- Household final consumption expenditure compiled through the SUT is at 2-digit level of Central Product Classification .
- Household final consumption expenditure and final consumption expenditure by non-profit institutions serving households (NPISHs) are compiled but not published separately in view of the marginal coverage of the NPISHs.¹
- Government final consumption expenditure is published at the one-digit level of the COFOG, but compiled at a finer level of detail.
- Gross fixed capital formation is compiled by industrial use and by six types of assets. Data cross-classified by activity and type of assets are available as from 1992 and are published on the website of the CSO.
- Changes in inventories are not compiled for all activities (only for wholesale and retail trade, sugar production and manufacturing).
- The source used to estimate fixed capital formation in the national accounts depends on the type of asset and the sector involved. For instance, capital formation in residential buildings is estimated from building permits issued; non-residential buildings from building permits and surveys; investment in machinery from imports, domestic production and surveys; and purchases of vehicles from the National Transport Authority.
- In compiling GDP by expenditure components, the degree of reliance on fixed ratios derived from benchmarks or other sources that are more than five years old is nil.

¹ The larger NPISHs are known from the administration kept by the Registrar of Associations.

As regards the techniques used to address specific issues of GDP compilation, the following observations are made:

- Government final expenditure is exclusive of incidental sales.
- Expenses of residents traveling abroad are included in household final consumption expenditure (and vice versa).
- Expenditures on items that are considered stores of wealth (such as jewelry, works of art) are not included in the estimates of valuables, as the latter category is not distinguished from final consumption expenditure.

To compile volume measures of the expenditure components of GDP, specific price indices/deflators are used to deflate GDP components. Final consumption expenditure of households is deflated by the total CPI; the construction price index is used for ownership of dwellings. Constant price estimates of government consumption expenditure are derived from the production approach. The construction and building component of the gross fixed capital formation at constant prices are compiled through deflation using the construction price index. Data on machinery and equipment are deflated using components of CPI (cars) and the imports price index. However, in some cases (aircraft and marine vessels), the exchange rate index is used for deflation. Exports and imports of goods and services are both deflated by the exports and imports price indices for goods. There are no estimates of changes in inventories in constant prices.

The specific quarterly compilation techniques are mostly in accordance with international standards and good practices. The quarterly national accounts data are compiled using 1999 as a base year. The CPI, PPI, IPI, EPI, and the construction price index are all re-referenced to 1999 before deflating the current quarterly national account estimates. Same applies for the volume indices used in extrapolation. Benchmarking is done using the Denton technique, and the BENCH software has been applied. The annual constant price estimates are first re-referenced to 1999 before used as benchmarks for the quarterly ones. The national accounts compilation system derives the series from seasonally unadjusted source data, thus providing unadjusted quarterly estimates. Seasonally adjusted GDP is calculated on an experimental basis.

There is no sizeable part of the economy that is not covered by regular national accounts estimates. The main gaps in coverage concern the already mentioned illegal activities and the smaller NPISHs. The activities of the production units without fixed location are included by extrapolating the results of the Census of Economic Activities by licenses and the average output per worker.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information, where applicable.

Underreporting of output by enterprises is as far as possible adjusted by comparison of the reported data with foreign trade records, VAT data, and data collected by the Registrar of Companies. As the source data are usually consistent with national accounts requirements concerning definitions, classifications, and valuation, no major adjustments are required. Where the timing is not adequate (e.g., accounting years of enterprises) usually little can be done to come to better estimates. An exception is the adjustments to bring the cash data of compensation of employees paid by central government to an accrual basis.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

The data compiled from the main sources used in the national accounts statistics are checked with other primary/secondary sources whenever possible. It is to be noted that national accounts source data are assessed every five years using the results of the five-yearly CEA. Benchmark data for large as well as small establishments obtained from the CEA are used to update annual estimates based on various sources (annual surveys, and administrative sources).

Outliers in the structural ratios are investigated, including the following: intermediate consumption to total output; value added to total output; gross fixed capital formation to GDP; household consumption to GDP; exports to GDP; and imports to GDP.

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

The 5-yearly SUT allows for the detection of discrepancies between the estimates compiled from the various sources. However, between the five year cycle, the discrepancy between GDP by production activities and GDP by expenditure components is included in changes in inventories.

The discrepancy between HBS data and the household consumption expenditure estimates obtained through the SUT can be attributed to various causes, including some conceptual issues:

- The reporting period covered by the various sources differs
- The HBS underreports expenditure abroad
- The HBS does not include NPISHs, as does the Mauritius national accounts category of private final consumption expenditure;
- The HBS underreports expenditure on cigarettes, alcoholic beverages, and expenditure in bars and restaurants;
- The HBS rental value is considered too low;
- Foreign resident workers in Mauritius are not included into the HBS;
- National Accounts includes owner-occupied dwellings;

- Remaining differences are mainly located in the service categories.

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 national accounts data are subject to recurrent revisions before being considered as final. The direction and magnitude of revisions between preliminary and final data are investigated. Short explanations about the reasons and type of revisions – current or occasional accompany the release of national accounts.

The results of investigations and adjustments made in the statistical processes are taken into account in compiling the data for the subsequent periods.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

Quarterly National Accounts (QNA) estimates are compiled and published since 2005. The periodicity follows the standards of the SDDS.

4.1.2 Timeliness follows dissemination standards.

QNA are released within three months after the end of the reference quarter. This is in accordance with the requirements of the SDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

The statistical discrepancy between GDP by production and GDP by expenditure components is not shown explicitly, and is included in change in inventories. The discrepancy, which can only be determined for the benchmark years (when HBS/SUT are available), is around 10 percent.

The national accounts data are reconciled within the SUT framework for the benchmark years, the latest of which is 2002. The CSO is considering compiling annual SUT, but is at present constrained by availability of specialized software.

GDP estimates at current prices, volume measures and (implicit) deflators are consistent within the “value = volume × price” framework.

The concepts and definitions for compiling quarterly GDP estimates are identical to those used to compile the annual estimates. For consistency, the quarterly estimates are aligned with the annual estimates through “benchmarking.” However, quarterly volume measures are not publicly available to the users, and the only data disseminated are the growth rates to the corresponding quarter of the previous year.

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

Consistent time series data are available without break for a period of at least five years; the data series as from back as 1990 compiled according to the recommendations of the 1993 SNA are thus available. The CSO adjusts back series to account for methodological developments and also, as far as possible, changes in data sources

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

The national accounts statistics are consistent with balance of payments and government finance statistics. Currently, the BOP is the main source of statistical data for the transactions with the rest of the world.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

The revision cycle is predetermined and stable from year to year. It is well known by the public. Small revisions can be incorporated any time; they are worked back as far as possible. New important source data may be temporarily suppressed until a major revision takes place.

The annual and the quarterly estimates follow the revisions cycle as described in the table below:

Estimates	Timetable for:	
	Annual estimates	Quarterly estimates
Preliminary estimate	3 months	3 months
First revised estimate	6 months	6 months
Second revised estimate	9 months	9 months
Third revised estimate	12 months	12 months
Final estimate	15 months	15 months

The first release of quarterly national accounts is within 3 months of the end of the reference quarter. The quarterly data are fully reconciled with each annual revision. In the process of elaboration of the accounts for the current quarter, some quantitative changes could result in revisions to the previous quarters of the current year. The purpose of these within year revisions is to improve the consistency and comparability of the quarterly data. Such revisions also maintain consistency between the quarterly and annual accounts.

The first annual estimate of GDP and its sub-categories is derived from preliminary quarterly accounts for the current year and taking into account effects of policy measures; and become available also within 3 months of the end of the year. The annual data is being revised with the release of each quarterly data. Usually 15 months after the end of the year, the annual data are considered final.

4.3.2 Preliminary and/or revised data are clearly identified.

Notes with all tables explain the status of the estimates: forecast or revised forecast, provisional estimates, and revised estimates. The revised data are accessible on a sufficiently detailed level.

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

Reasons for differences between previous estimates and current ones are spelt out. The CSO publishes documentation on sources and methods for revising the data. This discusses the reasons for, and the direction of the revisions and their magnitude.

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).

National accounts data are published in a clear manner - charts and tables are disseminated with the figures to facilitate their analysis. The series shown in the CSO *Economic and Social Indicators* cover four years. Long and detailed time series are available either in the annual digest or in historical series posted on the CSO website. Depending on the type of publication, datasets are published with various levels of detail. An analysis of current-period developments is included in all publications. The release of quarterly GDP estimates is supplemented with short comments and methodological notes.

Annual data are disseminated as time series. However, the QNA in constant prices are not disseminated in a time series format, but as growth rates compared to the corresponding quarter of the previous year.

5.1.2 Dissemination media and format are adequate.

National accounts (annual and quarterly) estimates are disseminated through a dedicated annual national accounts publication (*National Accounts of Mauritius*) and in the series *Economic and Social Indicators*. The national accounts data are first released through the website, and later through hardcopy publications. Longer time series can be accessed electronically through the web.

5.1.3 Statistics are released on a preannounced schedule.

National accounts estimates are released according to an advance release calendar published on the CSO's website at the end of every year with publication dates for the coming year.

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

National accounts estimates are released simultaneously to all users on the website on the date specified in the release schedule. One day prior to release on the website, a letter with the main highlights is sent to the Minister of Finance and Economic Development who is responsible for statistics and to the Financial Secretary for their information. This fact is made public through the GDDS metadata.

5.1.5 Statistics not routinely disseminated are made available upon request.

Nonpublished subaggregates are made available to users upon request. The terms and conditions on which they are made available are publicized.

5.2 Metadata accessibility

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

A comprehensive description of national accounts methodology is published in the annual national accounts publication as well as in the *Economic and Social Indicators* for the QNA. These are also available on the website of the CSO. The GDDS metadata are published on the IMF Dissemination Standards Bulletin Board.

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

Metadata are available at different levels of detail.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

Names and phone numbers of contact persons for the national accounts are mentioned in all publications relating to national accounts. Assistance to users is monitored through periodic surveys of users of national accounts

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

Information on publications is available on the website of the CSO. They are also available in the *Guide to the Central Statistics Office* and the *Customer Charter* both available on the CSO website.

Table 1. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts
(Compiling Agency: Central Statistical Office)

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	
		O	LO	LNO		NO
0. Prerequisites of quality						
0.1 Legal and institutional environment		X	X			Training in NA and QNA methodology needed.
0.2 Resources						
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X	X			The annual sequence of accounts compiled does not include the capital account. Valuables and some intangible assets are not included into the assets boundary.
2.2 Scope						
2.3 Classification/sectorization		X	X			Some general government and rest of the world transactions are recorded on a cash basis.
2.4 Basis for recording						
3. Accuracy and reliability						
3.1 Source data			X			Different accounting years of units and insufficient data on changes in inventories reduce accuracy. Deviations from international standards include outdated coefficients in agriculture, single deflation of VA in some activities, no volume measures for changes in inventories, base year for QNA more than 5 years old, direct deflation of VAT and import duties. Statistical discrepancy investigated through supply and use framework only on a 5 year basis.
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				
4. Serviceability						
4.1 Periodicity and timeliness		X	X			Statistical difference not explicitly shown, but together with changes in inventories.
4.2 Consistency						
4.3 Revision policy and practice		X				

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Element	NA	Assessment			Comments	
		O	LO	LNO		NO
5. Accessibility						
5.1 Data accessibility			X		Volume measures of QNA in a time series format as well as deflators are available only upon request.	
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

II. CONSUMER PRICE INDEX

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

According to point 16 in the first schedule to the Statistics Act 2000,² the CSO is responsible for “compiling prices of commodities and services at any or all transaction levels, rents, cost of living.” Practice is consistent with this Act as no agency in Mauritius other than the CSO compiles a CPI, or claims the responsibility for compiling a CPI. Section 3 of the Statistics Act 2000 gives the Director of the CSO the sole responsibility for deciding the extent, form, and timing of publication and dissemination of any statistics produced by that Office.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Data sharing is not needed for the compilation of the CPI, as both the five-yearly Household Budget Surveys (HBS) from which the weights are derived, and the regular price collection are carried out by the CSO. To ensure coordination with the main users and providers of data, a Consumer Price Advisory Committee has been set up (see item 0.3.1 below).

More generally, the coordination of statistical activities in all ministries and government departments is one of the duties of the Director of the CSO (Section 5 of the Statistics Act 2000). In addition, the Statistics Advisory Council advises the Minister responsible for statistical matters on coordination of statistical activities in Mauritius.

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

With a few exceptions, the CSO is obliged to respect the confidentiality of individual data. Before entering on duty, all CSO staff have to subscribe a declaration of secrecy. Statistical work is mostly carried out on spreadsheets that have no external electronic links. Individual data are stored under lock, and all computers are password protected.

Sections 17 through 22 of the Statistics Act 2000 deal with confidentiality. Section 17 rules that except for the purposes of a prosecution under the Act, no part of individual returns, and no document that would enable the disclosure of particulars of any person, undertaking, or business, shall be published, admitted in evidence, disclosed to any ministry or government department, or shown to any person not employed in the execution of the Act. However, the

² Act No. 38 of 2000, signed by the President of the Republic on November 30, 2000 and published in the *Government Gazette of Mauritius* No. 127 of December 2, 2000.

possible identification of individual data merely by reason of the fact that an undertaking is the only one within its particular sphere of activities does not prevent publication. The CSO may also disclose (i) information available to the public under any public document, (ii) basic enterprise information such as name, address, industrial classification, and number of employees, (iii) details of external trade, (iv) information relating to a local authority or other statutory body. With approval of the Minister, the CSO may further disclose individual records for research and statistical purposes, provided that all identifying information has been removed and the persons involved in the research or statistical project have made a declaration of secrecy.

Section 20 of the Statistics Act 2000 stipulates that the CSO should take steps to ensure the security and confidentiality of statistical information in whatever form it is stored. Furthermore, all individual census and surveys forms containing names and addresses should be destroyed after the data have been processed and validated, but not later than five years after the completion of the census or survey (Section 21).

Finally, Section 22 of the Statistics Act 2000 prescribes the declaration of secrecy required from every person employed in the execution of the Act. The wording of this declaration is set out in the third schedule given by the Act.

Further protection is provided under the Official Secrets Act 1972, Article 3.2.f.

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

Section 13 of the Statistics Act 2000 gives the CSO the power to obtain particulars in respect of any statistical collection carried out in accordance with the Act. The CSO also has access to public or other records if approval of the Minister has been obtained. However, no person is required to supply information on technical processes or trade secrets. Refusal or neglect to provide information, or making untrue statements are offences and subject to the payment of a fine and imprisonment. The CSO does not have the right to inspect books and records, premises, and stocks of businesses or persons in case of non-compliance.

The CSO implements various measures to encourage voluntary response. For instance, households whose cooperation is sought for the HBS receive a letter from the CSO Director that explains the purpose of the survey and provides information about confidentiality. Usually, before the start of the HBS the public is sensitized through press communiqué (radio, television and newspapers). In addition, oral information is provided during the visits of the interviewers. Outlets that have been selected for price collection receive a letter signed by the Director of statistics that explains the purpose of the CPI and shows the tables that are being produced on occasion of the revision of the base year and when the outlet is contacted for the first time. Supervisors and the Senior Statistician can be contacted if problems arise.

0.2 Resources

0.2.1 Staff, financial, and computing resources are commensurate with institutional programs

The number of staff for the CPI program is adequate (one statistician, one senior statistical officer, six price collectors on the island of Mauritius and two price collectors on Rodrigues). Staff has sufficient experience and knowledge of concepts. The price collectors receive practical training by a supervisor; a price collectors' manual has been prepared to this end. Staff on higher positions participate in the international training sources and seminars, as it is for instance those organized by the South African Development Community and the International Labor Office. Overall, the conditions of employment have been sufficient to retain experienced staff but CSO has experienced some staff losses in recent period.

The CSO has allocated sufficient financial resources to its CPI program. Adequate computer capacity is available. An example of staff skills is that they developed an Excel program to double-check the results of the main program used to compile the statistics.

0.2.2 Measures to ensure efficient use of resources are implemented

The CSO does not estimate the costs of producing individual statistics. Neither does it collect information on how much the burden laid on respondents is. A statistical program that addresses issues concerning the efficient use of available resources does not exist.

However, the cost of large censuses and surveys, such as the HBS, is carefully monitored.

0.3 Relevance

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

The CSO assesses whether the CPI adequately responds to user needs by means of the CPI Advisory Committee mentioned earlier. A user survey on the ESI of the CPI has also been carried out in November 2004.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

Quality monitoring is largely implicit in the CSO's work processes; a separate plan for improving quality does not exist. It should be noted however, that since participating in the General Data Dissemination System (GDDS) and in view of its forthcoming adherence to the Special Data Dissemination Standards (SDDS), the CSO has undertaken major efforts to improve the quality of its statistics.

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

At each review of the CPI, the CSO sets up a CPI Advisory Committee to bring together representatives of workers, employers, traders, consumers and government for consultation and advice. For instance, the Committee is requested to endorse proposals on the types of households covered or the aggregation formula to be used when changing the base year.

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

The setting of statistical priorities, formulation of programs of work, and discussion of various aspects of quality are in place for the improvement, extension, coordination, and harmonization of statistical activities in Mauritius.

A user survey on the Economic and Social Indicator (ESI) on the CPI was conducted in November 2004

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The CSO compiles the CPI statistics on an impartial basis. According to the Statistics Act 2000, the Director of the CSO shall ensure the independence of the statistical information produced by that agency. The Act also states that the Director has the sole responsibility for deciding the procedure and method to be employed in the provision, as well as the extent, form, and timing of publication and dissemination of any statistics produced by the CSO.

The professionalism of staff is promoted by writing interpretations of the data, preparing methodological papers on the occasion of revisions, the organization of seminars for users of the CPI, and CSO-supported occasional lectures by higher staff at the University of Mauritius.

1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations

The compilers are free to choose the data sources and statistical techniques they think fit. However, the CSO is not free to collect any mandatory statistics until regulations have been made by the Minister prescribing the particulars and information to be furnished in relation to the statistics that are to be collected.

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

In Mauritius, it is not deemed appropriate for the Director of the CSO to comment on erroneous interpretation or the misuse of statistics. The Statistics Advisory Council, set up under Section 23 of the Statistics Act 2000, may issue public statement after consultation with the Ministry or Department involved on the matter in question.

1.2 Transparency

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

The Statistics Act 2000 defines the terms and conditions under which the CSO produces and disseminates data. The Statistics Act is, among other things, posted on the CSO's Internet page.³

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

The release of the monthly CPI is done simultaneously to the general public and government officials, including the Minister of Finance and Economic Development who is responsible for statistics in the country. For the quarterly publication⁴ of the Economic and Social Indicator (ESI) on CPI, a letter with some highlights on the content of the ESI is sent to the Minister of Finance and Economic Development one day before its release on the CSO website.

The CSO releases its data simultaneously to all interested parties on the internet (through its website). This release is publicized in the publication 'ESI- Consumer Price Index' which is issued every quarter by the CSO. The first hard copy of the monthly CPI is in the weekly *Government Gazette*.

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

In general, products of the CSO are clearly identified as such, even though various publications also indicate the name of the parent ministry.⁵ This is also the case for the publication of the CPI in the *Economic and Social Indicators* series. The *Government Gazette* indicates the CSO as the source of the CPI data.

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

³ The CSO's website is <http://statsmauritius.gov.mu>.

⁴ The quarterly publication includes data already disseminated on the website.

⁵ The Ministry of Finance and Economic Development

Major changes in methodology are discussed in the CPI Advisory Committee where the major stakeholders are represented and are announced in publications and on the CSO website.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized

Ethical rules for staff are laid down in the Code of Ethics for Public Officers and in the Official Secrets Act, both of which are published. The Statistics Act 2000 contains further provisions concerning the faithful and honest fulfillment of duties of staff and the limitations on disclosure of information that comes to their knowledge by reason of employment.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follows international standards, guidelines, or agreed practices

The CPI concepts and definitions are following the International Labor Office (ILO) and are broadly in line with the *Consumer Price Index Manual*. The household consumption expenditure as defined by the *System of National Accounts 1993 (1993 SNA)* was used in the selection of weights. However, the concept of the CPI includes some mixed elements to account for the expenditures for durables (owner-occupied housing) following a mixed acquisition and payment concept.

Level of detail for commodities and services is broadly sufficient for detailed analysis of price movements including 12 divisions, 43 groups, and 84 item classes. However, only division level indices are published.

2.2 Scope

2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices

The HBS and the CPI cover the full economic territory of the country, that is, the island of Mauritius and the island of Rodrigues.

The delimitation of the constituent units of the economy is broadly in accordance with the *1993 SNA*. Both urban and rural households are covered, as well as households of all sizes. However, only households with Mauritian nationality are included, instead of all economically resident households. This dates back from the initial concepts of the CPI, designed to serve primarily as a measure to index wages, pensions, and other benefits (compensation index). It is argued that the consumption of foreign residents is not

representative of Mauritius nationals' pattern, and their inclusion would bring distortions to the policy analyses in that the escalation index would exclude this category. The excluded categories refer mainly to foreign workers engaged in manufacturing (textile) or construction activities currently representing about four percent of the active population but only two percent of the total resident population. Furthermore, the use of the CPI has been lately extended among others to serve as an inflation measure (in addition to the forecast inflation index) and basis for compilation of the core inflation indices used to set inflation targets for monetary policy purposes, facts that entail corrections to the index' scope. Moreover, its use in national accounts for household expenditure deflation entails a broad coverage to conform to the *1993 SNA*. The scope of the index also excludes the institutional households. With respect to households that are involved in unincorporated business activities (including farmers and fishermen), a separation between purchases for business purposes and final consumption expenditure is made.

The CPI includes market goods and services for consumption including goods and services associated with the maintenance and repair of houses. Goods produced on own account for final consumption are excluded, and illegally marketed goods and services are difficult to capture. Instead, corrections are rightfully made for underreporting of certain categories of goods (cigarettes and alcoholic beverages).

As regards housing services, the imputed rentals were excluded from the weights system, although they are covered by the HBS. Instead, to accommodate the requests from users (particularly workers' representatives), the CPI concept was adjusted to include the mortgage interest paid.

2.3 Classification/sectorization

2.3.1 Classification/ sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices

The commodities in the CPI basket and the 2006/07 Household Budget Survey (HBS) are classified according to the Classification of Consumption Expenditure according to Purpose (COICOP) including twelve divisions, each representing a specific set of commodities. The divisions are further divided into 42 groups, 84 item classes, and 1,080 items.

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 in accordance with the *1993 SNA*. Consumption expenditures are valued at purchaser's values, that is, including trade and transport margins, net taxes on products and non-deductible value added tax (VAT).

Product specifications are carefully designed and include price determining characteristics where applicable. In the case of products for which payment can be made either by cash or

credit card, the cash payment value is retained (considered representative of the consumption behavior as it excludes additional cost for payment by credit card). Administratively regulated prices (gasoline, gas containers for cooking, bread, imported flour, etc.), representing about 20 percent, are properly covered. Sale and discounts applicable to all consumers are rightfully included, as well as representative second-hand goods (cars).

2.4.2 Recording is done on an accrual basis

Prices of goods and services are generally recorded in the period they are purchased. Prices for the large majority (non-perishable products) are collected during the 12th and 18th of the month. For the perishable products, including fruits, vegetables, and fish, prices are collected weekly. Prices for perishables are collected, for a particular market, within the same time period and on the same day of the week. For administratively regulated prices (see also 2.4.1), prices are updated whenever there are changes, for example following the government decisions.⁶ For specific services, such as vacation packages or air tickets, prices are recorded at the moment of purchase irrespective of the period of consumption, practice that is in accordance with the accrual principle.

2.4.3 Grossing/netting procedures are broadly consistent with international standards, guidelines, or agreed practices.

The CPI covers purchases of used cars, which are in majority imported products, and therefore netting of these transaction is not required.

3. Accuracy and reliability

3.1 Source data

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

The source for the CPI weights is the quinquennial HBS. The survey sample methodology and the estimation procedures are reviewed during the preparation of each HBS. The last HBS was conducted during July 2006-June 2007 on a sample of 6,720 households out of a total number of households of around 335,000.⁷ The sampling frame was the 2000 Housing and Population Census updated to account for population movement. A two stage stratified sampling design with probability proportional to size was used. At the first stage, a sample of 840 clusters was selected out of the total of 3,050 clusters following the stratification by geographical district and taking into account additional information as derived from the Relative Development Index. This index is based on 12 variables encompassing housing and living conditions, literacy and education, and employment derived from the 2000 Housing

⁶ Prices are monitored through press announcements).

⁷ Thus, the sample size was 2 percent of total households.

and Population Census. All selected clusters were spread evenly over the 12 months of the survey period to properly account for the seasonal consumption expenditure. Thus, the fieldwork was performed in 65 clusters each month. In the second stage, the complete list of all households in each cluster was drawn and the sampled households were selected. Following a circular systematic sampling method after stratification by household size, consumption expenditure class and religion, a fixed number of eight households were retained. Non-response, which was originally around 11 percent, was handled by replacement with another household having the same stratification criteria.

The selection of the varieties of goods and services to be priced for the CPI, as well as the type of outlets from which price quotes are collected, has been made on the basis of a study into the buying habits of the population. This study was conducted during the same period as the 2006/07 HBS when the price survey to identify new products for the base year took place. The representative items and varieties were selected based on their sales volume; their total number is 194. For every category that represents more than 0.1 percent of expenditure, a representative item has been sought. In response to requests from users and in consultation with an ILO expert, the CSO agreed to include the interest on the house mortgage⁸ in the basket. The weight assigned for this service was based on a study on the household income spending to determine the amount disbursed on house loans. The interest component was retained and integrated into the consumption basket.

Outlets were selected following the criteria of regional distribution, sales volume, and expectation that they are able to offer the selected items on a regular basis. The benchmark information from the previous 2001/02 study was used updated by current observation of the trend of the points of purchase of the population (with information from the 2006/07 HBS that includes a question on the point of purchase). About 7,800 price quotations are collected from the 400 selected outlets across the islands of Mauritius and Rodrigues. The product specifications are sufficiently detailed to ensure that the same variety is priced each period. The sample and survey methods for the CPI are also reviewed every five years. Plans are to revise the list of outlets and price quotations every year to better reflect the expenditure pattern and also collect additional information targeting quality changes or apparition of new products.

Ad-hoc surveys to supplement the regular survey program are neither conducted regarding the HBS nor the CPI pricing procedures. However, contacts with various users are frequent, in the efforts to learn about new developments that would impact the CPI.

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

⁸ The study of the impact of the mortgage into the household income spending showed a 25 percent households are contracting loans.

The source data are broadly consistent with the definitions, scope, valuation and classifications required for CPI purposes.

The prices are collected through personal visits, except in the case of standard tariffs such as the prices for electricity, water, public transport, and telephone that are obtained directly from producers (either by phone, e-mail, or fax at the moment a change in tariff occurs) or regulatory bodies.⁹ The observed prices are transaction prices, that is, those that any member of the public would pay to purchase the specific good or service.

The prices of perishable items are collected on a weekly basis (always on the same day¹⁰ and in a two-hour interval), while those for non-perishables are recorded once a month on a day falling between the 12th and the 18th. Rent data are collected on a quarterly basis.

Where needed, source data are adjusted to correspond to actual concepts of prices. For example, for any good or service,¹¹ which is expected to be consumed uniformly over the month, an average price (calculated on a prorated basis) is used for the CPI calculation to reflect actual price paid by consumers during that month.

3.1.3 Source data are timely

Source data are sufficiently timely: the new CPI following revision of the base year is released three-four months after the HBS has been conducted to allow preparation of the results of the HBS. Field interviewers and the CSO staff have follow-up procedures to ensure timely receipt of prices. The price collection allows publication of the CPI about five working days after the reference month or earlier, that is, in accordance with SDDS prescriptions.

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.

With regard to the HBS, information on the sampling errors is published. Consistency checks are also carried out using external data from sources such as other surveys, import and production data. This information is also published.

⁹ As in the case of the telecommunication services.

¹⁰ Depending on the market day, which differ from a region to another.

¹¹ Such as electricity, bread, cigarettes or water

With regard to the CPI, the prices are checked for consistency among all outlets and across time. Random field checks are also made to ensure that price collection is made properly. When outliers are detected, their cause is investigated; if no apparent mistake is found the deviating value is accepted for the calculation of the CPI. The calculation of the index takes place by two independently working programs to verify the correct treatment of data in the automated process.

3.2 Statistical techniques

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

Several compilation procedures to minimize processing errors, such as editing, coding, tabulation errors, are employed.

Prices for temporarily missing products are imputed assuming the same price change as of similar items in the group or from other outlets. Imputation is usually made for up to three months, after which a replacement by an item in the same category, whose price is collected simultaneously, is made. An example in this regard is the powder milk that temporarily disappeared from the market.

Appropriate adjustment is made for quality changes by collecting prices for an overlap period (overlap method) and by consulting the selling unit to differentiate the quality change from the total increase in the product value.

New products are only introduced when the weights and basket are updated. These are targeted ahead and included on the list of reserve items for which prices are collected simultaneously to provide either replacements or for inclusion in the new basket.

Seasonal adjustment is made for vegetable items using the 12-month moving average price instead of the actual monthly price.

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

The weight period for the current index is July 2006-June 2007 and the price reference corresponds to the same period.

The weights emerging from the 2006/07 HBS are adjusted for known underreporting in particular items (tobacco, alcoholic beverages). Discrepancy between HBS data and household consumption expenditure estimates obtained through the supply-use tables are mainly attributed to conceptual issues.

The values recorded for goods and services represent the economic cost to the consumer at the time the good or service is purchased regardless payment method. Therefore, the value of cash payment is retained as representative of the consumption pattern.

Elementary indices are calculated using the geometric mean of price relatives between prices observed in the current month and those of the base period. The formula used to aggregate elementary indices to higher levels is the Laspeyres. Short-term price changes are calculated as month-to-month percent change or as year-on-year percent change (the CPI for the year being calculated as the average for 12 months). Long-term price changes are calculated using the new base year (July 2006-June 2007).

When the new weights are introduced, the new index is linked to the old one using a linking coefficient over a period of one year. The linking coefficient is also published with the new series but no backwards revisions are made to the old series. There is a three-month time lag between the preparation of the new weights and the compilation of the new index. During this period, the CPI is compiled using the old base, which are backdated to the new period four months later. For example, the 2006/07 series commences with July 2007 month but the new data are released four month later together with the rest of the elapsed months (August-September).

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information, where applicable.

Index results are analyzed and monthly changes or comparisons with same month of previous year are undertaken. The CPI is not regularly assessed against the implicit deflators resulting from the national accounts. On the other hand, comparisons are made with the producer price index or import price indices.

Systematic analyzes of the source data are made in the context of weight and base year revisions that occur every five years.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

Relevancy checks of the elementary indices are made and any unusual movements, such as outliers, are verified and traced back to the collector and reporting outlet if necessary.

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

All problems are investigated as they surface and causes are briefly explained in the commentaries posted in the publications.

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).

In accordance with the international practice, the CPI is not revised. However, differences between the forecast inflation rate¹² and the realized overall price change are subject to analysis.

The revision of the base year gives rise to studies that are made available to the public.

4. Serviceability

4.1 *Periodicity and timeliness*

4.1.1 Periodicity follows dissemination standards.

The CPI is monthly, meeting the SDDS standards.

4.1.2 Timeliness follows dissemination standards

In accordance with international standards, the CPI is disseminated within five working days of the reference month. Efforts are undertaken to release the data as soon as possible.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

The CPI is internally consistent since higher-level indices are aggregates of lower-level indices.

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

Consistent time series data are available without break for periods of about five years. The new CPI was introduced from July 2007. The previous series with July 2001-June 2002 as reference base is available for the period July 2002-June 2007. Unpublished detailed data are also available at the CSO for the next three months (July–September 2007) during which the new series was prepared. Back series can be recalculated by using the linking factors although the results may reflect discontinuities in the series due to change in classifications. However, this exercise was not undertaken and only five-year series are presented on different bases.

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

¹² Prepared on the basis of the trend of the last four years and published every six months, respectively in January and July. The last forecast was published in advance in November on an exceptional basis, together with the first series of the new CPI covering July-September 2007.

CPI is comparable with the PPI. However, because the index is not revised backwards when the base and weights are updated, no consistency check can be made with other series for the overlapping periods. Given the importance of the CPI, this may be a serious impediment in the calculation of volume measures for the national accounts or to respond to the needs of other users.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

The weight revision schedule follows a well-established cycle of five years, which is known to the public. New important source data (new products that gain in the importance) might be temporarily put on hold while waiting for the major revision. Furthermore, in anticipation of the change in the base year, the CPI data series for the first three months (July- September 2007) – corresponding to the beginning of the new series based on July 2006-June 2007 – compiled initially on the old base (July 2001-June 2002), were released at the aggregated level only (general index) to avoid misinterpretations given the common understanding that CPI series are not revised. However, the publication releasing the new series of indices (for July-September) does not include back series published with new and old weights and related analysis for the public to better understand the effects of rebasing.

Adequate documentation of revision of the weights (including the underlying HBS) and the index basket is published following the regular revision.

4.3.2 Preliminary and/or revised data are clearly identified.

Not applicable.

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

Differences between the results of subsequent HBSs are analyzed and published in a separate report *Household Budget Survey*, which is also posted on the website.

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 main results of the CPI are published every month on the Internet and in the *Government Gazette*. More details are included in the quarterly *Economic and Social Indicators* dedicated to the CPI. The latter publication includes a discussion of the main items, the overall index for the three past years and the current year, a table with the net contribution of main

commodities that have affected the index during the last quarter, the weights of the 12 major divisions of expenditure and their indices for the current year, and the inflation rates for calendar years and fiscal years since 1975.

Although, as indicated above, the index aggregates are compiled down to 84 item classes, the CPI is only published at the division-of-expenditure level. For the benefit of some users, CSO might consider posting more detailed data on its website. The analysis that accompanies the tables published in the *Economic and Social Indicators* series usually illustrates the causes of price change by mentioning the monthly-to-month variation in the price of selected items, but longer time series for these items are not given.

As mentioned above on 4.3.1, for the first three months of the new CPI series (July-September 2007), only the general index was released in anticipation of the change in base year to follow. This was not however, followed by publication of back series with new and old weights and related comparison analyses.

5.1.2 Dissemination media and formats are adequate

Besides publication on the Internet, the *Government Gazette*, and the *Economic and Social Indicators* series, CPI is also published annually in *Mauritius in Figures and Digest of Statistics*.

Publication of CPI is not accompanied by a press release.

Longer time series of monthly indices at division level are posted on the website. However, since no backward adjustment to series has been done, these series have different base years and, therefore are not comparable.

5.1.3 Statistics are released on a pre-announced schedule

An advance release calendar, posted on the CSO website, announces the precise release dates of the quarterly publications on the CPI. Users are also informed (in the quarterly publication) that the monthly CPI is published within 5 working days after the reference month.

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

The monthly CPI is released simultaneously to all interested users on the same date via the Internet.

For the quarterly publication of the ESI on CPI, a letter with some highlights on the content of the publication is sent to the Minister responsible for statistics one day before its release on the CSO website. (see also 1.2.2)

5.1.5 Statistics not routinely disseminated are made available upon request.

Non-confidential data at a more detailed level are available upon request, fact mentioned on the website.

5.2 Metadata accessibility

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

A comprehensive description of both the HBS and CPI methodology is published every five years in the Methodological Report of the *Household Budget Survey*. This report is posted on the CSO website.

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

Metadata are available at two levels of detail to meet users' needs. A summarized version of the CPI methodology is included in the quarterly *Economic and Social Indicators* publication on CPI which is also posted on the CSO website. A FAQ's on CPI is also available on the CSO website. Furthermore, the GDDS metadata are also published on the IMF data dissemination bulletin board. For technical users, the CPI detailed methodology is described in a Methodological Report, posted on the website.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

Contact person and contact information for the CPI is mentioned on the GDDS metadata, as well as on the CSO's publications.

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

Information on publications is available on the CSO website. It is also available in the *Guide to the Central Statistics Office and the Customer Charter* (also posted on the CSO website).

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

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				Resident foreign workers are not covered.
2.2 Scope			X			
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
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				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X			X	
4.3 Revision policy and practice						Revision policy does not cover dissemination of comparative series for the period following the introduction of a new base and weights.

Table 2. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Consumer Price Index)
(*Compiling Agency: Central Statistics Office*)

Element	NA	Assessment			Comments
		O	LO	L/NO	
5. Accessibility					
5.1 Data accessibility			X		Only data for the major 12 commodity groups are published.
5.2 Metadata accessibility		X			
5.3 Assistance to users		X			

III. PRICE STATISTICS (PRODUCER PRICE INDEX)

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Central Statistics Office (CSO) collects and disseminates statistics under the authority of the Statistics Act No. 38 of 2000. Practice is consistent with this Act as no agency in Mauritius other than the CSO compiles a PPI, or claims the responsibility for compiling a PPI. Section 3 of the Statistics Act 2000 gives the Director of the CSO the sole responsibility for deciding the extent, form, and timing of publication and dissemination of any statistics produced by that Office.

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

Major source data underlying compilation of the PPIs, i.e., periodic surveys and censuses, are carried out by the CSO's units, ensuring thus a good coordination of the work.

More generally, the coordination of statistical activities in all ministries and government departments is one of the duties of the Director of the CSO (Section 5 of the Statistics Act 2000). In addition, the Statistics Advisory Council advises the Minister responsible for statistical matters on coordination of statistical activities in Mauritius.

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

The Statistics Act stipulates that any individual information is treated as strictly confidential and that no information is released that might enable identification of an individual or establishment.

The Act specifies that: 'The Director may disclose information in the form of individual statistical records solely for bona fide research or statistical purposes provided that

- (a) All identifying information such as name and address has been removed; and
- (b) The information is disclosed in a manner that is not likely to enable the identification of the particular person or undertaking or business to which it relates."

Section 20 of the Statistics Act 2000 stipulates that the CSO should take steps to ensure the security and confidentiality of statistical information in whatever form it is stored. Furthermore, all individual census and surveys forms containing names and addresses should

be destroyed after the data have been processed and validated, but not later than five years after the completion of the census or survey (Section 21).

Finally, Section 22 of the Statistics Act 2000 prescribes the declaration of secrecy required from every person employed in the execution of the Act. The wording of this declaration is set out in the third schedule given by the Act.

Further protection is provided under the Official Secrets Act 1972, Article 3.2.f.

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

In the Statistics Act, there is provision for legal action for non-response. It is considered an offence if a respondent refuses to furnish or give false information and in such cases fines can be imposed. Nevertheless, in practice the collaboration of respondent is sought considering reliability of data collected.

0.2 Resources

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

Staff allocated to compilation of PPIs is considered too tight given the number of tasks they are involved in. PPIs prices are collected by the Prices Unit of the CSO, which is staffed by one senior statistical officer and 3 statistical officers. Compilation and analysis of the PPI-M and PPI-A are done by the Industry Unit and Agriculture Unit respectively. In the case of the PPI-A, staff involved in the editing process, index compilation, and analysis include one statistician, 1 senior statistical officer, and one statistical officer. The number of staff involved in PPI-A is the same.

The staff are well trained to perform their duties but the computing facilities may need upgrading to better respond to current needs. The excel software is used for computations and tabulations.

Prices are collected by trained staff of the Prices Unit of the CSO.

0.2.2 Measures to ensure efficient use of resources are implemented.

Measures to ensure efficient use of resources are implemented. The Performance Management System (PMS) recently implemented enables periodic reviews of staff performance.

As an encouragement to consistent application of concepts, classification and other methodologies across datasets, staffs are given the opportunity to attend workshops and when

necessary, the office seeks outside expert assistance to evaluate statistical methodologies and compilation systems.

Budgeting procedures are used to help allocate resources.

0.3 *Relevance*

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

User surveys are carried out at times to cater for users' needs. For example, a user survey was carried out in 2006 for PPI-A and another one is planned for December 2007 for PPI-M. The results of these surveys provide useful insights on the users' needs and help CSO improve its statistics.

0.4 *Other quality management*

0.4.1 Processes are in place to focus on quality.

Quality monitoring is largely implicit in the CSO's work processes; a separate plan for improving quality does not exist. It should be noted, however, that since participating in the GDDS, the CSO has undertaken major efforts to improve the quality of its statistics and is foreseeing now subscription to the SDDS.

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

Monitoring processes are in place to inform management on the quality achieved for ongoing statistical activities. Among indicators that are regularly followed, most significant are the response rates to surveys, revision history, timeliness evaluation, and time lag to implement revised international classifications and systems.

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

The setting of statistical priorities, formulation of programs of work, and discussion of various aspects of quality are in place for the improvement, extension, coordination, and harmonization of statistical activities in Mauritius.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

There is no interference from outside in all the processes with regards to the compilation of PPIs. According to the Statistics Act 2000, the Director of the CSO shall ensure the independence of the statistical information produced by the agency. The Act also states that the Director has the sole responsibility for deciding the procedure and method to be employed in the provision, as well as the extent, form, and timing of publication and dissemination of any statistics produced by the CSO.

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

Timeframe to publish estimates are based on statistical consideration and decided at the beginning of the year. The compilers are free to choose the data sources and statistical techniques they think fit. However, the CSO can only start data collection for censuses and surveys after regulations have been made by the Minister prescribing the particulars and information to be furnished in relation to the statistics that are to be collected.

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

In Mauritius, it is not deemed appropriate for the Director of the CSO to comment on erroneous interpretation or the misuse of statistics. The Statistics Advisory Council, set up under Section 23 of the Statistics Act 2000, may issue public statement after consultation with the Ministry or Department involved on the matter in question.

1.2 Transparency

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

The Statistics Act 2000 defines the terms and conditions under which the CSO produces and disseminates data. The Statistics Act is, among other things, posted on the CSO's Internet page.¹³ The Statistics Act is also mentioned in the publication "A Guide to CSO."

¹³ The CSO's website is <http://statsmauritius.gov.mu>.

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

The release of the quarterly PPIs is done simultaneously to all users through the website. However, for the quarterly publications,¹⁴ a letter with the main highlights is submitted to the Minister of Finance and Economic Development, who is responsible for statistics, one day before its release.

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

In general, products of the CSO are clearly identified as such, even though various publications also indicate the name of the parent ministry.¹⁵ This is also the case for the publication of the PPIs in the *Economic and Social Indicators* series and the other publications where the PPIs data are published.

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

The CSO gives a three-month advance notice of changes in the PPI methodology, source data and statistical techniques in the PPI publications.

1.3 Ethical standards

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

Ethical rules for staff are laid down in the Code of Ethics for Public Officers and in the Official Secrets Act, both of which are published. The Statistics Act 2000 contains further provisions concerning the faithful and honest fulfillment of duties of staff and the limitations on disclosure of information that comes to their knowledge by reason of employment.

The CSO has also published a 'Customer Charter' which outlines the commitment of the CSO staffs towards users. New staff of CSO is given 1/2 day induction course whereby the work of the office as well as the standards in place is explained to them.

2. Methodological soundness

CSO compiles and disseminates separate PPI indices covering (i) the manufacturing sector (PPI-M), (ii) the agricultural sector (PPI-A) including agricultural products and excluding fishing, forestry, and agricultural services, and (iii) the construction sector (PPI-C). These

¹⁴ The quarterly publication includes data already disseminated on the website.

¹⁵ The Ministry of Finance and Economic Development

indices cover the domestic market. In addition, export and import indices are produced. This assessment covers the PPI-M and PPI-A.

2.1 Concepts and definitions

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

The concepts and definitions of the PPIs largely follow internationally accepted standards. The PPI-M measures changes in the output prices for domestically produced goods in the manufacturing sector, excluding the exported goods.¹⁶ The PPI-A measures average changes in the selling prices producers receive for their agricultural products. The PPI-C measures changes in prices of basic inputs for a sector of the construction activities (residential building). This is an input price index, as opposed to the other two that are output price indices. and the PPI-C will not be assessed in this report.

PPI-M weights are derived from the market output comprising sales and changes in inventories. The level of detail for commodities and economic activities is sufficient to permit detailed analysis of price movements at division, group, class, and product level classified according to NSIC.¹⁷

The bulk of the products in agriculture, with the exception of forestry, fishing and agricultural services, is taken into account in the PPI-A calculation. The representative items and varieties have been selected on the basis of the production value. Concepts and definitions used to compile PPI-A are in conformity with the recommendations of the Food and Agriculture Organisations of the United Nations (FAO) and the EUROSTAT. The concept of output that is used to derive the weights is the product of quantities and prices, excluding the exported values. Ninety-five percent of the products selected for the basket are sold to the domestic market. The output for vegetables and root crops is priced at the primary wholesaler but adjustments are made to obtain the equivalents of the farm-gate prices.

2.2 Scope

2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices. The PPIs were designed to suit the internal purposes of the CSO and also to provide complementary inflation measures for important sectors of the economy, such as manufacturing and agriculture. Therefore, the scope of the PPIs was confined to these activities representing about 20 percent of the GDP (manufacture) and six percent (agriculture) respectively. If more importance would be given to preparing a good deflator for the national accounts aggregates, then a broader coverage of economic activities should be considered.

¹⁶ Covered by a separate export price index.

¹⁷ NSIC is identical with the ISIC rev 3 at four-digit level.

All large manufacturing establishments (employing 10 persons or more) representing 95 percent of the manufacturing activity are covered by the PPI-M. It is considered that the small enterprises, whose presence is most notable in the furniture, textile, metal products, and food industries, will not have an impact on the general trend of prices given their small representativity. Moreover, it has been noted that price changes pertaining to small establishments follow the same trend as for large enterprises. The index excludes own-account production of goods for own final use and illegal activities, exclusions which are common for the PPI. It is considered that the goods surveyed in the PPI-M are mainly traded in the domestic markets, and the offshore-produced goods are therefore effectively excluded. Free zones, offshore enterprises are covered by the export price index.

For the PPI-A, the index covers the main agricultural activities, crop production, and farming classes of the National Standard Industrial Classification of Economic Activities (NSIC). Agricultural services, forestry, fishing (for the domestic market), and illegal commodities are excluded on the basis of low importance in the economy and difficulty in collecting source data.

2.3 Classification/sectorization

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

1993 SNA is used to classify institutional units and transactions. The classification of the industrial activities covered is the NSIC,¹⁸ which is an adapted version of ISIC Rev. 3. The product classification follows the NSIC at five-digit level. Manufacturing activities are classified by 23 divisions, 62 groups, and 127 commodity classes and 210 sub-classes.

PPI-A also uses the NSIC at five-digit level to classify the activities and the CPC for products, practice in line with the international recommendations. Major sections cover (a) Crop products and (b) Animals and animal products. A total of 13 groups, of which 9 belong to crop products, and 56 commodities are retained.

¹⁸ The only deviation is the combination of divisions 15 and 16, Manufacture of food products and beverages and Manufacture of tobacco respectively into the publications in order to prevent confidentiality break since there is only one Tobacco Company. However, at the more detailed levels, the NSIC is identical with the ISIC.

2.4 *Basis for recording*

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

The weights for the PPI-M are determined using values of output at basic prices, exclusive of VAT, other taxes on products (excise duties), and transport margins separately invoiced.

Respondents are asked to report actual market prices excluding VAT or excise taxes. Product specifications include transaction characteristics. Discounts for volume sales are also included.

For PPI-A, since the value of market production is not available, the total production is considered as a proxy in the calculations of weights. The weights are derived by multiplying the average of production for three years by the average of unit prices of the reference period, which is the mid year. The current index' weights were thus derived using the average production of 2001–2003 and the prices of the reference period (2002).

In principle, prices collected should refer to farm-gate prices, but it is extremely difficult to obtain such prices for vegetables. Hence, the wholesale prices of these products at the two main auction markets are recorded once a week. These prices are adjusted to provide a proxy for the farm-gate price (see also 3.1.1).

2.4.2 *Recording is done on an accrual basis.*

Although collection of prices for the PPI-M is quarterly, prices refer to monthly values pertaining to the last week of each month.

In the PPI-A, the collection of prices for vegetables is carried out weekly,¹⁹ whereas prices for some other products are recorded monthly. Final prices for sugar and tobacco are obtained after one year.²⁰ So the provisional prices are kept constant every month for a period of one year and are subsequently revised when the final prices are obtained. In the case of sugar cane, the annual final price per tone received by the producers of sugar is used in the calculation of PPI-A. This price is obtained from the annual price of the manufactured sugar value by applying a fixed coefficient reflecting the amount received per unit by the producers of sugar cane (76 percent in the reference period). This coefficient is kept constant for the period of time decided by the government. Final price for tea is available after two years.²¹ Hence the provisional price is kept constant over a period of 24 months and is subsequently revised when the final price becomes available.

¹⁹ Wednesdays or Saturdays, depending on the market.

²⁰ Price is finalized in June for sugar and in March for tobacco.

²¹ Price is finalized in June.

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

For a small economy as Mauritius', the question of multiple-establishment companies does not arise. The weights are gross values of shipments, which is consistent with international practices.

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.

PPI-M

Current PPI-M is based on 2002 weights and has 2003 as reference period. The source of weights for the actual PPI-M is the 2002 Census of Economic Activities (CEA). The sampling framework for the survey, which is conducted with a periodicity of five years, is the Business Register updated regularly. Enterprises with 10 or more employees covering 95 percent of the gross output of the large non-EPZ manufacturing enterprises in 2002 were retained for the unit selection. Only very few replacements of enterprises in the sample of the establishments had to be made in time since CSO has good relations with the enterprises in the sample. This also allows early collection of information about new products and developments in the market. Weights are updated every five years, following the cycle of the CEA.

The new basket consists of 75 producers and 220 varieties. Selection of the commodities to be included in the basket was proportional to the output of the enterprises selected during the first stage. In the second stage, the list of commodities to be priced was finalized, prevalence being given to those products representative of the output of the industry and that are produced on a continuous basis. Detailed specifications (name, description, brand, weight, size, etc.) of the selected products were obtained from the enterprises.

Monthly prices of selected commodities are collected at the end of each quarter through visits to selected enterprises.

PPI-A

As from 2003, the composition of the PPI-A basket and weights have been derived from the output data compiled as the average of production during 2001, 2002, and 2003. Production estimates were compiled on the basis of quantity and price information by product/activity collected by the agricultural unit. Adjustments are made to eliminate the export shares (very small though) in order to ensure consistency with the prices surveyed that target domestic

market. 2002 is the reference period. The weights are kept fixed and updated every five years.

The representative items and varieties included in the basket were selected on the basis of their importance in the consumption of the domestic market. Total number of varieties for which price quotations are collected is 100, representing 83 percent coverage of the products. All important producers/products for the domestic market were selected.

For the main commercial crops (sugar cane, tea leaf and tobacco leaf) the respective marketing agencies are the source of price data. For example, the price retained for sugar cane represents about 76 percent of the manufactured sugar value after the administratively related charges were removed. This coefficient is administratively regulated and helps determine the amount that the farmers are entitled to for the sugar cane produced and delivered to the manufacturing industry. This ratio was in vigor for the base year 2002. The coefficient has changed in 2004 to 78 percent, but the new one was not used for the calculation of the current period price that entered in the index calculation, which is a departure from the good practice. The resulting price index for sugar cane also reflects heavily the world market trend in the absence of a significant local market.

For vegetables, price data are obtained mainly at the two main auction markets. The wholesale prices collected in these markets are adjusted²² for trade and transportation margins to derive a farm-gate price. The prices for fruits and flowers are recorded from different sources, such as planters and exporters (as relevant to reflect a farm-gate price). For animals and animal products, prices are available at sources varying from marketing agencies (e.g., the price paid to producers for milk) to producers.

Occasional contacts are made with producers and related ministries and agencies (i.e., Agricultural Research and Extension Unit) to learn about new developments in the field that need to be taken into account in the PPI-A compilation.

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

Source data require adjustments to approximate the definition of valuation (PPI-A) and time of recording (both PPIs). For certain commodities (tea, tobacco, sugar), there is a time lag between prices at the time of production and the moment when the actual prices become available and is incorporated into the index. In the absence of complementary source data this gap is difficult to overcome.

3.1.3 Source data are timely.

²² A study on the auction market has enabled CSO derive a 91 percent coefficient to be used in calculating a farm-gate price for vegetables.

Monthly PPI-M are published 10-12 weeks after the reference quarter. The quarterly PPI-A is released within eight to nine weeks after the end of the reference quarter.

Update of the weights is delayed because certain companies have accounts on the fiscal year only (July to June). For example, in order to collect production data for the new 2007 base year, collection will have to start in July 2008 to allow all companies complete their fiscal documents. This implies that the new PPIs with 2007 base will come out in 2009.

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.

Standard editing procedures are used to validate the accuracy and reliability of the data. Collected prices are validated after proper editing. Regular supervision of price collectors is organized to ensure good data quality. Major discrepancies in data collected are subject to additional verification by the senior statistical officer/statistician and with the respondent enterprise, as applicable. Surveys or censuses are assessed in the context of periodic revisions of weights and base.

Complementary sources, such as the VAT Department, Registrar of companies, results of annual industrial surveys, are consulted to verify accuracy of data.

3.3 *Statistical techniques*

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

PPI-M

Prices for temporarily missing products, movement of similar items in the group is analyzed, and if it is found unchanged, the price is carried forward for a quarter (given that collection is quarterly). Exceptionally, carry forward was extended to two quarters, where no similar product was found in the reserve list²³ of items. A successful example of replacement is a type of fertilizer, which disappeared from the market and was replaced after three months by a similar product for which prices have been collected outside the basket.

²³ About 200 additional price quotations.

Adjustments for quality differences are undertaken for replacement products using the overlap method and/or in consultation with producers. Most often, these refer to changes in packaging or volume.

New products, although targeted ahead, are only introduced with the index update. For example, the activity of ship repairing has gained in importance in recent years, but it will only be considered for the new index to be released sometime in 2009.

Indices are not seasonally-adjusted. The seasonal categories are not considered significant.

PPI-A

The accuracy of the prices collected is verified regularly. Prices are cross checked with related ones of the CPI.

Temporarily missing products are carried forward until they reappear. These relate mostly to exceptional situations. For example, the February 2007 cyclone led to temporary disappearance of cabbage and carrots, whose prices were carried forward until the reappearance of the product.

Fixed weights are used for flowers, tea, tobacco, sugar cane, as well as for animal and animal product groups. For seasonal commodities, such as fresh vegetables and root crops, the method of variable weights (12 monthly weights in the base year) is used. Seasonal baskets (12 different baskets targeting seasonal products) are used to treat seasonality in the PPI-A. Besides recognized positive aspects, the greatest disadvantage of this method is the impossibility to measure month-to-month changes in the indices.

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

PPI-M has 2003 as reference period and 2002 for the weights. PPI-A has 2002 as reference period for both weights and prices. As earlier mentioned, the weights are derived from average annual production figures for the period 2001-2003 valued at mid-2002 prices. In the case of PPI-M, the weights are not aligned with prices. It is considered that, given the relative stability of the sector, the price changes that have been observed would not significantly affect the relative weights of the different categories in the PPI-M. However, the recent tendency of the economy seems to reflect an increased inflation, and therefore a need to consider price updating the weights for the coming exercise of the index update. More generally, it is a departure from the good practice.

Elementary indices are compiled as weighted averages of price relatives. Higher-level indices are aggregated using the Laspeyres formula.

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

3.4.1 Intermediate results are validated against other information, where applicable. For both indices, the results are analyzed and monthly changes or comparisons with same month of previous year are undertaken. The sub-indices are not regularly assessed against the implicit deflators resulting from the national accounts based on the consideration that they are used to deflate related national accounts indicators. However, periodic meetings to verify consistency checks in the QNA, can account for such an assessment. Comparisons are made with the CPI or with the import/export price indices.

Systematic analyzes of the source data are made in the context of weight and base year revisions that occur every five years.

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

Relevancy checks of the elementary indices are made and any unusual movements, such as outliers, are verified and traced back to the collector and reporting unit if necessary.

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

All problems are investigated, as applicable, and the reasons underlying significant movements are briefly explained in the commentaries accompanying publication of data. For the internal purposes, each quarter working files are prepared containing notes on relevant issues related to data collection, processing, or queries received.

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).*

Periodic revisions (every five years) of weights are undertaken, but results of these exercises are not put into a publication format. Only routine internal investigations of sources of errors in the data are made.

4. *Serviceability*

4.1 *Periodicity and timeliness*

4.1.1 *Periodicity follows dissemination standards.*

Both indices are compiled with a monthly periodicity but, due to the frequency of data collection, which takes into account resource limitations, dissemination is quarterly, which is not in accordance with the SDDS.

4.1.2 Timeliness follows dissemination standards.

The indices are released 10-12 weeks (PPI-M) or 8-10 weeks (PPI-A) after the reference collection quarter.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

The PPIs are internally consistent since higher-level indices are aggregates of lower-level indices.

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

Consistent time series data are available without break for various periods of time, at minimum five years.

The PPI-M was first published in March 1994 with 1993 as reference period, but the coverage was then limited to the “Manufacture of food products, beverages and tobacco.” The index was revised in June 2002 to cover all relevant industry groups of the domestic manufacturing sector with base period 1998. The current series of PPI-M is based on a basket of goods derived from the 2002 Census of Economic Activities (CEA) and has retained 2003 as reference period. It has been compiled for the period January 2003 onwards. The new series is expected to be ready in 2009. However, no chaining or backwards revision to previous series has been made to extend the time series. Similarly, no chaining or backwards revision to previous series has been made for the PPI-A. However, plans are to revise backwards the PPIs series to better respond to users’ needs.

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

PPIs are comparable with related sub-indices of the CPI.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

The weight revision schedule follows a well-established cycle, which is known to the public. The weights of the PPI-M are revised every five years with the availability of the results of the CEA carried out every five years. The weights of the PPI-A basket of goods are also revised every five years.

In addition, for PPI-A, revisions are also made to provisional prices for sugar, tobacco, and tea.

A calendar of publications for the coming year, including expected release dates and revisions, is posted on the website at the beginning of each calendar year.

4.3.2 Preliminary and/or revised data are clearly identified.

PPI-A: Users are informed in the introductory part of the analysis about the updates of previous figures. Revised figures are indicated by annotations in the tables.

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

Not applicable (see 3.5.1).

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).

Time series of PPI-M and PPI-A data are published in dedicated quarterly Economic and Social Indicators and on the website (<http://statsmauritius.gov.mu>). Data are also published in other related publications, such as the Digest of Industrial Statistics and Digest of Agricultural Statistics.

Data are disseminated accompanied by charts and brief analyses of monthly, quarterly and yearly developments to facilitate analysis.

While the level of detail is satisfactory for the PPI-M (including class-level dissemination of indices for the main category, i.e., Manufacture of food products and beverages), it is insufficient for PPI-A.

5.1.2 Dissemination media and format are adequate.

The media and format of publication suit users' needs (see also 5.1.1). Excel tables are included as a presentation option on the website.

5.1.3 Statistics are released on a preannounced schedule.

An advance release calendar, posted on the CSO website, announces the release dates of the quarterly publications on the PPIs at the beginning of each calendar year.

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

The PPIs are released simultaneously to all interested parties through the website and via the quarterly Economic and Social Indicators by topic. However, a letter including the main

highlights is submitted to the Minister of Finance and Economic Development and to the Financial Secretary one day before the publication release (see also 1.2.2).

5.1.5 Statistics not routinely disseminated are made available upon request.

Non-confidential data at a more detailed level are available upon request, but this opportunity is not advertised.

5.2 Metadata accessibility

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

Brief explanatory notes on the methodology of the PPI-M and PPI-A are published in the dedicated Economic and Social Indicators, other related publications, as well as on the website. However, no methodological notes/ manuals are available yet although the initiative to prepare them is underway.

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

Only the above-referred metadata are prepared. No manuals or working documentation is available for more technical users.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

All publications include the name and contact details of the person responsible for the compilation of the index. Contact person and contact details for each of the PPIs are mentioned on the GDDS metadata, as well as on the CSO's publications. As published in CSO's Customer Charter, all requests are accommodated within seven days.

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

Information on publications is available on the CSO website. It is also available in the Guide to the Central Statistics Office and the Customer Charter (also posted on the CSO website).

Table 3. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Producer Price Index)
(Compiling Agency: Central Statistics Office)

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	
		O	LO	LNO		NO
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				Staff and computer equipment are insufficient.
0.2 Resources			X			
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data			X			Coefficient used in calculation of current period prices for sugar cane is not updated. For tea, tobacco, sugar, the final price is determined with a significant time lag. For PPI-M seasonal adjustment not made. New products are only introduced with the weight update. Revision studies are not conducted.
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		
4. Serviceability						
4.1 Periodicity and timeliness			X			PPIs are released quarterly.
4.2 Consistency		X				Consistent long-term series are not reconstructed. Series are not linked.
4.3 Revision policy and practice			X			

Table 3. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Producer Price Index)
(*Compiling Agency: Central Statistics Office*)

Element	NA	Assessment			Comments
		O	LO	L/NO	
5. Accessibility					
5.1 Data accessibility			X		PPI-A: Only the major commodity groups are published. No detailed methodological notes are available.
5.2 Metadata accessibility				X	
5.3 Assistance to users		X			

IV. GOVERNMENT FINANCE 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 Statistics Act 2000 of 30 November 2000 proclaimed on 2 April 2001 governs the activities of the Central Statistics Office (CSO), under the administration and control of the Director of Statistics. The Act gives the Director of Statistics the authority to take any census in Mauritius; and to collect, compile, analyze, abstract, and disseminate statistical information relating to the commercial, industrial, financial, agricultural, social, demographic, economic activities and general conditions of the people of Mauritius.

The first schedule to the Act lists thirty-one matters on which the Director of Statistics, with the approval of the Minister responsible for Statistics, or on the direction of the Minister, may collect statistical information. Statistics may not be collected until regulations have been made under the Act prescribing the particulars and information to be furnished. The taking of a census is subject to a direction of the President of the Republic who issues regulations prescribing the content and conduct of the census.

According to section 5, the Director shall cause statistics collected under the Act to be compiled, tabulated and analyzed, and may cause the statistics or abstracts of them to be published and disseminated in such manner as he may determine. The Director of Statistics is also authorized to coordinate and monitor statistical activities in all Government Ministries and Departments, local authorities and other statutory bodies with a view to implement sound statistical standards and minimize unnecessary duplication and overlap in the collection and publication of statistical information. The Director of Statistics has the sole responsibility for deciding the extent, form, and timing of publication and dissemination of any statistics produced by the CSO.

No specific legal responsibility has been granted to a single agency to compile government finance statistics (GFS). The CSO has the institutional responsibility under the Statistics Act 2000 (Article 5.1.b) to collect, compile, analyze, abstract, publish and disseminate statistical information on economic activities. The CSO is the only agency that collects, processes and disseminates general government statistics. The Ministry of Finance and Economic Development (MOFED) collects, processes and disseminates (primarily) budgetary central government statistics and central government debt. In compliance with Section 19 of the Finance and Audit Act 1973 the Accountant-General in the Treasury Department of the MOFED publishes an Annual Report showing the financial position of Mauritius as of the last day of the financial year (June 30). However, neither the CSO nor the MOFED is required legally to compile GFS.

Recommendation: *Legally/officially assign the responsibility to compile GFS for the general government to the CSO.*

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

By virtue of the Statistics Act, the Director of Statistics has to collaborate with Ministries and Departments of the Government in the collection, compilation, analysis, publication and dissemination of statistical information. As working arrangement, staff of the CSO are currently posted in line ministries. The coordination of statistical activities in all ministries and government departments is one of the duties of the Director of Statistics (Section 5 of the Statistics Act 2000). In addition, the Statistics Advisory Council advises the Minister responsible for statistical matters on coordination of statistical activities in Mauritius.

It should be noted that Section 7 of the Statistics Act 2000 obliges every ministry, department and statutory body to provide the CSO with data at the times, in the manner, and for the periods prescribed by the Director of Statistics. Data are regularly supplied to other institutions such as Bank of Mauritius (BOM) and Ministry of Health and Quality of life for compilation of other statistics or for further analysis.

The MOFED publishes budgetary central government data that follow the concepts and definitions of *A Manual on Government Finance Statistics, 1986 (GFSM 86)*. The MOFED provides all the revenue and expenditure data of the budgetary central government to the CSO for the compilation of GFS for the general government. The BOM, the Debt Management Unit of the MOFED, and the Treasury provide details on the financing of government to the CSO. Local authorities and extra-budgetary units also provide information on their operations.

The CSO also is responsible for compilation of the national accounts. The GFS compilers within the MOFED contribute to the relevant compilation of the general government sector in the national accounts.

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

The CSO is obliged to respect the confidentiality of individual data. Before entering on duty, all CSO staff have to sign a declaration of secrecy. Statistical work is mostly carried out on spreadsheets that have no external electronic links. Data received by the CSO are transmitted electronically or processed centrally on government computers. Individual data are stored under lock and all computers are password protected.

Section 17 of the Statistics Act restricts the disclosure of information relating to an individual person or business, but also sets out particular circumstances where exceptions are permitted (e.g. with the written consent of the person or owner of the business.)

Section 18 allows disclosure of information which is in the public domain while under section 19 “The Director may disclose information in the form of individual statistical records solely for bona fide research or statistical purposes provided that

- (a) all identifying information such as name and address has been removed; and
- (b) the information is disclosed in a manner that is not likely to enable the identification of the particular person or undertaking or business to which it relates.

Section 20 of the Statistics Act 2000 stipulates that the CSO should take steps to ensure the security and confidentiality of statistical information in whatever form it is stored. Furthermore, all individual census and surveys forms containing names and addresses should be destroyed after the data have been processed and validated, but not later than five years after the completion of the census or survey (Section 21).

Finally, Section 22 of the Statistics Act 2000 prescribes the declaration of secrecy required from every person employed in the execution of the Act. The wording of this declaration is set out in the third schedule given by the Act.

Further protection is provided under the Official Secrets Act 1972, Article 3.2.f.

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

Section 13 of the Statistics Act 2000 gives the CSO the power to obtain particulars in respect of any statistical collection carried out in accordance with the Act. The CSO also has access to public or other records if approval of the Minister has been obtained. No person is, however, required to supply information on technical processes or trade secrets. Refusal or neglect to provide information, or making untrue statements are offences and subject to the payment of a fine. However, in order not to affect the reliability of data collected, the collaboration of the respondent is preferred.

The CSO implements various measures to encourage voluntary response. For instance, folders explaining the purposes of major surveys are distributed in the English and French languages and often such cases give also rise to a presentation by the Minister on television. Some questionnaires contain a short introduction on the objectives of the survey. The CSO may also make the main results of the survey available to respondents.

Under Article 7 of the Statistics Act 2000 heads of ministries, government departments, administrative heads of local governments and statutory bodies must report the statistical information required by the Director of Statistics. Also, under Article 7 of the Statistics Act 2000, these government agencies and statutory bodies must complete and transmit the required information “at the times, in the manner and for the periods as may be prescribed.” In addition, under Article 14 the Director of Statistics (or any authorized officer) can obtain statistical information from any record or document of the government, local authority or

statutory body. However, the CSO does not have the right to inspect books and records, premises, and stocks of businesses or persons in case of non-compliance. The Statistics Act 2000 contains provisions for penalties under Article 28.2 (up to 20,000 rupees).

0.2 Resources

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

The CSO has four staff positions dedicated to the compilation of annual GFS for the general government sector and in cooperation with the MOFED the functional classification of budgetary central government expenditure on a quarterly basis. These staff also are assigned to compile quarterly general government statistics for the national accounts. Resources are limited; in particular staff resources are constrained taking into account the current migration from the methodology described in the *GFSM 1986* to the methodology described in the *Government Finance Statistics Manual, 2001 (GFSM 2001)*. While computer resources seem adequate at the moment, any additional demands could over-extend these resources.

On-the-job and external training have been available to the MOFED and CSO staff. Formal internal training has not been provided. Some staff have attended external training on the *GFSM 1986* and on the *GFSM 2001*.

Significant progress to automate government finance compilation procedures has been achieved recently through the implementation of the Treasury Accounting System (TAS) used by the Accountant-General to follow the cash flows of the budgetary central government. However, this process needs to be extended to other areas of the general government. Data for non-budgetary central government and local governments are input manually. A new chart of accounts, based on the *GFSM2001*, is currently being prepared and is expected to be implemented as from the financial year 2008/09.

Recommendation: *Strengthen and increase staff resources for work on GFS..*

0.2.2 Measures to ensure efficient use of resources are implemented.

The CSO does not estimate the costs of producing individual statistics. Neither does it collect information on how much the burden laid on respondents is. A statistical program that addresses issues concerning the efficient use of available resources does not exist.

Attempts to use resources efficiently are ad hoc and informal. Budget costs are not measured routinely, therefore they are not assessed against desired output targets.

0.3 Relevance

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

The budgetary central government data are compiled concomitantly with the budget preparation. The Minister of Finance and Economic Development reviews the outcome of the previous fiscal year in the budget speech. Although GFS for general government are not directly used to formulate, monitor or evaluate fiscal policy, these data are used by the MOFED in its macroeconomic analysis.

The analytical framework follows the *GFSM 1986* closely and could be suitable for users' analytical needs, if the data were more timely.

Although feedback from users is not sought on a regular basis and the relationships between users and compilers have not been formalized thus far. The main users (such as the Ministries of Finance and Economic Development and Local Government, as well as the BOM) provide feedback via additional data requests. The Statistics Advisory Council (established in May 2001) has the authority under the Statistics Act 2000 to develop these relationships.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The setting up of statistical priorities, formulation of work programs, and the discussion of various aspects of quality are part of the activities of the Statistics Advisory Council. This Council has, among other things, the function of advising the Minister on:

- the improvement, extension, coordination, and harmonization of statistical activities in Mauritius
- the actual and perceived integrity of, and public confidence and trust in, Mauritius's statistics, and,
- the maintenance of independence, accuracy, relevance, integrity, timeliness, and professional standard of statistical information produced in Mauritius.

Special quality assurance teams for monitoring quality indicators, conducting periodic reviews, and conducting process improvement studies do not exist. The CSO is not a large organization, and management itself performs many of these quality assurance tasks.

Senior staff in the MOFED and CSO have put strong emphasis on quality statistics. In addition, the Statistics Act 2000 (Article 24.1.vii) highlights aspects of quality statistics to be maintained by the Statistics Advisory Council: "the maintenance of independence, accuracy, relevance, integrity, timeliness and professional standard of statistical information produced in Mauritius."

The autonomous National Audit Office observes international accounting standards and audits all the budgetary central government units, most of the extra-budgetary units, and all local government units in the general government.

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

Quality monitoring is largely implicit in the CSO's work processes; a separate plan for improving quality as such does not exist. Since joining the General Data Dissemination System, the CSO has undertaken major efforts to improve the quality of its statistics, including GFS.

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

During the work program planning, there is trade-off among the dimensions of quality (availability of resources, timeliness and accuracy of data). However, the GFS data are compiled using mainly final data and only a very limited amount of estimates are used.

Also, the Statistics Advisory Council has, amongst others, the function of advising the Minister on: (i) the improvement, extension, coordination, and harmonization of statistical activities in Mauritius; (ii) the actual and perceived integrity of, and public confidence and trust in, Mauritius's statistics, and, (iii) the maintenance of independence, accuracy, relevance, integrity, timeliness, and professional standard of statistical information produced in Mauritius.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The CSO compiles statistics on an impartial basis. It has not experienced pressure from outside the CSO to change any data compiled.

According to the Statistics Act 2000, the Director of Statistics shall ensure the independence of the statistical information produced by that agency. The Act also states that the Director has the sole responsibility for deciding the procedure and method to be employed in the provision, as well as the extent, form, and timing of publication and dissemination of any statistics produced by the CSO.

The independence of the CSO, as the central depository of statistics and particularly in its capacity as GFS compiler is assured through the Statistics Act 2000. The budgetary central government statistics is compiled in cooperation by the CSO and the Budget Strategy and Management Department in the MOFED, which also prepares the annual budget.

The CSO and the MOFED staff have been involved in seminars and conferences to promote professionalism.

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

Compilers are free to choose the data sources and statistical techniques they think fit. However, the CSO is not free to collect any mandatory statistics until regulations have been made by the Minister prescribing the particulars and information to be furnished for the statistics that are to be collected.

There is no evidence of political interference in the selection of sources and methods, which are the responsibility of technical staff in the CSO and MOFED.

Changes to statistical techniques are not influenced by political considerations, but implementation of the new GFS methodology would require the support of the political leaders.

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

In Mauritius, it is not deemed appropriate for the Director of Statistics to comment on erroneous interpretation or the misuse of statistics. In the future, the Statistics Advisory Council might do so, as Section 24 of the Statistics Act 2000 allows the Council to issue public statements on any matter concerning its functions, after consultation with the agency involved.

The CSO and MOFED staff can provide expert advice on technical (not policy) aspects of GFS, but are rarely asked to do so.

Neither the MOFED nor CSO staff are allowed to comment publicly on the erroneous interpretation or misuse of statistics. The Minister of Finance and Economic Development comments on the budget (which includes central government 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 Statistics Act 2000 defines the terms and conditions under which the CSO produces and disseminates data. The Statistics Act is, among other things, posted on the CSO's website.

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

Approval processes for publication are not made public. In the CSO the publication of GFS data must be approved by the Director of Statistics. The publication of the budgetary central government data in the GFS format is part of the budget documents issued by the MOFED and must be approved by the Financial Secretary, and the Minister of Finance and Economic Development.

Recommendation: *Inform the users of the internal approval processes of the data.*

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

Products of the CSO are clearly identified as such, even though various publications also indicate the name of the parent ministry.

The GFS data released by the CSO are clearly identified as such.

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

While no advance notice is given of major changes in methodology, source data, or statistical techniques, the authorities state that changes would be clearly identified with the related published data.

The authorities state that changes that would cause a break in the time series would be identified. No examples are apparent of recent identified breaks in time series. There appear to be no explanatory footnotes providing such identification in recent publications because no breaks in time series have occurred recently.

1.3 Ethical standards

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

Ethical rules for staff are laid down in the Code of Ethics for Public Officers and the Official Secrets Act; both of which are published. The Statistics Act 2000 contains further provisions

concerning the faithful and honest fulfillment of duties of staff and the limitations on disclosure of information that comes to their knowledge by reason of employment.

The behavior of all civil servants falls under the “Code of Ethics for Public Officers.” In addition, the Statistics Act 2000 enumerates offenses under the Act and penalties (up to 50,000 rupees and imprisonment for up to one year). There is no specific code of conduct for compilers of GFS.

2. Methodological soundness

The GFSM 1986 guidelines are used in the following assessment.

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.

Mauritius’s GFS are compiled based on the *GFSM 1986*. The concepts, definitions and classification structures used follow, in general, the corresponding provisions of the *GFSM 1986*. The CSO and the MOFED are, however, currently migrating to the *GFSM 2001* methodology. Although, an official detailed migration path is not available an unofficial plan for migrating to *GFSM 2001* was prepared by the GFS compilers in the CSO.

Recommendation: *Prepare a detailed migration path and obtain official approval for implementing GFSM 2001.*

2.2 Scope

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

The scope of GFS in Mauritius is consistent with the international accepted standards and guidelines. In the compilation of GFS the CSO covers all government entities and activities. General government in Mauritius consists of budgetary central government, extrabudgetary institutions, social security funds, a regional government (provincial government), and local authorities.

The authorities prepare the following GFS tables;

- (a) Summary of Table of Major Components;
- (b) Government Revenue and Grants (Table A);
- (c) Classification of the Functions of Government (Table B);
- (d) Economic Classification of Government Expenditure and Lending minus Repayments (Table C);
- (e) Financing (Tables D and E) are prepared for the budgetary central government, the consolidated central government, and general government.

Tables on government debt are presented at the level of the central government.

As part of the migration to *GFSM 2001* the authorities are in a position to start publishing the “Statement of Sources and Uses of Cash” described in Table 4.2 of the *GFSM 2001* in December 2008.

2.3 Classification/sectorization

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

The sectorization/classification of government agencies and their transactions are in accordance with the *GFSM 1986* methodology. A detail list of all extrabudgetary units, nonfinancial public corporations, and financial public corporations is available in the CSO publication “*Digest of Public Finance Statistics.*”

GFS data are provided separately for each level of government (budgetary central government, extrabudgetary central government, social security, consolidated central government, regional government, local government and general government); since the establishment of a regional government (provincial government) on the island of Rodriques in October 2002 the data are included in general government.

2.4 Basis for recording

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

Payments in foreign currency, such as amortization payments, are converted into local currency using the official foreign currency rate prevailing on the day the payment is effected. Also, all foreign currency balances are valued at the official rates ruling on the last working day of the financial year.

2.4.2 Recording is done on a cash basis.

The accounts of budgetary central government, regional government, and local government are prepared on a cash basis.

The accounts of extra-budgetary units are available on an accrual and on a cash basis. The cash statements are used in the compilation of Government Finance Statistics. Transactions are recorded when checks are issued or payments received.

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

Government finance statistics are compiled on a gross basis in line with *GFSM 86*. Financing is compiled on a gross basis but recorded on a net basis and corrective transactions are netted against the original source data transactions during the compilation process.

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.

A comprehensive list of individual public sector units is published in the ‘Digest of Public Finance Statistics’.

Administrative systems provide stocks and flows for central government. Data on other units of central government are derived from audited/unaudited accounts submitted by the social security funds and extra-budgetary units. Data for regional government are based on the final accounts of the Rodrigues Regional Assembly and data for local government are derived from audited/unaudited accounts provided by the local authorities. There are five municipalities, four district councils, and 124 village councils that comprise local government. Local government is small relative to the rest of government.

These data are used to compile all the different levels of government: budgetary central government, consolidated central government, and general government.

Data on the domestic and foreign debt stock are obtained from the Debt Management Unit in the MOFED, the accounts of the Accountant-General, and the BOM.

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

The Treasury Accounting System (TAS) that contains the budgetary central government data is not linked directly to GFS categories. However, in working towards the implementation of *GFSM 2001* the authorities are linking the TAS and the GFS codes.

Budgetary data are reclassified to conform to aggregate GFS categories and a derivation table is published in the annual budget. A list of adjustments to align the data to GFS categories is coordinated with the CSO.

The timing of recording and valuation of source data are consistent with GFS concepts.

3.1.3 *Source data are timely.*

Budgetary central government data are available monthly on a provisional basis and are timely to allow for reporting monthly data with a lag of one month.

Source data for extra budgetary units, social security, Rodrigues, and local authorities are obtained from the final accounts within 3 to 6 months of the close of the financial year. However, in order to improve the timeliness of the data, the CSO is making all government institutions aware of deadlines set for SDDS reporting.

Recommendation: *Continue work on improving the timeliness of source data by obtaining an agreement on the timely provision of data from all major source data providers.*

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 source data are analyzed for misreporting to check for temporal consistency and consistency with other related data. Data inconsistencies are queried.

3.3 *Statistical techniques*

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

Data are based primarily on administrative records and few statistical techniques are applied. Compilation procedures minimize processing errors such as coding, editing and tabulation errors. Sound techniques are in place to estimate missing data, when relevant. The estimation of missing data are based on accepted statistical processes (including extrapolation).

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

Generally accepted methods are used to adjust and consolidate GFS data derived from administrative and accounting records. Suspect submissions or data discrepancies identified in the consolidation are investigated and resolved, frequently through direct contacts. No other statistical procedures are employed. Data adjustments and reclassifications appear to follow sound statistical techniques.

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

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

An appropriate balance between accuracy and timeliness is targeted. Before the publication of the data, all tables are checked for internal consistency.

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

All discrepancies between GFS and intermediate budgetary data, and those between the intermediate budgetary and accounting data, are investigated. Expenditure data are cross-checked for consistency with other ad-hoc data obtained from government institutions, and fiscal revenue data are cross-checked against all other intermediate data, such as information from the Mauritius Revenue Authority.

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

Both the CSO and the MOFED make use of the data from the Debt Management Unit and BOM for both domestic and foreign financing (based on historical cost on a cash basis) and compare them against the aggregated data compiled by the Accountant-General (Treasury, MOFED).

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).*

There are virtually no revisions, except for the small updates to the latest annual budgetary central government figures. Therefore, there are no need for revision studies.

4. *Serviceability*

4.1 *Periodicity and timeliness*

4.1.1 *Periodicity follows dissemination standards.*

Mauritius meets the periodicity requirements prescribed by the SDDS, as follows:

- General government operations data meet the SDDS annual periodicity requirement.
- Central government operations data meet the SDDS monthly periodicity requirement.
- Central government debt data meet the SDDS quarterly periodicity requirement with a breakdown by maturity, creditors, and by currencies.

4.1.2 Timeliness follows dissemination standards.

Mauritius meets the timeliness requirements prescribed by the SDDS, as follows:

- General government operations data does not meet the SDDS six month timeliness requirement. Data are disseminated with a lag of 9-10 months after the end of the reference period.
- Central government operations data meet the SDDS monthly timeliness requirement.
- Central government debt data meet the SDDS quarterly timeliness requirement.

Recommendation: *Improve the timeliness of the general government operations data.*

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

Consistent time series are available and vertical consistency holds for all levels of government.

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

Generally, divergences from expected trends in the fiscal time series are related to underlying fiscal policy or economic developments. These developments are outlined in the Minister of Finance and Economic Development's budget speech.

The methodology and statistical systems for government data have not changed significantly, therefore discontinuities have not arisen from changes in methodology or statistical systems and therefore no breaks in time series have occurred.

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

The government finance statistics are consistent with national accounts statistics. The government finance components comprising external debt data are consistent with corresponding debt stocks. However, no regular consistency checks and reconciliations are done with data available from the BOM and the depository corporations.

Recommendation: *Regularly check for consistency between GFS and monetary data and prepare a reconciliation table.*

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

In general, data are not revised, however, this revision policy is not made clear to the public.

Recommendation: *Explain the revision policy in the GFS publication.*

4.3.2 Preliminary and/or revised data are clearly identified.

The status of the data is clearly identified.

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

Not applicable

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 data are disseminated in Mauritian rupees. The fiscal year starts on the 1st of July and ends on the 30th of June.

Data are presented for revenue, expenditure, lending minus repayments, and overall balance (surplus/deficit), and foreign and domestic financing. Separate presentations cover:

- (i) Budgetary central government accounts;
- (ii) Extrabudgetary units;
- (iii) Social security schemes;
- (iv) Consolidated central government accounts (that is, budgetary central government, extra-budgetary units, and social security schemes);
- (v) Regional government (provincial government);
- (vi) Local government; and

(vii) general government²⁴ (that is, consolidation of central government, regional government and local government accounts).

Data on central government debt are disseminated according to debt holder, instrument, and maturity as well as debt guaranteed by the central government.

Additional series are disseminated to meet a range of users' needs with various levels of details.

The data are disseminated in a clear manner with charts and tables to facilitate analysis.

5.1.2 Dissemination media and format are adequate.

A list of publications, including the dedicated GFS publication by the CSO is listed in the *Government Gazette* and on the CSO website. The annual cycle of the budget papers is well publicized.

The annual CSO *Digest of Public Finance Statistics* and MOFED *Recurrent Budget* publications contain the GFS for general government and budgetary central government data, respectively. Data on outstanding central government debt are published on the MOFED's website. Data on debt guaranteed by the central government are available in the *Annual Report* of the Accountant-General and on the website of the MOFED on a quarterly basis.

5.1.3 Statistics are released on a preannounced schedule.

An advance release calendar is available for the publications of the CSO. However, no advance release calendars are available for monthly data on central government operations or outstanding central government debt.

Recommendation: *Prepare and disseminate advance release calendars for central government operations and outstanding central government debt.*

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

Data are available to all users simultaneously at the time of release on the website of the Central Statistics Office (<http://statsmauritius.gov.mu>) and the website of the MOFED (<http://www.gov.mu/portal/site/MOFSite/menuitem.44970c4fac5619f4e0aad110a7b521ca/>).

5.1.5 Statistics not routinely disseminated are made available upon request.

²⁴ A functional classification of general government expenditure is also available

Non-confidential data are made available upon request; however the terms and conditions on which these data could be provided are not published in GFS publications. While there are not many instances of such requests, the CSO has assisted students and embassies with their research using GFS.

5.2 Metadata accessibility

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

The sources of data published by the Central Statistics Office are given in the *"Digest of Public Finance Statistics."* This annual digest also includes a description of concepts and definitions of the "GFSM." A link is also available from the website of the CSO and the MOFED to the metadata disseminated on the IMF's DSBB website.

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

No detailed technical descriptions of concepts, sources, and methods, are published. Brief descriptions of concepts, sources, and methods are provided to general users in publications, along with the data.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

Contact persons and their phone numbers are identified in the GFS publications.

While few users take advantage of CSO support on GFS, it appears that such assistance is provided quickly and reliably.

There are no provisions for the contact person to respond to the misuse of government finance data (see 1.1.3 above), although the Minister of Finance and Economic Development has responded publicly on occasion.

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

The Government Gazette contains a list of publicly available publications and related charges. The documents are available from the Printing Department and the CSO. A list of publications and the publications are also provided on the Internet.

Table 4. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(Compiling Agency: Central Statistics Office)

Element	NA	Assessment			Comments
		O	LO	LNO	
0. Prerequisites of quality					
0.1 Legal and institutional environment			X		The official responsibility to compile GFS is not assigned. Resources are constrained, especially taking into account the current migration to <i>GFSM2001</i> .
0.2 Resources			X		
0.3 Relevance		X			
0.4 Other quality management		X			
1. Assurances of integrity					
1.1 Professionalism		X			Users are not informed of the approval processes of the data.
1.2 Transparency			X		
1.3 Ethical standards		X			
2. Methodological soundness					
2.1 Concepts and definitions			X		An official detailed migration path for migrating to GFSM 2001 is not available
2.2 Scope		X			
2.3 Classification/sectorization		X			
2.4 Basis for recording		X			
3. Accuracy and reliability					
3.1 Source data			X		Source data for the compilation of GFS for general government are not timely enough to meet SDDS timeliness requirement.
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. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Central Statistics Office*)

Element	NA	Assessment			Comments
		O	LO	L/NO	
4. Serviceability					
4.1 Periodicity and timeliness			X		General government data do not meet the SDDS timeliness requirement. No regular consistency checks or reconciliations are performed between government and monetary statistics. Although there is no need for the frequent revision of the data the users are not informed of the revision policy or practice.
4.2 Consistency			X		
4.3 Revision policy and practice			X		
5. Accessibility					
5.1 Data accessibility			X		No advance release calendars for central government operations and outstanding central government debt.
5.2 Metadata accessibility		X			
5.3 Assistance to users		X			

V. MONETARY STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Bank of Mauritius (BOM) is responsible for compiling and disseminating monetary statistics. The data are compiled under the terms and conditions set out in the Bank of Mauritius Act (BOM Act) of 2004, which governs the activities of the BOM. The BOM's responsibility for compiling, processing, and disseminating statistics is clearly specified in Section 5(1)(d) of the Act, which provides that the BOM shall collect, compile, and disseminate, on a timely basis, monetary and related financial statistics. In terms of section 32 of the BOM Act, the BOM shall, as soon as may be practicable, after the last working day of each month, prepare and publish a return on its assets and liabilities as at the close of business on that day.

The BOM compiles and disseminates monetary statistics in its *Monthly Statistical Bulletin* and on its website. The framework used is that of the Depository Corporations Survey (DCS), which is a consolidation of the accounts of the BOM and those of all deposit-taking institutions in the country, that is, banks and non-bank deposit-taking institutions. In addition to the monthly DCS, the BOM publishes separate data on each of its components, the Central Bank Survey (CBS) and Other Depository Corporations Survey (ODCS), and the underlying sectoral balance sheets of the BOM, banks, and non-bank deposit taking institutions.

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

Within the BOM, there are adequate arrangements in place to ensure the smooth flow of information between the Statistics Division, the Supervision Division, the Accounting and Budgeting Division, the Financial Markets Operations Division, and the Information Technology Division for the purpose of compiling monetary and financial statistics. The BOM monthly balance sheets, along with more detailed schedules called the Certificate of Balances, are provided to the Statistics Division by the Accounting and Budgeting Division within one week after the end of the reference month. Banks' monthly returns are reported directly to the Statistics Division within ten working days after the end of the month, while the monthly balance sheet reports of the non-bank deposit-taking institutions are provided with a lag of about three weeks. The Statistics Division shares these reports with the Supervision Division.

Data sharing and coordination with other data producing agencies (CSO, Ministry of Finance) appear to be adequate. In particular, there are uniform classification guidelines (such as a detailed list of units of government or a list of government accounts) to ensure consistency of classification in monetary statistics, national accounts, and government

finance statistics. The newly established Committee of the Statistics Advisory Council (SAC) on International Commitments will provide the forum to ensure further coordination and harmonization among the data compiling agencies.

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

In accordance with section 26 of the BOM Act, the directors, officers or employees of the Bank are forbidden to disclose directly or indirectly to any person any information relating to the affairs of the Bank, of any other bank or financial institution or of any of its customers, which he has acquired in the performance of his duties or the exercise of his functions. Every Director or head of department of the BOM should take an oath of confidentiality, while every other officer or employee of the Bank should make a declaration of confidentiality before beginning to perform any duties. Violation of confidentiality is considered a criminal offence and, upon conviction, is liable to a fine not exceeding one million rupees and to imprisonment for a term not exceeding 5 years.

Monetary and financial statistics are produced mainly from balance sheet data provided by banks and nonbank deposit-taking institutions in their monthly returns. Only the staff of the Statistics Division and of the Supervision Division have access to data of individual banks before they are consolidated for publication in the *Monthly Statistical Bulletin*.

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

The BOM's legal mandate with regard to statistical reporting is sufficiently addressed in the BOM Act. In accordance with section 50, the BOM may, whenever necessary, require the cooperation of banks and other financial institutions, issue instructions or guidelines or impose requirements on or relating to the operations and activities of and standards to be maintained by the banks and other financial institutions. Any person violating these powers of the BOM may be subject to a fine not exceeding 500,000 rupees and to imprisonment for a term not exceeding 5 years. Furthermore, Section 51(1) of the BOM Act gives the BOM the power to require information and data from financial institutions at such time and in such manner and form as may be approved by the BOM. Moreover, the BOM may publish, in whole or in part, at such times as it may decide, the information or data furnished. The Act also empowers the BOM to examine the accounts, books, records and other documents of any financial institution, in order to verify its compliance with any requirement under the banking laws.

Financial institutions responsibilities with regard to reporting to the BOM are regulated in the Banking Act 2004 (Banking Act). In accordance with Section 35 (1), every financial institution shall, not later than the tenth working day of each month, forward to the central bank a statement, in such form and in such medium as may be approved by the central bank, showing the assets and liabilities of all its offices and branches in Mauritius together with an analysis of advances, bills discounted and any other credit as at the close of business on the last working day

of the preceding month. In terms of Section 35 (2), every financial institution shall furnish the central bank, within such period and in such manner as it may require, with such additional statements and information relating to the operations of the financial institution and those of its affiliates in Mauritius or its branches and affiliates outside Mauritius as the central bank may consider necessary or expedient to obtain for the purposes of the banking laws.

0.2 Resources

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

Within the BOM's Statistics Division, direct responsibility for compiling monetary and financial statistics rests with the Monetary and Financial Statistics Section (MFS Section). The MFS Section has a total of six staff, five of which are professionals (one Chief and four analysts) exclusively devoted to the compilation and analysis of monetary and financial statistics. The analysts engaged in compiling monetary and financial statistics are required to have a university degree in economics or statistics (at least a Bachelor's degree). The remaining one staff member is a statistical assistant, with a primary responsibility for data processing. It is estimated that, on average, it takes at least one year of on-the-job training to gain sufficient knowledge and expertise to do the basic compilation work. All professional staff in the MFS Section have at least five years of experience at the central bank, and adequate experience in the compilation of the monetary and financial statistics. Current staffing is adequate for present needs.

Monetary and financial statistics compilers are given the opportunity to participate in training courses offered at the South Africa Reserve Bank Training Institute, the Bank of England Center for Central Bank Studies, and the relevant courses offered by the IMF Institute. However, owing to staff turnover, at present only the section chief attended the monetary and financial statistics course organized by the IMF. Specialized methodological training of other staff of the section needs to be strengthened, in particular with the view to the developmental needs of the monetary and financial statistics compiled by the BOM.

The computer resources utilized in the collection and compilation of monetary statistics are adequate. All staff members have personal computers that are connected to the BOM network.

Recommendation: Utilize available training opportunities to enhance specialized methodological qualifications of the MFS Section staff.

0.2.2 Measures to ensure efficient use of resources are implemented.

In general, all programs in the BOM are subject to budget considerations and performance assessments. However, with the adoption from mid-2003 of the DCS based on the *Monetary and Financial Statistics Manual (MFSM)* as the framework for compiling monetary statistics, the BOM continued through the end of 2006 to compile the Monetary Survey, that was based

on the 1984 IMF's draft *Guide to Money and Banking Statistics in International Financial Statistics*. At present, even though the compilation of the monetary survey has been discontinued, data collection forms used for the monetary survey (so called segmental balance sheets) are still required from depository corporations in parallel with the report forms (sectoral balance sheets) designed for the compilation of the DCS. Hence, both the reporting depository corporations and the MFS Section have to deal on a regular basis with two reporting frameworks that are based on different methodological underpinnings. Although the segmental balance sheets provide some information that is not available in sectoral balance sheets and are used by the Supervision Division of the BOM, no effort has been made so far to incorporate these additional information needs into the framework of sectoral balance sheets, so that the old report forms could be discontinued with the corresponding resource cost saving for the reporting depository corporations and the BOM.

Recommendation: Use the DCS analytical framework as the only methodological basis for monetary data collection and compilation; discontinue reporting arrangements based on the monetary survey framework.

0.3 Relevance

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

The BOM conducts regular reviews to assess whether monetary statistics meet the needs of policymakers and other data users. Senior staff participate in users' fora, including international statistical meetings and seminars organized by international and regional organizations. Monetary statistics compilers are aware of the developments in the financial markets, including the introduction of new instruments and institutions, and work toward incorporating these changes in the monetary statistics. Given that monetary statistics are fully based on the IMF's methodology, the BOM's effort in upgrading the existing statistics is primarily aimed at adjusting as soon as possible to the new methodological and data presentation initiatives. A recent example has been the introduction of the Standardized Report Forms (SRFs) by the IMF. While the BOM was among the first countries to implement the SRFs, further work is underway to fully comply with classification requirements of the SRFs. This refers, in particular, to the need to extend the classification by currency to all categories of financial instruments that are distinguished in the SRFs.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The BOM recognizes that official statistics must have the confidence of their users and provides the infrastructure to exercise quality control at every stage of data production and dissemination. Thus, the Supervision Division verifies that data reporting practices followed by banks and nonbank deposit-taking institutions are consistent with the regulations issued under the Banking Act of 2004. The Statistics Division has systems and procedures in place

to ensure quality in the compilation process and analysis, and in the review of data prior to publication.

There is wide recognition of the tradeoffs between data quality and timeliness. The production of monetary statistics is to a great extent automated through the use of linked worksheets. As a measure of quality control, data processing includes a series of built-in checks and validations at every stage of the production cycle. As a result of these processes, it has been possible to adhere to a strict publication schedule, while maintaining the quality of the data.

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

Within the BOM, the staff of the Statistics Division and the Supervision Division work closely together to establish priorities concerning the collection and compilation of the data; ensure the smooth flow of data within the BOM; and avoid duplication of effort. Within the Statistics Division, the Head of the division and the staff of the MFS section monitor the quality of data closely.

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

The Banking Committee, chaired by the Governor of the BOM, includes chief executives of all banks. To facilitate improvements in monetary statistics, the Banking Committee established a technical committee on statistics, which includes two representatives from each commercial bank. The main task of the technical committee is to review the quality of the monetary statistics and focus on the further development of monetary statistics.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The statutory provisions under which the BOM compiles monetary statistics are adequate to support its independence in conducting these functions. Specifically, Section 3 (3) of the BOM Act grants the BOM independence in performing its functions. Accordingly, the BOM can perform its statistical functions independently without fear, favor or prejudice. Staff involved in compiling monetary statistics enjoy reasonable professional independence, within usual limits imposed by the hierarchical structure of the central bank. Professional competency plays a key role in recruitment and promotion policy. Staff involved in producing monetary statistics are given opportunities to enhance their professionalism through participation in external courses and on-the-job training.

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

The choice of sources and statistical methods is determined solely by statistical considerations. In compiling monetary statistics, the BOM strives to adhere to the methodological guidelines of the *MFSM*.

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

The Statistics Division is authorized to comment on misinterpretations of its statistics if deemed truly significant. However, no need for such comments was identified in the recent past. The BOM seeks to prevent misinterpretation or misuse of monetary statistics by providing explanatory materials and notes on its website and in its publications.

1.2 Transparency

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

The BOM Act and the Banking Act, as well as other relevant documents, are available at the BOM's website. The description of the methodology underlying monetary statistics compiled by the BOM was published in the February 2007 issue of the *Monthly Statistical Bulletin* and are also posted on the BOM's website.

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

Following the approval of the data by the Statistics Division, the DCS is provided to the management of the BOM. No officials outside the BOM have access to the data before their release to the public. Information on internal access to data prior to their release is available to the public in the Mauritius GDDS metadata published on the IMF's Dissemination Standards Bulletin Board (DSBB).

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

The BOM is identified as the source of the monetary statistics, but there is no indication in the *Monthly Statistical Bulletin* of the primary responsibility of the Statistics Division for compiling these statistics. In the case of redissemination of data produced by other agencies (CSO, Ministry of Finance), the source of the data is given in footnotes.

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

A “Note on the Change in Methodology in Monetary Statistics,” was published in the February 2007 issue of the *Monthly Statistical Bulletin*, coinciding with the discontinuation of the monetary survey data framework. An advance notice was not given.

1.3 Ethical standards

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

The staff of the BOM are bound by the code of conduct as documented in the “Conditions of Service” and “Discipline and Disciplinary Procedures” that are provided to each staff member at the commencement of employment. These internal documents instruct the staff, in particular, to observe secrecy regarding the information acquired in the course of duty, not to allow any unauthorized access to books and papers belonging to the Bank, and not to engage in public discussion of the BOM’s affairs or policy without the permission of the management.

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 for compiling monetary and financial statistics is based on the *MFSM*, which the BOM has applied since June 2003. The DCS is a consolidation of the accounts of the Bank of Mauritius and other depository corporations (ODCs), which comprise banks and nonbank deposit taking institutions. In addition to the monthly DCS, its two component surveys, the CBS and the ODCS are also disseminated, along with the underlying sectoral balance sheets for the central bank and for the ODCs.

As mentioned earlier under 0.2.2, in parallel with the DCS and its components, the BOM continued compiling the Monetary Survey, which was based on the 1984 IMF’s draft *Guide to Money and Banking Statistics in International Financial Statistics*. Although the dissemination of the monetary survey was discontinued at the end of 2006, the MFS Section continues to compile it for internal use and some tables published in the *Monthly Statistical Bulletin* are still based on the monetary survey framework. This includes, in particular, tables referring to the components and sources of reserve money and to the components and sources of broad money (M2).

2.2 *Scope*

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

The financial corporations sector of Mauritius comprises the BOM (the central bank), twenty banks, thirteen non-bank deposit-taking institutions, the Development Bank of Mauritius (DBM), three money-changers, five foreign exchange dealers, as well as mutual funds, investment companies, insurance and re-insurance companies, asset management companies, a venture capital fund, and other providers of financial services. The BOM, banks, and the non-bank deposit-taking institutions issue the types of financial instruments that are included in the national definition of broad money. Therefore, these financial corporations are included in the depository corporations subsector.

The institutional coverage of the DCS includes all financial institutions identified at present as depository corporations in Mauritius. However, no information is available at the BOM on mutual funds, some of which may be issuing liquid liabilities that may need to be considered as close substitutes for deposits. Such mutual funds would need to be included in the coverage of the DCS as issuers of money. Hence, more information is needed to verify whether the coverage of the DCS is in fact complete. Although at present there are no banks in liquidation, in the past the BOM had a practice of including such banks in the coverage. This practice is consistent with the recommendations of the *MFSM*.

Given that the M1 and M2 monetary aggregates are derived from the monetary survey analytical framework, their scope is restricted to banks and does not include nonbank deposit taking institutions.

Recommendation: Conduct a survey of the mutual funds to ascertain whether they issue close substitutes for deposits and, therefore, qualify for the inclusion in monetary statistics as depository corporations.

2.3 *Classification/sectorization*

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

The classification of financial instruments and the principles of sectorization applied in the monetary statistics compiled by the BOM are fully consistent with the guidelines of the *MFSM*. The only identified exception is the treatment of the National Pension Fund, which has been included in the DCS as a financial corporation, rather than as a component unit of the central government subsector. On the other hand, in accordance with the recommendations of the *MFSM*, securities repurchase agreements are treated as collateralized loans.

Given that the BOM implemented the DCS framework prior to the development of the SRFs, the sectoral balance sheets provided to the BOM by ODCs include the breakdown by currency (national/foreign) only for currency holdings, deposits, and securities other than shares, as it was envisaged in the *MFSM*. Hence, these sectoral balance sheets do not fully meet the classification requirements of the SRFs, in which all financial instruments are to be classified by currency. This classification issue, however, does not affect the data disseminated by the BOM to the public, because these data are presented in a more aggregated format and do not include currency breakdowns. Work is underway at the BOM to incorporate fully the currency breakdowns into the sectoral balance sheets.

Recommendation: Reclassify the NPF as part of the central government subsector.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

In line with the general recommendation of the *MFSM*, the valuation of financial assets and liabilities is based on market prices or, for financial assets and liabilities that are not traded or traded infrequently, on market-price equivalents (fair values). Loans and deposits, however, are included in the statistics on the basis of book value, which includes the nominal value of the principal augmented by the accrued interest. This practice is consistent with the *MFSM* guidelines. In line with the *MFSM* recommendations, loans are reported on a gross basis, without netting of provisions for expected losses. These provisions are reported in liabilities as part of other accounts payable, although in the present reporting they are not separately identified.

Financial instruments denominated in foreign currency are converted into national currency values at the mid-point market exchange rate prevailing at the balance sheet date or, for transactions, at the transaction date. This practice is consistent with the recommendations of the *MFSM*.

2.4.2 Recording is done on an accrual basis.

In the DCS and its component surveys, in accordance with the accrual accounting principles recommended by the *MFSM*, interest accruing on deposits, loans, and securities other than shares is incorporated into the outstanding amount of the underlying financial asset or liability. However, in the monetary survey that is still compiled by the BOM for internal use (see sections 0.2.2 and 2.1), interest accruals are included in other (unclassified) assets or liabilities. Consequently, monetary aggregates M1 and M2, as well as the reserve money indicator, which are derived from the monetary survey, are in fact based on a cash basis. These cash-based aggregates are disseminated in the *Monthly Statistical Bulletin* along with the accrual-based aggregate of broad money liabilities that is a standard component of the DCS and the accrual-based indicator of the monetary base, which is a standard component of the CBS. No explanatory notes are provided in the *Monthly Statistical Bulletin* to explain the differences in the accounting basis of the monetary aggregates disseminated by the BOM.

Recommendation: Discontinue the compilation and dissemination of the cash-based reserve money, M1 and M2, replacing their analytical uses with the accrual-based monetary base indicator and broad money liabilities aggregate that are derived within the DCS. If needed for analytical purposes, derive other monetary aggregates (including M1) from the DCS framework.

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

Data are collected and compiled on a gross basis. Assets and liabilities of the banks are reported on a gross basis in their monthly returns and are aggregated into a statement of assets and liabilities without consolidating interbank positions. Similarly, the central bank accounts are compiled and disseminated on a gross basis. Reciprocal asset/liability positions between the BOM and the depository corporations, as well as those among the depository corporations, are separately identified. Consistent with the standard recommended in the *MFSM*, netting and consolidation adjustments are made only in presenting the analytical survey (the DCS).

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 accounts are the accounting records (balance sheet) of the BOM prepared by the Accounting and Budgeting Division of the BOM. These reports are generated from an electronic general ledger system based on complete reporting. Source transactions are captured and the reports are generated from a predetermined classification of each account. The balance sheet is presented in different levels of detail for various purposes and user groups. For the purpose of compiling monetary statistics, the BOM sectoral balance sheet is augmented by detailed schedules (Certificates of Balances). The basic data sources for ODCs are the individual monthly returns called Sectoral Balance Sheets. In addition to the Sectoral Balance Sheets, banks report detailed breakdown by activity (industry) of claims on private sector in a form called Sectorwise Distribution of Credit to the Private Sector (Segmental Balance Sheets).

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

Source data used for compiling monetary statistics provide a reasonably good approximation of the concepts, definitions, scope, classifications, and recording principles for compiling sound monetary statistics that are recommended in the *MFSM*. Report forms for depository corporations are based on sound design principles and are reviewed periodically to take

account of changed circumstances and needs. A recent example is the pending revision of sectoral balance sheets provided by the ODCs to address the need for more detailed classification by currency that emerged from the implementation of the SRFs.

3.1.3 Source data are timely.

The data collection system allows sufficient time for the compilation of monetary statistics within the timeframe that is necessary to meet the SDDS timeliness guidelines. The accounting records of the BOM are provided to the Statistics Division within a week after the end of the month for purposes of monetary data compilation. The returns of the banks are at present submitted via electronic transmission by the 10th working day of the month, while the reports of the nonbank deposit taking institutions are reported by the 15th calendar day after the end of the month.

3.2 Assessment of source data

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

Automated procedures are used to facilitate the monitoring of the accuracy of data reported by individual financial corporations. The data received from ODCs are verified using built-in consistency checks. There is no documentation of data management procedures in user-manuals available for internal use, but the comments feature is used in Excel spreadsheets to explain details of data processing.

3.3 Statistical techniques

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

Compilation procedures rely on automated consistency checks to minimize processing errors such as coding, editing, and tabulation errors.

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

Given that data are fully based on accounting records, no estimation techniques are employed to adjust data for missing balance sheet items. Also, no seasonal adjustments are applied to monetary aggregates.

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

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

The quality of monetary statistics is monitored throughout the compilation process, which is automated. The source data from banks are subject to a number of built-in internal consistency checks and validation routines. Any inconsistencies and unexplained large data variations are investigated with the reporting bank.

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

The accuracy of the monthly balance sheets reports submitted by banks is cross-checked against information provided by them to the BOM on a weekly basis. The MFS Section reviews the data and discusses any questionable data directly with the bank concerned.

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

Large changes in monetary or credit aggregates are very rare, and likely to occur only in the event of a significant change in the methodology. The procedures for ensuring internal and intertemporal consistency that are built in the data processing and compilation system provide adequate safeguards against unexplained fluctuations and large distortions in monetary statistics.

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).*

Monetary statistics are considered final when published and rarely subject to revisions. Nevertheless, sporadic data revisions are analyzed and, if necessary, additional instructions and clarifications are provided by the BOM to ensure consistency of reporting by all respondents. However, no formal revision studies are carried out.

4. *Serviceability*

4.1 *Periodicity and timeliness*

4.1.1 *Periodicity follows dissemination standards.*

Monetary statistics are compiled on a monthly basis which is consistent with the periodicity requirements of the SDDS.

4.1.2 Timeliness follows dissemination standards.

The DCS is disseminated on the BOM website with a lag of about four weeks . This timeliness meets the SDDS guideline for the analytical accounts of the banking sector. Central bank sectoral balance sheet (CBS) is posted within two weeks of the end of the month, which is consistent with the required SDDS timeliness for analytical accounts of the central bank.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

The data on reciprocal claims and liabilities of the BOM and the ODCs are reasonably consistent, with discrepancies limited to statistically insignificant level.. The Statistics Division applies several internal consistency checks including reconciliation of available stock and flow data. Statistics for the entire financial corporations sector and the flow of funds accounts are not compiled in Mauritius. Also, consolidation adjustment for reciprocal claims and liabilities among the ODCs are statistically insignificant.

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

The monetary statistics database of Mauritius is maintained by the Statistics Division in Excel spreadsheets. The database starts in June 2003. Monthly time series are published in the *Monthly Statistical Bulletin* for the most recent 2 years.

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

The consistency of the monetary statistics with the external sector statistics is ensured through the use of the same source data, when appropriate. The designation of foreign assets and liabilities is consistent, and the data on international reserve assets in the SRFs are based on the balance of payments data.

The consistency of monetary data on net claims on government with government finance data on bank financing is not routinely monitored by the BOM. No comprehensive reconciliation of the differences between monetary and fiscal data is carried out.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

Monetary statistics are considered final when first publicly released and are not subject to regular revisions based on a pre-established schedule. This revision policy is publicized in the GDDS metadata that are posted on the IMF's DSBB. However, no notice of this revisions policy is provided in national publications.

4.3.2 Preliminary and/or revised data are clearly identified.

Given that monetary data are considered final when first released to the public and it is highly unlikely that data will be revised, BOM's publications do not include designations of the data as preliminary, revised or final. Data users treat them as final. However, no notice of the final status of the data is provided in national publications.

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

Given the sporadic nature of revisions to monetary data, no formal revision studies and analyses are prepared and made available to the public. Even in the case of a major revision of the broad money data in the DCS as of the end of 2006, that was related to the modification of the national definition of broad money, no specific commentary was provided to explain this change in the definition of broad money and resulting data revisions for the past period.

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 presentation of monetary statistics by the BOM facilitates the interpretation of the data by the users. In the *Monthly Statistical Bulletin*, the central bank and ODCs sectoral balance sheets and surveys are presented in a time series format for the two most recent years.

5.1.2 Dissemination media and format are adequate.

Monetary data are disseminated in hardcopy and in electronic formats to meet the needs of data users. The entire *Monthly Statistical Bulletin* is posted on the BOM's website in a PDF format. Downloadable data in Excel are also posted for the most recent period.

5.1.3 Statistics are released on a preannounced schedule.

There is no publicly announced advance release calendar for the Monthly Statistical Bulletin, but the Statistics Division strictly follows an internal publication schedule, according to which the *Bulletin* is to be published on the 20th day of each month. The users are aware of this schedule and expect the publication of the *Bulletin* on this date. However, the schedule for posting the data on the BOM's website is not preannounced.

Recommendation: Publish a note on the data release schedule in the Monthly Statistical Bulletin and on the BOM's website.

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

Monetary statistics are released on the BOM website simultaneously to all users. Prior to their release, the access to the data is limited to the management of the BOM.

5.1.5 Statistics not routinely disseminated are made available upon request.

Nonpublished (but nonconfidential) data are made available upon request from the Statistics Division. This policy, however, is not publicized and the BOM rarely receives user requests for historical and non-published data.

5.2 Metadata accessibility

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

A summary statement of the methodology underlying the compilation of the DCS was published in the February 2007 issue of the *Monthly Statistical Bulletin (MSB)*. Also, the BOM website provides a built-in hyperlinks to the GDDS metadata posted by the IMF on the Dissemination Standards Bulletin Board (DSBB). However, these hyperlinks are not easily identifiable, and the GDDS metadata are not up-to-date (e.g., they still describe monetary survey, even though the compilation of monetary survey was discontinued in December 2006).

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

The description of methodology in the note published in the *MSB* and in the GDDS metadata is quite general. No detailed description of methodology and data compilation practices is available.

5.3 *Assistance to users*

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

Contact points, including emails and telephone numbers are provided within the metadata published on the IMF's DSBB. However, the contact data are not current. In addition, the *Monthly Statistical Bulletin* and the BOM website provide email address for user queries.

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

The *Monthly Statistical Bulletin* is distributed free of charge to a wide range of users, including government agencies, banks and other financial institutions, colleges, libraries, etc. No other statistical publications are produced by the BOM.

Table 5. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Monetary Statistics
(Compiling Agency: Bank of Mauritius)

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
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X	X			Specialized methodological training of staff needs to be strengthened. Duplication of some compilations work because of the use of two analytical frameworks.
0.2 Resources						
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency			X			Internal access is identified only in DSBB. Notice on changes in methodology was published along with new data, rather than in advance.
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			An outdated framework of the monetary survey is still used to compile some tables.
2.2 Scope			X			Mutual funds have not been analyzed for possible inclusion into the DCS. M1 and M2 aggregates are based on data excluding nonbank depository corporations.
2.3 Classification/sectorization			X			National Pension Fund is incorrectly sectorized as financial corporation rather than as part of the central government.
2.4 Basis for recording			X			M1 and M2 aggregates are on a cash basis.
3. Accuracy and reliability						
3.1 Source data		X				
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			Data are considered final when published and there are no regular revisions to be studied. Occasional data revisions are not formally analyzed.

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(Compiling Agency: Bank of Mauritius)

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	
		O	LO	LNO		NO
4. Serviceability						
4.1 Periodicity and timeliness		X	X			The consistency with the GFS data is not routinely monitored and differences are not reconciled. National publications do not explain the revision policy for monetary statistics. No notes explaining final status of the data. Analyses of occasional data revisions are not made public.
4.2 Consistency				X		
4.3 Revision policy and practice						
5. Accessibility						
5.1 Data accessibility			X			The schedule of posting of the data is not publicly announced. The availability of nonpublished data is not publicized. Only a general description of methodology is available. The note on changes in methodology is not easily identifiable in the MSB archive; the link to DSBB is not clearly designated on the BOM website; GDDS metadata are not current. Contact person's data published on DSBB are not current.
5.2 Metadata accessibility			X			
5.3 Assistance to users			X			

VI. BALANCE OF PAYMENTS STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The BOM is responsible for compiling and disseminating the balance of payments statistics. Section 51A states that the Bank is responsible for the preparation of the balance of payments accounts and the external assets and liabilities position of Mauritius.

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

Data sharing and coordination among the data producing agencies is in need of improvement. While most information flows between data producing units is satisfactory, information from the Financial Services Commission (FSC) to the BOM for purposes of compiling balance of payments and IIP is not. Within the BOM there are informal arrangements in place to ensure the smooth flow of information needed to compile the balance of payments statistics, between the Statistics Division, the Supervision Division, the Accounting and Budgeting Division, and the Information Technology Section. Arrangements are also in place for data sharing and coordination with the other data-producing agencies that provide data for input into the balance of payments statistics, such as the CSO for data on trade in goods, the MOFED for data on public sector external debt transactions, and the Accountant-General for data on current and capital transfers of government. Arrangements for provision of data to the CSO (such as for measures of imports adjusted to an f.o.b. basis (free on board), and for services in international trade in services, as well as for income transactions with the rest of the world) are also satisfactory. However, data on the activities and positions of Global Business Licence Holders (GBLs) with the rest of the world are not, for the most part, prepared by the FSC, the supervising agency.

The GDDS Coordination Committee has the responsibility for coordinating the work of the various data-compiling agencies on completing the plans for improvement indicated in the GDDS metadata of Mauritius. The BOM is represented on this committee, together with all relevant agencies with responsibility for the collection of data, with the exception of the FSC.

In addition, the Statistical Advisory Council (SAC), a group comprising both data-compiling agencies and users that was established under the Statistics Act 2000, has the authority to comment on issues, such as data sharing and coordination, that may hinder the dissemination of timely, high-quality macroeconomic statistics. The SAC last met in March 2007, when the chair resigned. His replacement is being sought by the CSO, which is the secretariat of the SAC.

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

The BOM Act provides for the confidentiality of the source data. Section 51A states that any information provided under this provision of the act shall not be divulged without the written permission of the person. However, the BOM has no confidentiality rules to avoid residual disclosure.

Procedures are in place to ensure that the data are kept confidential. Only the staff of the Balance of Payments Section of the Statistics Division have access to the bank reporting forms, and the responses to the surveys. In addition, the electronic files in which the balance of payments statistics are compiled are password-protected and accessible only by staff of the Balance of Payments Section, and all source documents received in hardcopy are kept in locked filing cabinets within the section.

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

The Banking Act of 2004 and the BOM Act of 2004 (as modified in 2007) provide the legal basis for mandatory reporting of data to the BOM by banks and all institutions and persons in Mauritius. The BOM Act also imposes a substantial fine (50,000 rupees/day) for noncompliance.

0.2 Resources

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

The Balance of Payments Section has a total of four staff assigned to the compilation of the balance of payments statistics—all are university-trained professionals (the Chief, two Analysts, and one Research Assistant responsible for data processing). The Chief has 10 years of experience in the compiling balance of payments statistics, while the research assistant has two years of experience at the BOM. The two Analysts are new to balance of payments compilation.

The only formal training on balance of payments concepts and compilation practices by any of the current staff in the Balance of Payments Section was a two week IMF training course, taken by the Chief in Harare in 1998.

Pay levels are in the process of being adjusted to ensure that remuneration remains competitive with private sector banking in Mauritius. Staff turnover has been fairly high in recent years, but the arrival of the new staff, combined with increases in pay, should result in lower turnover in future.

The computer resources allocated for the collection and compilation of the balance of payments statistics are adequate. All staff members have personal computers that are

connected to the BOM network. In addition, the staff of the Balance of Payments Section have access to the balance of payments compilation files through a password-system.

The physical facilities are appropriate. The lighting and cooling are satisfactory; the office furniture and equipment are adequate to perform required tasks.

Funding for the compilation of the balance of payments appears to be adequate, provided the additional resources required to move to a survey based system are provided in the future. The budget process is conducted at one year at a time, but, as the compilation of balance of payments statistics is an established program, continued funding does not appear to be under threat.

0.2.2 Measures to ensure efficient use of resources are implemented.

A review of resource use was made recently (in 2007) to explore how the overall efficiency and effectiveness of the collection of statistics at the BOM could be improved. Following this assessment, an organizational change was made, resulting in the creation of a unit devoted solely to the collection and compilation of statistics (the Statistics Division). The head of this unit reports directly to the Second Deputy Governor. The program manager is required to account for the effective use of resources.

0.3 Relevance

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

The SAC includes users from the public and private sectors and these users can raise concerns about the overall relevance of the data, omissions, or request extended data breakdowns. Thus, although queries on other aspects of the balance of payments statistics are frequently received—primarily requests for more detailed balance of payments data that are compiled but not published—there is no mechanism for monitoring these requests and for reviewing the queries to determine whether they indicate that the needs of users are being met by the data presently disseminated. That having been said, however, in response to repeated requests for additional data on direct investment, the BOM now publishes in the *Monthly Statistical Bulletin (MSB)*, on an ongoing basis, a breakdown of direct investment, by industry and country of origin (for inward direct investment), and destination (for outward direct investment).

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The creation of a separate unit solely devoted to the compilation and dissemination of statistics (see 0.2.2) is a clear recognition that the BOM regards statistics as an important function in its own right, within the overall structure of the Bank. Moreover, the increased resource allocation (see 0.2.1) reflects management's appreciation of the importance of

statistics, given the impact that changes in the macroeconomic situation of Mauritius (notably, the liberalization of the economy and the suspension of exchange controls) has had on the manner in which data need to be collected. That is, the use of data reported by banks on their customers' transactions with nonresidents has become less viable in such an environment, resulting in the move by the BOM toward a more survey based system of collecting data. Without this change, the quality of data would have deteriorated severely. However, the BOM has not actively pursued, with the FSC, the collection of data on the activities of the GBLs, which has led to a serious weakness in data quality.

There is no formal staff training program for balance of payments statistics. This is especially important, given a) the complexity of the topic, and b) the high turnover of staff in recent years. Most training is done on the job. No current staff member has attended a balance of payments training course for several years.

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

Managers are advised about significant revisions. Staff are able to contact the IMF Statistics Department for input on statistical issues.

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

The recent decision to launch an enterprises survey (in 2007) is a belated recognition of the deterioration in data quality, which had been falling for several years.

Outside the SAC, there is no formal mechanism to take into account of users' comments on quality standards and emerging data requirements.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The BOM demonstrates strong professional independence when compiling the balance of payments statistics. The BOM is not required to submit the balance of payments statistics to any civil servants or Ministers for approval prior to their publication, and the decision to publish is made entirely within the BOM. Responsibility for, and decisions about, the methodology to be used to compile the balance of payments statistics lie entirely within the Statistics Division of the BOM.

Professionalism of the staff in charge of compilation of the balance of payments statistics is actively promoted by encouraging participation in lectures, conferences, seminars, and training courses, though, as noted (0.4.1), no staff member has attended an IMF training course for some years.

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

Decisions about the choice of data sources and statistical techniques are made solely on the basis of statistical considerations.

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

The BOM is entitled to comment on erroneous interpretation and misuse of the balance of payments statistics, but rarely exercises this right. Instances where the data have been misinterpreted in the media are brought to the attention of the Governor.

1.2 Transparency

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

The BOM Act is on the BOM website (<http://bom.intnet.mu>). In addition, the terms and conditions under which the balance of payments statistics are compiled are shown in the GDSS metadata on the DSBB, to which the BOM website is hyperlinked.

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

Selected data that comprise elements of the balance of payments statistics are made available to other data-compiling agencies, such as the Ministry of Finance (for compilation of government finance statistics) and the CSO (for national accounts), prior to the release of the balance of payments statistics to the public. The public is not informed of this prior access.

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

The Statistics Division is not identified in the *MSB* and the BOM's *Annual Report* as being the unit responsible for compiling the balance of payments statistics.

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

Advance notice is not given of major changes in methodology, source data, and statistical techniques. At the time of the change to the methodology set out in the fifth edition of the *Balance of Payments Manual (BPM5)* in 1995, the public was informed of the changes at the time the data were published. The public has not been informed of other changes introduced since that date.

1.3 Ethical standards

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

The BOM Act provides broad ethical guidelines for employees of the BOM. Section 26 of the Act provides for confidentiality of information. In addition, staff of the BOM are bound by the code of conduct documented in the *Conditions of Service* and *Discipline and Disciplinary Procedures*, copies of which are provided to each staff member when they first begin working at the Bank. All staff, as a condition of service, are required to sign an oath of confidentiality. These internal documents instruct the staff to observe, in particular, secrecy regarding the information acquired in the course of duty, not to allow any unauthorized access to books and papers belonging to the Bank, and not to engage in public discussion of the BOM's affairs or policy without the permission of the Second Deputy Governor.

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 overall structure of the balance of payments statistics is broadly in conformity with the guidelines presented in *BPM5*. The breakdown of the current, capital, and financial accounts is all in line with *BPM5*. For example, goods and services are separated from income, and the financial account records all the functional categories separately. However, no sector information is provided for portfolio investment and no instrument breakdown in "other investment."

The balance of payments data cover the transactions of residents with the rest of the world. The offshore financial institutions as well as the Freeport business units operating in Mauritius are treated as residents. Effective July 2005, Freeport transactions are covered in the balance of payments. However, transactions of offshore financial institutions with the rest of the world are only partially covered in the balance of payments (see 2.2 below).

Deviations from the concepts and definitions specified in the *BPM5* are generally kept under review, though they are not identified in the BOM's publications. Many of the changes the BOM has introduced in the last few years are a reflection of the need to keep abreast of changes in the economic and reporting environment.

2.2 Scope

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

In principle, all resident-nonresident transactions (and positions) are covered in the balance of payments statistics (and positions statement). However, in practice, there are shortcomings, notably in regard to direct investment and the activities of GBLs. A survey has

recently been launched to address the shortcomings in the former (for income, transactions and positions of the major direct investment enterprises and direct investors in Mauritius); efforts to address the collection of data for GBLs are continuing.

2.3 Classification/sectorization

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

The classification of the balance of payments for Mauritius is broadly consistent with the main aggregates of the *BPM5*. However, as noted (2.1.1), some of the detail (on sector and instrument) in the financial account is missing.

Deviations from above classification systems are kept under review.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

Flows and stocks are generally valued and recorded according to internationally accepted standards guidelines. Transactions are generally recorded at market prices, but most interest is recorded on a cash basis. Imports are adjusted from a c.i.f. basis to an f.o.b. basis. Imports are recorded when they are cleared at Customs.

Where imports are reported in foreign currencies, these are converted to Mauritian rupees at the exchange rate prevailing on each Tuesday of the preceding week supplied by the Bank of Mauritius to Customs each week. Other transactions that are measured in foreign currencies are converted to Mauritian rupees at the prevailing daily market rates, when known. Otherwise, the average for the period is used. When transactions are derived from stock data, adjustments are made to remove price or exchange rate changes, where appropriate. For stock data, book values are generally used: in some instances, these data will include accrued interest; in other instances, interest is not accrued.

Deviations from the above valuation principles are kept under review.

2.4.2 Recording is done on an accrual basis.

For the most part, transactions are recorded on a cash basis. Imports and exports are recorded at the time they pass through Customs. Interest receivable and payable by banks, on their own account, is recorded on an accrual basis. No estimates are made for reinvested earnings (though, as noted, 2.2.1., a recently launched survey will begin to collect data on reinvested earnings.)

Loan drawings are entered in the accounts at the time of actual disbursement, and loan repayments are entered when made. Accordingly, arrears are not captured in the data.

Deviations from the above accrual accounting are kept under review.

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

The current and capital accounts, for the most part, record transactions on a gross basis, while the financial account records transactions on a net basis (that is, transactions in an asset/liability class are netted against other transactions in the same asset/liability class: the assets and liabilities are not netted against each other). However, the following current account transactions are recorded on a net, rather than gross, basis: (i) data on communications services, as payments of the Mauritian Post Limited and the Mauritius Telecom with their international counterparties are settled with a single payment. These settlements may include financial account transactions as well as current account transactions; (ii) those services transactions or income transactions that are subject to withholding taxes, as the data source is the banking records, so that the payments are recorded net of withholding taxes, instead of gross, as recommended in *BPM5*; and (iii) those intercompany transactions that are settled on a net basis, as, again, the data source is the banking records. These, too, may include financial account, as well as current account, transactions.

Deviations from the international standard regarding the basis of recording are not identified in the publications but they are kept under review.

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 the compilation of the balance of payments for Mauritius are in need of improvement. The principal data sources are merchandise trade data (for goods), bank reports of transactions with nonresidents for most of the other items, as well as the financial statements of the commercial banks and the BOM. These data do not capture the activities of GBLs, and, with the liberalization of the Mauritian economy, more transaction are being routed through other avenues. However, the recently launched enterprise survey is a major improvement of data (for both transactions and positions) on direct investment. It demonstrates the way for the capture of similar data on transactions and positions of GBLs.

The reports from the banks need to take account of the change in banking licenses. Before the introduction of the single banking license, the BoM had treated “offshore” banks as nonresidents, given their very limited involvement with the domestic economy. Following the introduction of the single banking license, even though formerly “offshore” banks had no restrictions on conducting business with residents, in order to retain consistency with the monetary aggregates, the BoM decided to continue using the net foreign assets (NFA) of banks in the monetary survey, rather than move to the NFA from the more comprehensive

coverage in the DCS. Given that many of the formerly “offshore” banks are conducting business with residents, especially GBLs, it is no longer appropriate to continue using in the calculation of banks’ NFA only those from the monetary survey – transactions in the external assets and liabilities of all entities should be reflected in the balance of payments. Moreover, in the reports that the BOM receives from the banks, the activities of the GBLs are separately identified and are not treated as transactions by residents, even though, the BOM considers GBLs to be residents.

In addition, the BOM obtains data from the MOF, and direct surveys are conducted by the BOM for items where the other data sources are considered to be inadequate. However, as the Mauritian economy liberalizes, and especially since the suspension of exchange controls, the primary data source for non-goods transactions – the bank reporting system – is proving insufficient to meet the necessary data quality. Some of the gaps in the data are substantial. The BOM has recognized this problem and is moving, incrementally, toward a system that relies more on surveys to collect the necessary information.

Current account

General merchandise: The main source is the Central Statistics Office, which compiles international trade statistics on the basis of trade returns received from the Customs Department of Mauritius Revenue Authority. Goods exported are valued on a fob basis and goods imported on a cif basis. Imports are adjusted by the BOM to a fob basis by excluding the freight and insurance components. The ratio for splitting freight and insurance has not been reviewed for many years and the relative weights (90 percent transportation, 10 percent insurance) may have changed substantially.

Data on goods (both imports and exports) are identical with those in the national accounts.

Goods procured in ports: These are included as part of merchandise trade in accordance with *BPM5*. Data on goods procured in Mauritian ports by foreign airline and shipping companies are obtained from the trade statistics published by the CSO, and data on goods procured in ports abroad by Mauritian airline and shipping companies are obtained from airline and shipping companies through quarterly surveys conducted by the BOM.

Services

Transportation: The main data sources are the quarterly survey of airline and shipping companies and the CSO. Transportation credits measure receipts by the domestic carriers from passenger fares and freight on exports and shipments between foreign ports and port disbursements earned from non-resident carriers. Transportation debits measure payments made to non-resident carriers for passenger fares, freight on imports, and other port disbursements.

Travel: Travel credits are estimated from purchases by banks of foreign exchange from tourists, business travelers, hotels and traders and travel debits obtained from sales of foreign currencies to residents. However, there is volatility in the credit series which appears to be affected by exchange rate movements, so that the time of recording of transactions may be different from the time the transaction occurred. In order to address this problem, a data

model could be used that would use data on arrivals and departures (from the Ministry of Tourism), in conjunction with spending by tourists while in Mauritius (using data from the Department of Immigration and Customs). This information would need to be supplemented by a survey of tourist operators, as a significant proportion of spending on travelers to Mauritius is sold to tour operators abroad, as package tours. Such revenues may not be brought back to Mauritius during the time the tourists are in the country, or these revenues may not be captured in the data at all – as the funds may be kept in accounts abroad and be used to pay for other items (such as imports and income).

Other Services: Data on other services are derived from banking records. To the extent that receipts for service exports are kept abroad, they will not be captured in the data. To the extent that banks themselves provide services to, or receive services from, nonresidents, these are currently captured.

Income

Compensation of employees: Data on compensation of employees, for both credits and debits, are obtained through a survey of transport companies.

Investment Income

Income on direct Investment: Data on dividends paid to nonresident direct investors abroad and dividends received by resident direct investors are obtained from the banking records submitted to the BOM by banks, and from reports provided by commercial banks to the BOM's Supervision Department. Reinvested earnings are not calculated at present. However, a new enterprise survey (see 2.2.1.), launched in 2007, will collect this information in future.

Other Investment: Debits cover interest payments and other charges on foreign loans of the government, parastatal bodies, the private sector, and banks on their own account. Credits measure the interest receipts on foreign investments of banks and BOM. Data are derived from the banking records of and the records of the BOM.

Current Transfers

Data on private current transfers are derived from the banking records of banks as well as from information obtained from the Post Office. For government current transfers, data are derived from the records of the Accountant General's Office of the Ministry of Finance.

Capital Transfers

Migrants' Transfers: Estimates are derived from the banking records of banks; no estimates are made for items in kind.

Financial Account

Direct Investment: Data are mainly derived from banking records and from the BOM's Supervision Department. No estimates are currently made for reinvested earnings, for transactions that are not conducted through the Mauritian banking system, or other noncash

financial investment (such as the provision of capital equipment by a direct investor). However, a new survey, launched in 2007, will provide data on these, as well as improve the quality of data on other assets and liabilities of direct investment enterprises in Mauritius and direct investment abroad. The new survey does not cover GBL1, and, therefore, as many of these are direct investment enterprises and direct investors abroad, their assets and liabilities are not currently captured. These assets and liabilities are substantial.

Portfolio Investment: Data are derived from the banking reports and supplemented by information obtained from the Stock Exchange of Mauritius and from regular surveys of the non-bank institutions. The banks' financial statements are also used for their own account holdings. No estimates are currently included in the balance of payments (or the international investment position) for the results of the Coordinated Portfolio Investment Survey (CPIS), other than the portfolio investments of banks, and there are no estimates for the portfolio investment liabilities of those GBLs that are not direct investment enterprises (mostly, collective investment funds): these liabilities are substantial.

Other Investment: Data on drawings and repayments of loans on account of the government and parastatal bodies are obtained from the Ministry of Finance Debt Monitoring Unit. Data on investment by banks on their own account are derived from their financial statements. Transactions are estimated as the difference between two outstanding stocks and adjustments are made to exclude valuation changes. Data on the investment activities including use of Fund Credit are derived from the BOM's financial statements. Data for all other enterprises' other investment transactions are derived from banking records supplemented with information provided by non-bank institutions. Effective July 2004, trade credit is estimated and included in "Other Investment-Short Term Liabilities."

Reserve Assets: Data are obtained from the BOM's financial statements and comprise monetary gold, SDRs, Reserve Position in the Fund, foreign exchange of the Bank of Mauritius and other claims. Adjustments are made to exclude valuation changes.

The bank reporting form is updated from time to time, and the BOM has regular contacts with the banks, regarding their reports. Because the collection system has used only surveys with very a limited number of respondents (such as for transportation) or has begun using surveys only very recently (the enterprise survey), the BOM does not have a well established business register. As the BOM becomes more practiced in conducting a survey, a business register will be set up, and which should be kept up-to-date by monitoring of the financial press.

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

The source data drawn from surveys and ITRS are consistent with the definitions, scope and classifications. As the data are reported on a cash basis, the time of recording may not be consistent with when the transaction occurred.

When the enterprise survey was launched, the BOM did not conduct a seminar for the respondents to inform them what information was required. The BOM had had contact with a

small subset of the survey and the indications from those contacts were that a seminar was unnecessary.

The adjustment of merchandise trade data to “goods” is undertaken by the CSO and appears to be satisfactory.

Information on external debt presently covers both the public sector and private sector, but the data for the latter is the sum of the transactions in the balance of payments. The new enterprise survey will assist in addressing part of the problem but until data on the debt of GBLs are available, there will be a substantial gap in the data on external debt.

3.1.3 Source data are timely.

The data received from the banking records are very timely. The data are reported monthly, in an electronic spreadsheet submitted by e-mail. Data are required to be reported within seven days after the end of the reference month.

The revision to the BOM Act provides the legal basis to ensure that survey data be reported to the BOM for statistical purposes. Previously, there was no compulsion on the part of respondents to provide the information requested. Until the launch of the enterprise survey, the surveys that the BOM conducted had not been extensive, and the respondents report in a timely manner.

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 data management procedures used by the Balance of Payments Section to compile the balance of payments data obtained from the banking records are designed to reduce the possibility of data entry errors—the detailed data obtained are transmitted electronically by the banks in Excel spreadsheets and are electronically downloaded at the BOM into a detailed aggregation spreadsheet. Information on the percentage changes and absolute changes since the previous month are calculated electronically for each item for each bank, and any exceptional changes are queried with the relevant bank. The data are then input electronically into the detailed compilation spreadsheet. Revised data are reviewed in the same way. However, as the banking reports are provided to the BOM in aggregate, it is not possible to review individual transactions for accuracy.

Data from all other sources are received in hardcopy and have to be input manually into the detailed compilation spreadsheet. Once the detailed compilation spreadsheet is complete, the data are input manually into the Excel spreadsheet provided by the IMF’s Statistics Department for reporting the standard *BPM5* components. Comparisons are then made between the component totals in the two spreadsheets to ensure that no errors have occurred during the entry of data into the Fund spreadsheet.

The recently launched enterprise survey will be reported in electronic form. Once data for more than reference period are available, similar edit checks will be made to those above.

The detailed data compilation procedures of the BOM staff responsible for the balance of payments statistics are not documented.

3.3 *Statistical techniques*

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

For the most part, compilation procedures minimize processing errors (see above 3.2.1.). Adjustments are made for imports and exports that are not recorded by Customs particularly imports by non-traders. Data revisions and adjustments are made as and when data become available. Currently for Mauritius balance of payments compilation, there are no established procedures for estimating missing values.

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

Some balance of payments components are cross-checked against related data series or indicators. For example:

- the data on travel are cross-checked against data published by the CSO on tourist arrivals, and the change in the exchange rates;
- the data on petroleum imports are cross-checked against data on the change in oil prices; and
- the data on sugar exports are compared with the traditional seasonal pattern, drought conditions etc.

Adjustments to several other estimation procedures have not been modified for several years or no adjustments are made. For example:

- the c.i.f./f.o.b. factor for valuing imports has not been adjusted for many years;
- interest payments are not adjusted for to include withholding taxes deducted at source
- travel data models are not used to augment or verify data from the ITRS;
- data on telecommunications services reported in the ITRS are not adjusted to a gross basis;
- transactions in securities in secondary markets, which are reported net of fees and commissions, are not adjusted to a gross basis based on information on average commission rates obtained from a sample of securities dealers.
- data are not seasonally adjusted.

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

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

Information reported in the financial press is followed up, on an ad hoc basis, to ensure that high-value direct investment and other transactions are captured in the data.

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

Some information is checked against other data to ensure a degree of consistency. For example, data on travel-related transactions are analyzed in relation to information compiled by the customs and immigration authorities on the numbers of international travelers entering/leaving the country, and the difference between the value of trade flows as recorded through Customs and those recorded in the banking reports is used as the basis for estimating trade credit but these estimates are not fully investigated or monitored. Moreover, data on freight earnings are not regularly assessed in relation to the value/volume of the trade flows, and the reported financial flow data are not reconciled with changes in the corresponding stock data collected for external debt and for other elements of the international investment position.

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

Net errors and omissions are closely monitored and efforts are made to determine the reasons for any significant increases in the size of the net errors and omissions item. The growth in magnitude and volatility in net errors and omissions in recent years was a factor in the BOM's decision to explore alternative approaches to the collection of data.

Some use is made of counterpart information. For example, the Fund data on the use of Fund credit and SDRs are used to cross-check the data provided by the Accounting, Budgeting, and Payment System Department of the BOM. However, bilateral comparisons of trade data are rarely made; data compiled by the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD) on foreign assistance to individual countries are not used to cross-check the data on foreign aid provided by the Accountant-General; the BIS banking data are not used to compare the claims of nonresident banks on residents of Mauritius; and the counterpart (liability) data from the CPIS are not used in the IIP or the balance of payments.

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).*

Any major revisions to the bank records data or to the trade data are queried by the BOM and an explanation of the change is sought from the relevant bank or agency.

No formal revision studies are undertaken. Users are not informed of the reasons for revisions to the data.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

The BOM disseminates quarterly balance of payments statistics, which meets the periodicity prescribed by the SDDS. The partial IIP is prepared annually, which meets the periodicity prescribed by the SDDS requirements. The MOF disseminates the external debt data quarterly by the MOF, which meets the periodicity prescribed by the SDDS.

4.1.2 Timeliness follows dissemination standards.

The BOM disseminates the balance of payments statistics with a timeliness of between three months, which is consistent with SDDS requirements. The IIP is not disseminated by the BOM on its website or through its own publications. The available (partial) positions data are reported to the IMF Statistics Department in time for inclusion in *Balance of Payments Statistics Yearbook (BOPSY)* and *International Financial Statistics (IFS)*, that is, within nine months, which meets the timeliness of the SDDS requirements. External debt data are disseminated by the MOF within three months of the reference date, which meets the timeliness of the SDDS requirements.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

Quarterly balance of payments statistics sum to the annual. Errors and omissions has been rising in recent years: remedial efforts are in place to address the problem. Financial account data are not reconcilable with the IIP or external debt data.

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

The practices of the BOM regarding the provision of data that are generally consistent and reconcilable over time. The BOM has endeavored to avoid a break in series that would have arisen as a result of recent changes in the legal and statistical environment (such as the changes to the banking licenses and the treatment of the residence status of GBLs) but these efforts have had an impact on the data quality. In view of the need to address this deterioration in data quality, the BOM plans to carry the data series back to 2003. At that point, the BOM plans to advise users with a detailed methodological notes to identify and explain the main breaks and discontinuities in the balance of payments component time series, their causes, as well as adjustments made to maintain consistency over time.

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

The balance of payments statistics are broadly consistent with data obtained from other data sources and statistical frameworks. The balance of payments data are reconciled with the monetary statistics—the two data sets share the same basic data source in a number of instances, and efforts are made by the BOM staff to ensure that any errors identified, revisions made etc. are reflected in both the balance of payments and the monetary statistics.

The BOM staff compiling the balance of payments statistics also work closely with the national accounts compilers at the CSO. The CSO compilers use the BOM data on imports and exports of services as a data source for the external sector national accounts. The BOM also compares the aggregates of the balance of payments with the aggregates for the national accounts of the external sector as a quality control check prior to publishing the balance of payments statistics.

The banking sector transactions in the balance of payments statistics are drawn from the same data source as the monetary and financial statistics.

The balance of payments components comprising external debt data are not fully consistent with the corresponding debt stocks, as the external debt data exclude most private sector debt.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

Data revisions are usually made as and when revised data become available from other agencies, such as revised trade data provided by the CSO. On occasion, the balance of payments statistics are also revised to reflect changes in the methodology, or improvements in the coverage, such as the recent revisions made to incorporate data on foreign bank deposits. This revision practice is not disseminated in the BOM publications.

There is no clear stated policy to indicate when data are considered final so that changes will only occur after that date as a result of new methodology (such as the introduction of new concepts, based on the new balance of payments manual).

4.3.2 Preliminary and/or revised data are clearly identified.

The quarterly data for the latest year are “preliminary.” Those for the previous year are “revised”, and those for earlier years are “final.” However, the status of the data is not clearly indicated for the quarterly data published in the *MSB*, which are noted only as being “estimates.” The annual data published in the BOM’s *Annual Report* use the convention of “estimates” for preliminary data, and “revised.” Those data that are considered to be final are identified only through the absence of a footnote to the contrary. However, there have been instances when the data for earlier years have been revised and the revised status of the data has not been identified.

The BOM advises users at the time data are revised as a result of new methodology, not in advance.

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

No studies or analysis of revisions are undertaken on a routine basis. In addition, the public is not informed of the reasons for the revisions made to the data. However, if this information is nonconfidential, the requested explanation is provided with the approval of the Second Deputy Governor.

5. Accessibility

5.1 Data accessibility

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

The balance of payments statistics are disseminated according to the standard components of the *BPM5*, and with time series. The length of time series available on the BOM's website is the same as that provided in the *MSB* and the *Annual Report*, but only four quarters' data are available: this could easily be lengthened on the BOM's website.

Commentaries on current-period developments are included in the *MSB* and the *Annual Report*. The commentary in the *Annual Report* is accompanied by charts. There are no seasonally adjusted data.

5.1.2 Dissemination media and format are adequate.

The dissemination media are adequate. The quarterly data are first released in the hardcopy edition of the BOM's *MSB*, which is placed on the BOM website on the same day. The annual time series data are published in the hardcopy edition of the BOM's *Annual Report*, which is posted on the BOM website on the same day. Starting with the September 2007 quarterly data, the BOM plans to disseminate the balance of payments statistics on its website as soon as the data are available, and will no longer wait for the release of the *MSB* before releasing the data.

The data are released in electronic form, in time series, which meet users' needs.

5.1.3 Statistics are released on a preannounced schedule.

There is no formal pre-announced schedule of release dates, but the *MSB* is usually released around the 20th of the month. Internal BOM policy requires that the publication be released no later than the 20th, but indicates that it can be released earlier if that date falls on a weekend or holiday. There is no specific deadline for the release of the BOM *Annual Report*, but the document is usually published at the end of September.

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

The data are released simultaneously to all interested parties through the publication of the hardcopy edition of the *MSB*.

5.1.5 Statistics not routinely disseminated are made available upon request.

Nonpublished, nonconfidential sub-aggregate data are available to users on request. However, the availability of these detailed data is not publicized.

5.2 Metadata accessibility

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

No descriptions of the methodology used, the data sources, coverage of the data, etc. are published in hardcopy by the BOM. However, information on these issues is published in the Fund's *BOPSY*, and the BOM has a hyperlink from its website to the GDDS metadata posted on the DSBB. However, the public is not informed of the availability of this information in the BOM hardcopy publications. Differences from international standards are not annotated.

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

The level of detail in the information made available on the BOM's website and in the *MSB* and the *Annual Report* is the same, broadly in line with the standard components of *BPM5*. Some additional, nonconfidential data are available on request, but the availability of these data is not publicized. Information provided to the IMF, for inclusion in *BOPSY* and the *IFS* is more detailed (providing data on sector for *portfolio investment* and instrument for *other investment*).

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

Details of the contact person for the balance of payments data are not publicized in the hardcopy publications. The GDDS DSBB does, however, provide information on a high level contact person, and arrangements have been established within the BOM to ensure that any queries received by that contact are directed to the relevant person in the Balance of Payments Section. Any requests for unpublished, nonconfidential data must be made in writing (by letter or fax) and the release of the data must be approved by the Second Deputy Governor

There is no formal system for monitoring and reviewing queries from users to determine whether the existing data meet user requirements.

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

No formal catalogue is disseminated. However, the BOM website has a section on its publications (the *MSB* and the *Annual Report*) that contains the electronic versions of these two publications.

Table 6. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Mauritius)

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	
		O	LO	LNO		NO
0. Prerequisites of quality						
0.1 Legal and institutional environment			X			The BOM and the FSC need to coordinate to collect data on GBLs. There are no confidentiality rules to deal with indirect disclosure. Staff resources need to be increased as BOM moves to a survey based system. There is no mechanism for monitoring users' requests to determine users are being met.
0.2 Resources				X		
0.3 Relevance			X			
0.4 Other quality management				X		
1. Assurances of integrity						
1.1 Professionalism		X				An advance release calendar is not made known to the public.
1.2 Transparency			X			
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				Transactions of offshore financial institutions with the rest of the world are only partially covered in the balance of payments. No sector information is provided for portfolio investment and no instrument breakdown in "other investment."
2.2 Scope			X			Some items (such as settlements of telecommunications) are recorded net in the current account, which may include financial account transactions as well.
2.3 Classification/sectorization			X			
2.4 Basis for recording			X			

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Element	NA	Assessment				Comments
		O	LO	LNO	NO	
3. Accuracy and reliability						
3.1 Source data			X			Transactions and positions of GBLs are not included in the balance of payments, the IIP, or external debt data. External debt data for the private sector are the sum of measured transactions.
3.2 Assessment of source data			X			Banking reports are in aggregate, so individual transactions cannot be verified. The BOM follows up with the banks for apparent errors but these are not fully documented.
3.3 Statistical techniques			X			There are no established procedures for estimating missing values The split between insurance and freight for the cif/fob adjustment of imports has not been verified with importers; no travel model is used; interest is not adjusted for withholding taxes. Discrepancies are not systematically investigated.
3.4 Assessment and validation of intermediate data and statistical outputs						No revisions studies are carried out.
3.5 Revision studies			X			
4. Serviceability						
4.1 Periodicity and timeliness		X				The IIP and external debt data are not consistent with the balance of payments.
4.2 Consistency			X			The BOM has not adopted the DCS causing a discontinuity of data following the creation of a single banking license. There is no clear stated policy to indicate when data are considered final.. There is no revisions policy.
4.3 Revision policy and practice			X			

Table 6. Mauritius: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Mauritius)

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	
		O	LO	LNO		NO
5. Accessibility						
5.1 Data accessibility			X			The time series on the BOM's website is for four quarters only. There is no advance release calendar.
5.2 Metadata accessibility				X		The availability of unpublished nonconfidential data is not publicized. No metadata are published by the BOM on balance of payments..
5.3 Assistance to users			X			Details of the contact person for the balance of payments data are not publicized in the hardcopy publications.

Appendix I. Summary of the Special Data Dissemination Standard (SDDS)

The SDDS prescribes the following practices under each of the identified dimensions:

Data dimension (coverage, periodicity, and timeliness)

- the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars providing at least a one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- the dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to:

- post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and

- maintain an Internet website, referred to as the National Summary Data Page (NSDP), which contains the actual data described in the metadata and to which the DSBB is electronically linked.

The IMF staff is monitoring observance of the standard through Snips maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: <http://dsbb.imf.org>.

**Appendix II. Data Quality Assessment Framework—Generic Framework
(July 2003 Framework)**

Quality Dimensions	Elements	Indicators
0. Prerequisites of quality	<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 <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 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness <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 <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 charges, are widely available.</p>

Appendix III. Users' Survey

Summary of results of survey of data users

1. With the assistance of the Ministry of Finance and Economic Development and to complement the assessment, a survey was conducted among users of macroeconomic statistics. About 150 questionnaires were sent a broad range of users, including government agencies, private and public enterprises, foreign representations, banks, and media. Users were asked to evaluate the coverage, periodicity, timeliness, dissemination practices, accessibility, and overall quality of the official statistics. A meeting with users was held. The response rate was nearly 36%, with 54 users returning completed surveys.
2. Users expressed general satisfaction with the overall quality of the statistics produced by CSO and the BOM. On a five-point scale (1 being poor and 5 being excellent), respondents' average rating for the overall quality of the official statistics for all sectors was a 3.56, with the lowest score (3.38) given to consumer price statistics and the highest (3.86) given to national accounts statistics. The vast majority of users (86.5% percent) felt that the statistics were generally as good as or better than those disseminated by other countries in the region.
3. There was broad satisfaction with the methodological soundness of the official statistics. Some respondents emphasized the need to improve the timeliness of the fiscal data. Users were also generally satisfied with level of coverage and detail of the statistics. Favorable opinions were also expressed for the periodicity and timeliness of the data. For all sectors, the large majority indicated that they were satisfied with the accessibility to official statistics, with most relying on the official websites. Several users indicated that the disseminated data and metadata could be strengthened.

Table 7. Mauritius: **Questionnaire received as of November 20, 2007**

Type of Respondent	Total Received
Business associations	2
Bank	5
Non Bank	2
Insurance	5
Ministries	15
Extra-budgetary units	15
Nonfinancial public enterprises	6
Foreign representation (embassies)	2
District councils/municipalities	2
Media	0
Total	54

Source: "Questionnaire for Users of Official Macroeconomic Statistics", compilation by IMF staff