

EXECUTIVE SUMMARY

This Report on the Observance of Standards and Codes (ROSC) data module provides a review of Bulgaria's data dissemination practices against the IMF's Special Data Dissemination Standard (SDDS), complemented by an in-depth assessment of the quality of the national accounts, consumer price index (CPI), producer price index (PPI), government finance, monetary, and balance of payments statistics. The agencies that compile the statistics assessed in this report are the Bulgarian National Bank (BNB), the Ministry of Finance (MOF), and the National Statistical Institute (NSI). The assessment was carried out by a mission from the IMF Statistics Department that visited Sofia during January 15–30, 2003.

The mission reached the following main conclusions:

- **SDDS subscription:** Bulgaria participates in the General Data Dissemination System (GDDS), and meets or exceeds SDDS requirements for most of the data sets. However, among other requirements, the Reserve Template data need to be compiled and disseminated, and timeliness needs to be improved for certain real sector data. The authorities indicated their strong commitment to subscribe to the SDDS shortly, and have appointed an SDDS Coordinator.
- **Prerequisites of quality:** Bulgarian statistical agencies have a legal and institutional framework that supports statistical quality. But resources for the balance of payments, national accounts, and price statistics are not sufficient for the requirements of these statistical programs, especially in view of the intention to implement the European Union guidelines in these areas. All agencies demonstrate awareness of quality as a cornerstone of their statistical work.
- **Integrity:** All agencies demonstrate professionalism, and provide guidelines on ethical conduct for staff. Pre-release access to government users is documented, but for the NSI the GDDS metadata are inaccurate.
- **Methodological soundness:** The Bulgarian national accounts, CPI, PPI, government finance statistics (GFS), and monetary statistics generally follow internationally accepted guidelines on definitions, scope, classification, sectorization, and valuation. Certain improvements to scope (national accounts, CPI, and GFS), classification (monetary) and the basis of recording (national accounts, GFS, and monetary) could be made. More substantial improvements should be made to the balance of payments (BOP) statistics.
- **Accuracy and reliability:** Source data and statistical techniques are generally sound for national accounts, and monetary statistics. Improvements could be made to certain aspects of the price indices and GFS. In the case of balance of payments, significant improvements are required. There is also scope for improving the rigor of revisions practices and studies.

- **Serviceability:** Bulgarian statistics are generally relevant, consistent, and available on a timely basis with good frequency. However, there is no formal user group to monitor the relevance of BOP statistics. Timeliness is a concern for the quarterly gross domestic product (GDP) estimates, the PPI, and GFS. The macroeconomic statistics are broadly consistent. Several datasets do not provide the public with proper analyses of revisions and, for the GFS, the revisions policy is not published and preliminary data are not clearly identified.
- **Accessibility:** Most datasets are readily available to the public with the exception of the PPI, while it is being redeveloped. Also, more detailed GFS financing data should be published. Suitable metadata are available to the public except for GFS and the national accounts, for which some available details are not published. All datasets provide adequate assistance to users, except that the PPI is not included in the NSI catalog.

I. INTRODUCTION

1. The data module of this Report on Observance of Standards and Codes (ROSC) provides a summary of Bulgaria's dissemination practices on the coverage, periodicity, and timeliness of the data categories relative to the Special Data Dissemination Standard (SDDS), even though Bulgaria has worked within the General Data Dissemination System (GDDS) framework for three years, because of the authorities' expressed commitment to subscribe to the SDDS in the near future. It is complemented by a detailed assessment of the quality of national accounts, consumer and producer price indices, and government finance, monetary, and balance of payments statistics using the Data Quality Assessment Framework (DQAF) developed by the IMF's Statistics Department. This report is based on information provided prior to and during a staff mission from January 15–30, 2003,¹ as well as publicly available information.

2. Section II includes an overview of the SDDS and an assessment of Bulgaria's data dissemination practices against this standard. Section III presents a summary assessment of the quality of the principal macroeconomic datasets, following the dataset-specific assessment frameworks. Finally, Section IV sets out recommendations to achieve further improvements in Bulgaria's statistics.

II. DATA DISSEMINATION PRACTICES AND THE SPECIAL DATA DISSEMINATION STANDARD

3. Bulgaria's dissemination practices are being assessed in relation to the SDDS in the present report (in terms of the data, access, integrity, and quality dimensions).² Bulgaria has

¹ The mission team was headed by Mr. Rifaat Basanti and included Messrs. Ethan Weisman, Gary Barinshtein, Ms. Michelle Hassine (all STA), Messrs. David Collins and David Hughes (experts), and Ms. Eloise Villanueva (STA—Assistant).

² A detailed description of the SDDS can be found on the IMF's Dissemination Standards Bulletin Board on the Internet at <http://dsbb.imf.org>. For each dimension, the SDDS prescribes

(continued)

participated in the GDDS since May 2000, so existing dissemination procedures follow those on the GDDS. The following elements are based on the revised GDDS metadata posted in June 2002 on the Data Dissemination Bulletin Board (DSBB) at <http://dsbb.imf.org/gddsweb/country/bgrindex.htm> and information provided by the Bulgarian authorities during the mission. The Bulgarian authorities have expressed an interest in subscribing to the IMF's SDDS and have appointed a SDDS Coordinator.

4. Macroeconomic statistics reviewed in this report are compiled and disseminated by three agencies, as follows: (i) the National Statistical Institute (NSI) is responsible for national accounts, price and production statistics; (ii) the Ministry of Finance (MOF) is responsible for government finance statistics (GFS); and (iii) the Bulgarian National Bank (BNB) is responsible for monetary and BOP statistics. Access to macroeconomic statistics is provided through official publications and at the following Internet websites:

- BNB's website <http://www.bnb.bg/bnb/home.nsf/fsWebIndex>;
- MOF's website <http://www.minfin.government.bg/en>;
- NSI's website http://www.nsi.bg/Index_e.htm.

Data dimension: coverage, periodicity, and timeliness

5. Based on the information available to the mission, Table 1 compares Bulgaria's data dissemination practices to the SDDS requirements with respect to coverage, periodicity, timeliness and the advance release calendar (ARC) for 18 SDDS data categories. The review shows that:

- Bulgaria meets the SDDS requirements for the coverage of all SDDS data categories, with the exception of production index data. These are not in a time series format as required by the SDDS, i.e., volume measures are not disseminated in reference to a fixed base.
- All the data categories meet or exceed the SDDS prescribed periodicity.
- Reserves Template data are not yet compiled or disseminated.
- As the transition period for the new external debt category ended on March 31, 2003, data for the quarter ending on June 30, 2003 must be disseminated by end-September 2003.

“good practice” elements that can be monitored by users of statistics (see Annex I of part III). See “Guide to the Data Dissemination Standards (Module 1: The Special Data Dissemination Standard), IMF, May 1996. Also, the fourth *Review of Fund's Data Standards Initiatives*, page 19, summarizes the transition period in place for the external debt data categories.

- With the use of regular timeliness flexibility for the International Investment Position (IIP), all other data categories, except for the national accounts and the producer price index (PPI), meet or exceed the timeliness requirements of the SDDS (assuming the MOF website is updated monthly). The current timeliness for IIP data is 12 months after the end of the reference year, which is six months more than the SDDS requirements. With respect to PPI, Bulgaria needs to take a regular timeliness flexibility option. Also, pending the fulfillment of SDDS requirements for production index data, Bulgaria could take a special timeliness flexibility option for the national accounts.³

Access dimension

6. The SDDS access requirements provide that ARCs are made available to the public. ARCs are available for monetary statistics and all real sector datasets (with the exception of the PPI). However, for fiscal and external sectors, ARCs need to be developed and disseminated.

Integrity dimension

7. As a GDDS participating country, the relevant pages for Bulgaria on the DSBB show the terms and conditions under which official statistics are produced, information on internal government access to data, and information on whether there is ministerial commentary accompanying the data releases. Information on revisions and advance notice of major changes in methodology are usually disseminated, except for the GFS data.

Quality dimension

8. Bulgaria's GDDS metadata provide information that corresponds to the quality dimensions of the SDDS.

³ That is, a special timeliness flexibility option for the national accounts could only be taken if the SDDS requirements for the production index (the tracking indicator) were met.

Table 1. Bulgaria: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the Special Data Dissemination Standard (SDDS) as of January 30, 2003

| SDDS Data Category | Coverage (meets SDDS requirement) | Periodicity | | Timeliness | | Comments ARC ⁴ |
|---|--|-------------|---|------------|---|------------------------------|
| | | SDDS | Bulgaria | SDDS | Bulgaria | |
| Real Sector | | | | | | |
| National accounts | Yes | Q | Q | Q | 80D (115D for 4 th quarter) | Yes |
| Production index/indices | No Data are not in time-series format | M | M | 6W | 40D | Yes |
| Employment | Yes | Q | Q (Establishment Survey; Labor Force Survey) | Q | 40D (Establishment Survey) 52D (Labor Force Survey) | Yes |
| Unemployment | Yes | Q | Q (Labour Force Survey) M (Register) | Q | 52D (Labor Force Survey) 15D (Register) | Yes |
| Wages/earnings | Yes | Q | Q | Q | 40D | Yes |
| Consumer price index | Yes | M | M | M | 2W | Yes |
| Producer price index | Yes | M | M | M | 40D | No |
| Fiscal Sector | | | | | | |
| General govt. operations | Yes | A | A | 2Q | 2Q | No Not yet disseminated. |
| Central govt. operations | Yes | M | M | M | M | No Not yet disseminated. |
| Central govt. debt | Yes | Q | M | Q | 3W | No Not yet disseminated. |
| Analytical accounts of the banking sector | Yes | M | W | M | W | Yes |
| Analytical accts. of the central bank | Yes | M | W | 2W | W | Yes |
| Interest rates | Yes | D | D | NA | W | NA |
| Stock market: share price index | Yes | D | D | NA | D | NA |

⁴ ARCs must be published at least a quarter ahead of data release dates

| SDDS Data Category | Coverage (meets SDDS requirement) | Periodicity | | Timeliness | | Comments ARC ⁴ |
|---|-----------------------------------|-------------------|---------------------------|------------|---------------------------|------------------------------|
| | | SDDS | Bulgaria | SDDS | Bulgaria | |
| External Sector | | | | | | |
| Balance of payments | Yes | Q | M | Q | 8W | No Not yet disseminated. |
| International reserves and foreign currency liquidity: (a) Official reserves | Yes | M (W recommended) | W | W | 1D | No Not yet disseminated. |
| (b) Reserves template | No Data are not yet compiled. | M | Data are not yet compiled | M | Data are not yet compiled | No Not yet disseminated. |
| Merchandise trade | Yes | M | M | 8W | 8W irregular | No Not yet disseminated. |
| Intn'l investment position | Yes | A (Q recommended) | A | 2Q | 12M | No Not yet disseminated. |
| Exchange rates | Yes | D | D | NA | D | NA |
| External debt | Yes | Q | M | Q | 5W | No Not yet disseminated. |
| Addendum: Population | Yes | A | Q | NA | 2M | NA |

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; and (A) annually.

III. SUMMARY ASSESSMENT OF DATA QUALITY

9. Interest in assessing the quality of data derives from the objectives of complementing the SDDS with a consideration of the quality of the data being disseminated and of focusing more closely on the quality of the data that underpin surveillance of countries' economic policies. Against this background, the Statistics Department of the IMF has developed a tool to provide a structure and a common language to assess data quality. The DQAF comprises a generic framework⁵ and a set of dataset-specific frameworks. The frameworks cover five dimensions of

⁵ Information on data quality can be found at the IMF website on the "Data Quality Reference Site" (<http://dsbb.imf.org/dqrsindex.htm>).

data quality—integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility—and a set of prerequisites.⁶

10. An assessment of six macroeconomic datasets (national accounts, consumer price index (CPI), PPI, government finance, monetary, and the balance of payments statistics) was conducted using the frame of reference provided by the dataset-specific DQAF. The information resulting from the application of this framework to the Bulgarian statistics system is presented below, following the structure of the DQAF. Conclusions are also presented in the form of standardized summary tables in which the assessment of data practices is made on a qualitative basis, using a four-part scale (Tables 1–6) in the Detailed Assessment.

11. Over the last decade, Bulgaria’s statistical system changed substantially as major structural changes occurred in the economy:

- Bulgaria’s transition to a market economy during the first half of the 1990s was characterized by sporadic and often inconsistent structural reforms and stop-and-go stabilization efforts. The main macroeconomic statistics were evolving but the system was ill-equipped to handle these rapid changes. Bulgaria experienced deep financial crises and economic collapse in 1996–97, which led to the adoption of a currency board arrangement in July 1997, a sweeping restructuring program, and significant improvements in fiscal and monetary statistics.
- Aided by ongoing stabilization programs, Bulgaria’s macroeconomic indicators are currently relatively stable. Therefore, the country is poised to move to second generation reforms (deepening structural reforms), in order to enhance its status in international financial markets. In this respect, Bulgaria expressed interest to participate in the SDDS at an early date.
- On current plans, Bulgaria is expected to join the European Union (EU) by 2007. Bulgaria has completed a medium-term plan for improvement of statistics during 2003–2006 with the EU.⁷

Prerequisites of quality

This category in the DQAF identifies conditions within the agency in charge of producing statistics that have an impact on data quality. The elements within the category refer to the legal and institutional environment, resources, and quality awareness.

⁶ See also the Generic Framework set out in Appendix II of the accompanying detailed assessments volume to this report.

⁷ The November 13, 2002 EU Roadmap for Bulgaria *acquis alia*, note key steps under Economic and Monetary Union (chapter 11), Statistics (chapter 12), and Financial and budgetary provisions (chapter 29) that affect the integrity and methodology of statistics.

12. The **NSI**, which is responsible for the national accounts, the CPI and the PPI, among other statistics, is the main government producer of statistics. This is stipulated in the *Law on Statistics* published in the Official Gazette, No. 57 of June 25, 1999 amended in No. 42 of April 27, 2001. This law provides a legal and institutional environment that clearly sets out responsibility for the relevant statistical work, provides for data sharing and coordination, calls for protection of the confidentiality of individual responses, and makes legal provision for statistical reporting. Resources are a serious problem because of the lack of office space, financial resources, and high turnover of staff. In particular, the NSI does not have sufficient status within the government to offer remuneration packages that enable it to recruit and retain well qualified staff.⁸ Moreover, the government is in the process of moving the NSI out of its existing offices without providing alternative suitable accommodation. The NSI maintains a high sense of quality awareness, as evidenced by the creation of a separate division on quality issues. It also has a number of oversight bodies looking at different aspects of quality and actively participates in EU initiatives in this area.

13. The *Organic Budget Law* (1996) and the *State Debt Law* (2002) provides the **MOF** with the authority and a legal and institutional environment to compile and disseminate fiscal statistics. The MOF has established strong contacts with reporting units and other institutions that compile data relevant for cross-checks. Resources are adequate for current compilation needs; however, more resources would speed the implementation of fiscal statistics developments needed to comply with EU reporting requirements and migration to the *Government Finance Statistics Manual 2001 (GFSM 2001)*. Quality awareness is adequate at all levels.

14. The **BNB** compiles balance of payments, IIP, external debt, and monetary statistics for Bulgaria. It has a comprehensive legal and institutional mandate (*Law on BNB* and *Law on Statistics*) to collect the required data. It is obligated by legal statutes to maintain the requisite confidentiality of individual reporter's data, and has a legal mandate to disseminate statistics. However, the BNB believes that the current *Foreign Exchange Law (2000)* does not allow them to collect all the information needed for BOP compilation; a revision to the law is currently before the National Assembly. While BNB resources for compiling monetary statistics are adequate, they are not sufficient to maintain the programs for compiling BOP statistics. Quality awareness is promoted by BNB management; however, there is scope for further improvement in quality awareness for BOP.

Integrity

Integrity identifies features that support firm adherence to objectivity in the collection, compilation, and dissemination of statistics so as to maintain users' confidence. Elements refer

⁸ NSI staff are currently classified as category 3 in the Bulgarian civil structure, while line ministry staff are more highly remunerated in category 2.

to the professionalism and ethical standards that should guide policies and practices, which should be reinforced by their transparency.

15. The **NSI** maintains a high degree of professionalism, with its independence supported by the *Law on Statistics*. Statistics are compiled on an impartial basis by professional, trained staff, with decisions on data sources and statistical techniques based solely on statistical considerations and guided by international recommendations. The NSI is proactive in communicating with users through monthly press conferences and the agency always reacts to any public misinterpretation of statistics. Transparency of statistical policies and practices is promoted by the widespread availability of the terms and conditions under which the NSI functions, the clear identification of NSI products and the provision of advance notice of significant changes in methodology. However, pre-release access is given to senior government officials, contrary to GDDS metadata. Guidelines on the ethical standards required of staff are clearly documented and well known.

16. The **MOF** staff exhibit professionalism in the compilation of fiscal statistics. In addition, the independent National Audit Office (NAO) audits the fiscal statistics quarterly. Fiscal statistics are prepared in a transparent manner and MOF responsibility is clearly identified with the disseminated product. Ethical standards are ensured through sanctions contained in the *Law for the Civil Servant*, the *Law on Access to Public Information* and the *Law on Protection of Classified Information*, which are well known.

17. The **BNB** strongly encourages professionalism among its staff. The choice of sources for the compilation of statistics is dictated solely by analytical considerations to meet international standards, and BNB staff comment on the perceived misinterpretation and misuse of statistics. With respect to transparency, the terms and conditions under which statistics are collected, processed and disseminated are available to the public. There is no government access to monetary statistics prior to their general dissemination. BOP statistics are released to the government one day before they are disseminated to the public, but this practice is publicized. Staff are clearly informed about their duties, responsibilities, and ethical standards.

Methodological soundness

Methodological soundness refers to the application of international standards, guidelines, and agreed practices. Application of such standards, which are specific to the dataset, is indicative of the soundness of the data and fosters international comparability. Elements refer to the basic building blocks of concepts and definitions, scope, classification and sectorization, and basis for recording.

18. The **national accounts** broadly meet the concepts and definitions of the *European System of Accounts, 1995 (ESA 95)*. However, some additional work is required to bring the accounts fully into line with the scope of the *ESA 95*; financial accounts for each sector are still under development. The classifications/sectorization are in accordance with international standards. However, the basis for recording is not fully consistent because government output and final consumption are recorded on a cash, rather than accrual, basis.

19. The **consumer price index** generally follows the concepts and definitions and the basis for recording of the *ESA 95*. The scope relates to market purchases by resident households; however, housing is not included. The classification of consumption activity follows COICOP.

20. The **producer price index** conforms to international standards in relation to concepts and definitions for recording of product prices and weights. Its scope relates to domestic sales of the core mining, manufacturing, electricity, gas, and water industries by resident market enterprises. The classification of enterprises and products is based on a combination of NACE Rev. 1, Classification of Products by Activities, and PRODCOM. The basis for recording weights and prices fully reflects basic prices on an accruals basis.

21. For **government finance statistics**, Bulgaria uses the concepts and definitions of *A Manual on Government Finance Statistics, 1986 (GFSM 1986)*, but has initiated steps to implement the EU Deficit and Debt requirements for fiscal statistics, which positions the authorities well for the migration to the *GFSM 2001*. The assessment in this report is based on the data sets compiled using the *GFSM 1986* and the national methodology. Except for debt data, the scope of the fiscal statistics comprises the entire general government, and classification and sectorization generally follow international practices. However, central government debt statistics misclassify IMF purchases as external, rather than domestic debt, and compilation of local government debt statistics only began in 2003 (albeit negligible as a share of total debt). The valuation methods of domestic and external debt are not consistent. Fiscal data are recorded on a cash basis (consistent with the *GFSM 1986*), but no data are available on arrears.

22. The concepts and definitions used by the BNB for compiling **monetary statistics** conform with the principles presented in the *Monetary and Financial Statistics Manual (MFSM)*. The BNB is also progressively adopting the European Central Bank (ECB)'s framework for monetary data. The overall structure, scope, classification principles, and the basis for recording are consistent with the *MFSM*, except as follows. With regard to classification, positions on financial derivatives, which at present are reportedly small, are not included in monetary statistics; several "other" items (in particular, in the other depository corporations (ODCs)' foreign liabilities) are not disaggregated by financial instrument; and the treatment within the central bank survey of certain small components of the IMF accounts deviates from the recommended guidelines. As concerns basis for recording, gold and nonfinancial assets are not valued at market prices.

23. The concepts and definitions used in compiling the **balance of payments statistics** conform to the fifth edition of the *Balance of Payments Manual (BPM5)* except that residents' foreign currency accounts with resident banks are incorrectly included in the BOP statistics, and other source data do not uniformly apply the standard criteria for residency. While, in principle, the scope of the data should cover all resident/non-resident transactions, the data insufficiently cover shuttle trade and financial assets. The classification generally follows the requirements of *BPM5*. Regarding the basis for recording, most data are collected on a cash basis rather than accruals, and market prices are not always available.

Accuracy and reliability

Accuracy and reliability identifies features that contribute to the goal that data portray reality. Elements refer to identified features of the source data, statistical techniques, and supporting assessments and validation.

24. For the **national accounts**, significant improvements have been made to the source data by producing a more comprehensive and reliable business register. The estimates for informal activities have also been refined to make the best use of all available data. Source data are generally timely. Statistical techniques generally follow best international practice. Assessment and validation, and revision studies are used to guide statistical improvements.

25. The weights and prices source data for the **consumer price index** are obtained from comprehensive surveys. The Household Budget Survey is a continuous survey based on a random sample, with monthly results. The business register is not considered to be sufficiently up-to-date for the retail industry to support outlet sampling, so judgmental sampling is used. The statistical techniques used are generally sound though quality adjustment techniques need to be applied more widely across products. The approach to the assessment and validation of source and intermediate data and revision studies is sound.

26. Work is well advanced on a redevelopment program to introduce a new methodology, based on transaction pricing, into the **producer price index**, and rebase the index to the year 2000. The source data for the prices and weights are obtained from comprehensive data collection programs. Pending completion of the program to survey transaction prices during 2003, about 17 percent of industrial sales are still represented through the old approach (unit value measurement). Statistical techniques are generally sound although the weights, which are in the process of being updated, are currently over seven years old. There is scope for improving the application of product quality adjustment techniques. Processes followed for the assessment and validation of source and intermediate data follow international standards. Revision studies are not routinely undertaken because revisions are rare and insignificant.

27. **Government finance statistics** source data are timely and complete; however, they are reported on a cumulative, rather than discrete (separate), monthly basis. This prevents revisions to any month other than the latest reported month. Statistical techniques, assessment and validation exercises meet international standards. Quarterly data are audited by the NAO. Revision studies are not conducted, and corrections made during the compilation process are not systematic or thoroughly documented.

28. Detailed balance sheet records constitute the source data for **monetary statistics**. They are timely and provide ample information. The balance sheet records satisfy the internal constraints imposed by the structure of the double-entry system of book-keeping. The source data are not subject to statistical adjustment, and the assessment and validation of source data and intermediate results are robust. Revision studies of methodological changes, when they occur, are carried out for internal discussions.

29. For **balance of payments**, source data derived from the International Transaction Reporting System (ITRS) and surveys are not comprehensive, timely, or representative of the population of respondents. In addition, merchandise trade source data are prone to errors and are not timely. These deficiencies result in frequent and substantial revisions to the BOP. In the case of statistical techniques, data entry is error-prone and the c.i.f./f.o.b. factor for trade data has not been reviewed since 1994. No satisfactory assessment and validation of source data are applied to inform the compilation process and statistical discrepancies of intermediate data are rarely investigated. Revision studies are made when major methodological changes occur, but do not inform the statistical process.

Serviceability

Serviceability focuses on practical aspects of how well a dataset meets users' needs. Elements refer to the extent to which data are relevant, produced, and disseminated in a timely fashion with appropriate periodicity, are consistent internally and with other datasets, and follow a predictable revisions policy.

30. Efforts to ensure the relevance of the **national accounts** involve various meetings with user groups, and surveys specifically addressing their needs. The timeliness and periodicity, with which the national accounts are published, meet SDDS requirements, except for the timeliness of the fourth quarter of each year. Consistent time-series according to the *ESA 95* are available from 1991. The national accounts statistics are fully consistent with the balance of payments and with data for general government. The national accounts publications identify preliminary data, as appropriate, and identify revisions and their causes, but analyses of revisions are not published.

31. The relevance of the **consumer price index** and the **producer price index** is maintained through meetings with users. The indices are consistent internally and over time. Concerning timeliness and periodicity, both indices meet the SDDS periodicity requirement and the CPI exceeds the timeliness requirement. However, the PPI does not meet the SDDS timeliness standard. The revisions policy and practice of both indices is known to users.

32. **Government finance statistics** are relevant to users and are disseminated with periodicity that meets the SDDS requirements. The publication of central and general government operations data on the web began in January 2003, so experience is limited with meeting the SDDS timeliness requirements using this medium. Consistency in the time series is hampered by the changes in scope due to structural reforms, especially privatizations. However, institutional tables accompany the data on the web to assist users to compare data over time. Revision policy and practice are not publicly disseminated, preliminary and revised data are not clearly indicated in publications, and there are no formal revision studies.

33. The relevance of **monetary statistics** in meeting users' needs is monitored based on the feedback sent to the designated BNB e-mail address and during advisory group meetings. Timeliness and periodicity meet and exceed the SDDS guidelines. Monetary statistics show consistency within the dataset, except for an asymmetry in the BNB's claims on banks which

include claims on non-operating banks that are outside the coverage of the ODC sector (the ODC sectoral coverage, however, conforms with the ECB's guidelines). Monetary statistics are largely consistent with the corresponding positions in the fiscal and BOP data. Revisions and preliminary data are clearly identified. Revisions studies, arising from methodological changes when these occur, are not published.

34. There is no formal user advisory group to monitor the relevance of the existing **balance of payments statistics** in meeting users' needs. The timeliness and periodicity of the data meet the SDDS requirements. Consistent time series are available from 1997 onwards. Revisions are monitored and assessed on an ongoing basis. The national publications describe the revisions policy.

Accessibility

Accessibility deals with the availability of information to users. Elements refer to the extent to which data and metadata are clear and easily available and to which assistance to the users is adequate to help them find and use the data.

35. The **national accounts** are readily accessible; the publications present the statistics in a clear manner, with charts and tables to facilitate analysis. Many publications contain metadata. However, the comprehensive description of the annual current price GDP figures, produced for the Statistical Office of the European Communities (Eurostat), has not yet been published. Much statistical information, including extensive detail, is published in Bulgarian on the NSI website. The NSI's means of dissemination and assistance to users fully meet requirements.

36. Metadata are accessible for the **consumer price index** and the **producer price index** in both hard copy and electronic form. Regarding data accessibility, the release of the CPI is simultaneous to all users, and data are announced at a press conference and clearly presented in various formats. However, pending introduction of the new methodology, the PPI publication was discontinued in 2001, although the data are available on request. It was planned to recommence publication in March 2003 as the new methodology has been largely implemented. Assistance to users is available for both indices, although the PPI is not currently listed in the catalog of publications.

37. **Government finance statistics** data accessibility for users is adequate and on the web, although details on the financing of government operations and expenditures by function are not disseminated. The data format generally follows international standards. Data are disseminated simultaneously to all users. Metadata accessibility is adequate. ARCs and detailed documentation on concepts, sources, and methods have not yet been prepared or disseminated. MOF staff provide ample assistance to users. Contact persons and subscription information for the monthly budget bulletin became available on the web in January 2003.

38. **Monetary statistics** are readily accessible and are presented in a clear format that facilitates their use and interpretation. They are disseminated in a condensed and a detailed format in the weekly and monthly bulletins published by the BNB, and are also available on the

BNB's web site. Statistics are made available on a pre-announced schedule and simultaneously to all users. With regard to metadata accessibility, BNB's publications, in hard copy and on its web site, include comprehensive general and specific notes concerning sources and methods. Assistance to users is provided through direct contacts with the BNB via e-mail and telephone numbers posted on the web. A catalog of publications, documents, and other services to users is available on the BNB's web site.

39. Accessibility of balance of payments statistics is achieved through dissemination both in hard copy and electronically, through press releases. In January 2003, the BNB decided to start releasing balance of payments statistics simultaneously to all users, subject to a one-day pre-release to government. Description of metadata and methodologies are available via the BNB website and the IMF's DSBB. Sources and additional methodological detail are published in the *BNB Monthly Bulletin*. Assistance to users is provided through the contact person listed on the website. In addition, publications list the BNB Press Office as the contact point for the public, which directs inquiries to the appropriate specialist. A full list of publications is on the BNB website.

IV. STAFF'S RECOMMENDATIONS

40. Based on the results of the data quality assessment, discussions with the Bulgarian authorities in the statistics compiling agencies, and responses from data users, the following measures are proposed to increase further Bulgaria's adherence to international statistical standards.

Cross-cutting Recommendations⁹

High priority

- Take the remaining steps to support SDDS subscription, including the development and dissemination of a National Summary Data Page for SDDS data categories and posting ARCs on the website of the disseminating agencies. Compile and disseminate the Data Template on International Reserves and Foreign Currency Liquidity when available. Also, disseminate production index data in reference to a fixed base.
- Provide the NSI with appropriate office accommodation; pursue the application to reclassify the NSI to a higher status (to a category 2 institution) to make staff salaries more competitive; allocate additional staff within the headquarters of the NSI for the compilation and development of the national accounts, CPI and PPI; and appropriately increase the staff in the BOP division of the BNB.

⁹ These recommendations apply to two or more sectors or statistical-producing agencies.

Other key recommendations

- Amend the GDDS metadata to accurately reflect the internal government pre-release access arrangements for key data (e.g., national accounts and CPI).
- Clearly indicate preliminary and revised data to all users. Undertake more systematic revision practices and studies, and make the results available to users.

National Accounts

High priority

- Advance the timeliness of the fourth quarter GDP estimates to 90 days.
- Bring the scope of the national accounts fully into line with the recommendations of the *ESA 95* and continue to develop financial accounts

Other key recommendations

- Publish the *ESA 95* metadata produced for Eurostat.

Consumer Price Index

High priority

- Extend the application of quality adjustment techniques to a wider range of product prices.
- Investigate possible ways to maintain more up-to-date retail industry information on the business register to support CPI outlet sampling.

Other key recommendations

- Undertake extensive consultation with major users on including housing in the national CPI.

Producer Price Index

High priority

- Advance the timeliness of the PPI to one month.
- Re-commence publication of the PPI and update the ARC and the catalog of publications.
- Complete the program of implementation of transaction pricing methodology into the PPI as soon as possible.
- Finalize the index rebasing program to convert to a year 2000 weighting and reference base period.

Other key recommendations

- Increase the rigor and the extent to which quality adjustment techniques are applied to product prices.

Government Finance Statistics

High priority

- Improve the fiscal data so they meet fiscal reporting requirements for EU accession. In particular, implement the new chart of accounts (with codes that link the chart to EU and *GFSM 2001* frameworks), the Financial Information Management System, and detailed metadata.
- Disseminate information (stocks and flows) on arrears of central and local governments.
- Collect separate (discrete) monthly data from reporting units (rather than cumulative reports). Compile and disseminate discrete monthly and quarterly data, to create useful time series.
- The MOF website should be updated monthly.

Other key recommendations

- Publish data on local government debt statistics. Reclassify IMF purchases in the government debt statistics. Value domestic and external debt consistently.
- Disseminate more fiscal information on the financing of government operations, specifically aggregates on bank and nonbank domestic financing and breakdowns of external financing into bonds and loans.

Monetary Statistics

High priority

- Disaggregate all foreign liabilities of commercial banks' by financial instrument; for back dates as far as possible, include banks' positions on financial derivatives and classify them by sector of counterparty; and rationalize treatment of certain small components of the IMF accounts in the central bank survey.
- Value gold and nonfinancial assets at market prices.
- Separately identify central bank's claims on nonoperating banks that are excluded from the coverage of ODC survey.

Balance of Payments Statistics

High priority

- Bring reporting instructions into line with the *BPM5* guidelines to comply with critical definitions, such as residency and to allow for proper coverage of data, such as an

adequate reporting of financial assets. Clarify instructions on the accrual principle and prescribe more systematical valuation at market prices, for example in compiling foreign direct investment and reporting financial assets.

- Improve the comprehensiveness and timeliness of all source data; merchandise trade, ITRS and surveys.

Other key recommendations

- Foster interagency cooperation to improve the timeliness of the supply of merchandise trade data.
- Following the outcome on the proposed revision to the *Foreign Exchange Law*, the BNB should draw up statistical reporting procedures to address deficiencies in source data.