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

This Report on the Observance of Standards and Codes on the Data Module for the Slovak Republic 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 April 29, 2005. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Slovak Republic or the Executive Board of the IMF.

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

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services 700 19th Street, N.W. ● Washington, D.C. 20431 Telephone: (202) 623 7430 ● Telefax: (202) 623 7201 E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: \$15.00 a copy

International Monetary Fund Washington, D.C.

INTERNATIONAL MONETARY FUND

SLOVAK REPUBLIC

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

Prepared by the Statistics Department

Approved by William E. Alexander and Michael C. Deppler

April 29, 2005

The Report on the Observance of Standards and Codes (ROSC)—data module—provides an assessment of Slovak Republic'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 Statistical Office of the Slovak Republic, the National Bank of Slovakia, and the Ministry of Finance.

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

SOSR: http://www.statistics.sk

NBS: http://www.nbs.sk MOF: http://finance.gov.ski

This report is based on information provided prior to and during a staff mission from February 18–March 3, 2004 and publicly available information. The mission team, headed by Mr. Ethan Weisman, comprised Mmes. Margaret Fitzgibbon and Maria Mantcheva, Messrs. Ewe-Ghee Lim, Paul Shevchenko (all STA), and David Collins (Expert), and Ms. Arlene Tayas (Administrative Assistant, STA).

Contents	Page
Acronyms	3
Executive Summary	4
I. Introduction	5
II. Data Dissemination Practices and the Special Data Dissemination Standard	5
Data dimension: coverage, periodicity, and timeliness	
Access dimension.	6
Integrity dimension	7
Quality dimension	
Monitoring of data	
III. Summary Assessment of Data Quality	9
Prerequisites of quality	9
Assurances of integrity	10
Methodological soundness	11
Accuracy and reliability	12
Serviceability	14
Accessibility	15
IV. Staff's Recommendations	16
Cross-Cutting Recommendations	16
Institutional Arrangements	
National Accounts	
Consumer Price Index	
Producer Price Index	
Government Finance Statistics	18
Monetary Statistics	
Balance of Payments Statistics	19
Text Tables	
1. Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness	
of Data Compared to the SDDS	
2. DQAF—Summary Presentation of Results	20

ACRONYMS

1993 SNA System of National Accounts 1993 1995 ESA European System of Accounts 1995

BPM5 Balance of Payments Manual, fifth edition

CPI Consumer Price Index

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

ECB European Central Bank

Eurostat Statistical Office of the European Communities

HMS Harmonized Monetary Statistics IMF International Monetary Fund

MFSM Monetary and Financial Statistics Manual

MOF Ministry of Finance

NBS National Bank of Slovakia NMS National Monetary Statistics NPF National Property Fund PPI Producer Price Index

ROSC Report on the Observance of Standards and Codes

SDDS Special Data Dissemination Standard SOSR Statistical Office of the Slovak Republic

STA IMF's Statistics Department

EXECUTIVE SUMMARY

This Report on the Observance of Standards and Codes data module provides a review of the Slovak Republic's data dissemination practices against the IMF's Special Data Dissemination Standard (SDDS), complemented by the in-depth assessment of the quality of the national accounts, consumer price index, producer price index, government finance, monetary, and balance of payments statistics. The agencies that compile the statistics assessed in this report are the Statistical Office of the Slovak Republic (SOSR), the National Bank of Slovakia (NBS), and the Ministry of Finance (MOF). The assessment was carried out by a mission from the Statistics Department that visited Bratislava, Slovak Republic during February 18–March 3, 2004.

The mission reached the following main conclusions:

- **SDDS observance/subscription:** The Slovak Republic has subscribed to the SDDS since 1996 and observes or exceeds all of the prescriptions of these standards. The National Summary Data Page is hyperlinked to the Dissemination Standards Bulletin Board.
- **Prerequisites of quality:** Statistical agencies generally have a legal and institutional framework that supports statistical quality, although the formal legal mandate to disseminate statistics should be made explicit. Resources are generally adequate for existing statistical programs; however, low wages at the SOSR (relative to other public sector agencies) mitigate against staff retention. Additional resources for the SOSR and MOF would be required to pursue needed statistical improvements and strengthen related transparency. All agencies demonstrate quality management as a cornerstone of their statistical work.
- **Assurances of integrity:** All agencies demonstrate a high level of professionalism, and provide guidelines on ethical conduct for staff. In general, compilers are transparent in their policies and practices, although advance notification of methodological and other changes is not given.
- **Methodological soundness:** Methodological practices generally follow internationally recognized standards. Minor areas for improvement were observed in the national accounts and balance of payments statistics. Migration to the *Government Finance Statistics Manual 2001* is in progress. There are two sets of monetary statistics. The national monetary statistics are not fully in line with international standards; the other set, harmonized monetary statistics, follows the European Central Bank (ECB) methodology.
- Accuracy and reliability: Source data and statistical techniques are generally sound. Assessments of source data, intermediate data, and statistical outputs are conducted regularly and contribute to the accuracy and reliability of the statistics. For the national accounts and prices, areas for improvement include the Household Budget Survey sample, foreign trade price indices, and quality adjustments and weight calculation

- 5 -

techniques for price indices. Even though formal revision studies are not conducted, revised data are reviewed to inform statistical processes.

- Serviceability: The Slovak Republic statistics meet SDDS periodicity and timeliness requirements; however, annual national accounts statistics are disseminated with a long lag, and quarterly general government statistics are not disseminated. In general, data are not consistent across sets of macroeconomic statistics. Users cannot reconcile the data based on available information because of coverage, classifications, and basis of recording inconsistencies. Revision policies and practices follow a regular schedule, except for national accounts and government finance statistics. However, revision practices and studies are not widely publicized (except for price statistics).
- Accessibility: Data are widely accessible to users, especially via the Web, and are clearly presented. In general, only summary metadata are available and detailed metadata are not prepared and disseminated to users. Assistance to users follows good practices.

I. Introduction

- 1. The data dissemination module of this Report on the Observance of Standards and Codes (ROSC) provides a summary of the Slovak Republic's practices on the coverage, periodicity, and timeliness of the data categories. 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 (STA). This report is based on information provided prior to and during a staff mission from February 18–March 3, 2004, as well as publicly available information.
- 2. Section II includes an overview of the Special Data Dissemination Standard (SDDS) and an assessment of the Slovak Republic'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 the Slovak Republic's statistics.

II. DATA DISSEMINATION PRACTICES AND THE SPECIAL DATA DISSEMINATION STANDARD

3. The Slovak Republic subscribed to the SDDS in September 1996 and started posting descriptions of methodology and source data (metadata) on the Dissemination Standards Bulletin Board (DSBB) in October 1998. The Slovak Republic has been in observance of the SDDS since October 1999, meeting specifications for coverage, periodicity, timeliness, and

¹ The mission team was headed by Mr. Ethan Weisman and comprised Ms. Margaret Fitzgibbon, Mr. Ewe-Ghee Lim, Ms. Maria Mantcheva, Mr. Paul Shevchenko (all STA), Mr. David Collins (expert), and Ms. Arlene Tayas (STA—Administrative Assistant).

advance release calendars. Also, the Data Template on International Reserves and Foreign Currency Liquidity has been disseminated and hyperlinked to the DSBB since July 2000. The National Summary Data Page (NSDP) has been hyperlinked to the DSBB since March 2000.

- 4. Three official institutions are responsible for the compilation and dissemination of prescribed SDDS data categories:
- The Statistical Office of the Slovak Republic (SOSR) produces data on the national accounts, production, employment, unemployment, wages/earnings, prices, merchandise trade, and population. It is the SDDS national coordinator.
- The National Bank of Slovakia (NBS) is responsible for producing data on the banking system, interest rates, balance of payments, international reserves and foreign currency liquidity, international investment position, external debt, and exchange rates.
- The Ministry of Finance (MOF) produces statistics on central government operations, general government operations, central government debt, and stock market/share price index.
- 5. The Slovak Republic provides access to these data through a variety of publications and the following Internet websites:
- SOSR: http://www.statistics.sk/webdata/english/index2 a.htm
- NBS: http://www.nbs.sk/INDEXA.HTM
- MOF: http://www.finance.gov.sk/mfsr/mfsr.nsf/vdb News E?OpenView&Count=20

Data dimension: coverage, periodicity, and timeliness

6. The Slovak Republic meets SDDS specifications for the data dimension for all data categories without the use of any flexibility option. Data on the national accounts, employment, unemployment, wages/earnings, prices, merchandise trade, and international investment position exceed SDDS prescriptions on timeliness, while analytical accounts of the central bank and international investment position data exceed the prescription for periodicity. The coverage, periodicity, and timeliness of macroeconomic data are compared with SDDS requirements in Table 1.

Access dimension

7. In observance of SDDS requirements on public access, advance release calendars are disseminated on the websites of the agencies responsible for each set of data. These advance release calendars are supplemented by a quarter-ahead presentation of release dates on the DSBB. Data are released simultaneously to all users on the agencies' websites and on the

Slovak Republic's National Summary Data Page (http://www.statistics.sk/webdata/mmf/nssu.htm).

Integrity dimension

8. Summary methodology descriptions for all SDDS data categories are posted on the DSBB. In addition, the laws, regulations, and decrees under which the official statistics are collected, compiled, and disseminated are posted on the websites of compiling agencies, and are available upon request. Internal government access to the data prior to their release to the public is made known to the public, if this occurs, except in the context of government finance statistics. For all SDDS data categories, major changes in methodology are announced in the relevant publications after implementation of the change.

Quality dimension

9. Summary methodology descriptions for all SDDS data categories are posted on the DSBB.

Monitoring of data

- 10. The IMF staff began monitoring subscribers' performance under the SDDS in July 2000. Monitoring is carried out against the release dates stated in the advance release calendars and the metadata, to verify that the data are released according to the calendar posted on the DSBB. The Slovak Republic's dissemination practices are in observance of the SDDS.
- 11. In general, the mission found the SDDS metadata to be out-of-date, especially in the area of integrity. Several statistics producing agencies rely on links to the DSBB from their own websites to inform users about methodology and other metadata. However, methodological advances have not yet been reflected and the DSBB does not have adequate metadata for sophisticated users.

Table 1. Slovak Republic: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the Special Data Dissemination Standard (SDDS)

SDDS	Coverage	Perio	dicity	Tin	neliness	
Data Category	(meets SDDS requirement)	SDDS	Slovak Republic	SDDS	Slovak Republic	Comments
Real Sector	1		Republic			
National accounts	Yes	Q	Q	1Q	NLT 75 D	Timeliness exceeds SDDS requirements
Production index/indices	Yes	M	M	6W, M encouraged	6W	- 4
Employment	Yes	Q	Q	1Q	NLT 80D	Timeliness exceeds SDDS requirements
Unemployment	Yes	Q	Q	1Q	NLT 80D	Timeliness exceeds SDDS requirements
Wages/earnings	Yes	Q	Q	1Q	80D	Timeliness exceeds SDDS requirements
Consumer price index	Yes	M	M	1M	NLT 15D	Timeliness exceeds SDDS requirements
Producer price index	Yes	M	M	1M	NLT 28D	Timeliness exceeds SDDS requirements
Fiscal Sector						
General government operations	Yes	A	A	2Q	26W	
Central government operations	Yes	M	M	1M	4W	
Central government debt	Yes	Q	Q	1Q	NLT 13W	
Financial Sector						
Analytical accounts of the banking sector	Yes	M	M	1M	M	
Analytical accounts of the central bank	Yes	M (W recom- mended)	10D	2W (W encouraged)	NLT 14D	
Interest rates	Yes	D	D	1/	D	Except average lending and deposit rates of commercial banks (1M)
Stock market: share	Yes	D	D	1/	1D	
price index						
External Sector						
Balance of payments	Yes	Q	Q	1Q	NLT 1Q	
Official reserve assets	Yes	M (W recom- mended)	W	1W	2-6D for official reserves	
Reserves template	Yes	M (W recom- mended)	М	1W	NLT 1M for the complete data template	
Merchandise trade	Yes	M	M	8W (4-6W encouraged)	NLT 4W	Timeliness exceeds SDDS requirements
International investment position	Yes	A (Q recom- mended)	Q	3Q (Q encouraged)	26W	Timeliness exceeds SDDS requirements
Exchange rates	Yes	D	D	1/	D	
Addendum: Population	Yes	A	A		10W	

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; (NLT) not later than; and (...) not applicable.

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

III. SUMMARY ASSESSMENT OF DATA QUALITY

- 12. 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, STA has developed a tool to provide a structure and a common language to assess data quality. The DQAF comprises a generic framework² and a set of dataset-specific frameworks. The frameworks cover five dimensions of data quality—integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility—and a set of prerequisites.³
- 13. An assessment of six macroeconomic datasets (national accounts, consumer price index, producer price index, 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 Slovak Republic's statistical 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.
- 14. The Slovak Republic's statistical system has changed substantially in recent years. The transition to a market economy that began in the 1990s and the separation from the Czech Republic in 1993 led to significant changes in the structure of the economy. In addition, the Slovak Republic joined the European Union on May 1, 2004. In preparation for accession to the European Union, Slovak statistical agencies generally have made substantial improvements to meet Statistical Office of the European Communities (Eurostat) and European Central Bank (ECB) requirements.

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, relevance, and other quality management.

15. The **SOSR** (responsible for the national accounts, the consumer price index (CPI), the producer price index (PPI), and other statistics) has the central role in overseeing the entire national statistical process. The *Law on State Statistics* (No. 540/2001) provides a <u>legal and institutional environment</u> that clearly sets out responsibility for the collection and processing

² Information on data quality can be found at the IMF website on the "Data Quality Reference Site" (http://dsbb.imf.org/dqrsindex.htm).

³ See also the Generic Framework set out in Appendix II of the accompanying detailed assessments volume to this report.

of statistics, data sharing and coordination, the protection of the confidentiality of individual responses, and the legal obligation to report data. Although the law does not explicitly state a dissemination obligation, there are well established dissemination practices. Overall resources are adequate to secure the statistical work program. However, the lack of competitive salaries for SOSR staff within the public sector mitigates against staff retention. The relevance of statistics is maintained through ongoing user liaison and the consultation process to annually update the three-year state program of statistics. A focus on quality is maintained and monitored through the formal commitment of top management supported by staff training and the application of processes such as total quality management.

- 16. The **MOF** is responsible for government finance statistics. The <u>legal and institutional</u> <u>environment</u> under which it operates defines its administrative and accounting data collection and reporting responsibilities but does not provides a clear mandate to disseminate government finance statistics. Consequently, the <u>relevance</u> of data for statistical user needs is not actively monitored. <u>Resources</u> are adequate for current tasks; however, substantial strengthening of fiscal statistics would require additional resources. Staff performance reviews ensure an efficient use of resources. <u>Quality</u> awareness is promoted, although there is no declared statistical program.
- 17. The **NBS** compiles balance of payments and monetary statistics for the Slovak Republic. It has a comprehensive <u>legal and institutional</u> environment that provides a mandate to collect the required data. It is legally obligated to maintain the requisite confidentiality of individual reporters' data. Data sharing arrangements with the SOSR and MOF are in place and work well. <u>Resources</u> are adequate for data collection and compilation of the statistics. The <u>relevance</u> of the statistics produced is safeguarded by regular consultations with internal and external users. <u>Quality</u> is a cornerstone of statistical work, and has focused recently on meeting Eurostat and ECB requirements, and other international standards.

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

18. The **SOSR** maintains a high degree of <u>professionalism</u>. Statistics are compiled on an impartial basis, and choices of sources and statistical techniques are informed solely by statistical considerations. Recruitment methods and training promote professionalism. The statistical office comments on erroneous interpretations of its data. <u>Transparency</u> of statistical policies and practices is promoted by the wide availability of the Statistics Law and the program for statistical surveys, as well as the clear identification of the SOSR's products. However, users of statistics are not made aware in advance of major changes in methodology. <u>Ethical standards</u> are promoted by the Act on Civil Service. SOSR staff also take an oath to observe practices of good conduct.

- 19. The **MOF** promotes <u>professionalism</u> among its staff. Staff responsible for the compilation of government finance statistics are well trained and qualified. International methodological standards are observed. However, administrative and accounting reporting considerations significantly guide the choices of sources and statistical methods. MOF spokespersons comment on erroneous statements in the media and provide explanatory briefings. <u>Transparency</u> needs to be upgraded. Statistical methodology, techniques, and processes are not notified to the public. <u>Ethical standards</u> for civil servants are defined in a civil service act. MOF management promotes ethical behavior among its staff.
- 20. Staff at the **NBS** maintain a high degree of <u>professionalism</u>; this is strongly encouraged by the NBS management, especially through recruitment policies and training. The provisions of the Act on the National Bank of Slovakia support the independence of the NBS, enhancing the ability of staff to compile statistics on an impartial basis. <u>Transparency</u> is fostered by the posting on the NBS website of laws and decrees underlying data compilation and dissemination. No official outside the NBS has access to data prior to publication on the NBS website. For the balance of payments statistics, advance notice of major changes in methodology and source data is not provided, although explanatory notes are provided when changes are introduced. <u>Ethical standards</u> for staff behavior are part of the NBS employment contract and are specified in the Governor's Instruction to the staff.

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.

- 21. The **national accounts** follow the <u>concepts and definitions</u> of the *European System of Accounts 1995 (1995 ESA)*. The <u>scope</u> of the national accounts includes the range of tables consistent with the minimum and recommended requirements for implementing the *System of National Accounts 1993 (1993 SNA)*. In addition, annual financial accounts are compiled. The delimitation of the constituent units of the economy and the production boundary are in line with international practices. The <u>classification/sectorization</u> follows international standards, except the classification of general government expenditure by function is not available. The <u>basis for recording</u> follows international standards. However, general government transactions are recorded mostly on a cash basis and foreign trade data are converted into national currency using a single fixed exchange rate for each month instead of the actual exchange rate at the date of the transaction.
- 22. The **consumer price index** follows the <u>concepts and definitions</u> of the *1995 ESA*, and the <u>scope</u> is consistent with international guidelines. The <u>classification</u> of consumption activity follows the Classification of Individual Consumption by Purpose, and the <u>basis for recording</u> is market prices valued at purchasers' prices and recorded on an accruals basis.

- 23. The **producer price index** concepts and definitions comply with Eurostat requirements and are compatible with the *1993 SNA*. The <u>scope</u> of the core index relates to domestic and export sales of the mining and quarrying, manufacturing, and energy industries by resident market enterprises. PPIs are also produced for other sectors of the economy. The <u>classification</u> of enterprises and products follows the Standard Classification of Economic Activities within the European Communities, the Classification of Products by Activity, and Lists of Products of the European Communities. The <u>basis for recording</u> weights and prices reflects market prices valued at basic prices and recorded on an accruals basis.
- 24. **Government finance statistics** are compiled in accordance with the <u>concepts and definitions</u> of *A Manual on Government Finance Statistics*, 1986 methodology. The MOF has a plan to progressively migrate to *Government Finance Statistics Manual 2001* methodology (as well as the *1995 ESA Manual on Government Deficit and Debt*). The <u>scope</u> covers all general government units for annual data and budgetary central government units for monthly and quarterly data. The <u>classification and sectorization</u> of transactions is derived from the budget classification by the use of bridge tables. Balances are derived from the MOF chart of accounts. The <u>basis of recording</u> is cash.
- 25. The two sets of **monetary statistics** compiled by the NBS (the "national monetary statistics" (NMS) used for internal policy discussions, and "harmonized monetary statistics" (HMS) submitted to international organizations) broadly follow the <u>concepts and definitions</u> in the *Monetary and Financial Statistics Manual (MFSM)*. However, in the NMS, foreign liabilities of government are treated as foreign liabilities of the NBS, with a counterpart adjustment in NBS claims on the government. The <u>scope</u> of the NMS and HMS is broadly in line with *MFSM* recommendations, although the NMS does not cover money market funds (1.9 percent of M2 as of end-February 2004). The <u>classification/sectorization</u> of the NMS and HMS also follows the *MFSM*. The HMS follows ECB guidelines for the classification of financial derivatives and loan-loss provisions. The <u>basis for recording</u> used in both NMS and HMS differs from the *MFSM* because market valuation is not applied to certain financial instruments.
- 26. The **balance of payments statistics** are compiled in accordance with the <u>concepts</u> and <u>definitions</u> set out in the fifth edition of the IMF's <u>Balance of Payments Manual (BPM5)</u>. The <u>scope</u> is broadly in line with <u>BPM5</u>. <u>Classification and sectorization</u> for the most part follow the recommendations of <u>BPM5</u>. While long-term construction projects are not included as direct investment, a plan is in place to include them. Market prices form the <u>basis for recording</u>; however, while some adjustments are made for recording interest on an accrual basis, most interest payments are recorded on a cash basis. Further, merchandise trade transactions are converted into national currency using a single fixed exchange rate for each month

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.

- 27. The <u>source data</u> for both the annual and quarterly **national accounts** are generally sound and timely, and are consistent with the methodological requirement of the *1995 ESA*. However, the Household Budget Survey sample is not representative and the unit value price indices for imports and exports measure price changes for nonhomogeneous goods. <u>Assessment of source data</u> is seen as an important part of the national accounts work and follow international best practices. <u>Statistical techniques</u> are basically sound, with production approach estimates made in sufficient detail and expenditure estimates made independently. Constant price estimates are compiled using sound deflation techniques. The base year for the accounts (1995) is outdated. Techniques used in compiling quarterly national accounts are sound, but benchmarking is done using a prorating technique, resulting in a step problem in the time series. <u>Assessment and validation of intermediate data and statistical outputs</u> follow sound procedures. Although differences between preliminary and final data are tracked and taken into account in compiling estimates for subsequent periods, systematic revisions studies are not conducted.
- 28. Regarding source data for the **consumer price index**, prices have been obtained from a comprehensive data collection program. However, the lower level weights have been based on a Household Budget Survey with a small, nonrandom sample and low coverage (although this is being rectified beginning January 2004), and the annual national accounts estimates used for the upper level weights are not timely. Assessment of source data is conducted routinely. Statistical techniques are generally sound, although there is scope for improving quality adjustment processes, weight calculation techniques, and the linking of reweighted series to previous series. The approach to the assessment and validation of intermediate data and statistical outputs, and revision studies, is sound.
- 29. **Producer price index** source data are obtained from comprehensive data collection programs, on a timely basis. <u>Assessment of source data</u> is conducted routinely. The <u>statistical techniques</u> are generally sound; however, processes to adjust for product quality and weight calculation techniques could be improved. The <u>assessment and validation of intermediate data and statistical outputs</u>, and <u>revision studies</u>, are undertaken on a sound basis.
- 30. Government accounting records are the <u>source data</u> for annual and quarterly **government finance statistics.** NBS banking data are the source for monthly government finance statistics. <u>Assessment of source data</u> is thorough. Accounting and banking source data are subject to extensive systematic evaluation and assessment for completeness and accuracy. <u>Statistical techniques</u> used in compilation, such as derivation and consolidation procedures, are satisfactory. <u>Assessment and validation of intermediate data and statistical outputs</u> are adequate. <u>Revision studies</u> are not conducted.
- 31. The major <u>source data</u> for **monetary statistics** are the detailed balance sheets of the NBS and commercial banks, which largely follow international accounting standards. For HMS, additional source data for money market funds are obtained from asset management companies. The source data are timely and capture the full range of financial instruments and economic sectors. <u>Assessment of source data</u> is adequate. <u>Statistical techniques</u> are sound, with electronic procedures minimizing errors during compilation. The assessment and

<u>validation of intermediate data and statistical outputs</u> are robust. <u>Revision studies</u> of methodological changes, when they occur, are carried out for internal discussion.

32. The <u>source data</u> are sufficient to compile **balance of payments statistics** in line with the recommendations of *BPM5*. Regular <u>assessment of the source data</u> is conducted through internal consistency checks and cross-checking of stocks and flows data, where appropriate. <u>Statistical techniques</u> are sound. Processing systems are automated to the extent possible. <u>Intermediate data and statistical outputs</u> are assessed against other data sources. The size of net errors and omissions is closely monitored and has remained small (as a share of gross exports plus imports) in recent years. The NBS monitors revisions between preliminary and revised data and revisions due to changes in methodology, but there are no formal <u>revisions</u> studies.

Serviceability

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

- 33. <u>Periodicity and timeliness</u> of the **national accounts** data meet the requirements of the SDDS. However, the annual independent estimates are disseminated with a delay. Internal <u>consistency</u> in the accounts is secured through the supply and use framework. Consistent annual and quarterly time series in current and constant prices are available from 1993. National accounts are not reconciled with the government finance statistics and the balance of payments. <u>Revision policy and practice</u> do not follow a regular cycle, and users are not informed about the timing of revisions. Studies of revisions are not made public.
- 34. The <u>periodicity and timeliness</u> of the **consumer price index** and **producer price index** meet the requirements of the SDDS. Both indices are <u>consistent</u> internally, over time, and with other statistical frameworks. <u>Revision policy and practice</u> of the indices follow a regular and transparent schedule.
- 35. **Government finance statistics** meet the SDDS <u>periodicity and timeliness</u> requirements. Quarterly general government statistics are compiled, but not disseminated. Data <u>consistency</u> for all units and sectors of general government is maintained. However, government finance statistics, monetary, and balance of payments financing and debt data are not consistent due to differences in coverage, classification, and valuation. The MOF general government data include the National Property Fund (NPF) while the NMS monetary survey, until recently, did not. Also, monthly and quarterly fiscal statistics cover the budgetary central government, while monetary data reflect the consolidated central government. On classification, the MOF records securities issued domestically according to original purchaser, while the NBS records them based on current holder. On valuation, in government finance statistics, interest on domestic currency denominated government bonds is on a cash basis, while in balance of payments statistics it is adjusted to accrual. The MOF <u>revision</u>

<u>policy and practice</u> has no regular revisions schedule or revisions analysis for its government finance statistics.

- 36. <u>Periodicity and timeliness</u> of **monetary statistics** meet SDDS requirements. Monetary statistics show <u>consistency</u> within the dataset, but users are not able to reconcile the data with the balance of payments. There are significant differences between monetary data on net claims on government and government finance statistics on domestic bank financing of government. <u>Revision policy and practice</u> follow a regular cycle each December. Other revisions for monetary statistics are infrequent and generally small. The schedule for revision has begun to be publicized.
- 37. <u>Periodicity and timeliness</u> of the **balance of payments statistics** meet the SDDS requirements. The statistics are internally <u>consistent</u> and consistent over time since 1997. They also are consistent with the international investment position and external debt statistics. Users are not able to reconcile balance of payments statistics with national accounts, monetary, or government finance statistics. <u>Revision policy and practice</u> follow an established pattern that is well-known; however, no public statement of the revision policy is available. Preliminary data are clearly identified.

Accessibility

Accessibility deals with the availability of information to users. Element refers 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.

- 38. The **national accounts** are readily <u>accessible</u> free of charge on the SOSR website. National accounts hard copy publications are available in Slovak and English. National accounts releases follow a four-month advance release calendar that is regularly updated on the SOSR website. Data are released simultaneously to all users. Nonpublished, nonconfidential data are available on request. On <u>metadata</u> accessibility, summary metadata are found on the website and more detailed documentation is found in the hard copy publications. Departures from the methodological requirements of the *1995 ESA* are made available to users. However, information on data sources such as response rates, nonsampling errors, sample design, and estimation and imputation techniques is not disseminated. <u>Assistance to users</u> is readily available, and contact persons and other services to the users, including annual catalogs of publications, are well publicized.
- 39. <u>Data accessibility</u> for the **consumer price index** and **producer price index** is good. Initial Internet releases of summary series conform to a preannounced, embargoed schedule, followed by more comprehensive, clearly presented, paper copy releases. Unpublished data are made available on request. <u>Metadata accessibility</u> for both indices is limited to brief summary statements (the SDDS summary), and there is no comprehensive documentation available. Prompt and knowledgeable <u>assistance to users</u> is readily obtainable and publicized.
- 40. <u>Data accessibility</u> for **government finance statistics** is adequate. Data are released on the website to a preannounced schedule. Monthly and quarterly data are presented on a

cumulative basis, which compromises analysis of time series. <u>Metadata accessibility</u> needs strengthening. The disseminated fiscal metadata and information on compilation methods are incomplete. <u>Assistance to users</u> is provided through e-mail. A list of available fiscal statistics is not disseminated.

- 41. **Monetary statistics** are generally <u>accessible</u> and presented in a clear format in the NBS monthly bulletin and website. However, there are difficulties in identifying the gross positions of the central and general government in the NMS and presentation of the NPF can be confusing to users. Data are released on a preannounced schedule and simultaneously to all users. Nonpublished nonconfidential data are available to users upon request. <u>Metadata</u> are available on the NBS website, which has a link to the IMF's DSBB, and detailed documentation is available for the NBS (in Slovak). <u>Assistance to users</u> is facilitated by the identification of a contact person on the DSBB, which can be accessed through the NBS website.
- 42. **Balance of payments** statistics are <u>accessible</u> through the NBS website through both the disseminated data page and the monthly *Monetary Policy* bulletin. They are released simultaneously to all users, according to the preannounced schedule. The bulletin also contains detailed commentary on the statistics, and users can subscribe to be notified by email. The NBS provides more detailed nonconfidential data on request, although this policy is not publicized. SDDS <u>metadata are accessible</u> on the NBS website. While very detailed documentation has been developed, this is primarily for internal use. The ECB publishes a document that provides a description of the sources and methods for compilation of the statistics; however this is not easily accessible by users. <u>Assistance to users</u> is facilitated by the publication of the names and contact details for two persons on the NBS website. Information on publications is available through the website.

IV. STAFF'S RECOMMENDATIONS

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

Cross-Cutting Recommendations

High priority

- Address intersectoral statistical inconsistencies and reconciliation procedures. Create an
 interagency group that includes in the core group the NBS, MOF, and SOSR, and as
 needed, representatives from other agencies (for example, Directorate of Customs, NPF).
- Provide users with more detailed metadata. Ensure that metadata are regularly updated and disseminated, and in this context, regularly update the IMF's SDDS metadata.

- Provide users with advance notification of major changes in methodology, source data, and statistical techniques.
- Ensure that users are aware of the regular revisions cycles for each major data set, and that advance notice is given prior to all significant statistical revisions. Clearly identify all revisions and provide explanations of the reasons for the changes.

Other key recommendations

- Review the legislative arrangements of the SOSR, NBS, and MOF to ensure that the responsibility for dissemination of statistics is clearly specified.
- Develop dissemination formats that include long time series of data that can be readily downloaded by users.

Institutional Arrangements

Other key recommendations

• Review wage levels in the SOSR, with a view to making them competitive with the rest of the public sector.

National Accounts

High priority

- Improve the timeliness of the annual independent national accounts estimates.
- Reconcile the national accounts estimates with the balance of payments and government finance statistics on a regular basis.
- Develop price indices of imports and exports based on direct surveys of price changes, and in the interim, use alternative deflators for imports and exports.
- Inform the users about the results of revisions studies.

Other key recommendations

• Improve the quarterly compilation benchmarking technique to avoid the step problem in the time series.

Consumer Price Index

High priority

- Develop (in consultation with National Accounts compilers) mechanisms for obtaining more timely annual household final consumption expenditure estimates to support regular index reweighting.
- Review the type and extent of product quality adjustment techniques used.

Other key recommendations

• With the next CPI reweight: (i) revalue the annual weights to align with the price reference period, and (ii) link the new reweighted index to the present 2000-year based index at December 2003, at all levels of the index hierarchy.

Producer Price Index

High priority

• Review the type and extent of product quality adjustment techniques used.

Other key recommendations

- Even though the PPI fully observes the DQAF standard in terms of scope, consider maximizing the index utility by developing a more broadly-based, summary PPI through the aggregation of the industrial PPI with the PPI output indices for the construction, agriculture, and forestry industries; potentially incorporate the market services indices as coverage is extended.
- With the next PPI reweight, revalue the annual weights to align with the price reference period.

Government Finance Statistics

High priority

- Regularly compare and reconcile government finance statistics aggregates with
 equivalent data in monetary and balance of payments statistics, and disseminate
 reconciliation tables where necessary.
- Disseminate quarterly general government statistics.
- Institute a policy, regular schedule, and analysis of revisions. Publish subannual data on a
 discrete basis to demonstrate the effect of revisions. Disseminate this information on the
 MOF website.

• Maintain a manual on fiscal statistics compilation. Provide background papers to explain compilation practices.

Other key recommendations

• Formalize the monitoring of user needs and reflect them in a declared statistical program.

Monetary Statistics

High priority

- In the NMS, discontinue the practice of treating the foreign liabilities of government as those of the NBS and cover money market funds.
- In cooperation with MOF, reconcile government financing data and monetary statistics, and carry out a reconciliation exercise on a regular basis.

Other key recommendations

- Apply market valuation to financial instruments in line with the recommendations of the *MFSM*
- Improve the presentation of the NMS monetary survey by showing underlying gross data in net credit to general government and to central government.
- Update metadata to indicate that NMS broad money includes nonresident domestic currency deposits in domestic banks, and provide the rationale underlying this practice to users.

Balance of Payments Statistics

High priority

- Work to develop methodology to adjust all investment income flows to approximate an accrual basis (noting that this adjustment is already made for domestic currency-denominated government bonds).
- Work with staff of SOSR, MOF and with the compilers of the monetary statistics in the Monetary Policy Department to develop and disseminate reconciliation tables.

Other key recommendations

- Ensure that documentation on sources and methods for compiling balance of payments statistics is readily available to users
- Make periodic revisions studies available to users.

Table 2. Slovak Republic: Data Quality Assessment Framework—Summary Presentation of Results

	1	,	,			•	
	National	Consumer	Producer	Government	Monetary	Balance of	
Element	Accounts	Price	Price	Finance	Statistics	Payments	Comments
	Statistics (NAS)	Index (CPI)	Index (PPI)	Statistics (GFS)	(MS)	Statistics (BOP)	
Key to symbols: $NA = Not Applicable$; $O = Pra$	= Practice Observ	ved; LO = Pra	ctice Largely	Practice Largely Observed; LNO	O =Practice La	=Practice Largely Not Observed; NO	rved; NO = Practice Not Observed
0. Prerequisites of quality							
0.1 Legal and institutional environment	0	0	0	ОТ	0	0	GFS: see paragraph 16
0.2 Resources	ГО	ГО	ГО	ГО	0	0	NAS: see paragraph 15; CPI/PPI: see paragraph 15;
0.3 Delevience	C	C	C	01	C	C	GFS: see paragraph 16
				2 -) (GFS: see paragraph 16
))			or ide dand on the
1.1 Professionalism	0	0	0	ГО	0	0	GFS: see paragraph 19
1.2 Transparency	ГО	ГО	ГО	ГО	0	ГО	NAS: see paragraph 18; CPI/PPI: see paragraph 18;
1.3 Ethical standards	0	0	0	0	0	0	Oro. see paragraph 19; BOP: see paragraph 20
2. Methodological soundness							
2.1 Concepts and definitions	0	0	0	0	ГО	0	MS: see paragraph 25
2.2 Scope	0	0	0	0	ГО	0	MS: see paragraph 25
	ГО	0	0	0	0	ГО	NAS: see paragraph 21; BOP: see paragraph 26
2.4 Basis for recording	ГО	0	0	0	ГО	ΓO	NAS: see paragraph 21; MS: see paragraph 25; BOP: see paragraph 26
3. Accuracy and reliability							
3.1 Source data	ОТ	ГО	0	0	0	0	NAS: see paragraph 27; CPI: see paragraph 28
3.2 Assessment of source data	0	0	0	0	0	0	
3.3 Statistical techniques	ГО	ГО	ГО	0	0	0	NAS: see paragraph 27; CPI: see paragraph 28;
3.4 Assessment and validation of	0	0	0	0	0	0	111. See paragraph 27
intermediate data and statistical outputs	-	C	C	V I	C	C	MAS. cas norograph 27
4. Serviceability	2		0	VI			13.35. 500 paragraph 27
_	0	0	0	0	0	0	
4.2 Consistency	ГО	0	0	ГО	ГО	ГО	NAS: see paragraph 33; GFS: see paragraph 35;
4.3 Revision policy and practice	LNO	0	0	TNO	0	ОТ	NAS: see paragraph 33, GFS: see paragraph 35, BOP: see paragraph 35, BOP: see paragraph 37,
5. Accessibility							
5.1 Data accessibility	0	0	0	ONI	07 07	0	GFS: see paragraph 40; MS: see paragraph 41
5.2 iviciauaia accessiumily	ro	LINO	LINO	FINO)	ro	GFS: see paragraph 40; BOP: see paragraph 42;
5.3 Assistance to users	0	0	0	ГО	0	0	GFS: see paragraph 40

INTERNATIONAL MONETARY FUND

SLOVAK REPUBLIC

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

Response by the Authorities

April 29, 2005

Contents	Page
A. Cross-Cutting Recommendations	2
B. National Accounts	
C. Consumer Price Index	6
D. Producer Price Index	7
E. Government Finance Statistics	7
F. Monetary Statistics	8
G. Balance of Payments Statistics	

REACTION FROM THE SLOVAK REPUBLIC AUTHORITIES ON FUND STAFF RECOMMENDATIONS

A. Cross-Cutting Recommendations¹

Statements by all Agencies

High priority

• Address intersectoral statistical inconsistencies and reconciliation procedures. Create an inter-agency group that includes in the core group the NBS, MOF, and SOSR, and as needed, representatives from other agencies (for example, Directorate of Customs, NPF).

An Inter-agency committee was established during 2004. Multiple meetings among experts from the Statistical Office of the Slovak Republic (SOSR), the Ministry of Finance (MOF), and the National Bank of Slovakia (NBS), based on contractual relations, had the main aim to assure the flow of information across agencies. The Inter-agency committee was established to appraise the statistical results on foreign trade data before they are published.

In addition, an Inter-agency working group on government finance statistics was established with representatives from the MOF, SOSR, and NBS. The subject of the working group is reconciliation of the main government finance aggregates calculations (deficit and debt). This is the basis of the data harmonization process among the national accounts, government finance statistics (GFS), monetary, and balance of payments statistics.

• Provide users with more detailed metadata. Ensure that metadata are regularly updated and disseminated, and in this context, regularly update the IMF's SDDS metadata.

Supplementary information on implemented methodological changes are regularly disseminated at the time of government finance statistics data publication (using the *GFSM 2001* methodology).

The NBS has amended the SDDS metadata on the NMS as suggested by the Data ROSC mission. It will keep the SDDS metadata updated in case of any future significant methodological changes.

The IMF's SDDS metadata are regularly updated by the SOSR, MOF, and the NBS.

• Provide users with advance notification of major changes in methodology, source data, and statistical techniques.

_

¹ These recommendations apply to two or more sectors or statistical-producing agencies.

In the context of the quarterly national accounts, the SOSR began to publish in advance on its website, since January 1, 2004, all radical changes in methodology.

The same approach will be applied by the MOF in the field of GFS.

The NBS regularly announces advanced notifications of major changes in the NMS source data and methodology in the *Monetary Survey* monthly bulletins.

• Ensure that users are aware of the regular revisions cycles for each major data set, and that advance notice is given prior to all significant statistical revisions. Clearly identify all revisions and provide explanations of the reasons for the changes.

Information on significant statistical revisions in GFS will be provided on regular basis following the introduction of the revision policy.

Major regular revision cycles in the NMS include updating the preliminary data for December 31st of the previous year and for January 1st of the current year, with final data drawn up from the audited annual financial statements for the first half of the current year. In case of any non-regular revisions, the NBS provides identification of all affected Monetary Survey items and the reasons for the revision in footnotes.

Users are informed by the SOSR about revisions in the framework for each particular IMF standard for data dissemination. Users are informed about data revisions, specifying in detail the reasons for any revisions to time series in the SOSR publications in which the data appear.

Other key recommendations

• Review the legislative arrangements of the SOSR, NBS, and MOF to ensure that the responsibility for dissemination of statistics is clearly specified.

The responsibilities for dissemination of statistics among the above mentioned institutions are clearly defined. The NBS is responsible for the monetary statistics, balance of payments statistics, and interest rates statistics. The MOF is responsible for government finance statistics compilation according to the *GFSM 2001*. This fact is accepted by the SOSR and the NBS. The SOSR compiles and disseminates data in line with the "Data Transmission Program Under the *ESA 95*" and according to the approved Program of State Statistical Surveys.

The following agreements were signed for improving the cooperation in data compilation and dissemination among the above mentioned institutions:

A skeleton agreement on inter-agency beneficial co-operation has as its aim to exchange data and other information in the area of the statistics between the information systems of the

NBS and SOSR. This agreement was written and adopted on November 15, 2004 and it entered into force upon the day of its signing. The agreement was concluded for an indefinite duration.

A skeleton agreement on inter-agency beneficial co-operation has as its the aim to exchange data and other information in the area of the statistics between the information systems of the MOF and the SOSR. This agreement was written and adopted on May 31, 2004 and it entered into force upon the day of its signing. The agreement was concluded for an indefinite duration.

• Develop dissemination formats that include long time series of data that can be readily downloaded by users.

The MOF website contains GFS time series data since 1999. Further improvements are planned in the near future.

Full time series of the Monetary Survey are available to general public on request in accordance with the Act of the Slovak National Council No 211/2000 Coll. on Free Access to Information. It is possible to fill the electronic request form directly on the NBS internet page or by sending an e-mail to webmaster@nbs.sk.

It is expected that during the first half of 2005 the free public accessible database *Slovstat* will be available for users on the SOSR website, where long time series of indicators on economic and social development will be disseminated, including quarterly national accounts estimates. These database indicators then will be readily downloadable for users.

Institutional Arrangements

Other key recommendations

• Review wage levels in the SOSR, with a view to making them competitive with the rest of the public sector.

The SOSR agrees with suggested recommendation, but until now this problem has not been discussed

B. National Accounts

Statements by the Statistical Office of the Slovak Republic

On accuracy and reliability, the SOSR is participating in the Eurostat Project for improvement of assessments on final consumption of households. Family bank accounts data, data on small businesses, and commodity flow data are used for estimation of the final consumption of households. In 2004, the sampling technique for the households was changed to a stratified two-degree system of random selection, which covers approximately 4,700

households. The sample of the 2003 survey covered only about 1,600 households, and they were selected by simple random technique.

On quality management, the SOSR is implementing the Quality Management System, based on STN EN ISO 9001:2001 and CAF standards.

High priority

• Improve the timeliness of the annual independent national accounts estimates.

The SOSR has taken some steps to improve the timeliness of these estimates and has published the estimated data for 2003 within ten months after the end of the year. As of 2005, the institutional accounts will be disseminated within nine months after the end of the year, in order to fulfill the requirements of the new draft *ESA95* Transmission Program.

• Reconcile the national accounts estimates with the balance of payments and government finance statistics on a regular basis.

We do not agree with the statement that the national accounts estimates are not consistent with the government finance statistics, and the balance of payment statistics. All data sets use consistent methods, following the *ESA95* framework. The SOSR would also like to note, that many bilateral discussions have been held between the SOSR, the MOF, and the NBS, respectively, to exchange data, and to provide mutual verification and adjustment to the statistics.

Develop price indices of imports and exports based on direct surveys of price changes, and in the interim, use alternative deflators for imports and exports.

The National Accounts and Prices Directorate now has five main divisions. In addition to the Annual National Accounts Division, Accumulation Accounts Division, Quarterly National Accounts Division, and Price Statistics Division, the fifth division is the Foreign Trade and Administrative Systems Division. This fifth division is responsible for the calculation of trade price indexes (see section G, below).

Price indexes are used only to reflate imports and exports constant price estimates into current prices estimates. Additional data, such as producer prices, exchange rates, administrative data, are also used in the process of the revaluation. In 2005, the SOSR expects to start using prorating techniques to resolve the step problem in the quarterly time series. Currently, these techniques are still being verified.

• *Inform the users about the results of revisions studies.*

We agree with proposed recommendation. The SOSR will inform the public and users either through its website or during the press release meeting at the SOSR.

Other key recommendations

• Improve the quarterly compilation benchmarking technique to avoid the step problem in the time series.

In order to eliminate the step problem in the quarterly national accounts time series, the SOSR has started implementing appropriate benchmark techniques. The revised time series are expected to be ready by the end of 2005.

The SOSR participates in an Eurostat project for benchmarking the quarterly national accounts. Staff of the SOSR participates in the Eurostat and OECD workshops on benchmarking. Since the change in the methodology will have an impact on the quarterly national accounts estimates, we plan to inform users about the revised methodology.

C. Consumer Price Index

Statements by the Statistical Office of the Slovak Republic

High priority

• Develop (in consultation with National Accounts compilers) mechanisms for obtaining more timely annual household final consumption expenditure estimates to support regular index reweighting.

Annual national accounts data on annual household final consumption expenditure now are obtained on a more timely basis. Therefore, starting from January 2005, the SOSR compiles the CPI as a chain index.

• Review the type and extent of product quality adjustment techniques used.

The SOSR will review the quality adjustment techniques used currently, and will follow up with the requirements of the implementation group on quality adjustment and sampling, established by Eurostat.

Other key recommendations

- With the next CPI reweight: (i) revalue the annual weights to align with the price reference period, and (ii) link the new reweighted index to the present 2000-year based index at December 2003, at all levels of the index hierarchy.
- (i) The SOSR will consider aligning the annual weights with the price reference period beginning from January 2006.
- (ii) Since January 2005, the new reweighted index was linked to the December 2000 index using December 2004 as a link, at all published levels of index hierarchy.

D. Producer Price Index

Statements by the Statistical Office of the Slovak Republic

High priority

• Review the type and extent of product quality adjustment techniques used.

In 2004 the SOSR introduced, for the first time, the implicit product quality adjustment technique of overlap pricing.

Other key recommendations

• Even though the PPI fully observes the DQAF standard in terms of scope, consider maximizing the index utility by developing a more broadly-based, summary PPI through the aggregation of the industrial PPI with the PPI output indices for the construction, agriculture, and forestry industries; potentially incorporate the market services indices as coverage is extended.

The SOSR agrees that it would be useful to resolve the problem of inconsistencies in related producer price indices. Agriculture indices have variable monthly weights, construction indices are compiled on a quarterly basis. The SOSR plans to introduce gradually the survey of market services indices, which will not be completely covered until next PPI revision. The other PPI branches are completed monthly. The construction indices are only used as a substitute indicator for construction costs. Extending the scope of the PPI would require an increase in staff and financial resources, which are not currently available. Therefore, the SOSR does not plan to expand the PPI in the near future. Instead, it plans to use a consistent methodology in compiling the existing PPI output indices for agriculture and construction.

• With the next PPI reweight, revalue the annual weights to align with the price reference period.

The SOSR will consider aligning the annual weights to the price reference period in the next revision of the PPI.

E. Government Finance Statistics

Statements by the Ministry of Finance

As part of the Ministry of Finance plans to implement the *Government Finance Statistics Manual 2001 (GFSM 2001)*, general government statistics for 2003 were submitted to the IMF's Statistics Department and appear in the *2004 Government Finance Statistics Yearbook*. These data were prepared according to the *GFSM 2001* framework and on an

accrual basis. In addition, the MOF has begun to apply the *GFSM 2001* functional classifications to general government total expenditure, beginning with data for 2003.

High priority

• Regularly compare and reconcile government finance statistics aggregates with equivalent data in monetary and balance of payments statistics, and disseminate reconciliation tables where necessary.

As already mentioned above, an inter-agency working group on government finance statistics was established, with representatives from the MOF, the SOSR, and the NBS. The aim of working group is reconciliation of the main government finance statistics aggregates (deficit and debt), which is a basis for harmonizing national accounts data, GFS data, monetary statistics, and balance of payments statistics.

• Disseminate quarterly general government statistics.

The MOF is currently preparing the dissemination of quarterly GFS data following the *GFSM 2001* methodology.

• Institute a policy, regular schedule, and analysis of revisions. Publish subannual data on a discrete basis to demonstrate the effect of revisions. Disseminate this information on the MOF website.

The implementation of the revision policy will be considered through the Public Finance Management Reform Project application.

• Maintain a manual on fiscal statistics compilation. Provide background papers to explain compilation practices.

The *Manual on Fiscal Statistics Compilation* will be drafted within the Public Finance Management Reform Project application.

Other key recommendations

• Formalize the monitoring of user needs and reflect them in a declared statistical program.

The monitoring of the user needs on statistical data is carried out on the regular basis.

F. Monetary Statistics

Statements by the National Bank of Slovakia

The National Bank of Slovakia puts its best efforts to promptly apply measures to bring the Monetary Survey table into accordance with recommendations of the mission of the IMF's

Statistics Department in February–March 2004. Effective from February 2004 (and also revising time series backwards to 2003), the NBS introduced to the periodic Monetary Survey table additional memorandum items to meet criteria recommended by the mission. Even though the NBS still follows the national "country approach" in the main Monetary Survey table (which fits best our analytical framework for internal decision making processes), now the NBS also provides all relevant information for external users to distinguish the details in the global Monetary Survey data to banking sector positions only.

On the Harmonized Monetary Statistics (HMS), the counterparts to HMS measures of liquidity and its capital and reserves are net foreign assets, net claims on central government, credit to local government, social security funds and other resident sectors, and other items net. Other items net comprises interbank balances, fixed assets, longer term deposits (deposits with agreed maturity over two years and deposits redeemable at notices over three months), long term debt securities of depository corporations, and other unclassified assets less unclassified liabilities.

High priority

• In the NMS, discontinue the practice of treating the foreign liabilities of government as those of the NBS and cover money market funds.

Net foreign assets of the banking sector (excluding foreign liabilities of government) are available in memorandum items to the table (and also include gross positions). Reliable time series of money market funds data is available for 2004 only, since the official reporting obligations for money market funds came into force in January 2004. During 2003, the NBS had monitored internally the development of money market funds as a new progressive financial market instrument based on selected unofficial data provided by Association of Money Market Funds. For 2004, shares/units issued by money market funds are also covered in memorandum items to the table.

• In cooperation with MOF, reconcile government financing data and monetary statistics, and carry out a reconciliation exercise on a regular basis.

Balance of payments as well as monetary survey data originated both from balance sheets of banks, so they are reconcilable. However, a reconciliation table has yet to be disseminated to the public.

The Monetary Survey item "Net Credit to General Government" reflects real cash flows of government's assets and liabilities as reported by the NBS and commercial banks, which may not be consistent and/or comparable with methodology for the data published by Ministry of Finance. Also, not all government units were included in this position before 2005 (i.e. deposits of higher territorial units, deposits of government in foreign currency (EU funds) and non-budgetary deposits of government agencies in NBS). Information on these residual items was therefore covered in memorandum items to the table.

Other key recommendations

• Apply market valuation to financial instruments in line with the recommendations of the MFSM.

The accounting practices in the NBS and other monetary financial institutions are in line with Slovak accounting legislative and international accounting standards (IFRS/IAS).

• Improve the presentation of the NMS monetary survey by showing underlying gross data in net credit to general government and to central government.

Gross positions also are available now in the memorandum items to the NMS table. Also, the net position of the National Property Fund has been included since February 2004 and considered part of Net Credit to the General Government in main Monetary Survey table as well as in the text.

• Update metadata to indicate that NMS broad money includes nonresident domestic currency deposits in domestic banks, and provide the rationale underlying this practice to users

The NBS has already updated the SDDS metadata as suggested by the Data ROSC mission.

G. Balance of Payments Statistics

Statements by the National Bank of Slovakia

From May 1, 2004 the SOSR records data on foreign trade in the System Intrastat-SK. Trade products (which cover about 90 percent of trade in the system) are converted using the actual exchange rate at the date of the transaction (that is the date when a tax duty applies). Divergence is relevant only when compared with the Extrastat-SK system, which covers a small amount of trade. This is because the Extrastat-SK system uses the so called "custom exchange rate."

High priority

• Work to develop methodology to adjust all investment income flows to approximate an accrual basis (noting that this adjustment is already made for domestic currency-denominated government bonds).

The NBS has introduced valuation on an accrual basis in investment income for the banking sector since 2005. For other sectors and for portfolio investment (establishing a security by security database), income on an accrual basis is planned to be introduced in the near future.

• Work with staff of SOSR, MOF and with the compilers of the monetary statistics in the Monetary Policy Department to develop and disseminate reconciliation tables.

The balance of payments is fully reconcilable with national monetary statistics, because data sources for both sets of statistics are based on the balance sheets of banks.

Other key recommendations

• Ensure that documentation on sources and methods for compiling balance of payments statistics is readily available to users.

The ECB publishes a document that provides a description of the sources and methods for compilation of the statistics. Links to all document published by international organizations (such as the ECB) in the area of balance of payments are on the web site of National Bank of Slovakia within the SDDS—Balance of payments—category.

• Make periodic revisions studies available to users.

There is no substantial demand for revision studies from users. The NBS regularly monitors revisions between preliminary and subsequent changes to the data, as part of its regular data entry and processing. However, the NBS intends to prepare such a document in 2006.

INTERNATIONAL MONETARY FUND

SLOVAK REPUBLIC

Detailed Assessments Using the Data Quality Assessment Framework (DQAF July 2003)

Prepared by the Statistics Department

Approved by William E. Alexander and Michael C. Deppler

April 29, 2005

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in the Slovak Republic'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 Statistics	4
II. Price Statistics (Consumer Price Index)	26
III. Price Statistics (Producer Price Index)	43
IV. Government Finance Statistics	60
V. Monetary Statistics	81
VI. Balance of Payments	103
Tables 1. DQAF (July 2003): Summary of Results for National Accounts Statistics	
Appendices I. Summary of the Special Data Dissemination Standard (SDDS) II. Data Quality Assessment Framework—Generic Framework III. Users' Survey	125

ACRONYMS

1993 SNA System of National Accounts 1993 1995 ESA European System of Accounts 1995

BPM5 Balance of Payments Manual, fifth edition

BPS Balance of Payments Section, MPD

COFOG Classification of Functions of Government

COICOP Classification of Individual Consumption by Purpose

CPA Classification of Products by Activity

CPI Consumer Price Index

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

ECB European Central Bank

EU European Union

Eurostat Statistical Office of the European Communities

GDP Gross Domestic Production GFS Government Finance Statistics

GFSM 1986 A Manual on Government Finance Statistics, 1986 GFSM 2001 Government Financial Statistics Manual 2001 GFS Yearbook Government Finance Statistics Yearbook GMBS Guide to Money and Banking Statistics

HBS Household Budget Survey
HMS Harmonized Monetary Statistics
IAS International Accounting Standard
HICP Harmonized Index of Consumer Prices
IIP International Investment Position
IMF International Monetary Fund

Infostat SOSR Institute for Information Technology and Statistics ISWGNA Inter-Secretariat Working Group on National Accounts

ITRS International Transactions Reporting System

MFSM Monetary and Financial Statistics Manual

MOF Ministry of Finance

MPD Monetary Policy Department, NBS

NACE, Rev. 1 Statistical Classification of Economic Activities in the European

Communities, Revision 1

NBS National Bank of Slovakia NMS National Monetary Statistics

NPISH Non-Profit Institutions Serving Households

NSDP National Summary Data Page

OECD Organisation for Economic Co-operation and Development

PPI Producer Price Index

ROSC Report on the Observance of Standards and Codes

SD Statistics Department, NBS

SDDS Special Data Dissemination Standard

Sk Slovak crowns (Koruny)

SOSR Statistical Office of the Slovak Republic

TQM Total Quality Management

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, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the Slovak Republic's 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 the Slovak Republic's Report on the Observance of Standards and Codes (ROSC)—Data Module.

I. NATIONAL ACCOUNTS STATISTICS

0. Prerequisites of quality

0.1 Legal and institutional environment

The Slovak Republic Law on State Statistics No. 540/2001 articulates criteria for collecting statistical information, the roles of public bodies in the field of statistics, the rights and obligations of reporting units, mechanisms for protecting confidential statistical data, and responsibilities for publishing statistics and ensuring comparability of statistics.

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

The Law on State Statistics clearly defines the central role of the Statistical Office of the Slovak Republic (SOSR) in the production and dissemination of statistics. The statistical office is the central body of the State administration in the field of State statistics and has responsibility for overseeing the entire statistical process. The Law outlines the notion of a State program of statistics, developed by the SOSR in collaboration with ministries and State agencies for a three-year period. The program comprises surveys to be conducted by the SOSR, surveys to be conducted by other central government authorities, and administrative data to be supplied by ministries, State agencies, municipal bodies, or public institutions to the SOSR. The President of the SOSR has the discretion to add or delete surveys and administrative data sets from the program.

The SOSR has the responsibility for ensuring the comparability of all State statistical data and the adherence to statistical standards, classifications, and methodology, and ensuring that there are no gaps, overlaps, or shortcomings in the conduct of the statistical program. These arrangements are well established and the central role of the SOSR has been unchallenged.

Even though the law does not explicitly state a requirement to disseminate statistics, it is SOSR's policy and practice to disseminate macroeconomic statistics and the authorities accept this responsibility.

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

The State program of statistics clearly defines the responsibilities of each agency in the conduct of surveys, and specifies the administrative data that must be supplied to the SOSR by each agency. The SOSR may request any ministry, State agency, municipal body, or public institution to provide data collected, processed, or held by them in the process of carrying out their functions.

There are formal interagency agreements between agencies involved in statistical surveys (e.g., the SOSR and the National Bank of Slovakia (NBS), and the Ministry of Finance (MOF)), first containing general principles, and then addenda detailing the specific data sets to be shared. These addenda are updated annually. In addition, regular informal meetings between agencies are held to ensure the effective and timely flow of source data.

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

Article 30 of the Law on State Statistics states that any data collected for statistical purposes relating to an individual reporting unit, which can be directly or indirectly identified, is to be treated as confidential. It may not be published, communicated, or used for purposes other than statistical ones unless approved, in writing, by the legal entity or natural person who provided the data and to whom the data refers. The staff obligation to maintain confidentiality continues after an employment contract ceases to exist or the relevant work is completed. The confidentiality provision applies to employees of authorities or bodies executing the State statistical function, mayors of municipalities, or employees of other entities involved in the collection or processing of statistical data. Any breach of these confidentiality provisions is an offense subject to a fine of up to Sk 100,000. There have been no instances where the use of this penalty has been needed.

In surveys and other statistical enquiries, respondents are informed, generally in the introduction to the questionnaire, of their rights and obligations including a statement that the information provided by them will be used for statistical purposes only.

Access to individual data is restricted to staff who require the information in the performance of their statistical duties. The SOSR applies special aggregation rules to prevent residual disclosure in disseminated data.

The Law on State Statistics states that authorities or bodies performing a State statistics function may provide confidential data for research purposes to legal entities where the basic mission is to carry out research, provided conditions for data protection are ensured by such

legal entities. Data are to be provided in a form that will not enable direct identification of a legal entity or natural person to which the data relate.

The premises of the SOSR are not accessible to the public. The information technology work areas are only accessible to staff responsible for the information technology.

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

Article 18 of the Law on State Statistics states that reporting units are obliged to provide complete and accurate data for the statistical surveys included in the Survey Schedule within the proscribed deadlines. In cases of noncompliance, including misreporting, fines of up to Sk 100,000 may be imposed.

The SOSR carefully considers response burden. The SOSR has been successful in obtaining an increasing amount of data from administrative sources rather than from statistical surveys. The SOSR provides assistance to respondents in completing and submitting reports by providing points of contact (each questionnaire contains contact details of relevant statistical staff) and clear methodological guidelines that are included in the questionnaire and on the SOSR's website. The purpose of the data collection is provided in the questionnaire. Respondents are made aware of the importance of good quality statistics. Clear formal procedures have been established for dealing with respondents' complaints.

0.2 Resources

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

The National Accounts and Prices Directorate at headquarters has a staff of 60. It has four main divisions: Annual National Accounts Division, Accumulation Accounts Division, Quarterly National Accounts Division, and Price Statistics Division. There are 48 staff working on the national accounts. The national accounts compilers are well trained in the *European System of Accounts 1995 (1995 ESA)* through the Training of European Statisticians Program provided by the Statistical Office of the European Communities (Eurostat), internal training, and on-the-job training.

There is little difficulty in obtaining high quality recruits. However, there is stiff competition for fully trained staff from banks and other parts of the public sector, so retention has been problematic. Salaries are not fully competitive with the private or the public sectors.

The need to comply with European Union (EU) requirements has led to an overall increase in staff resources. Relevant SOSR staff have ongoing contacts with EU counterparts.

Financial resources are commensurate with the program for statistical surveys. Usually the resources for three years are planned simultaneously with the survey program.

Computing resources and upgrades are also adequate. The software is effective and periodically updated. Hardware is distributed effectively to facilitate the efficient collection and processing of data and management of databases. Adequate protection is provided for computer resources, including the provision of emergency back-up systems. Overall, office buildings provide satisfactory working facilities, with adequate furniture and equipment. Transportation arrangements are adequate.

0.2.2 Measures to ensure efficient use of resources are implemented

Periodic annual reviews of staff performance are conducted according to the Law on State administration. Efficiencies are achieved through the coordinating role assigned to the SOSR, which ensures the elimination of duplication in statistical surveys and the use of consistent concepts, classifications, and other methodologies across datasets.

The SOSR seeks outside expert assistance to evaluate statistical methodologies and compilation systems, when necessary. Assistance is mainly provided by Eurostat, especially through the experience gained by SOSR participation in pilot projects.

The resources used to compile statistics are periodically costed as part of the Total Quality Management (TQM) procedure. Efficiencies are sought by replacing exhaustive surveys with sample surveys and maximizing the amount of information that can be obtained from administrative sources.

0.3 Relevance

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

Users of statistics are regularly consulted, kept informed on specific aspects of current programs, and contacted for their feedback. Principal users are invited to submit proposals for the Schedule of Surveys in April of each year.

The Statistical Council, established by the SOSR, provides a forum for determining the needs of users of statistics.

The Information Services Unit of the SOSR monitors media commentary and reports on statistical matters. There are regular quarterly meetings of the SOSR with representatives of the press, academia, and commercial banks to review the usefulness of existing statistics.

The SOSR regularly participates in statistical meetings and seminars (working groups, task forces) organized by international, regional, and professional organizations such as the Statistical Office of the European Communities (Eurostat), the Organisation for Economic Co-operation and Development (OECD), the International Statistics Institute, and United Nations. New and emerging data requirements are identified by Eurostat and the European Central Bank.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The SOSR is responsive to the increasing demands in relation to the quality of statistics. The "Declaration of the Statistical Office of the Slovak Republic on Quality Policy and Quality Management System" of April 2003 is the main document that expresses the goals and commitments of the President and top management of the SOSR for their quality of statistics policy, as well as the creation, documentation, implementation, maintenance, and increased efficiency of the Quality Management System of the SOSR.

The SOSR management is committed to executing a policy on that which is based on requests from users and defined by rules, principles, recommendations, and conclusions of the standard STN EN ISO 9001:2001 and by further relevant documents. The Law on State administration requires the steady improvement in staff qualifications, and part of staff training in the SOSR relates to statistical quality. The SOSR recognizes trade-offs and interrelationships between datasets. The datasets are assessed mainly against the response rate and completion rate. As a rule, the SOSR uses at least two sets of independent data. The SOSR has implemented externally recognized processes that focus on quality: TQM, ISO 2001 (SOSR is in the final stage of obtaining the certificate), and quality initiatives within the European Statistical System (since 1998, the SOSR has been participating in a series of pilot projects which focus on the scope, content, and quality of the data infrastructure).

Information on the SOSR's commitment to quality is publicly available on its website.

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

Monitoring processes are in place to inform managers on the quality achieved for ongoing statistical activities, especially through defining technical projects (response rates, imputations, gross-ups, revisions history, and timeliness evaluations).

Compiling areas of the SOSR can obtain expert guidance on the quality of their statistics and on strategies for improving data production especially from the special agency established within the SOSR Institute for Information Technology and Statistics (Infostat). Infostat is a research institute with the responsibility for the development and implementation of statistical methodology.

Periodic reviews are undertaken to identify steps necessary to maintain quality requirements depending on survey types.

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

The planning process aims to ensure quality through addressing issues such as validation of data at time of entry, form design, definitions, time series and trend checks, internal consistency, and improved imputation techniques.

Survey results and processes are reviewed to identify deficiencies and improve the next survey. New mechanisms have been introduced to identify shortcomings at early stages of processing, rather than the end, to help reduce revisions.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The impartiality of the statistics compilation is outlined in the Statistics Law. Article 2 of the Law determines that "the SOSR, ministries and state agencies shall be independent and impartial in their collecting, processing or evaluating of statistical information... and shall be guided by the principles of reliability, objectivity, transparency, openness and protection of the confidential data." Article 6 states that the choice and tenure of the President of the SOSR is supportive of the independence of the office as he cannot be appointed simultaneously to any other position in the public or private sector. Article 7 makes the appointment and the removal of the President transparent.

Professionalism plays an important role in recruiting and promoting staff. Recruitment in the SOSR is competitive and is based on aptitude in statistics (through written and oral exams). Staff are encouraged to promote professionalism through participation in conferences, meetings, and seminars. The national accounts staff participate actively in several Eurostat task forces. They also prepare methodological papers for international meetings on national accounts topics organized by Eurostat, the OECD, and the United Nations Economic Commission for Europe.

Regular internal reviews of the methods used by the SOSR are carried out by the Statistical Council. Members of that council represent all bodies of official statistics as well as external experts. The Infostat, which is responsible for the development and implementation of statistics methodology, including those in national accounts and price statistics, has a well established professional reputation.

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

The choice of data sources and methods for the compilation of the national accounts and price statistics is based on the consideration of the respective compilers. The reasons behind

the choice of methodologies is made public through the program for statistical surveys. The decisions about the timing and format of the disseminated data are also based solely on statistical considerations.

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

The General Director of the National Accounts and Prices Directorate has the responsibility for responding to any erroneous interpretation or misuses of the national accounts and price data. Incidences of inappropriate interpretations and misuses of statistics are very rare. In these few instances, the misinterpretations and misuses are clarified immediately. The SOSR's policy is to avoid any misunderstandings by providing ample information with data releases. A unit in the SOSR is responsible for daily monitoring of the media.

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 Law is publicly available, including on the SOSR website, in Slovak and in English. The principles of the official statistics are outlined in Article 3 of the Law. Information about the rules for dissemination of statistical information products and services, advanced released calendar, and the catalog of statistical publications are also available on the website. The address of the SOSR, as well as the name, e-mail address, and telephone number of the dissemination unit, are available to the users.

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

The SOSR identifies through its website that the government may have prerelease access to the national accounts and price statistics data.

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

All national accounts data releases are clearly identified as being produced by the SOSR. In the case of joint publications, the SOSR data are identified as being a product of the statistical office. The SOSR publications request attribution when its statistics are used or reproduced.

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

Major changes in the methodology, source data, and statistical techniques are announced at the time of their release. Users are not informed in advance about major changes in methodology.

1.3 Ethical standards

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

Ethical standards are laid out in the Act on Civil Service. The SOSR staff who have direct access to individual and personal data are allowed to perform their duties only after taking an oath. New staff are made aware of the ethical standards when they join the SOSR. Each staff member has a copy of the Code of Ethics. Staff are reminded of the updates of the standards.

2. Methodological soundness

2.1 Concepts and definitions

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

The national accounts statistics are compiled in accordance with the guidelines of the 1995 ESA, which is based on and consistent with the concepts, definitions, and methodological framework of the System of National Accounts 1993 (1993 SNA). The Slovak Republic will enter the EU on May 1, 2004; as part of its preaccession program, it has adopted the 1995 ESA as the official standard for compiling national accounts statistics.

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 those whose compilation the ISWGNA has recommended. The SOSR compiles and disseminates the following accounts:

- annual and quarterly value added and gross domestic product (GDP) at current and constant (1995) prices by activity,
- annual and quarterly expenditures of GDP at current and constant (1995) prices,
- annual value added components at current prices by activity,
- sequence of accounts for the total economy with an annual frequency,
- annual rest of world accounts; and
- annual supply and use tables (SUT).

The Slovak national accounts define residence in accordance with the 1993 SNA and the fifth edition of the Balance of Payments Manual. The economic territory includes the territorial enclaves such as Slovak embassies and free zones. Workers who work only part of the year in another country are considered residents.

The production boundary is in accordance with the 1993 SNA. Thus, the scope of output measurement includes, among other things, the following items:

- research and development on own-account;
- output of goods for own-account fixed capital formation;
- mineral exploration;
- production of entertainment, literary or artistic originals;
- production of computer software; and
- illegal output sold to willing buyers.

The SOSR follows the convention of 1995 ESA, which says that the estimates for own-account production of households should be limited to the production, storage, and processing of agricultural products and to the construction of dwellings.

The asset boundary is in accordance with the *1993 SNA* and *1995 ESA*. Tangible assets include, in particular, defense related assets that could be used for civilian purposes; valuables and historical monuments; and agricultural work-in-progress (relevant for the quarterly national accounts only). Mineral exploration (whether successful or not), computer system software, and databases (purchased or built in-house), entertainment, literary or artistic originals, patented entities, as well as leases and other transferable contracts are included among intangible assets.

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 broadly consistent with internationally accepted standards, guidelines, and good practices, as detailed below:

• The 1995 ESA is followed for classifying institutional units, transactions, and other flows.

- The Slovak Classification of Activities (OKEC), a version of the Statistical Classification of Economic Activities within the European Communities (NACE, Rev. 1), is used to classify the economic activity of enterprises.
- The Slovak Classification of Goods and Services, a version of Classification of Products by Activity, is used to classify products.
- Currently, there is no classification for the functions of government. However, the Classification of Functions of Government is being implemented by the MOF.
- The Classification of Individual Consumption by Purpose (COICOP) is used to classify household final consumption expenditure.
- The Slovak Combined Nomenclature (based on the EU's combined nomenclature) is used to classify international transactions.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The valuation rules for recording flows and stocks are in accordance with the 1993 SNA/1995 ESA, except for the foreign trade statistics.

- Market output is valued at basic prices.
- Output for own-use is valued at basic prices.
- Excise taxes are included in the valuation of intermediate consumption.
- Imports and exports are valued on an f.o.b. basis and data on insurance and freight costs are available.
- Value added taxes are included in intermediate consumption, excluding the deductible part of the value added tax.
- However, transactions in foreign currency (for the foreign trade data) are converted to koruny using a fix exchange rate for one month (the rate of the second to the last Wednesday of the month), as prescribed by the Customs Law.

2.4.2 Recording is done on an accrual basis

In principle, accrual accounting is followed for all accounts. The accounting standards oblige all units to record their transactions on an accrual basis. However, figures for general government expenditure are still recorded on a cash basis. The national accounts division

adjusts the figures for taxes and social contributions onto an accruals basis using balance sheet data from the tax authorities.

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

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

Grossing and netting procedures are in accordance with the 1993 SNA. Transactions between establishments within the same enterprise are recorded on a gross basis.

3. Accuracy and reliability

3.1 Source data

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

Source data are collected through (i) annual and quarterly surveys of establishments; (ii) a household survey; (iii) price statistics; (iv) census surveys; and (v) administrative data sources.

Surveys of establishments

The SOSR maintains a statistical register, which is built on two subregisters: (i) the register of legal entities and (ii) the register of natural persons. The statistical register is based on the court registration of the legal units maintained by the Ministry of Justice and the registrations of the natural persons maintained by the Ministry of Interior. The Register contains two data sets—administrative identifiers (identification number, legal form, address, list of activities by registration, etc.) and statistical variables (type of statistical unit, number of employees, turnover by activity, institutional sector, activity status, etc.). The number of the active units registered is about 400,000. The type of economic activity and status (active or inactive) of the units is reviewed and updated once a year. The process of updating the register follows the EU Regulation 2186/93 on the maintenance of business registers. Since January 2001, the register is linked to other administrative registers—the registers of the National Labor Office, the Social Security Office, and the Value Added Tax (VAT) register.

The units are surveyed according to their institutional sector. The **nonfinancial corporations sector** units are stratified into two groups:

- small-sized units—with up to 19 employed persons and
- large-sized units—with more than 19 employed persons.

Annually and quarterly, the large-sized units are surveyed exhaustively, while the small-sized units are surveyed by a sample survey covering about 6,000 units. The sample is stratified by

regions and by activity (on a four-digit level of OKEC). Scientific random sampling techniques are used, which allows the use of proper imputation methods to handle nonresponse (such as using respondents-donors from the same sector of economic activity, size class, and region as the missing firm).

In 2000, the SOSR introduced the questionnaires of the Eurostat structural business statistics surveys. The data items requested are sufficiently detailed to derive output, intermediate consumption, fixed capital formation, and changes in inventories. The questionnaires also request data on compensation of employees, employment, output by commodity, and balance sheet information

The unincorporated activities of the households are surveyed annually through a sample survey covering about 12,000 units. The sample is stratified by region and by activity. The survey questionnaire requests detailed data for output, intermediate consumption, fixed capital, and changes in inventories.

The **financial corporation** sector is covered by exhaustive surveys annually and quarterly—one for the insurance institutions and one for the rest of the sector. The **Non-Profit Institutions Serving Households (NPISH)** are surveyed only annually through a sample survey covering about 3,000 units. Both questionnaires are sufficiently detailed for the national accounts purposes.

Household Budget Survey

The Household Budget Survey (HBS) is a monthly sample survey; however, the sample is not representative. Each month about 1,600 households (0.1 percent of the total number of households) are surveyed by interviewers employed by the regional statistical offices. The survey covers all geographic areas. The households are selected on the basis of the data from the last Population Census (2001) and the Microcensus of Household Income (1996). A multi-stage stratified sampling technique is applied, but the sampling is not random. The sample is based on quotas of households (the households are stratified by region, socioeconomic status, household size, net income per member, and number of dependents). About 25 percent of the households in the sample are replaced every year. The sample does not cover one–person households (about 5 percent of the total number of households). The refusals represent about 10 percent of the households from the frame (mostly high income households). Detailed data on the income and the expenditures of households are collected through the survey and aggregated by socioeconomic groups, by size of households, by deciles groups, by urban/rural regions, etc. Data on the purchases of consumption goods. production for own-consumption, purchases of valuables, as well as own-account fixedcapital formation are also collected.

Price statistics

Regarding prices, extensive use is made from industrial producer price indices (PPI), the consumer price indices (CPI), and unit values price indices of foreign merchandise trade.

Other price information includes sale prices of agricultural products, price indices of purchases by agricultural enterprises, and the construction price index for buildings and construction materials.

Census surveys

In 2001, the SOSR conducted a Population Census. Also, a census of agricultural farms (2001) and a census of the small and medium enterprises (2002) have been conducted.

Administrative data sources

The MOF compiles statistics of central and local government, and extrabudgetary funds revenue and expenditure. Data are available quarterly by economic classification. Data include all defense-related expenditure and are sufficiently detailed to measure output, intermediate consumption, fixed-capital formation, and final consumption of government services.

The SOSR receives monthly data on imports and exports of goods from the Customs Office. Since 2002, the national accounts compilers have had access to the tax returns data of the MOF. Annually, data on financial statements and profit/loss statements of legal entities and natural persons are made available to the SOSR.

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

Generally, the source data are consistent with the definitions, scope, classifications, time of recording, reference periods, and valuation of the national accounts estimates. However, the unit value indices for imports and exports used in compiling the constant price estimates of some nonhomogeneous Combined Nomenclature groups most likely measure not only the price changes but also changes in the product mix. The quarterly general government data and the balance of payments data received from the MOF and the NBS are available on a cumulative, rather than discrete, basis.

The annual data collection program covers all economic activities. Quarterly, all institutional sector, except the NPISH and the unincorporated activities of the households, are covered by data collection. The response rate of the large-sized nonfinancial enterprises is about 95 percent, for small enterprises it is over 60 percent, and for natural persons about 30 percent.

3.1.3 Source data are timely

There are no major problems with the timeliness of the source data. The establishment data, the price statistics data, the foreign trade statistics, and the general government data are obtained on a timely basis. Delays are experienced with the quarterly balance of payments data.

The independent estimates of the annual accounts (based on the annual collection of data) are available about 19–24 months after the end of the reference year. The processing timetable of those estimates is not timely enough for the benchmarking revision of the quarterly national accounts estimates.

3.2 Assessment of source data

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

Source data are assessed for their accuracy on a routine basis. Information is available about sampling and nonsampling errors for all surveys. The Quarterly National Accounts unit keeps archives for internal purposes on problems encountered (for example, issues of misclassification or measurement), to avoid similar problems in the future. Information is available about imputations made in the basic statistics. Outliers in basic statistics are checked and, if necessary, removed from the final results; high-value transactions are confirmed with respondents. The household survey is audited to verify the accuracy of the individual survey data. The source data are validated for temporal consistency and consistency with national accounts definitions, valuation, and classifications.

The national accounts staff routinely reviews the budgetary data, foreign trade data, price indices, and other data sources used to compile national accounts statistics. These secondary data are also checked for consistency with the national accounts definitions, valuation rules, reference periods, and classifications.

3.3 Statistical techniques

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

The local statistical offices collect and process source data from respondents. The SOSR designs data validation software (for checking coding, editing and tabulation errors) for each survey questionnaire. The data is further validated for processing errors in the headquarters information technology center (Infostat). The individual data are stored in a database.

The imputations and adjustments made for nonresponse, missing observations, and undercoverage follow sound estimation techniques. The grossing-up factors are derived scientifically. All imputation and adjustment procedures are well documented.

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

The SOSR participates in the Eurostat Project of Exhaustiveness (that started in 2000) to compile estimates for the nonobserved economy. The national accounts staff compiles

estimates for informal, hidden, and illegal activities, using a combination of methods—the SUT tables, the employment method, VAT based method, and case-by-case specific estimates for the GDP by activity and the expenditures components of GDP. The procedures used to incorporate those estimates are well documented.

Production approach procedures

The output and the intermediate consumption estimates for both the annual and the quarterly accounts are compiled on a four-digit level of OKEC. Fixed ratios/weights are used in deriving the quarterly data for the NPISH and the unincorporated activities of the households, and they are updated annually. Otherwise, fixed ratios are not used in the estimation process.

The output of owner-occupied dwellings is valued by the cost approach, as a sum of the intermediate consumption, consumption of fixed capital, net taxes on production, and net operating surplus. The estimation is based on data from the Population census (2001). The SOSR has plans to improve the valuation of owner-occupied dwelling output through participating in the relevant Eurostat task force.

The Slovak national accounts treat work-in-progress in conformity with international guidelines. Crops, standing timber, livestock reared for purposes of food, large construction projects, and output of large equipment are recorded as output. The stock of fish is not included in the output as it is considered to have an insignificant value.

Both the annual and the quarterly data on output and intermediate consumption are adjusted for holding gains and losses on inventories. Estimates are based on data on stock levels, the structure of inventories from the recent input/output tables, and price indices compiled by the SOSR.

The national accounts staff have revised their historical data for consumption of fixed capital. The old estimates were based on historical costs data. The new estimates of consumption of fixed capital are based on the value of the fixed assets revalued at replacement costs. The estimation method was proposed by Eurostat and was conducted within the Eurostat Project on consumption of fixed capital.

The national accounts compilers receive data on general government on a cash basis. Adjustments for an accrual basis are made to taxes (VAT, excise tax, and income tax) and for social contributions. The cash data are adjusted by a coefficient (compiled by the SOSR staff) for noncollected arrears.

The method used for deriving constant price estimates is the double deflation method using the SUT. Output at current prices (for 60 activities) is deflated using price indices—PPI, CPI, other price indices for goods and services, and wage indices (adjusted for labor productivity). The domestic output and the output for exports are deflated separately, using the PPI and the unit value price indices for exports. For intermediate consumption, implicit deflators are compiled for each activity (estimated on the basis of the data from the recent SUT matched

with the appropriate price indices). The base year is 1995. The SOSR is working on the move to 2000 as a base year and on the compilation of the constant price estimates based on 500 commodity groups. Volume measures of taxes and subsidies on products are estimated by applying base-year tax rates to the volume of transactions subject to tax.

Expenditure approach procedures

The GDP estimate by expenditure components (annual and quarterly) is derived independently, including independent estimates of household final consumption expenditure, gross-fixed capital formation, and changes in inventories. The data on household final consumption expenditure are compiled for 12 COICOP groups quarterly and for 58 groups annually. Government final consumption expenditure is compiled by activity (at the four-digit level of the national activity classification). Gross-fixed capital formation is compiled for 60 industries and four types of assets—machinery, transport equipment, buildings and other construction, and others. Changes in inventories are estimated by activity (60 groups) and by types of inventories. No fixed ratios that are more than one year old are used in the compilation of the expenditure approach components.

Government final consumption expenditure excludes incidental sales. Expenses of residents abroad are included in household final consumption expenditure, and expenditures of nonresidents in the domestic economy are excluded from private final consumption expenditure and are included in exports. Expenditures for jewelry and art work are included in valuables.

Components of household final consumption expenditure are deflated using the relevant subgroups of the CPI. Government final consumption expenditure is deflated using wage indices and subgroups of the CPI. Changes in inventories are deflated using the PPI and the wholesale price indices. Estimates of exports and imports of goods in constant prices are obtained by deflating the current values by unit value price indices of exports and imports. The constant price estimates of exports and imports of services are obtained by deflating the current values by the PPI or subgroups of the CPI.

Specific quarterly compilation techniques

Benchmarking is done using a prorating technique, therefore resulting in a step problem in the quarterly time series. The national accounts compilation system derives the series from seasonally unadjusted source data, thus providing unadjusted quarterly estimates. Seasonally adjusted quarterly constant price estimates are compiled using TRAMO/SEAT.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The data compiled from the main sources used to compile national accounts statistics are checked with other primary and secondary sources. Data derived through the establishment

surveys are cross-checked against tax data, data on output derived from administrative sources, as well as merchandise trade statistics. The efficiency of these checks is reinforced by the use of the commodity flow method. The household expenditure data are checked against the retail sales data, imports data, and the VAT data from the tax authorities.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Systematic procedures exist to assess routinely the potential discrepancies in intermediate data, leading to adjustments to remove them. An example is the quarterly assessment of the household consumption data, which are regularly assessed for discrepancies between the various data sources.

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

Annually, the supply-use framework is used to make GDP estimates by activity and expenditure components consistent. The balancing process involves the comparison of the detailed data in a supply-use framework at current and constant prices. The first quarterly estimates are reconciled using commodity flow techniques, and the unbalanced remaining value of the GDP (0.1 percent of the GDP for 2002) is shown as a statistical discrepancy.

The SOSR does not undertake an evaluation of data against unofficial estimates. Existing and new data sources are continually being studied and compared against the national accounts to identify possible biases.

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 implementation of the 1995 ESA was carried out in several stages; each one resulted in a revision to the national accounts time series. Three main revisions were carried out—in 1996, 1999, and 2000. The official dissemination of the most recent revised time series contains brief information on the results of the revision compared to the previous data. In the course of the current compilation of quarterly and annual national accounts, the direction and magnitude of revisions between the various versions are studied. The revisions are well documented and include detailed descriptions of the adjustments. However, systematic studies of revisions are not conducted.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The national accounts statistics are disseminated with quarterly periodicity as prescribed under the Special Data Dissemination Standard (SDDS). However, the annual independent estimates are disseminated with a delay.

4.1.2 Timeliness follows dissemination standards

The national accounts statistics meet the SDDS requirement on timeliness. Quarterly estimates of GDP are disseminated 75 days after the end of the reference quarter. However, independent annual national accounts estimates are disseminated about 19–24 months after the reference year.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The annual and quarterly GDP estimates by activity and expenditure approach for 1993–2001 are internally consistent. Consistency of the national accounts is established through balancing procedures in which consistent components are derived using the supply-use framework. The constant price estimates are also consistent. The estimates at current prices, volume measures, and implicit deflators are consistent within the "value = volume × price" framework. The quarterly GDP estimates add up to the annual estimates.

For 2002, the first annual (sum of the four quarters of data) production and expenditure GDP estimates show a statistical discrepancy of 0.1 percent. These estimates will be balanced through the supply-and-use framework once the independent 2002 estimate is compiled. The quarterly production and expenditure approach sets of estimates for 2003 also are not yet reconciled. These series will be benchmarked to the annual data after the independent annual estimates are ready.

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

Consistent annual time series are available for the period 1993–2001. Consistent quarterly time series are available for 1993–2002 and the first three quarters of 2003. A major change in the methodology was introduced in 2000—the measurement of the consumption of fixed assets is based on revaluation of the fixed assets; household consumption expenditure is adjusted for the underreporting of the high-income families; taxes on production are now compiled on an accrual basis; own account gross fixed capital formation is adjusted for profit margins, etc. The data for 2000 were compiled using both the old and the new methodologies, and the methodological revision was explained with the dissemination of the data. The SOSR has reconstructed its historical annual series back to 1993.

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

The national accounts and the balance of payments are not consistent, because the SOSR adjusts the trade, services, and income data for undercoverage, while the NBS does not incorporate those adjustments in its balance of payments estimates. The national accounts and government finance statistics are not reconciled. For example, movements in the 2003 quarterly general government final consumption expenditure data and fiscal expense data on general government are significantly different.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

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

Estimates	Timetable for:									
Estimates	Annual estimates	Quarterly estimates								
Preliminary estimate	75 days (sum of four quarters)	75 days								
First revised estimate	19–24 months	19–24 months								

The revisions cycle for both the quarterly and the annual national accounts estimates is not stable. It is different from year to year and this is not widely disseminated to users. Revised data are published with accompanying brief notes. New source data are incorporated as early as possible, if they do not lead to significant breaks in the time series. Otherwise, their introduction is postponed to the next main revision.

4.3.2 Preliminary and/or revised data are clearly identified

Users are informed in the text of the releases that the initially published data are preliminary and subject to revision. Preliminary data are not labeled in any special way in publications, except for the *Statistical Yearbook*. The revised data are disseminated with the same level of detail as previously published for the data being revised.

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

The main methodological revision in 2000 is well documented, and the reasons for the revision are explained in detail. The magnitude of revisions is measured, but the results are used for internal purposes and are not made available to the general public. No analysis of preliminary versus revised data is published to allow assessment of the reliability of the preliminary data. Some comments are, however, made in the current releases, on the extent and causes of revisions.

5. Accessibility

5.1 Data accessibility

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

The first release of national accounts data (through a website press release) at 9:00 a.m. on the preannounced day is a two- to three-page document, *Information Report*, that contains summary tables and text that comments on and explains the data, including references to revisions of earlier released data. More detailed tables and longer time series also can be accessed on the website. A hardcopy publication is available a week or two after the press release (see 5.1.2). The national accounts publications contain charts and tables, as well as analysis of current-period developments. The data are published with various levels of detail. Seasonally adjusted time series also are published. The presentation of the national accounts statistics is clear.

5.1.2 Dissemination media and format are adequate

The quarterly and the first annual national accounts data are released through the press release and later through the quarterly bulletin, *Macroeconomic Indicators of Quarterly National Accounts and Value Added*. A comprehensive publication for the annual independent national accounts data is issued once a year: *National Accounts of the Slovak Republic*. The most recent issue of the publication contains data for 2001. The national accounts data are also disseminated through the *Statistical Yearbook*.

The web page of the SOSR reproduces the data from the quarterly statistical bulletin. Longer time series can be accessed electronically. However, the electronic format of time series is in a printout version only.

5.1.3 Statistics are released on a preannounced schedule

The SOSR publishes a release calendar giving four-month precise release dates for all datasets, including the national accounts on its website. The same schedule is also available on the IMF's Dissemination Standards Bulletin Board (DSBB). However, the annual independent national accounts estimates are not included in the calendar. The calendar is strictly followed.

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

The national accounts data are released simultaneously to all users.

5.1.5 Statistics not routinely disseminated are made available upon request

In addition to the data published on the website and in the quarterly bulletin, it is possible to obtain more detailed national accounts tables (such as the supply and use tables) by applying directly to the SOSR. A fee may be charged. Contact persons who can assist with such inquiries are named on the website and in the hardcopy publications.

5.2 Metadata accessibility

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

Detailed documentation on the definitions, concepts, and methodology used in compiling the national accounts estimates is made available in the quarterly hardcopy publications and on the website. The metadata provide brief information on departures from the 1995 ESA, weaknesses in the data sources, and future plans for improvement. However, information on data biases, response rates to the main surveys, sample design, estimations, imputations, and linkages with other data systems is not disseminated.

A summary of national accounts methodology is posted on the SOSR website linked to the DSBB. It is reviewed and updated regularly.

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

For the annual national accounts, comprehensive descriptions of the sources and methods for various methodological improvements were compiled in cooperation with Eurostat, but are not available to the general public.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

All statistical releases list contact persons who may be reached by telephone or by e-mail. The access points to clients are well advertised. Assistance to users is not monitored through periodic surveys of users of national accounts.

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

The SOSR produces a catalog of publications, which is updated annually and contains a listing of publications that will be released during the year. The catalog provides a brief description of the data contained in the publication, the price, periodicity, expected month of release, the publication format, and the languages of dissemination.

Table 1. Slovak Republic: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts Statistics (Compiling Agency: Statistical Office of the Slovak Republic)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Observed; LNO = Practice Lorgely Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria	Comments			Salaries are not competitive with other agencies from the public sector.					Advance notice for major changes in methodology is not given to the users.					There is no functional classification for government expenditure.	Government transactions are recorded on a cash basis, foreign trade transactions are	converted into koruny using a fix exchange rate for one month.		HBS sample is not representative. Unit value price indices for imports and exports do not measure mure price changes		Benchmarking is done using a prorating technique, resulting in a step problem. The base	year (1995) is outdated.		Revision studies are not systematic.			National accounts, government finance statistics, and balance of payments data are not	reconciled. Revisions do not follow a regular cycle and users are not informed about the timing of the	revisions.			Information on data sources (response rate, sample design, estimation and imputation) is	not published.
Largely Observed; LNC	Assessment LO LNO NO	- - -														00											×		- -)II
Practice	Ass O LC		×	×	× ;	×		X	×	×		X	×	×	×			X	×	<u>×</u>	×	4	X		×	\times				X	<u>×</u>	Ļ
ved; LO =	NA]			r Y I	. 1		r 1		, 1			rx						r 4		<u> </u>				, 1					- 1		
Key to symbols: NA = Not Applicable; O = Practice Observ	Element	0. Prerequisites of quality	0.1 Legal and institutional environment			0.4 Quality Awareness	1. Assurances of integrity	1.1 Professionalism	1.2 Transparency	1.3 Ethical standards	2. Methodological soundness	2.1 Concepts and definitions	2.2 Scope	2.3 Classification/Sectorization	2.4 Basis for recording		3. Accuracy and reliability	3.1 Source data	3.2 Assessment of source data		3.4. Assessment and validation of		3.5 Revision studies	4. Serviceability		4.2 Consistency	4.3 Revision policy and practice		5. Accessibility	5.1 Data accessibility	5.2 Metadata accessibility	

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

0. Prerequisites of quality

0.1 Legal and institutional environment

The Slovak Republic Law on State Statistics No. 540/2001 articulates criteria for collecting statistical information, the roles of public bodies in the field of statistics, the rights and obligations of reporting units, mechanisms for protecting confidential statistical data, and responsibilities for publishing statistics and ensuring comparability of statistics.

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

The Law on State Statistics clearly defines the central role of the Statistical Office of the Slovak Republic (SOSR) in the production and dissemination of statistics. The statistical office is the central body of the State administration in the field of State statistics and has responsibility for overseeing the entire statistical process. The Law outlines the notion of a State program of statistics, developed by the SOSR in collaboration with ministries and State agencies, for a three-year period. The Schedule of Surveys comprises surveys to be conducted by the SOSR, surveys to be conducted by other central government authorities, and administrative data to be supplied by ministries, State agencies, municipal bodies, or public institutions to the SOSR. The President of the SOSR has the discretion to add or delete surveys and administrative data sets from the Schedule of Surveys.

The SOSR has the responsibility for ensuring the comparability of all State statistical data and the adherence to statistical standards, classifications, and methodology, etc. and ensuring that there are no gaps, overlaps, or shortcomings in the conduct of the statistical program. These arrangements are well established, and the central role of the SOSR has been unchallenged.

Even though the law does not explicitly state a requirement to disseminate statistics, it is the SOSR's policy and practice to disseminate macroeconomic statistics, and the authorities accept this responsibility.

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

The State program of statistics clearly defines the responsibilities of each agency in the conduct of surveys and specifies the administrative data that must be supplied to the SOSR by each agency. The SOSR may request any ministry, State agency, municipal body, or public institution to provide data collected, processed, or held by them in the process of carrying out their functions.

There are formal interagency agreements between agencies involved in statistical surveys (e.g., the SOSR and the National Bank of Slovakia, the SOSR, and the Ministry of Finance),

first containing general principles and then addenda detailing the specific data sets to be shared. These addenda are updated annually. In addition, regular informal meetings between agencies are held to ensure the effective and timely flow of source data.

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

Article 30 of the Law on State Statistics states that any data collected for statistical purposes relating to an individual reporting unit, which can be directly or indirectly identified, is to be treated as confidential. It may not be published, communicated, or used for purposes other than statistical ones unless approved, in writing, by the legal entity or natural person who provided the data and to whom the data refers. The staff obligation to maintain confidentiality continues after an employment contract ceases to exist or the relevant work is completed. The confidentiality provision applies to employees of authorities or bodies executing the State statistical function, mayors of municipalities, or employees of other entities involved in the collection or processing of statistical data. Any breach of these confidentiality provisions is an offense subject to a fine of up to Sk 100,000. There have been no instances where the use of this penalty has been needed.

In surveys and other statistical enquiries respondents are informed, generally in the introduction to the questionnaire, of their rights and obligations including a statement that the information provided by them will be used for statistical purposes only.

Access to individual data is restricted to staff who require the information in the performance of their statistical duties. The SOSR applies special aggregation rules to prevent residual disclosure in disseminated data.

The Law on State Statistics states that authorities or bodies performing a State statistics function may provide confidential data for research purposes to legal entities, where the basic mission is to carry out research, provided conditions for data protection are ensured by such legal entities. Data are to be provided in a form that will not enable direct identification of a legal entity or natural person to which the data relate.

The premises of the SOSR are not accessible to the public. The information technology work areas are only accessible to staff responsible for the information technology.

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

Article 18 of the Law on State Statistics states that reporting units are obliged to provide complete and accurate data for the statistical surveys included in the Survey Schedule within the prescribed deadlines. In cases of noncompliance, including misreporting, fines of up to Sk 100,000 may be imposed.

The SOSR carefully considers response burden. The SOSR has been successful in obtaining an increasing amount of data from administrative sources rather than from statistical surveys. The SOSR provides assistance to respondents in completing and submitting reports by providing points of contact (each questionnaire contains contact details of relevant statistical staff) and clear methodological guidelines that are included in the questionnaire and on the SOSR's website. The purpose of the data collection is provided in the questionnaire. Respondents are made aware of the importance of good quality statistics. Clear formal procedures have been established for dealing with respondents' complaints.

0.2 Resources

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

The SOSR seeks to ensure sufficient funding is obtained to secure the statistical work program. To the extent that resources are inadequate, then the outputs are less valuable. The overall budget has been constant in recent years but declining in real terms at a time when salaries are growing. Other sources of funding apart from the budget are associated with special purpose surveys and election work (e.g., the additional computers required for such work are retained in the office).

Overall staff numbers are adequate to perform the required tasks, though turnover is greater than desired owing to low salary levels, which are not competitive with those of other agencies. It is difficult to retain the younger, qualified staff.

There are four staff working on the consumer price index (CPI) in Bratislava, all of whom are university graduates. In the 38 collection districts, there are an average of two staff per district (some have only one price collector) with a regional coordinator in each of the eight regional offices of the SOSR. This totals to about 72 staff in the regions. The processing center in Trencin has eight staff controlling CPI processing.

Computing resources and upgrades are also adequate. The software is effective and periodically updated. Hardware is distributed effectively to facilitate the efficient collection and processing of data and management of databases. Adequate protection is provided for the computer resources including the provision of emergency back-up systems. Overall, office buildings provide satisfactory working facilities, with adequate furniture and equipment. Transport arrangements are adequate.

0.2.2 Measures to ensure efficient use of resources are implemented

Periodic annual reviews of staff performance are conducted according to the Law on State Administration. Efficiencies are achieved through the coordinating role assigned to the SOSR, which ensures the elimination of duplication in statistical surveys, and the use of consistent concepts, classifications, and other methodologies across datasets.

The SOSR seeks outside expert assistance to evaluate statistical methodologies and compilation systems, when necessary. Assistance is mainly provided by the Statistical Office of the European Communities (Eurostat), especially through the experience gained by SOSR participation in pilot projects.

The resources used to compile statistics are periodically costed as part of the Total Quality Management (TQM) procedure. Efficiencies are sought by replacing exhaustive surveys with sample surveys and maximizing the amount of information that can be obtained from administrative sources.

0.3 Relevance

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

Users of statistics are regularly consulted and kept informed on specific aspects of current programs, and contacted for their feedback. Principal users are invited to submit proposals for the Schedule of Surveys in April of each year.

The Statistical Council, established by the SOSR, provides a forum for determining the needs of users of statistics.

The Information Services Unit of the SOSR monitors media commentary and reports on statistical matters. There are regular quarterly meetings of the SOSR with representatives of the press, academia, and commercial banks to review the usefulness of existing statistics.

The SOSR regularly participates in statistical meetings and seminars (working groups, task forces) organized by international, regional, and professional organizations such as Eurostat, the Organisation for Economic Co-operation and Development, the International Statistics Institute, and United Nations. New and emerging data requirements are identified by Eurostat and the European Central Bank.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The SOSR is responsive to the increasing demands in relation to the quality of statistics. The "Declaration of the Statistical Office of the Slovak Republic on Quality Policy and Quality Management System" of April 2003 is the main document that expresses the goals and commitments of the President and top management of the SOSR for their quality of statistics policy, as well as the creation, documentation, implementation, maintenance, and increased efficiency of the Quality Management System of the SOSR.

The SOSR management is committed to executing a policy on quality that is based on requests from users and defined by rules, principles, recommendations, and conclusions of

the standard STN EN ISO 9001:2001 and by further relevant documents. The Law on State Administration requires the continuous improvement in staff skills and qualifications, and part of staff training in the SOSR relates to statistical quality. The SOSR recognizes tradeoffs and interrelationships between datasets. The datasets are assessed mainly against the response rate and completion rate. As a rule, the SOSR uses at least two sets of independent data. The SOSR has implemented externally recognized processes that focus on quality: TQM, ISO 2001 (the SOSR is in the final stage of obtaining the certificate), and quality initiatives within the European Statistical System (since 1998, the SOSR has been participating in a series of pilot projects which focus on the scope, content, and quality of the data infrastructure).

Information on the SOSR's commitment to quality is publicly available on its website.

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

Monitoring processes are in place to inform managers on the quality achieved for ongoing statistical activities, especially through defining technical projects (response rates, imputations, gross-ups, revisions history, and timeliness evaluations).

Compiling areas of the SOSR can obtain expert guidance on the quality of their statistics and on strategies for improving data production especially from the special agency established within the SOSR Institute for Information Technology and Statistics (Infostat). Infostat is a research institute with the responsibility for the development and implementation of statistical methodology.

Periodic reviews are undertaken to identify steps necessary to maintain quality requirements depending on survey types.

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

The planning process aims to ensure quality through addressing issues such as validation of data at time of entry, form design, definitions, time series and trend checks, internal consistency, and improved imputation techniques.

Survey results and processes are reviewed to identify deficiencies and improve the next survey. New mechanisms have been introduced to identify shortcomings at early stages of processing, rather than at the end, to help reduce revisions.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The impartiality of the statistics compilation is outlined in the Statistics Law. Article 2 of the Law determines that "the SOSR, ministries and state agencies shall be independent and impartial in their collecting, processing or evaluating of statistical information... and shall be guided by the principles of reliability, objectivity, transparency, openness and protection of the confidential data." Article 6 states that the choice and tenure of the President of the SOSR is supportive of the independence of the office as he cannot be appointed simultaneously to any other position in the public and private sector. Article 7 makes the appointment or the removal of the President transparent.

Professionalism plays an important role in recruiting and promoting staff. Recruitment in the SOSR is competitive and is based on aptitude in statistics (through written and oral exams). The statistical expertise of prices staff has been enhanced through international exposure, although limited to date. For example, CPI staff were involved in Eurostat working group meetings on the Harmonized Index of Consumer Prices (HICP).

Regular internal reviews of the methods used by the SOSR are carried out by the Statistical Council. Members of that council represent all bodies of official statistics as well as external experts. Infostat, which is responsible for the development and implementation of statistical methodology, has a well established professional reputation.

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

The choice of data sources and methods of compilation of the CPI is based on the consideration of the compilers. Information on survey methods is made public through the annual statistical program. The decisions about the timing and format of the disseminated data are also based solely on statistical considerations.

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

The General Director of the National Accounts and Prices Directorate, and the Head of the Prices Statistics Department, have the responsibility for responding to any erroneous interpretation or misuses of prices data. Incidences of inappropriate interpretations and misuses of statistics are very rare. In these few instances, the misinterpretations and misuses are clarified immediately. The SOSR's policy is to avoid any misunderstandings by providing ample information with data releases. A unit in the SOSR is responsible for daily monitoring of the media.

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 Law is publicly available, including on the SOSR website, in Slovak and in English. The principles of the official statistics are outlined in Article 3 of the Law. Information about the rules for dissemination of statistical products and services, advance release calendars, and the catalog of statistical publications, are also available on the website. The address of the SOSR, as well as the name, e-mail address, and telephone number of the dissemination unit, are available to the users.

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

The SOSR identifies on their website that the government may have prerelease access to prices data.

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

All price data releases are clearly identified as being produced by the SOSR. In the case of joint publications, the SOSR data are identified as being a product of the statistical office. The SOSR publications request attribution when its statistics are used or reproduced.

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

Major changes in the methodology, source data, and statistical techniques are announced through the statistical program at the time of their release, not in advance.

1.3 Ethical standards

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

Ethical standards are laid out in the Act on Civil Service. The SOSR staff who have direct access to individual and personal data are allowed to perform their duties only after taking an oath. New staff are made aware of the ethical standards when they join the SOSR. Each staff member has a copy of the Law for the State Administration. Staff are reminded of updates to the standards.

2. Methodological soundness

2.1 Concepts and definitions

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

The concepts and definitions of the Slovak national CPI follow the recommendations of the *European System of Accounts 1995 (1995 ESA)* and comply with Eurostat's regulations. It is a consumption index and, in addition to monetary expenditure, from 1997 it has included the imputed rent of owner-occupied dwellings.

2.2 Scope

The SOSR compiles a national CPI that includes imputed dwelling rents of owner-occupied dwellings, but excludes households' consumption from own production (in particular agricultural produce). In addition, the SOSR has commenced producing a Harmonized Index of Consumer Prices (HICP) for Eurostat. There are differences in scope between the two indices, with the main difference being that the HICP excludes imputed dwelling rents of owner-occupied dwellings. In addition to the national index, the SOSR produces seven separate indices for particular socioeconomic population groups with independent weighting patterns. These population groups are employees, pensioners, low-income households, employees with one child, employees with two children, employees with three children, and farmers. The CPI described below is the Slovak national CPI. Note that no regional indices are produced.

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

The scope of the national CPI is consistent with good practice. In terms of geographic coverage, the CPI represents the entire territory of the Slovak Republic, that is, urban and rural areas, but most of the prices are collected in urban areas. A very high population coverage of resident households is achieved as a result of adjustments made to the Household Budget Survey (HBS) data to account for the substantial survey undercoverage. The population strata are employees (manual and nonmanual), self-employed, farmers, pensioners, and institutional households.

The item coverage is all goods and services bought by the reference population for the purposes of final consumption. Excluded are expenditure on direct taxes, cash gifts, gambling, and illegal activities. Household consumption from own production is also excluded.

2.3 Classification/sectorization

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

Institutional units and transactions are classified according to 1995 ESA. The COICOP classification is used for the structure and aggregation of the index. There are 12 divisions, 43 groups, and 101 classes.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The prices recorded for the index are those actually paid by householders. That is, they are

market transaction prices, inclusive of VAT, and incorporating any discounts applied. The valuation basis of the prices is purchasers' prices, inclusive of trade and transport margins. Regarding the weights, household consumption expenditure is also valued at purchasers' prices. Detailed product specifications, which include all price determining characteristics, are defined as far as practicable.

2.4.2 Recording is done on an accrual basis

Prices for goods and services are collected from the selected outlets once a month, spread over the first twenty days of the month. The exceptions are: fresh fruit and vegetables with pricing spread over the first three weeks of the month under a fixed schedule of price collection in one third of the regions in each of weeks one, two, and three respectively; other food items priced on the 15th of the month; and fuel priced three times a month (on the 1st, 10th, and 20th of the month). Prices of goods are recorded in the period in which the purchases are made, while prices of services are recorded in the month in which their consumption commences (e.g., motor vehicle liability insurance that applies to a calendar year is recorded in the January CPI).

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

Used car prices are included in the index. They are predominantly imported and so, in practice, netting of these transactions is not required.

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 upper level CPI weights are based on annual national accounts household final consumption expenditure estimates, while the lower level weights are drawn from the HBS. HBSs have been conducted in the Slovak Republic since the mid-1950s using a "quota" sample approach. Under this approach, each year a quota of households is provided for each of the eight regions with the sample based on microsimulation modeling of the social and democratic development of the population of the Republic. Input data for the model are from the latest of the ten yearly population censuses and the latest of the microcensuses, which are based on a 1 percent sample of households and have been conducted every three to five years. The HBS results for 2000, and 2000 national accounts data, provided the basis for the compilation of the present CPI weights.

The sample for the 2000 HBS was 1,606 households (approximately 1 in 1,000) stratified by five main groups: manual workers outside agriculture, nonmanual workers, agricultural

workers, the self-employed, and pensioners. These groups were further stratified by numbers of children and income level.

The HBS covers 85 percent of total households. Excluded are households where the head of the household is a housewife, student, or disabled person, or households consisting of persons not living in dwellings—in total representing 5 percent of total households. Also, the HBS does not cover households that are not willing to submit data, that is, households with illegal income, households with too high or low income, with frequent changes of employment, and households that do not want to report on their consumption—these represent an additional 10 percent of households.

With shifting economic and social structures over the last decade, it was decided to move from a quota sample approach to a random sample—based household budget survey, which has commenced from the beginning of 2004. Basic features of this new approach, which will be used for future CPI reweighting, include sample size of 4,700 households, stratification by administrative region (8) and size of municipality (8), using a sampling frame from the Population and Housing Census 2001.

A regular monthly price collection is undertaken by personal visits to the selected outlets or service providers to collect consumer prices. The pricing points are described above under 2.4.2.

The representative items are selected predominantly on the basis of their share of total household expenditure. The consumer basket comprises 707 representative items (goods and services). The items are selected within COICOP categories following the European Union (EU) regulations, which specify that goods and services should be included in the index if their value accounts for more than 1/1000 (0.1 percent) of total household expenditure. The basket of items is reviewed and updated at the time of index reweighting. Specific products, or varieties, are selected for pricing by price collectors in cooperation with representatives of the outlets, predominantly on the basis of market share.

The outlets are selected purposively for about 120 cities, towns, and villages spread between 38 monitored collection districts on the basis of the popularity of the outlet (i.e., volume of sales), consistency and completeness of the outlets' product range, the degree of cooperation of the respondent, the geographic location, and the type of outlet. Generally, three to five outlets are selected for each item in a region, with a larger sample for Bratislava, and smaller samples in regions with fewer outlets and product ranges. There are currently about 8,500 outlets reporting 90,000 price quotations. Regulated prices, for instance, electricity, gas, railway transport, and post and telecommunication charges, are collected centrally.

The imputed rents of owner-occupied dwellings are derived using prices of cooperative apartments calculated per square meter of house area, and excluding utility services.

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

The CPI and national accounts data are closely coordinated, and there is consistency of definitions, scope, and classifications. The old HBS broadly met CPI requirements (after data adjustments), and it is anticipated that the new random sampling based HBS will meet the future needs of the CPI. It is expected to provide for an annually chained index.

3.1.3 Source data are timely

The periodicity and timeliness of the consumer price collection support the timely release of monthly CPI statistics. More than 99 percent of price quotations are received by the 20th of the reference month, and thus very few imputations are required. The quarterly quota sample HBS has provided timely source data for CPI reweighting, for instance, for the 2000 rebase and the planned 2003 rebase. However, there are long time lags before annual national accounts household final expenditure estimates, which are used to calculate high level CPI weights, become available (18–24 months after the reference period).

3.2 Assessment of source data

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

Sampling errors from the quota sample HBS and the consumer price collection are not available because scientific sampling techniques are not used. Nonresponse has been an issue for the HBS with coverage falling over time—from about 96 percent to 85 percent over the last ten years. The HBS excludes households that are not willing to submit data, that is, those with illegal income, very high or very low incomes, or frequent employment changes—these households represent 10 percent of the total number of households in Slovakia. The HBS results are adjusted by national accounts (e.g., for the consumption of very high income earners) and these adjustments are carried through to a very detailed commodity level when calculating the CPI weighting pattern. Nonresponse is not an issue for the price collection because of the use of personal price collection and minimum respondent burden.

3.3 Statistical techniques

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

For the consumer price collection, the verification and checking of prices is undertaken at a very detailed level, and a two-stage approach is used. Price collectors electronically capture observed prices and product characteristics for villages, towns, and cities in each collection district. Electronic files of collection district data are then aggregated to the SOSR eight regional office level, and the data are analyzed. Then, files are further analyzed on a national basis at the central computer center, and prices are queried directly with outlets as necessary.

In CPI compilation, temporarily missing prices are imputed at the 38 region level on the basis of the average price change of observed prices of the same representative item. For seasonal products, prices are only collected during the season. When a product is out of season, the last reported price is carried forward until the product comes into season again, and price collection resumes.

Products that become permanently unavailable are replaced. The list of varieties is continuously reviewed and new products are introduced according to set rules. The results from the annual HBS are used to identify new products.

Quality changes are handled by implicit techniques. The main methods used are overlap pricing, especially in relation to planned replacements, and the matched sample approach. No sophisticated, explicit quality adjustment techniques are employed.

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

CPI weights are based on household consumption expenditure as defined in the *System of National Accounts 1993*, with the exception that household consumption from own production is excluded. When there are parallel markets, expenditure weights include purchases in all markets. For owner-occupied dwellings, consumption is valued at the estimated rentals that tenants would pay for similar accommodation.

Elementary aggregate indices are calculated as the ratio of current period and base period unweighted average prices. These indices are aggregated to successive levels using the Laspeyres formula. The weights are updated every five years and the most recent update was introduced in 2002 based on calendar year 2000 weights. The price reference period is December 2000, which does not align with the weight reference period. The weights have not been revalued to December 2000, the price reference period.

The monthly CPI with the new 2000 based weights was compiled and published (commencing with January 2002) on a retrospective basis, for the period January 2001 to December 2001 after the old 1995 weighted index series had already been progressively published for the same twelve months. Then, from January 2002, the new series continued to be published, and it replaced the old series without a link to the old series. Although the difference in the price change displayed by the two series over the year 2001 was, in reality, minimal, technically there is a minor break in the published CPI series because of the lack of a formal linking of the old and the new series.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The CPI is compared with relevant aggregates from the producer price index (PPI) and with prices of centrally regulated items obtained from administrative sources.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Unusual movements in index components are investigated and verified at all stages of the index compilation.

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

There are no internal inconsistencies in the index calculation process because imputations are undertaken once only, and there is a single Total CPI aggregation process.

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)

CPI index numbers are final when first released and are not revised. The five yearly introduction of new weights into the CPI does not, of itself, result in revisions to the index series. However, as noted under 3.3.2 above, series for the 12 months of 2001 were released using both the old 1995, and the new 2000, weights. The two series were analyzed to assess the degree of substitution bias, and it was found that there was minimal difference in the two sets of results. Adequate documentation is maintained and includes descriptions of causes of changes.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The CPI is published monthly in conformity with the requirements of the Special Data Dissemination Standard (SDDS).

4.1.2 Timeliness follows dissemination standards

The CPI is published within 15 days after the reference month, which meets the requirements of the SDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

There is a single CPI total aggregation process, so the index is internally consistent.

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

There are consistent CPI index series available monthly back to 1990 for the total CPI, the 12 main divisions, and 43 groups of the Classification of Individual Consumption by Purpose classification

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

The CPI conforms to EU requirements and is broadly consistent with national accounts requirements for deflators and comparable components of the PPI.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Published CPI index numbers are final when first released and are not revised. The five yearly introduction of new weights and samples does not, of itself, result in revisions to the published index. This five-yearly cycle of reweighting is predetermined and is known to the public. It is planned to move to annual chaining of the CPI, which will be communicated to users in advance.

4.3.2 Preliminary and/or revised data are clearly identified

The published CPI time series are not revised, so index numbers are final when first released.

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

The changes in methodology associated with a reweight are described in methodological notes in relevant publications. Recalculated time series were published for the 12 months of 2001. Analysis of the impact of reweighting is available on request.

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 released in "Information Reports," which are posted on the Internet website of the SOSR at 9:00 a.m. on the day of release. Paper copies are available to the public from the SOSR Press Secretary and the Information Service of the SOSR. The report clearly presents three tables containing time series for the index groups on different bases, brief methodological notes, and a fairly detailed analytical commentary of recent price developments.

5.1.2 Dissemination media and format are adequate

In addition to the "Information Reports," more detail is presented in the monthly specialist paper publication *Consumer Price Indices in the SR*, which contains detailed tables and text and many graphs and charts. This publication is available by the end of the month in which it is released on the web. CPI data are also contained in the *Bulletin of the Statistical Office of the SR* and *Monitor of the Economy of the SR*. All publications are in English as well as Slovak

5.1.3 Statistics are released on a preannounced schedule

An advance release calendar giving the precise release dates for the coming four months is disseminated on the Internet website of the SOSR. The public is informed of the availability of the advance release calendar in the hardcopy publications. Statistics are released according to the schedule.

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

The data are released simultaneously to all interested parties.

5.1.5 Statistics not routinely disseminated are made available upon request

Nonconfidential, unpublished data are made available to the public on request. This service is 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

The metadata on the IMF's Dissemination Standards Bulletin Board are replicated on the SOSR website, in English and Slovak, and provide a useful guide to general users.

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

Different levels of metadata are available to meet users' needs, including how to find data (e.g., in the hardcopy bulletins and the catalog of publications). However, there is no separate comprehensive SOSR metadata publication to meet the needs of more sophisticated users. The metadata presented in the CPI bulletin are very brief.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

All publications provide the name and telephone number of a member of the staff who is able and available to provide assistance to users. Contact points by mail, fax, and e-mail are also provided. A prompt and knowledgeable service is provided to users.

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

The SOSR produces a catalog of publications on an annual basis. The catalog contains information on published titles, prices, and method of distribution. Infostat provides publications in electronic form via electronic information services. A list of publications is also available on the SOSR website and in their library.

Table 2. Slovak Republic: Data Quality Assessment Framework (July 2003): Summary of Results for Consumer Price Index

(Compilin,	g Agen ice Large	cy: Statist	(Compiling Agency: Statistical Office of the Slovak Republic) Not Applicable: O = Practice Observed: LO = Practice Largely Observed: Not Observed: Not Observed: SDDS = Complies with SDDS Criteria
Element	NA O	Assessment	t Comments
0. Prerequisites of quality)	
0.1 Legal and institutional environment	×		
0.2 Resources		×	The SOSR budget has been declining in real terms. Salaries are not competitive with other agencies, contributing to staff refertion problems
0.3 Relevance	×		
0.4 Other quality management	X		
1. Assurances of integrity			
1.1 Professionalism	×		
1.2 Transparency		×	Notice of major changes is given at the time of release, not in advance.
1.3 Ethical standards	×		
2. Methodological soundness	-	-	
2.1 Concepts and definitions	X		
2.2 Scope	×		
2.3 Classification/sectorization	×		
2.4 Basis for recording	×		
3. Accuracy and reliability			
3.1 Source data		X	In relation to CPI weighting:
			(i) the HBS has had a small sample, which was not randomly selected, and represented
			only 85 percent of households; and
			(11) annual national accounts household final consumption expenditure estimates are not available for 18-24 months after the and of the reference nation
	>		
	<		
3.3 Statistical techniques		×	Quality adjustment techniques need improving. The weights have not been revalued to align with the price reference period. The new 2000-weight based series has not been linked to the old 1995-weight based series
3.4 Assessment and validation of intermediate data and	×		
3.5 Revision studies	×		
4. Serviceability			
4.1 Periodicity and timeliness	X		
4.2 Consistency	×		
4.3 Revision policy and practice	×		
5. Accessibility			
5.1 Data accessibility	×		
5.2 Metadata accessibility		× 	Metadata are not comprehensive and are inadequate for more sophisticated users.
5.3 Assistance to users	×		

III. PRICE STATISTICS (PRODUCER PRICE INDEX)

0. Prerequisites of quality

0.1 Legal and institutional environment

The Slovak Republic Law on State Statistics No. 540/2001 articulates criteria for collecting statistical information, the roles of public bodies in the field of statistics, the rights and obligations of reporting units, mechanisms for protecting confidential statistical data, and responsibilities for publishing statistics and ensuring comparability of statistics.

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

The Law on State Statistics clearly defines the central role of the Statistical Office of the Slovak Republic (SOSR) in the production and dissemination of statistics. The statistical office is the central body of the State administration in the field of State statistics and has responsibility for overseeing the entire statistical process. The Law outlines the notion of a State program of statistics, developed by the SOSR in collaboration with ministries and State agencies, for a three-year period. The Schedule of Surveys comprises surveys to be conducted by the SOSR, surveys to be conducted by other central government authorities, and administrative data to be supplied by ministries, State agencies, municipal bodies, or public institutions to the SOSR. The President of the SOSR has the discretion to add or delete surveys and administrative data sets from the Schedule of Surveys.

The SOSR has the responsibility for ensuring the comparability of all State statistical data and the adherence to statistical standards, classifications, and methodology, etc. and ensuring that there are no gaps, overlaps, or shortcomings in the conduct of the statistical program. These arrangements are well established, and the central role of the SOSR has been unchallenged.

Even though the law does not explicitly state a requirement to disseminate statistics, it is SOSR's policy and practice to disseminate macroeconomic statistics, and the authorities accept this responsibility.

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

The State program of statistics clearly defines the responsibilities of each agency in the conduct of surveys and specifies the administrative data that must be supplied to the SOSR by each agency. The SOSR may request any ministry, State agency, municipal body, or public institution to provide data collected, processed, or held by them in the process of carrying out their functions.

There are formal interagency agreements between agencies involved in statistical surveys (e.g., the SOSR and the National Bank of Slovakia, and the Ministry of Finance), first

containing general principles and then addenda detailing the specific data sets to be shared. These addenda are updated annually. In addition, regular informal meetings between agencies are held to ensure the effective and timely flow of source data.

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

Article 30 of the Law on State Statistics states that any data collected for statistical purposes relating to an individual reporting unit, which can be directly or indirectly identified, is to be treated as confidential. It may not be published, communicated, or used for purposes other than statistical ones unless approved, in writing, by the legal entity or natural person who provided the data and to whom the data refers. The staff obligation to maintain confidentiality continues after an employment contract ceases to exist or the relevant work is completed. The confidentiality provision applies to employees of authorities or bodies executing the State statistical function, mayors of municipalities, or employees of other entities involved in the collection or processing of statistical data. Any breach of these confidentiality provisions is an offense subject to a fine of up to Sk 100,000. There have been no instances where the use of this penalty has been needed.

In surveys and other statistical enquiries respondents are informed, generally in the introduction to the questionnaire, of their rights and obligations including a statement that the information provided by them will be used for statistical purposes only.

Access to individual data is restricted to staff who require the information in the performance of their statistical duties. The SOSR applies special aggregation rules to prevent residual disclosure in disseminated data.

The Law on State Statistics states that authorities or bodies performing a State statistics function may provide confidential data for research purposes to legal entities where the basic mission is to carry out research, provided conditions for data protection are ensured by such legal entities. Data are to be provided in a form that will not enable direct identification of a legal entity or natural person to which the data relate.

The premises of the SOSR are not accessible to the public. The information technology work areas are only accessible to staff responsible for the information technology.

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

Article 18 of the Law on State Statistics states that reporting units are obliged to provide complete and accurate data for the statistical surveys included in the Survey Schedule within the proscribed deadlines. In cases of noncompliance, including misreporting, fines of up to Sk 100,000 may be imposed.

The SOSR carefully considers response burden. The SOSR has been successful in obtaining an increasing amount of data from administrative sources rather than from statistical surveys. The SOSR provides assistance to respondents in completing and submitting reports by providing points of contact (each questionnaire contains contact details of relevant statistical staff) and clear methodological guidelines that are included in the questionnaire and on the SOSR's website. The purpose of the data collection is provided in the questionnaire. Respondents are made aware of the importance of good quality statistics. Clear formal procedures have been established for dealing with respondents' complaints.

0.2 Resources

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

The SOSR seeks to ensure sufficient funding is obtained to secure the statistical work program. To the extent that resources are inadequate, then the outputs are less valuable. The overall budget has been constant in recent years but declining in real terms at a time when salaries are growing. Other sources of funding apart from the budget are associated with special purpose surveys and election work (e.g., the additional computers required for such work are retained in the office).

Overall staff numbers are adequate to perform the required tasks, though turnover is greater than desired owing to low salary levels which are not competitive with those of other agencies. It is difficult to retain the younger, qualified staff.

There are seven staff working on producer price indices (PPI) in Bratislava: three work on the industrial producer price index (Industrial PPI), one on agriculture, one on construction, and two on the new services collections. Eleven staff work on the PPI at the Trencin processing center.

Computing resources and upgrades are also adequate. The software is effective and periodically updated. Hardware is distributed effectively to facilitate the efficient collection and processing of data and management of databases. Adequate protection is provided for the computer resources including the provision of emergency back-up systems. Overall, office buildings provide satisfactory working facilities, with adequate furniture and equipment. Transport arrangements are adequate.

0.2.2 Measures to ensure efficient use of resources are implemented

Periodic annual reviews of staff performance are conducted according to the law on State Administration. Efficiencies are achieved through the coordinating role assigned to the SOSR, which ensures the elimination of duplication in statistical surveys, and the use of consistent concepts, classifications and other methodologies across datasets.

The SOSR seeks outside expert assistance to evaluate statistical methodologies and compilation systems, when necessary. Assistance is mainly provided by the Statistical Office of the European Communities (Eurostat), especially through the experience gained by SOSR participation in pilot projects.

The resources used to compile statistics are periodically costed as part of the Total Quality Management (TQM) procedure. Efficiencies are sought by replacing exhaustive surveys with sample surveys and maximizing the amount of information that can be obtained from administrative sources.

0.3 Relevance

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

Users of statistics are regularly consulted, kept informed on specific aspects of current programs, and contacted for their feedback. Principal users are invited to submit proposals for the Schedule of Surveys in April of each year.

The Statistical Council, established by the SOSR, provides a forum for determining the needs of users of statistics.

The Information Services Unit of the SOSR monitors media commentary and reports on statistical matters. There are regular quarterly meetings of the SOSR with representatives of the press, academia, and commercial banks to review the usefulness of existing statistics.

The SOSR regularly participates in statistical meetings and seminars (working groups, task forces) organized by international, regional, and professional organizations such as Eurostat, the Organisation for Economic Co-operation and Development, the International Statistics Institute, and United Nations. New and emerging data requirements are identified by Eurostat and the European Central Bank.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The SOSR is responsive to the increasing demands in relation to the quality of statistics. The "Declaration of the Statistical Office of the Slovak Republic on Quality Policy and Quality Management System" of April 2003 is the main document that expresses the goals and commitments of the President and top management of the SOSR for their quality of statistics policy, as well as the creation, documentation, implementation, maintenance, and increased efficiency of the Quality Management System of the SOSR.

The SOSR management is committed to executing a policy on quality that is based on requests from users and defined by rules, principles, recommendations, and conclusions of

the standard STN EN ISO 9001:2001 and by further relevant documents. The Law on State Administration requires the continuous improvement in staff skills and qualifications, and part of staff training in the SOSR relates to statistical quality. The SOSR recognizes trade-offs and interrelationships between datasets. The datasets are assessed mainly against the response rate and completion rate. As a rule, the SOSR uses at least two sets of independent data. The SOSR has implemented externally recognized processes that focus on quality: TQM, ISO 2001 (the SOSR is in the final stage of obtaining the certificate), and quality initiatives within the European Statistical System (since 1998, the SOSR has been participating in a series of pilot projects which focus on the scope, content, and quality of the data infrastructure).

Information on the SOSR's commitment to quality is publicly available on its website.

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

Monitoring processes are in place to inform managers on the quality achieved for ongoing statistical activities, especially through defining technical projects (response rates, imputations, gross-ups, revisions history, and timeliness evaluations).

Compiling areas of the SOSR can obtain expert guidance on the quality of their statistics and on strategies for improving data production especially from the special agency established within the SOSR Institute for Information Technology and Statistics (Infostat). Infostat is a research institute with the responsibility for the development and implementation of statistical methodology.

Periodic reviews are undertaken to identify steps necessary to maintain quality requirements depending on survey types.

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

The planning process aims to ensure quality through addressing issues such as validation of data at time of entry, form design, definitions, time series and trend checks, internal consistency, and improved imputation techniques.

Survey results and processes are reviewed to identify deficiencies and improve the next survey. New mechanisms have been introduced to identify shortcomings at early stages of processing, rather than at the end, to help reduce revisions.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The impartiality of the statistics compilation is outlined in the Statistics Law. Article 2 of the Law determines that "the SOSR, ministries and state agencies shall be independent and impartial in their collecting, processing or evaluating of statistical information... and shall be guided by the principles of reliability, objectivity, transparency, openness and protection of the confidential data" (see also 0.1.3). Article 6 states that the choice and tenure of the President of the SOSR is supportive of the independence of the office as he cannot be appointed simultaneously to any other position in the public and private sector. Article 7 makes the appointment or the removal of the President transparent.

Professionalism plays an important role in recruiting and promoting staff. Recruitment in the SOSR is competitive and is based on aptitude in statistics (through written and oral exams). The statistical expertise of prices staff has been enhanced through international exposure, although limited to date. For example, a PPI staff member was trained in the IMF's Joint Vienna Institute course in Vienna.

Regular internal reviews of the methods used by the SOSR are carried out by the Statistical Council. Members of that council represent all bodies of official statistics as well as external experts. Infostat, which is responsible for the development and implementation of statistical methodology, has a well established professional reputation.

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

The choice of data sources and methods of compilation of the PPI is based on the consideration of the compilers. Information on survey methods is made public through the annual statistical program. The decisions about the timing and format of the disseminated data are also based solely on statistical considerations.

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

The General Director of the National Accounts and Prices Section and the Director of Price Statistics have the responsibility for responding to any erroneous interpretation or misuses of prices data. Incidences of inappropriate interpretations and misuses of statistics are very rare. In these few instances, the misinterpretations and misuses are clarified immediately. The SOSR's policy is to avoid any misunderstandings by providing ample information with data releases. A unit in the SOSR is responsible for daily monitoring of the media.

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 Law is publicly available, including on the SOSR website, in Slovak and in English. The principles of the official statistics are outlined in Article 3 of the Law.

Information about the rules for dissemination of statistical products and services, advance release calendars, and the catalog of statistical publications, are also available on the website. The address of the SOSR, as well as the name, e-mail address, and telephone number of the dissemination unit, are available to users.

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

The SOSR identifies on their website that the government may have prerelease access to prices data.

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

All price data releases are clearly identified as being produced by the SOSR. In the case of joint publications, the SOSR data are identified as being a product of the statistical office. The SOSR publications request attribution when its statistics are used or reproduced.

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

Major changes in the methodology, source data, and statistical techniques are announced through the statistical program at the time of their release, not in advance.

1.3 Ethical standards

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

Ethical standards are laid out in the Act on Civil Service. The SOSR staff who have direct access to individual and personal data are allowed to perform their duties only after taking an oath. New staff are made aware of the ethical standards when they join the SOSR. Each staff member has a copy of the Law for the State Administration. Staff are reminded of updates to the standards.

2. Methodological soundness

2.1 Concepts and definitions

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

The concepts and definitions of the Industrial PPI comply with Eurostat requirements for short-term statistics. The weighting concept relates to a subset of the *System of National Accounts 1993 (1993 SNA)* definition of market output, that is, sales, which is clearly stated in the metadata. Changes in inventories and work-in-progress are not incorporated in the weighting pattern. The index conforms to the principles presented in the draft International

PPI Manual in terms of the pricing basis and the selection of product specifications for pricing.

2.2 Scope

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

The SOSR produces a suite of separate monthly producer price indices relating to the following sectors:

- the output of industrial producers (mining and quarrying, manufacturing, and energy);
- the output of the forestry industry;
- the outputs from, and inputs to, construction works;
- the outputs from, and inputs to, agriculture; and
- the output of market services (these indices are under development and relate to real estate services, rental services of machinery and equipment, data processing services, and other business services).

For the purposes of this data quality assessment framework, the focus will be on the traditional "Price Indices of Industrial Producers" compiled by the SOSR (later referred to as the Industrial PPI). However, recognition needs to be given to the additional coverage of the economy achieved through the production of the other PPI partial indicators for additional sectors of the economy. Following the next cycle of PPI reweightings, consideration should be given to maximizing the index utility by developing a more broadly based, summary PPI by aggregating the Industrial PPI with the PPI output indices for the forestry, construction, and agriculture industries. Also, as coverage of the market service industries is extended, data from these indices could also potentially be progressively included in the broadened PPI, along with data for any additional sectors surveyed.

The Industrial PPI covers Divisions 10–41 of the Classification of Products by Activity (CPA), which correspond to Sections C, D, and E of the Statistical Classification of Economic Activities in the European Communities, Revision 1 (NACE Rev.1). All resident market producers, as specified in the business register, are in-scope.

The Industrial PPI previously related to sales on the domestic market. From January 2003, the scope was extended and indices for sales on the export market have been compiled on an experimental basis, along with a total industrial sales aggregate. Indices are now published separately for domestic sales, export sales, and total sales.

The weights and prices relate to gross sales. The following are explicitly excluded: changes in inventories, work-in-progress, own-account production of market goods for own final consumption or capital formation, illegal market goods and services, and market services production for sale, own final consumption, or capital formation. These exclusions are common for national PPIs and are accepted under European Union (EU) regulations.

2.3 Classification/sectorization

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

The 1993 SNA is followed in the classification of institutional units and transactions. As required by Eurostat, the CPA is used for the classification of statistical units and production activity. There is a hierarchical index classification structure from the Industry total down to the 1-digit section, 2-digit subsection, and 3- and 4-digits of the CPA and NACE Rev.1 (which correspond).

Below this level, the index weights were based on the results of a "One-time Survey for the Purpose of Selection of Representatives for Observation of Price Development of Individual Producers" for the year 2000, involving 800 respondents. The index hierarchy extends below the 4-digit CPA, to the 6-digit CPA, 8-digit List of Products of the European Communities (PRODCOM), and 10-digit PRODSLOV (the national classification of PRODCOM). For pricing purposes, the classification extends to 12 digits.

Reporting units are selected on the basis of sales values reported in the structural business survey—for establishments with 20 employees or more—by establishment classified at the 4-digit CPA group level. The aim is to cover 90 percent of the sales of each CPA group.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Weights and prices are valued at basic prices (ex-factory, ex-mine, etc.) and exclude value added tax, excise duties, and transport costs. Prices on the export market are based on the prices agreed between domestic producers and foreign purchasers, excluding transport costs, converted to koruny using the prevailing exchange rate of the National Bank of Slovakia.

The specification of products for pricing are fully defined.

2.4.2 Recording is done on an accrual basis

Prices for major transactions are reported for the period 10th–12th of the month. If there are no major transactions in that period, transactions for the period between the 1st and the 9th of the month are reported. Businesses are required to consistently report for one or the other of the pricing bands over time. The weights are based on actual sales in the year 2000.

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

The Industrial PPI is a gross sector index with transactions recorded on a gross basis. Stage of processing indices are not produced, so no netting procedures are necessary.

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

There is a regular structural business survey harmonized with European standards. The survey is based on the SOSR Register of Organizations, which contains a list of all legal entities and natural persons (self employed) enrolled in business in the Slovak Republic. The survey relating to big enterprises covers units with 20 or more employees, which account for sales in excess of Sk 731 billion in 2000. In 2000, the survey covered 3,152 units with an overall response rate of 92.45 percent. After inactive units were accounted for, the response rate was 98.9 percent.

The primary source for updating the legal units is the Register of Legal Entities maintained by the Ministry of Justice.

An editorial board within the SOSR oversees the design of the survey questionnaire, which is field tested, scrutinized by regional staff, reviewed by the board and ultimately officially gazetted in the laws of the Slovak Republic. Within each form there is built-in validation through cross-checking between data items.

The sample of establishments for the monthly producer price collection is selected using a cut-off approach based on 2000 sales at the 4-digit CPA group level. The overall aim is to achieve an average of 70–80 percent coverage at the 2-digit CPA group level. Approximately 600 establishments were selected for the survey. The selected establishments proposed lists of the most important products for price observation; from these lists, a selection was made using volume of sales as a criterion.

A monthly mail questionnaire is sent to respondents in advance for a whole year along with a catalog of representative items containing a list of products specified by a 12-digit numerical code; the first 10 digits represent the PRODSLOV, and the last two digits uniquely define the product to support pricing to constant quality. In addition, detailed descriptions of the quality of the product and the delivery terms, etc. are provided. Approximately 4,000 products for domestic sales and 1,800 export products are surveyed.

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

The price and weighting source data closely conform to the definitions, scope, and classifications of the Industrial PPI. They also conform to the time of recording and the valuation of the statistics.

3.1.3 Source data are timely

In the producer price collection, 80 percent of prices are received by the 25th of the reference month and follow-up ensures that virtually 100 percent are received by the end of the month. The results of the Structural business survey are available within five–six months of the end of the reference year, which is very timely for PPI reweighting purposes.

3.2 Assessment of source data

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

In relation to the weighting data source—the structural business survey—sampling errors are not available because cut-off sampling is used. However, very high coverage is achieved, and an up-to-date business register supports the ongoing conduct of the survey.

The producer price collection uses purposive sampling, so no sampling errors are available. Response rates are close to 100 percent, so no adjustments are necessary. Imputation is undertaken for the small number of missing observations in a month. The price quotes are carefully checked over time, and with related products, and any unusual figures are queried with the respondents, either over the phone or during personal visits by SOSR staff. The samples of respondents and products are maintained to ensure representativeness. The product specification samples are maintained on a monthly basis with the collection form inviting businesses to suggest replacement items where necessary.

3.3 Statistical techniques

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

Price data are rigorously checked and cross-checked at all stages of the compilation process, and amendments and adjustments made as necessary. Attention is given to ensuring ongoing conformity to international and European standards (e.g., the recent extension of coverage to include export sales).

The processing system includes built-in relationship checking and testing procedures. The logical relations in basic product configurations and tables to be published are also checked visually.

In relation to temporarily missing prices, the SOSR strives to select product specifications with continuous sales. When a price is missing, one of two techniques is employed depending upon the previous price development of the product. The price is either imputed using the movement of the next level of aggregation in the index, or repeated. If the product continues to have missing prices, a more continuous replacement will be sought. There are few seasonal products in the PPI; an example is clothing and footwear though it has a low weight. Depending on the circumstances, the last price of the out-of-season product is carried forward until it comes back into season—this is the more common approach, or a summer series can be spliced onto a winter series.

When products become permanently unavailable, new products are selected on the basis of the respondent's advice written on the form. The respondent is requested to supply specifications of a product with similar quality characteristics and sales condition, and from the same 6-digit CPA group. Product replacements are carried out monthly.

Where the technical characteristics of a heavily weighted item change, the reporting unit is requested to submit an annex to the reporting form in which the characteristics of the old and new product are compared and quantified. These data are used to calculate the difference in value of the two products and apply an explicit quality adjustment to the observed price. Such adjustments are relatively infrequent and for major items only.

Quality change for all other items is handled by splicing the price of the new product onto the old one. This assumes that the value of the difference in quality between the two items is equal to the difference in price. This approach has the disadvantage that it potentially disregards real price changes that are introduced at the time of a model or variety change. No other implicit quality adjustment techniques—such as overlap pricing—are applied.

New products are introduced within the 6-, 5-, and 4-digit CPA groups before weight revisions.

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

Gross sales data are used as the basis of the weighting of the PPI.

Elementary aggregate indices for 6-digit CPA groups are calculated as the weighted arithmetic mean of price relatives. These indices are aggregated to successively higher levels using the modified Laspeyres formula. The weights are updated every five years and the most recent update was based on calendar year 2000 weights. The price reference period is December 2000, which does not align with the weight reference period. The weights have not been revalued to December 2000, the price reference period.

In the case of the domestic sales PPI, the monthly index with the new 2000-based weights was linked to the old 1995-based series at December 2000 to form a continuous monthly and annual series back to 1993.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The PPI, and its components, are carefully checked against consumer price index (CPI) data and also against export and import unit value indices.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Unusual movements in index components are investigated during the Industrial PPI compilation process. The SOSR Information Report of the Industrial PPI describes the main current movements in the index.

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

There are no internal inconsistencies in the index because imputations are undertaken once only and there is a single Industry Total aggregation process.

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 Industrial PPI index numbers are final when first released and are not revised. The five-yearly introduction of new weights and samples does not, of itself, result in revisions to the published index. However, there is internal analysis of the impact of the new weights to determine the effects of substitution bias on the PPI. Adequate documentation is maintained and includes descriptions of causes of changes.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The Industrial PPI is published monthly in conformity with the Special Data Dissemination Standard (SDDS) requirements.

4.1.2 Timeliness follows dissemination standards

The Industrial PPI is published within 28 days after the reference month, which meets the requirements of the SDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

There is a single Industry Total aggregation process, so the index is internally consistent.

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

A consistent index series for the *domestic* Industrial PPI is available monthly back to 1993 at the three-digit CPA group level and higher level aggregations. Indices for export sales, and an industry total PPI including *export sales* as well as domestic sales, are available from January 2003, on an experimental basis. The industry total index is consistent with the domestic and export sales PPIs.

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

The PPI conforms to EU requirements and is broadly consistent with the national accounts requirements for deflators and comparable components of the CPI.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Published Industrial PPI index numbers are final when first released and are not revised. The five yearly introduction of new weights and samples does not, of itself, result in revisions to the published index. This five-yearly cycle of reweighting is predetermined and is known to the public.

4.3.2 Preliminary and/or revised data are clearly identified

The published Industrial PPI time series are not revised, so index numbers are final when first released.

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

The changes in methodology associated with a reweight are described in methodological notes in relevant publications. An analysis of the impact of reweighting is available on request.

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 released in "Information Reports," which are posted on the Internet website of the SOSR at 9:00 a.m. on the day of release. Hard copies are available to the public from the SOSR Press Secretary and the Information Service of the SOSR. The reports clearly present three tables containing time series at the 2-digit level of the CPA on different bases, brief methodological notes, and a fairly detailed analytical commentary of recent price developments.

5.1.2 Dissemination media and format are adequate

In addition to the "Information Reports," more detail is presented in the monthly specialist paper publication *Price Indices of Industrial Producers, of Drinking and Drainaged Water in the SR*, which contains detailed tables and text and many graphs and charts; this bulletin is available within three–four days of the data release on the web. PPI data are also contained in the *Bulletin of the Statistical Office of the SR* and *Monitor of the Economy of the SR*. All publications are in English as well as Slovak.

5.1.3 Statistics are released on a preannounced schedule

An advance release calendar giving the precise release dates for the coming four months is disseminated on the Internet website of the SOSR. The public is informed of the availability of the advance release calendar in the hardcopy publications. Statistics are released according to the schedule.

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

The data are released simultaneously to all interested parties.

5.1.5 Statistics not routinely disseminated are made available upon request

Nonconfidential, unpublished data are made available to the public on request. This service is 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

The metadata on the IMF's Data Standards Bulletin Board are replicated on the SOSR website, in English and Slovak, and provide a useful guide to general users.

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

Different levels of metadata are available to meet users' needs, including how to find data (e.g., in the hardcopy bulletins and the catalog of publications). However, there is no separate comprehensive SOSR metadata publication to meet the needs of more sophisticated users. The metadata presented in the PPI bulletin is very brief.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

All publications provide the name and telephone number of a member of the staff who is able and available to provide assistance to users. Contact points by mail, fax, and e-mail are also provided. A prompt and knowledgeable service is provided to users.

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

The SOSR produces a catalog of publications on an annual basis. The catalog contains information on published titles, date of publication, prices, and method of distribution. Infostat provides publications in electronic form via electronic information services. A list of publications is also available on the SOSR website and in their library.

Table 3. Slovak Republic: Data Quality Assessment Framework (July 2003): Summary of Results for Producer Price Index (Compiling Agency: Statistical Office of the Slovak Republic)

dino)	ung Ag	ency.	Statistica	(Computing Agency, Statistical Office of the Stovak Republic)
Key to symbols: $NA = Not Applicable$; $U = Practice Observed$; $LO = Practice Observed$	Practice L	argely Or	served; LNO	Key to symbols: NA = Not Applicable; U = Practice Observed; LO = Practice Largely Observed; NO = Practice Not Observed; NO = Practice Not Observed; SDDS = Compiles with SDDS Criteria
Flement	NA	Asse	Assessment	Comments
	0	ГО	LNO NO	
0. Prerequisites of quality				
0.1 Legal and institutional environment	X			
0.2 Resources		×		The SOSR budget has been declining in real terms. Salaries are not competitive with other agencies, contributing to staff retention problems
0.3 Relevance	×			
0.4 Other quality management	×			
1. Assurances of integrity				
1.1 Professionalism	×			
1.2 Transparency		×		Notice of major changes is given at the time of introduction, not in advance.
1.3 Ethical standards	×			
2. Methodological soundness				
2.1 Concepts and definitions	X			
2.2 Scope	×			
2.3 Classification/sectorization	×			
2.4 Basis for recording	X			
3. Accuracy and reliability				
3.1 Source data	×			
3.2 Assessment of source data	×			
3.3 Statistical techniques		×		Quality adjustment techniques need improving. The weights have not been revalued to align with the price reference period
3.4 Assessment and validation of intermediate data	×			
3.5 Revision studies	×			
4. Serviceability			_	
4.1 Periodicity and timeliness	X			
4.2 Consistency	×			
4.3 Revision policy and practice	X			
5. Accessibility				
5.1 Data accessibility	×			
5.2 Metadata accessibility			×	Metadata are not comprehensive and are inadequate for more sophisticated users.
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 powers of the central organs of state service are defined in the *Organization of Activities of Government and Organizations of Central State Service Act* No. 575/2001, which bestows on the Ministry of Finance (MOF) the responsibility for government finances, taxation and customs administration, financial control, and internal audit. The specific responsibilities of the MOF in the area of public finance are contained in the *Budgetary Rules Act* No. 303/1995, as amended, which enables the MOF to request submission of data from public administration organizations (§ 8, paragraph 5, § 50, paragraphs 3 and 4). *The State Statistics Act* No. 540/2001 enables the MOF to undertake statistical surveys within its authority (§ 11, paragraph 2). The MOF implements its responsibilities for collection of source data on public finances through the issuance of administrative regulations, which are published in *Finančný spravodajca (Financial Newsletter)*.

None of the above legislation provides a clear mandate for the MOF to disseminate government finance statistics (GFS). However, as a general policy, the MOF disseminates fiscal data to the public regularly, including through the budget processes.

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

It follows from the *Organization of Activities of Government and Organizations of Central Civil Service Act* No. 575/2001 that ministries and other central organs of state service should cooperate closely in fulfilling their tasks (§ 38). In the area of GFS, the cooperation is between the MOF and the Statistical Office of the Slovak Republic (SOSR). This cooperation is confirmed by the long standing (1993) *Agreement on Mutual Provision of Data*, by which a framework for cooperation is defined. The agreement is an interinstitutional accord. Each year, by means of a supplement to the agreement, the requirements of the SOSR are specified for data, the collection and processing of which is mandated to the MOF. The agreement enables both organizations to use the same source data in the development of GFS and in the development of SOSR statistical programs. (see 3.1.1 for details).

The National Bank of Slovakia (NBS) also compiles certain data on public finances. The current cooperation between the MOF and NBS follows from a separate long-term agreement on the maintenance, by the NBS, of a payments system for the MOF. This agreement enables the MOF to obtain daily information on revenue, expenditure, and the deficit of the state budget. Data on state budget financial assets and liabilities are available monthly.

Working meetings of the MOF, SOSR, and NBS staff are organized as required. An example are working meetings to prepare notification tables on the deficit and debt of general government pursuant to the *European System of Accounts 1995 (1995 ESA)* that are submitted to the European Commission.

The MOF also maintains contacts with general government organizations, primarily the National Property Fund of SR, Slovak Land Fund, social security funds, and Slovenská konsolidačná, a.s., in order to correctly classify their government finance data.

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

The *State Statistics Act* No. 540/2001 states that individual data are to be treated as confidential (§ 2, letter f). Pursuant to § 30, paragraph 1 of this Act, individual data shall not, without the approval of legal or natural persons who have provided them and to whom they relate, be disclosed or announced to anybody, or used for other than statistical purposes.

The MOF receives data from general government organizations primarily for the evaluation of budget execution, based on MOF instruction to that affect. The secondary use of these administrative source data by the MOF and the SOSR is for the compilation of GFS.

The MOF data processing center, DataCentrum, has developed systems for protecting the confidentiality and security of these data.

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

Reporting of information necessary to compile GFS has a legislative mandate in three Acts: the *State Statistics Act* No. 540/2001, the *Budgetary Rules Act* No. 303/1995 as amended, and the *Accounting Act* No. 431/2002.

The *Budgetary Rules Act* imposes an obligation on general government organizations to submit to the MOF their budgets for the coming year and data necessary for the evaluation of budget execution (§ 8, paragraph 5, § 17, paragraph 4, § 50, paragraphs 3 and 4).

The *Accounting Act* imposes an obligation to compile accounting statements and publish closing summary accounts. The detail of this obligation is specified in MOF regulations published in *Finančný spravodajca*. For more detail on reporting, see part 3.1.1.

0.2 Resources

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

Statistical compilation at the MOF is carried out by the Statistical Standards Implementation Department. The department currently has four employees, which the authorities find adequate to perform the immediate tasks. A recent staff review reduced the staff numbers from five to four. The qualifications of the staff are appropriate for their duties. They acquired the necessary statistical skills by participating in courses and workshops organized by the International Monetary Fund (IMF) and the Statistical Office of the European Communities (Eurostat), and by studying relevant manuals and methodological regulations. It is required that the staff have a sufficiently detailed knowledge of international statistical standards (*A Manual on Government Finance Statistics*, 1986 (*GFSM 1986*), *Government Finance Statistics Manual 2001 (GFSM 2001)*, and 1995 ESA), budgetary classifications used in the Slovak Republic, budgetary reporting practices, and accounting standards used by organizations of general government in Slovakia.

Effective January 1, 2004, and as part of the recent staff review, wages were increased. The wage level seems adequate and competitive with conditions in the Slovak Republic general government sector. Staff turnover in recent periods has not been excessive.

Equipment and computer technology facilities are adequate. So far, Excel software has been used for compiling public finance statistics. The statistical time series data are backed up by the Informatics Department. The MOF building provides an adequate working environment.

Although adequate for current tasks, substantial strengthening of fiscal statistics would require additional resources. One area where additional resources could be required, is the improvement of municipal data quality.

0.2.2 Measures to ensure efficient use of resources are implemented

Performance of employees in the development of GFS is evaluated with regard to the fulfillment of the tasks for a particular year. The development of annual and quarterly GFS is a permanent part of the evaluation. Performance is reviewed by the immediate superior, General Director of the Section, and the State Secretary. In 2003, the job descriptions and work unit efficiency was examined by an external auditor (personnel audit).

0.3 Relevance

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

In 2000, a meeting was arranged with analysts from the biggest Slovak banks and journalists dealing with economic coverage, to explain the basic principles of the *GFSM 1986* and *1995 ESA* methodologies, and their use in the measurement of general government deficits. In general, data development needs are monitored by the Public Relations Department through individual requests for data, which are submitted pursuant to the *Act on Freedom of Information*. User needs are not actively monitored.

No special studies are undertaken to identify emerging data requirements. The main source of new data requirements are the international institutions, especially the IMF, Eurostat, and the European Central Bank, or the requirements of particular missions received at the MOF. Since the users of GFS also include the SOSR and NBS, cooperation with these organizations is important. A working group on the application of the *1995 ESA*, comprising representatives from all three organizations, was established. A recent meeting of the State Secretary of the MOF with the Chairman of the SOSR and the Vice-governor of the NBS targeted further strengthening of this cooperation. The MOF regularly participates in meetings, workshops, and seminars on GFS organized by the European Union. Participation in these seminars is coordinated with the SOSR.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The quality of GFS is underpinned by emphasis on the quality of accounting source data provided by individual units of general government. The accounting practices of these organizations are directed by the MOF, which specifies the accounting standards and procedures. Data from the accounting systems of state budgetary and extrabudgetary organizations and state funds are monitored by relevant ministries. Data from municipalities and their budgetary and extrabudgetary organizations are monitored by accounting staff stationed at tax offices, and are examined by auditors. Annual data from other organizations of general government are examined by auditors. The Statistical Standards Implementation Department of the Section of National Reporting, is responsible for the quality of accounting data generated at the MOF.

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

Monitoring and review of the quality of the statistical data is the responsibility of MOF senior staff. (see also 0.4.1); however, there is no declared statistical program. Oversight of the data which are to be disseminated is the responsibility of the general director of the section whose data are being disseminated. Their approval is necessary for the data to be disseminated on the MOF's website. Official documents in which the results of public

finance management are presented (for example, the State Closing Account) must be discussed and approved by the Meeting of the Leaders of MOF (*Porada vedenia* MOF). Other reports on public finance operations are approved by the State secretary (for example, EU notification tables on deficit and debt).

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

Planning the program of GFS development at the MOF involves compromises between the availability of quarterly accounting data and requirements of domestic and foreign users, and internal needs of the MOF. These sometimes-conflicting requirements are the subject of continuing attention of data compilers, who endeavor to progressively enhance the quality of data.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The MOF, as the central body of state administration, compiles GFS based on methodologies that follow recognized international statistical standards.

The MOF Section of National Reporting is in charge of the compilation of public finance statistics, and is organizationally separated from the MOF Section of Budgetary Policy, which compiles the budget. Statistical data are derived from accounting statements of individual organizations of general government. In their compilation, no intervention of state bodies takes place. Statistical data are disseminated in the State Closing Account, which is discussed and approved by the National Council (parliament) of the Slovak Republic.

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

Sources of data for the compilation of GFS (see 3.1.1 for details) are for the most part identical with sources of data which the MOF uses in reporting on budget execution. Hence, the choices and decisions are guided by administrative and accounting considerations, rather than statistical considerations.

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

The MOF discloses data on budget execution and other data on GFS by means of media briefings. Information that is published or reported in the media is monitored by the Press and Public Relations Department. If necessary, a MOF spokesperson will make a public announcement and provide an explanation to correct erroneous interpretations.

1.2 Transparency

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

The public is informed about accounting instructions issued by the MOF, which are published annually in *Finančný spravodajca*. Similar information is not provided regarding the processing and dissemination of statistics.

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

Several senior officials of the MOF have access to statistical data on government finances prior to their release. This includes access to quarterly reports on budget execution and annual State Closing Account. The public is informed about prior access by government officials on the website of the Office of the Government: http://www.finance.gov.sk/mfsr/mfsr.nsf/0/D2B6128ABC10FE0AC1256E320049F6E3?OpenDocument

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

The MOF releases GFS on its website. This method of disseminating information ensures their clear identification as products of the MOF.

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

The MOF announces changes in the budgetary classification of revenue and expenditure, accounting procedures and system, collection forms and contents of statements, and method and terms of submitting data in its *Finančný spravodajca* gazette and on its website, before the beginning of the fiscal year. Similar information is not provided regarding statistical methodology and statistical techniques.

1.3 Ethical standards

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

Rules for staff behavior are identified by the *Civil Service Act* No. 312/2001 (§ 53). The staff are informed about these rules. The MOF provides seminars aimed at promoting ethical behavior among its staff.

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 compilation of GFS is based on the recommendations of the *GFSM 1986*. Currently, steps are being taken for transition to the methodology of the *GFSM 2001* and the *ESA Manual on Government Deficit and Debt*). In 2003, the MOF provided data compiled according to *GFSM 2001* methodology for publication in the IMF's *Government Finance Statistics Yearbook* (*GFS Yearbook*). The reported data for 2000 through 2002 are on a cash basis and include detailed tables on transactions in revenue, expense, assets and liabilities, and a Statement of Sources and Uses of Cash. Transactions data on an accrual basis, other economic flows data, and complete balance sheets are not yet available.

The existing, undeclared, *GFSM 2001* migration plan includes: gradual application of accrual accounting, market valuation of assets, and analysis of debt data. Based on this plan, it is expected that *GFSM 2001* accrual reporting may be possible for 2006.

2.2 Scope

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

Beginning in 1996, public finance statistics on the operations of the central and general government have been disseminated according to the requirements under the Special Data Dissemination Standard (SDDS). Data on central government cover the operations of the State budget, excluding extrabudgetary accounts (state funds; and social, employment, health insurance, and privatization funds), and are disseminated on the MOF webpage: http://www.finance.gov.sk/mfsr/mfsr.nsf/0/D2B6128ABC10FE0AC1256E320049F6E3?OpenDocument

Data on the operations of general government cover all activities of general government units. Excluded are quasi-fiscal activities of certain nonfinancial public enterprises. Data for central, regional, and local governments are not shown separately. Currently, a minor role is played by regional and local governments, in health, education, and social assistance, but this is expected to grow under the decentralization initiative. Data are disseminated on the MOF webpage:

http://www.finance.gov.sk/mfsr/mfsr.nsf/0/517254B6A86A9C1BC1256D7B004022E0?OpenDocument&ID=PAR684972537044&TYPE=U&LANGUAGE=E&LENGTH=S.

Data on central government debt cover budgetary central government (State budget), excluding extrabudgetary accounts (state funds; and social, employment, health insurance, and privatization funds). Data are disseminated on the MOF webpage:

 $\underline{http://www.finance.gov.sk/mfsr/mfsr.nsf/0/CDFC8DD689F523F9C1256D75004283F9?OpenDocument.}$

General government and budgetary central government (State budget) data disseminated on the MOF website are presented in accordance with *GFSM 1986* methodology. Tables are compiled for central government, local governments, and general government as a whole. Unconsolidated and consolidated data are available on request, either by inquiry to the MOF's Press and Public Relations Department or a link on the MOF website. Revenue and expenditure, statistics are compiled annually from 1996 and quarterly from 2000.

Data on the gross debt of the general government, classified by foreign and domestic, short-term and long-term and according to type of debt instrument (bonds, bank loans and other debt instruments), are available on request. Tables are compiled for central government, local governments, and general government as a whole, on an unconsolidated and consolidated basis. General government debt statistics are compiled annually from 1996 and quarterly from 2003. Data on budgetary central government debt (State budget), which is the largest part of general government debt, are reported quarterly from 1998.

Preliminary data are replaced by final data as those become available.

2.3 Classification/sectorization

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

In the Slovak Republic GFS institutional sectors are defined in accordance with the concepts of the *System of National Accounts 1993* and the *GFSM 2001*. So far, the operations of regional governments have not assumed the character of a separate *GFSM 2001* institutional sector.

Data compiled according to the GFSM 1986 methodology include:

- Summary Table of Major Components (III.K)
- Government Revenue and Grants (Table A)
- Classification of the Functions of Government (Table B)
- Economic Classification of Government Expenditure and Lending minus Repayments (Table C)
- Financing by Type of Debt Holder (Table D)
- Financing by Type of Debt Instrument (Table E)

- Central Government Debt
- Government Guaranteed Debt

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Flows are valued on a cash payments basis. Gross debt is recorded at face value, the amount which the government is obliged to pay on debt maturity. Transactions are recorded at values that are current when transactions take place. Balances, at the end of the period, denominated in foreign currency are converted to national currency using the mid-point exchange rate, between the sellers' and buyers' market exchange rate. Securities issued are recorded in the sector of the original purchaser.

2.4.2 Recording is done on an accrual basis

Transactions are recorded mostly on a cash basis. Accrual adjustments are made to certain transactions in the *1995 ESA* "notification" tables provided to Eurostat. For fiscal 2003, these include: corporate and personal income taxes, excises, value added taxes, social contributions, interest paid, wages and salaries, supplies, and other expenses.

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

All transactions are reported gross, except corrective transactions such as tax refunds and overpaid expenses.

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 data collection program at the MOF is based on the obligation of all organizations belonging to general government to submit data on the management of public finances in accordance with relevant legislation and accompanying regulations.

The obligation to provide information is contained in three acts: *Budgetary Rules Act* No. 303/1995, as amended; *Accounting Act* No. 431/2002, as amended, and *State Statistics Act* No. 540/2001. The obligation to provide data is specified in the regulations under the *Instruction of the Ministry of Finance of the Slovak Republic*, published annually in the *Finančný spravodajca* government gazette. The instruction defines the scope, manner, and deadlines for submitting data on the execution of the public budget. Statements submitted on

the basis of this instruction represent administrative records and are not part of government statistical reporting. The instruction imposes an obligation on all general government organizations to submit:

- data necessary for an assessment of budget execution,
- closing summary accounts, and
- other prescribed data that are not included in the first two datasets.

Under the *Budgetary Rules Act*, the use of the budgetary classification is obligatory for all organizations belonging to the general government sector. The budgetary classification of revenue and expenditure is published annually, by the MOF's Budgetary Policy Section, in the *Finančný spravodajca*. It specifies the items of revenue and expenditure according to the economic and functional classification and is guided by international standards, most recently by the *GFSM 2001* and Classification of Functions of Government (COFOG).

The Closing Summary Accounts consist of two parts—the Profit and Loss Account and the Balance Sheet, including explanatory notes. Every organization of general government has the obligation to compile and submit a Balance Sheet. The Profit and Loss Account is only compiled and submitted by those organizations that are required to use accrual accounting (they do not include budgetary organizations, state funds, self-governing regions and the National Property Fund). The Closing Summary Accounts are produced and published in the form specified by the MOF Department for Accounting Legislation and Methodology, guided by the recommendations of international accounting standards.

The above-mentioned legislative norms ensure that the MOF obtains quarterly and annual data on cash revenue and expenditure, and assets and liabilities, of every general government organization, as well as data on the expense and revenue of those general government organizations that use accrual accounting (semi-budgetary organizations, the Slovak Land Fund, public higher educational establishments, Slovenská konsolidačná, a.s., Veriteľ, a.s.). Partial accrual data, relating to operational expense, are also submitted by the National Property Fund, social security funds, budgetary organizations, state funds, municipalities, and self-governing regions.

The data sources also provide information on transfers among units of general government, which are used in consolidation within levels of government and for general government as a whole. Matrix views of flows among units of general government are prepared to ensure accuracy of consolidation on the revenue and expenditure sides. The accounts created for data collection comply with the valid budgetary classification and chart of accounts, which are used for recording financial stocks and flows in the general government accounting system. The accounts are updated annually for changes in the budgetary classification and new data requirements. Bridge tables and derivation tables are used to reclassify data into a GFS format.

Apart from quarterly and annual data obtained from accounting sources, the MOF also has access to monthly data from the bank accounts of the state budget, kept at the National Bank of Slovakia. This information is used to compile revenues and expenditures at the end of each month, cumulatively since the beginning of the year. These are the source data for monthly statistics on central government operations.

The MOF has a special administrative data source on the operations of Sociálna poisťovňa (Health Insurance Company), other health insurance companies, and the National Labour Office (until 31 December 2003, when its operations were taken over by the Ministry of Labor, Social Affairs and Family of the Slovak Republic, and Sociálna poisťovňa), which provide selected monthly data on revenue, expenditure, receivables, and payables.

Beginning in 2005, the State Treasury of the Slovak Republic is expected to start providing comprehensive monthly data for all central government units. This will cover data on revenue and expenditure of central government organizations that are clients of the State Treasury. The data will be obtained from bank account records of these organizations, in accordance with the budgetary classification. The provision of limited data began in January 2004 and will gradually expand over the course of 2004.

A complete register of general government organizations is available for the compilation of GFS. The register is maintained by the SOSR. General government organizations Slovenská konsolidačná, a .s. and Veritel', a.s., established in recent years, were included in the register in 2003.

The institutional and geographic coverage of the source data for the compilation of GFS is complete. This is guaranteed by the above-mentioned legislative norms and the long established computer systems used in collecting and processing government accounts. Data processing is done by DataCentrum Bratislava, a separate organization established for this purpose by the MOF. DataCentrum processes the submitted accounts into comprehensive sets for budgetary organizations, semi-budgetary organizations, municipalities, self-governing regions, and state funds. The individual ministries are responsible for the accuracy of the data submitted by the budgetary and semi-budgetary organizations and state funds administered by them. The relevant offices of the eight self-governing regions are responsible for the accuracy of the data of the budgetary and extrabudgetary organizations operating under their jurisdiction.

To ensure the accuracy of accounting data from the municipalities and their budgetary and semi-budgetary organizations, the MOF created 38 municipal accounting methodology jobs. These positions are situated in tax offices, to cover the entire territory of Slovakia. Their task is to supervise the accounting of the assigned municipalities and towns, ensure the timely submission of accounts, control the accuracy of those accounts, record the data on an electronic medium (floppy disk), and send the data to DataCentrum. The MOF organizes quarterly working meetings with the accounting methodology experts.

The other units of general government, that is, the National Property Fund, the Slovak Land Fund, Slovenská konsolidačná, a.s., Sociálna poisťovňa, the National Labour Office (until 31 December 2003), and the five health insurance companies, submit their accounts directly to the MOF.

Since January 1, 2004, the operations of the National Labour Office were assumed by the Ministry of Labor, Social Affairs and Family of Slovak Republic, and Sociálna poist'ovňa. Their accounts will be processed, along with other budgetary central government organizations, through the State Treasury. Their annual Closing Summary Accounts are verified by audit companies. The Ministry of Education is responsible for the submission of the accounts for public higher educational establishments.

From January 1, 2004, the State Treasury began to take over the collection and processing of accounting data for its client organizations. DataCentrum will continue to collect and process data for the municipalities and the budgetary and semi-budgetary organizations operating under the municipalities, because these will not be clients of the State Treasury. The remaining general government organizations are required to submit accounting data to the State Treasury using its financial management information system (National Reporting Model). The responsibility for the control and accuracy of the data remains as described above, with the exception of health insurance companies, whose data are verified and submitted by the Ministry of Health.)

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

The source data for GFS, which follow the *GFSM 1986* methodology, are based on the economic and functional categories of the budgetary classification of revenue and expenditure. The data are derived in great detail, as required, for the compilation of state budget revenue and expenditure, and completed to include items that are specific to individual units of general government. The scope of the budgetary classification is sufficient to meet the definitions of GFS so that the output values are adequate for the assessment of the state of public finances and its development, on the cash principle.

Source data allow the compilation of GFS in the required categories and with a high level of approximation to the economic classification under *GFSM 1986* or *GFSM 2001*, on the cash principle. The COFOG functional classification of expenditure was introduced by decree no. 271/2002, issued by the SOSR, which made its use binding. Since 2003, the reporting of data on expenditure under COFOG is obligatory for all units of general government. Source data on assets and liabilities obtained from the Closing Summary Accounts also allow compilation of statistics of stocks with an acceptable level of approximation to the classification of assets and liabilities under *GFSM 2001* and *1995 ESA*. Source data provide sufficient detail for the consolidation of the sector of general government and its subsectors.

3.1.3 Source data are timely

Accounting source data are provided quarterly. The instruction of the MOF, which imposes the obligation on all units of general government to submit accounts, states that the data must be submitted for the 1st, 2nd, and 3rd quarters within 30 days after the end of the quarter and annual data within 35 days after the end of the year.

All units of general government are notified in writing regarding the instruction for the submission of data to the MOF, and through the publication of the instruction in the *Finančný spravodajca*, and on the MOF website. Government organizations responsible for the submission of source data are in regular contact with their parent organizations.

Monthly source data from the NBS are available within 14 days.

3.2 Assessment of source data

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

Source data submitted to the MOF from the accounts of the organizations of general government pass through several levels of quality control. The first level, for data of budgetary and semi-budgetary organizations, and state funds established by the central government, is at the relevant ministries. The data of municipalities and their budgetary and semi-budgetary organizations are validated by the 38 accounting methodology experts employed by the MOF in decentralized tax offices. The data of budgetary and semi-budgetary organizations operating under the eight self-governing regions are validated by the offices of the self-governing regions.

The second level of accounting data quality controls for the budgetary and semi-budgetary organizations of state, funds, municipalities, and self-governing regions is performed in DataCentrum Bratislava, the organization that processes the data in accordance with instructions from the MOF. The accuracy of logical links and other data consistency checks are performed. The accounting data quality controls for public higher education establishments are performed by the Ministry of Education. The remaining organizations of general government (the National Property Fund, the Slovak Land Fund, Sociálna poisťovňa, health insurance companies, the National Labour Office, Slovenská konsolidačná, a.s.) are required to have their annual data verified by auditors.

The last level of data quality control is performed at the MOF.

3.3 Statistical techniques

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

No significant estimates of missing data are made in the compilation of GFS based on the cash principle. If a change is found in the annual source data, after GFS have been compiled, a correction is made to the statistical data.

In GFS, budget payments to nonbudget general government organizations to cover operating expenses are classified as transfers; rather than final expenditure on wages and salaries, use of goods and services, and other expenses. This prevents an accurate analysis of general government operational costs.

Discrepancies between stocks and flows are not identified under the *GFSM 1986* methodology.

Compilation procedures are described in working documents, but no compilation manual is maintained.

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

The compilation of statistical data from source accounting data employs bridge and derivation tables, which map budgetary revenue and expenditure classification items to the appropriate GFS classification items. The derivation tables, recommended by the *GFSM 1986*, identify which source data transactions require consolidation and reclassification. This process includes the derivation of the deficit/surplus and its financing, divided into foreign and domestic. The results from the derivation tables are confronted with the results obtained by the compilation of revenue and expenditure totals from detailed source data. Special attention is paid to data consolidation. Source data provide satisfactory information necessary for carrying out the consolidation of revenue, expenditure, and debt. In order for the consolidation to be easily understandable, matrices are compiled to show flows among general government units. In the compilation of these matrices, the recommended rule on accepting consolidation flows from the expenditures side is predominantly applied.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

No other data sources than those stated in part 3.1.1 are used for the compilation of GFS.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The definitive data sources are the accounting records prepared and submitted by the individual organizations of general government. The accounting framework guarantees the

consistency between the flows and changes in stocks, for accounting data. However, the revaluation of foreign financial assets and liabilities using end-of-period exchange rates, for statistical purposes, leads to a disconnect between changes in stocks and transactions flows. These differences are not reconciled under the *GFSM 1986* methodology.

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

Statistical outputs are checked horizontally and vertically to maintain logical links between detailed and aggregate items, as well as between general government and its subsectors. Possible statistical discrepancies in fiscal data among the MOF, the SOSR, and the NBS are minimized because all three organizations use identical sources of data, collected by the MOF. This does not guarantee that the source data are not adjusted or reclassified to satisfy a different methodological requirement or user view.

Currently, routine checks are not carried out to verify the consistency of comparable series in national accounts, monetary, and balance of payments data (see 4.2.3).

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)

Quarterly and annual GFS compiled in accordance with *GFSM 1986*, as well as source data that were used in their compilation, are archived. Annual statistics are held as time series, from 1996 to 2002, by individual unit and subsector, and for the entire general government sector, in both unconsolidated and consolidated forms. Data reliability is assessed annually, always during the compilation of the statistics for the latest year.

The necessary revisions of data in the preceding years are carried out subsequently to the result of this assessment. The complete revised time series are provided internally (within the MOF) to users of GFS. The findings that resulted from the assessment of data reliability and the revisions carried out are used to modify and add to the data collection program for the following year. One example would be the inclusion of Slovenská konsolidačná, a.s. in general government finance statistics.

No documentation is maintained on the reasons and magnitudes of historical revisions. Revision studies are not conducted.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of the dissemination of GFS data follows the IMF's SDDS. Data on general government operations (revenue, expenditure, deficit) are disseminated annually. Data on central government operations (state budget) are disseminated monthly. Data on central government debt are disseminated quarterly.

4.1.2 Timeliness follows dissemination standards

The timeliness of the dissemination of GFS data meets the requirements of the IMF's SDDS. Annual data on general government operations are disseminated within six months after the end of the year. Monthly data on central government operations are disseminated with a limited scope, within two to four days after the end of the month, and with greater detail within 10 to 14 days after the end of the month. Quarterly data for central government debt are disseminated within 10 weeks after the end of the quarter.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The same *GFSM 1986* classifications are used in the compilation of quarterly and annual statistics. General government organizations that use accrual accounting (Slovak Land Fund and Slovak Consolidation Agency) are required to report data to the MOF on a cash basis. Consequently, internal consistency of the datasets is maintained for the units and subsectors of general government.

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

Time series that are consistent with *GFSM 1986* methodology are available for the years 1996–2002. During the revisions carried out so far, changes have been introduced retroactively for the entire time series.

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

Source data described in part 3.1.1, used by the MOF for the compilation of GFS under the *GFSM 1986*, are also used by the SOSR for the compilation of national accounts. Because of conceptual differences between *GFSM 1986* and *1995 ESA* methodologies it is not possible to directly compare the summary measures (deficit/surplus and net lending/borrowing) of the two statistical systems. A reconciliation is made quarterly between *GFSM 1986* and *1995 ESA* statistics, by MOF and SOSR, when providing notification tables to the European

Commission. However, the 2003 September and December quarter movements in the SOSR general government final consumption expenditure data and the MOF expense series are significantly different and have not been reconciled.

So far, the GFS data have not been formally compared with the balance of payments data released by the NBS. Data from NBS bank accounts are regularly compared and reconciled with state budget accounting data. The National Property Fund, the Slovak Land Fund, and the Slovak Consolidation Agency do not keep their accounts at the NBS. The NBS collects banking data from their commercial banks and includes them with budgetary organizations' banking data, which are then compared with MOF data on deficit financing.

Fiscal financing data are not consistent with monetary and balance of payments data, nor is there consistency for debt data. These inconsistencies appear to be due to differences in coverage, classification, and valuation, rather than data sources. The MOF general government data includes the National Property Fund, while the NBS monetary survey, until recently, did not. Also, monthly and quarterly fiscal statistics cover the budgetary central government, while the monetary data reflect the consolidated central government. On classification, the MOF records securities issued domestically according to original purchaser, while the NBS records them based on current holder. On valuation, in GFS, interest on domestic currency denominated government bonds is on a cash basis, while in the balance of payments statistics, it is adjusted to accrual.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Historical data revisions are usually made at the time when statistics are compiled for the most recent year (for example, when data are submitted for publication in the IMF's *GFS Yearbook*). There is no regular schedule for the carrying out of revisions.

4.3.2 Preliminary and/or revised data are clearly identified

Preliminary GFS are compiled by the MOF for internal use. They are made available externally upon request and their preliminary character is clearly stated at the time.

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

At present, the MOF does not issue a statistical publication in which it presents the results of revisions and their explanation.

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)

GFS are presented on the MOF website according to the *GFSM 1986* methodology. Monthly and quarterly data are presented on a cumulative basis, which compromises analysis of time series. The annual consolidated data on revenue and expenditure, the deficit and its financing for the sector of general government are published in the Summary Table of Major Components recommended by the *GFSM 1986*. In addition, detailed consolidated revenue and expenditure of general government are published in separate tables. The published data from 1997 to 2002 are methodologically comparable.

Cash data for 2000 through 2002, originally compiled under the *GFSM 1986* standard, were transformed into the *GFSM 2001* format and provided to the IMF for publication in the 2003 *GFS Yearbook*.

5.1.2 Dissemination media and format are adequate

GFS data are disseminated by the MOF in two ways:

- via the www.finance.gov.sk/ website
- via e-mail on inform@mfsr.sk/

The SDDS section on the MOF website is maintained in accordance with the prescribed SDDS dissemination schedule, showing *GFSM 1986* framework tables on annual general government data, monthly data on central budgetary government (state budget), and quarterly data on central budgetary government (state budget) debt. The format of these presentations is constant, which ensures easy recognition for data users.

In the last three years, the annual State Closing Account report has been published on the MOF's website, after its approval by the National Council of the Slovak Republic, in June or July. Copies of the State Closing Account are available to the public in MOF's library. Information presented in the State Closing Account are provided to the public at no cost, pursuant to the *Freedom of Information Act* No. 211/2000. Data on the deficit of the general government, provided on a *GFSM 1986* basis and according to the *1995 ESA* methodology, together with detailed information on budget execution, are included in the State Closing Account. The entire document is disseminated on the MOF website.

E-mail is used by the MOF as a medium for the dissemination of individual requests for selected fiscal data. Requests are typically received from universities, banks, unions, and nongovernment organizations.

5.1.3 Statistics are released on a preannounced schedule

The MOF uses the SDDS data dissemination schedule (advance release calendar) to notify users when data will be available. The data are released punctually in accordance with the preannounced dates.

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

The GFS data are released by the MOF on its website on the dates that are announced six months in advance, in accordance with the SDDS advance release calendar. This ensures that data are made available to all users at the same time.

5.1.5 Statistics not routinely disseminated are made available upon request

Apart from GFS data published by the MOF on its website, other data are also available to users of statistics. The MOF's Section of National Reporting provides other data upon request. This dissemination policy is regulated by the *Freedom of Information Act* No. 211/2000. In accordance with this act, the MOF's Press and Public Relations Department maintains an official record of all information requests, which are processed in cooperation with the relevant Sections of the ministry. The Section of National Reporting is responsible for queries on GFS. Under the above-mentioned act, the requests must be answered within 10 days. The users of statistics can also send their requests to the MOF by e-mail, via website inform@mfsr.sk/. The procedures necessary for obtaining the information are provided 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

Metadata on the data disseminated through the MOF website are published on the website www.statistics.gov.sk/.

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

General information on statistical data is also published on www.statistics.gov.sk/. However, background papers and working documents are not provided to the public. The disseminated fiscal metadata and information on compilation methods are incomplete.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The contact point for information: contact person, telephone number, fax, and e-mail address; are included on the MOF website www.statistics.gov.sk/.

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

The MOF does not publish a catalog of publications and documents on GFS and a list of available fiscal statistics is not disseminated. The scope of services provided to users of GFS is defined under the *Freedom of Information Act* no. 211/2000, which includes the obligation to provide, upon request, all types of government information, within 10 days. The MOF website includes guidelines on how to obtain the information, which covers both the procedures involved and the charges for these services.

Table 4. Slovak Republic: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics (Compiling Agency: Ministry of Finance)

Key to symbols: $NA = Not Applicable$; $O = Practice Observed$; $LO = Proceed$	actice L	argely	Observed;	LNO = P	= Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS
Llamant	VIV	Ì	Assessment	ent	Commanta
Element	NA	0	TO TNO	ON C	Comments
0. Prerequisites of quality					
0.1 Legal and institutional environment			×		There is no clear mandate to disseminate GFS.
0.2 Resources			×		Strengthening of fiscal statistics requires additional resources.
0.3 Relevance			×		User needs are not actively monitored.
0.4 Other quality management			×		There is no declared statistical program.
1. Assurances of integrity					
1.1 Professionalism			X		Guided significantly by accounting and administrative rather than statistical considerations
1.2 Transparency			×		Statistical methodology, techniques, and processes are not notified to the public.
1.3 Ethical standards		×			
2. Methodological soundness					
2.1 Concepts and definitions		X			
2.2 Scope		×			
2.3 Classification/sectorization		×			
2.4 Basis for recording		X			
3. Accuracy and reliability					
3.1 Source data		×			
3.2 Assessment of source data		×			
3.3 Statistical techniques		×			
3.4 Assessment and validation of intermediate data and		×			
statistical outputs					
3.5 Revision studies	X				Revision studies are not conducted.
4. Serviceability					
4.1 Periodicity and timeliness		X			
4.2 Consistency			×		Fiscal, monetary, and balance of payments financing data are inconsistent.
					Fiscal and national accounts data are not reconciled. Fiscal, monetary, and balance of payments debt data have different coverage.
4.3 Revision policy and practice			×		There is no regular revisions schedule or revisions analysis.
5. Accessibility					
5.1 Data accessibility			×		Monthly and quarterly data are presented on a cumulative basis.
5.2 Metadata accessibility			<u>×</u>		Fiscal metadata and information on compilation methods are incomplete.
5.3 Assistance to users			X		List of available fiscal statistics is not disseminated.

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

Monetary statistics are collected, compiled, and disseminated by the National Bank of Slovakia (NBS), the central bank of the Slovak Republic. The NBS collects data from all operating commercial banks and also from banks in liquidation. The legal basis for data collection is given in Article 42 of the Banking Act, which states that banks and branch offices of foreign banks shall be obliged to produce and present to the NBS returns, notifications, and other reports, within specified deadlines; and the content, form, arrangement, deadlines, method, and place of presentation shall be stipulated by the NBS in a decree promulgated in the country's "Collection of Laws."

Article 42 also states that data and other information in returns, notifications, and other reports must be comprehensible, easy to follow, supportable, and give a true and fair picture of reported facts, and must be presented in a timely manner. When presented returns, notifications, and other reports fail to comply with the prescribed methodology, or when reasonable doubts arise as to their correctness or completeness, banks and branches of foreign banks shall be obliged to provide the NBS with supporting material and explanation at its request within a set deadline. Finally, the NBS can also require certain statistical reporting requirements from banks, branches of foreign banks, and asset management companies through NBS decrees. Examples of such decrees in 2003 include Decree No. 9/2003 to asset managements companies and Decree No. 10/2003 to banks on new statistical reporting requirements.

In addition, Article 34a of the NBS Act provides the legal foundation for the NBS to collect information from nonbank entities, such as securities dealers and other financial entities. Article 34a states that "state authorities, local self-governing bodies, any other public bodies, and other legal persons and natural persons shall be obliged to submit to the National Bank of Slovakia free of charge, complete, correct, true, and timely information, reports, statements and other supporting documents and explanations that the National Bank of Slovakia needs to perform its tasks under this [NBS] Act and under special regulations; the content, form, structure, deadlines and method of presentation shall be stipulated by the National Bank of Slovakia through decrees promulgated in the Collection of Laws of the Slovak Republic."

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

The NBS is the sole institution involved in compiling monetary statistics. It collects all the requisite source data needed for this purpose. The NBS also disseminates monetary statistics to domestic and foreign users, including international organizations. It cooperates closely

with domestic agencies like the Statistical Office of the Slovak Republic (SOSR) and the Ministry of Finance (MOF) to which it supplies NBS and aggregated bank data on a regular basis. In turn, the NBS obtains data such as GDP and inflation from the SOSR. Each year, the NBS consults with the MOF and SOSR before it finalizes any needed changes or additions to its bank reporting forms.

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

The confidentiality of individual reporters' data is guaranteed by the National Bank of Slovakia Act. Article 40 of the Act regulates banking secrecy at the NBS and states that banking secrecy is to be observed in all banking operations of the NBS. More specifically, the Governor's Instruction No. 11/1997 including subsequent amendments stipulates that the confidentiality of individual bank data must be strictly upheld and that only aggregated information can be made available to the public—so that the identification of data on individual transactions and reporting institutions can be prevented. The NBS has internal rules on staff which allows for access to data only for work-related needs. For instance, access to a new database on entrepreneurs is limited to only 10 staff, bankwide. Respondents to bank report forms are informed that the information they provide will be used solely for the purpose of producing statistics.

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

Article 42 of the Banking Act (see Section 0.1.1) provides the legal basis for statistical reporting and data collection. Part Nine of the Banking Act also mandates that noncompliance with reporting requirements will trigger corrective measures from the NBS including penalties.

Commercial banks are encouraged to report to the NBS because they also benefit from the publication of monetary statistics on a comprehensive and timely basis. To facilitate data reporting, the NBS strives to provide banks with very clear and detailed instructions on how data should be reported. In addition, the NBS seeks to create goodwill and secure cooperation from reporters by seeking their comments before any changes to report forms or new reporting requirements are implemented.

0.2 Resources

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

The Statistics Department (SD) of the NBS is made up of four sections—statistics for international institutions; banking statistics; foreign exchange statistics; and statistics on nonbanking subjects. The statistics for international institutions section is responsible for collection, compilation, and dissemination of monetary statistics in line with the

methodology of international institutions such as the European Central Bank (ECB) and the IMF (the so-called "harmonised monetary statistics"). The section has six staff, consisting of one staff in technical support, and the remaining five involved in methodology, data compilation, and collection (since January 2004, the responsibility for data collection has been shared with the banking statistics division). The Banking Statistics section is responsible for collecting bank statistics, which are processed and then forwarded to the Monetary Policy Department for the compilation of what is called "national monetary statistics" which is used for policy making by the NBS Board. The foreign exchange statistics section and the section on nonbanking subjects are responsible for collecting data for balance of payments statistics.

Overall, the number of staff for the compilation of monetary statistics is adequate. They are well qualified and the department puts great emphasis on staff training through attendance at training courses overseas. Wages at the NBS are competitive within the public sector and staff turnover is relatively low.

Funding generally has not been a problem. In recent years, the budget has expanded rapidly in part because of Slovakia's need as an accession country to meet ECB requirements in statistics. Two years ago, the statistics for international institutions section was created to meet such needs; and recently, five new staff were hired to manage the new database on entrepreneurs.

Computer resources are adequate. Software utilized for compiling and analyzing statistical data is effective, periodically updated, and well adapted to perform existing and new tasks. Hardware is also generally available to facilitate processing of data, and the SD gets effective support from the Information Technology Department. Protection is provided for computer resources via the implementation of emergency back-up systems. Physical facilities and other resources are also adequate to perform the required tasks.

0.2.2 Measures to ensure efficient use of resources are implemented

Periodic reviews of staff performance were previously not conducted, but beginning in 2004, half yearly reviews of individual performance accompanied by a personal merit rating system will be implemented. In addition, there will be annual reviews to determine education and training needs of staff. Costing and budgeting practices are in place. The budget has to be approved by the Board every September. Travel must be approved by the Director of the Department, and cost savings are sought by requiring traveling staff to take the cheapest economy flight available and the lowest cost hotel accommodations.

0.3 Relevance

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

The relevance of the monetary statistics produced is safeguarded by regular consultations with data users. Within NBS, the SD consults frequently with the Monetary Policy Department for inputs into the types of data needed for policy analysis. Outside NBS, the SD consults with the SOSR and MOF each May on their data needs, including comments on any prospective revisions to bank report forms. Interaction with other outside users is undertaken through the NBS's Public Relations Section, which will channel user needs to the relevant agency in the bank. In addition, the NBS regularly participates in statistical meetings and seminars organized by international organizations to keep abreast of new and emerging requirements for statistics.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

Reliable monetary statistics are crucial for monetary policy decisions. Thus, SD management is sensitive to all aspects of data quality, and promotes a shared concern for data quality throughout the department. Processes in place to ensure data quality include computerized procedures to check reported data for internal consistency as well as consistency across reporting institutions; and a commitment to ensure that monetary statistics are compiled and disseminated in a timely manner. The emphasis placed on internal verification and checking of data before release to the public is a signal to staff regarding management's commitment to quality.

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

Managers are informed of the quality of the statistical work program especially concerning the extent to which monetary statistics are produced consistently on a timely basis. Where local expertise is lacking and expert guidance is needed to improve the quality of the statistical program, management is prepared to look abroad for viable candidates. The creation of the statistics for international institutions section reflects the organization's efforts to upgrade statistical compilation in line with international methodologies, as well as to gauge progress and success towards that objective.

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

As noted in Section 0.3.1, there is regular contact with users within NBS, from other public sector agencies, and from the public, in order to gauge the relevance of the monetary statistics produced. This interaction, however, also affords regular opportunities for the SD to obtain feedback on quality issues and new and emerging data requirements. In addition,

another emphasis of SD, in planning its statistical program, has been to achieve higher efficiency through greater specialization--by reorganizing existing staff as necessary. Success in achieving greater efficiency will result in increased resource availability to SD without the necessary trade-offs from other dimensions of quality, like timeliness, accuracy, and reliability.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Under the NBS Act, the NBS is the independent central bank of the Slovak Republic. The NBS is a legal entity, empowered to issue binding regulations and decrees as promulgated in the "Collection of Laws" of the Slovak Republic. The Act specifies the relationship of the NBS with the government as follows: The NBS shall fulfill its tasks independently of instructions from state authorities, local self-government bodies, any other public bodies and from legal persons and natural persons.

Professionalism of SD staff is underpinned by the NBS recruitment process. Recruitment is based exclusively on merit, especially the expertise and aptitude of the job seekers in the fields of accounting and statistical methods. Once selected, recruits are subject to hands-on internal training in the methodology and compilation of monetary statistics. SD staff have many opportunities to participate in training seminars, courses, and workshops organized by the Institute of Bank Education, a department within NBS, as well as from professional organizations and international organizations like the ECB, in order to further their knowledge of statistical methods and practices.

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

The choice of source data and statistical techniques is based solely on statistical considerations, particularly the meeting of international statistical requirements. Likewise, decisions about the timing and mode of dissemination are preannounced and based only on statistical considerations.

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

The NBS's Public Relations Department usually monitors the information published by the press. Thus far, there has been no occasion where the NBS has had to comment on erroneous interpretations of its statistics, although it has the legal right to do so. This experience may reflect the fact that explanatory materials are always provided on the NBS website whenever there is a change in data due to a change in methodology or other significant revisions. In

addition, briefings are organized regularly to comment on developments in key monetary indicators.

1.2 Transparency

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

The laws and decrees that set the terms and conditions for the compilation and dissemination of monetary statistics, including confidentiality provisions, are available on the NBS website.

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

No official outside the NBS has access to the data prior to publication or dissemination on the NBS website.

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

All NBS publications (and its website), clearly identify the NBS as the data producing agency for its outputs. Data obtained from other agencies such as the SOSR, Financial Market Authority, and Stock Exchange also clearly identify their sources.

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

In the past, the NBS had not given advance notice of changes in methodology, source data, or statistical techniques. Its experience had been that major changes could not be implemented until the NBS Board gave its approval. However, once approval was given, the changes tended to be implemented quickly. At that time, notes, footnotes, supplementary comments, an/or articles were provided to explain the changes. Prior to the mission's departure, the NBS implemented a new policy by giving advance notice on the NBS website that monetary data compiled according to ECB methodology would be disseminated in five weeks.

1.3 Ethical standards

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

Ethical standards for staff behavior are part of the NBS employment contract. New NBS staff are required to sign an agreement to adhere to confidentiality and secrecy rules while working at the NBS. As noted in Section 0.1.3, the Governor's Instruction No. 11/1997 establishes clearly the rules on the confidentiality of individual bank data while Article 40 of the Banking Act establishes secrecy rules on banking operations of the NBS. New staff are made aware of the standards when they join and the standards are reinforced through training courses, which provide guidance on staff behavior and the ethical standards expected of NBS staff.

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 NBS compiles two sets of monetary statistics. The first set is called "national monetary statistics (NMS)," which is compiled by the Monetary Policy Department of the NBS and used in internal discussions of monetary policy as well as in consultations with the European Department of the IMF. The second set is called "Harmonized Monetary Statistics (HMS)," which is compiled by the statistics for international institutions section of the NBS's SD, and submitted to international institutions such as the IMF (specifically, its Statistics Department) and the ECB. Both sets of statistics use the same source data reported by banks to NBS. The NMS also covers data on nondepository corporations' liabilities, specifically, the government's foreign liabilities, including its domestic currency bonds and bills held by nonresidents (described below). In contrast, the HMS data cover money market funds (obtained from asset management companies) in addition to bank data.

The concepts and definitions underlying the NMS and HMS are broadly similar but there are also a few significant differences. The NMS are largely based on the methodology underlying the IMF's 1984 draft *Guide to Money and Banking Statistics (GMBS)* and on guidance given to the authorities over the years by visiting IMF European Department missions. On the other hand, the HMS is based on the methodology underlying the ECB's framework for monetary statistics, which is largely consistent with the principles underlying the IMF's *Monetary and Financial Statistics Manual (MFSM)*.

Structure of the NMS

The NMS compiled by the Monetary Policy Department include the monthly monetary survey of banking institutions, which is largely equivalent to the *MFSM's* depository corporations survey or broad money survey. It presents measures of liquidity and its counterparts, which reflect depository corporations' positions by economic sector and by financial instrument. In addition, depository corporations' positions in Slovak crowns (Sk) and foreign currencies are also available.

The NMS measures of liquidity are broad money and its components, progressing from narrow money (M1) to narrow money plus quasi-money (M2 or broad money), each disaggregated by their constituent financial instruments. Narrow money consists of currency outside banks and demand (transferable) deposits in Sks while quasi-money comprises time,

¹ Various monetary aggregates of NMS are also submitted to the ECB, which designates them as "nationally defined" aggregates.

Monetary Statistics

savings, and all foreign currency deposits. The M2 aggregate comprises M1 plus quasimoney.

A special feature of the national definition of broad money under the NMS is that money holders include certain nonresidents, in addition to the usual resident holders like nonfinancial corporations, other financial corporations, households and other resident sectors.² The Sk deposits of nonresidents in domestic banks are included in the NMS measure of M2.³ While this treatment of nonresident deposits deviates from the 1984 IMF's *GMBS*, it is consistent with *MFSM* guidelines, which does not contain prescriptions for the national definition of broad money and provides substantial discretion for the authorities (*MFSM*, para. 283)—although for transparency, the *MFSM* would recommend that such deposits be separately identified as nonresident deposits included under M2. In this context, the M2 aggregate under the NMS also excludes bank liabilities like repo deposits, debt securities of depository corporations with less than two year's maturities, and money market fund shares held by domestic nonbanks.

The counterparts to measures of liquidity are net foreign assets and net domestic assets. Net foreign assets are largely positions of depository corporations relative to nonresidents, but under the NMS, they also include certain adjustments that re-route from "government liabilities to nonresidents" into "central bank liabilities to nonresidents," with contra-entries in the central bank's claims on the government. Under the NMS, these adjustments are undertaken for the government's foreign liabilities to nonresidents in foreign currency as well as for the government's liabilities to nonresidents in the form of Sk government bonds and bills. Such adjustments are allowed under *GMBS* guidelines, but only if the government transactions with nonresidents reflected a performance of the *monetary authorities' function* (such as when a Treasury borrows from the IMF). However, the government transactions with nonresidents in the NMS largely reflect transactions of a fiscal nature, which should not be rerouted to the central bank's accounts. These NMS adjustments for net foreign assets are inconsistent with the *MFSM* guidelines.

The NMS net domestic assets have three major components: net claims on general government (i.e., net of general government deposits), credit to households and enterprises, and other items (net). Net claims on general government reflect the contra-entries implemented with the rerouting of government foreign liabilities to the central bank's accounts, making them larger than if such rerouting adjustments had not been implemented. Credit to the nongovernment sector is disaggregated by domestic and foreign currency. Only

² Local governments and social security funds are not defined as money holders in the NMS; deposits of these entities are not part of broad money. These deposits are netted against bank claims on them under "net credit to general government" because these institutional units are part of the general government sector.

³ As of end-January 2004, these deposits were small, about 0.3 percent of M2.

the credit to the nongovernment sector in domestic currency is further disaggregated by households and enterprises—even though the data collected would allow for finer disaggregation of credit in domestic and foreign currency, in line with *MFSM* recommendations. Other items net comprises interbank balances, fixed assets, capital and reserves, repo deposits, debt securities of depository corporations, and other unclassified assets less unclassified liabilities.

Structure of the HMS

The HMS compiled by the statistics for international institutions section presents a monetary survey that is equivalent to the *MFSM's* depository corporations or broad money survey. The HMS differs from the NMS in three major ways: (1) its definition of broad money does not include Sk deposits of nonresidents; (2) but broad money includes repos, debt securities of depository corporations with under two year's maturity, and money market fund shares, and (3) its definition of net foreign assets does not include the rerouting of government foreign liabilities to the central bank's accounts. In contrast to the NMS, the HMS definitions of broad money and net foreign assets are consistent with the methodology of the *MFSM*.

The liquidity measures are broader than for NMS and consist of three monetary aggregates—M1, M2, and M3—with M3 being the broadest measure in line with ECB requirements. M1 consists of currency outside banks and Sk and foreign currency demand deposits, including overnight deposits; M2 consists of M1 plus Sk foreign currency time deposits of up to two years plus deposits redeemable with notice of up to three months. M3 consists of M2 plus repos, bank debt securities with a maturity of up to two years, and money market fund shares held by domestic nonbanks. These HMS liquidity measures differ from those of the NMS, but both measures are consistent with *MFSM* methodology. Apart from the liquidity measures, the other item in HMS liabilities is capital and reserves.

The counterparts to HMS measures of liquidity and its capital and reserves are net foreign assets, net claims on central government, credit to state and local governments and other resident sectors, and other items net. Other items net comprises interbank balances, fixed assets, repo deposits, long term debt securities of depository corporations, and other unclassified assets less unclassified liabilities.

2.2 Scope

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

The scope of the monetary survey under the NMS is broadly consistent with the recommendations of the *MFSM* because it includes the positions of all resident depository corporations in the Slovak Republic. However, it deviates from *MFSM* guidelines by including the coverage of the foreign liabilities (in foreign and domestic currency) of government within the monetary sector. In addition, the NMS monetary survey excludes the coverage of money market funds, which are recommended for inclusion by *MFSM*,

since money market fund shares are likely to be good substitutes for deposits.⁴

The scope of the monetary survey under HMS is mostly consistent with *MFSM* principles. The HMS survey covers positions of all resident depository corporations plus money market funds as recommended by the *MFSM*.

One difference between both the NMS and HMS and the *MFSM* on the issue of scope is that banks in the process of liquidation are excluded from the NMS and HMS monetary statistics. However, under the *MFSM*, depository corporations operating under the control of regulators, even when they are no longer dealing with the public, should continue to be covered in the depository corporations survey. The rationale is that as long as these depository corporations continue to exist, its liabilities to all depositors and other creditors continue to exist (*MFSM*, paras. 95 and 308). However, the NMS and HMS treatment of banks in liquidation is consistent with ECB guidelines, which follow a more legalistic approach. Banks whose licenses have been cancelled by supervisory authorities, by definition, drop out of the ECB list of monetary financial institutions (equivalent to depository corporations) covered in ECB monetary statistics.

2.3 Classification/sectorization

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

The principles underlying the sectorization of institutional units under both the NMS and HMS are largely consistent with the *MFSM* methodology, as well as with the *European System of Accounts 1995 (1995 ESA)* and the *System of National accounts 1993 (1993 SNA)*. Both NMS and HMS apply the "center of economic interest" criterion to distinguish between resident and nonresident units, in accordance with the IMF's *Balance of Payments Manual*, fifth edition, and in conformity with the *MFSM*.

The nonresident sector under the NMS is disaggregated into central banks, other monetary financial institutions (equivalent to depository corporations), and all other sectors. The HMS breaks down its nonresident sector into European Monetary Union participating states, and the rest of the world before applying the NMS disaggregation to each of its two main nonresident subsector components.

The NMS resident sectors are disaggregated as follows: (1) financial corporations, which includes the central bank, other monetary financial institutions, and other financial corporations such as insurance corporations and other financial intermediaries; (2) general

⁴ While money market funds are excluded from the NMS monetary survey (the data used in policy making), the liabilities of money market funds have begun to be monitored by NBS's Board from 2004 onwards.

government, which includes the central government, local governments, and social security funds, and the National Property Fund; (3) nonfinancial corporations, including public and other nonfinancial corporations; and (4) other resident sectors, including households and nonprofit institutions serving households. Again the HMS has the same disaggregation except that it does not require a breakdown of nonfinancial corporations into its public and private components (in line with ECB requirements).

The classification of financial instruments under the NMS and HMS is also broadly consistent with the *MFSM*. NMS financial instruments are broken into the following groups: monetary gold and SDRs; currency and deposits; loans; securities other than shares; shares; and other assets/liabilities, net.⁵ The HMS has largely the same breakdowns except that it shows an additional subcategory, "money market fund shares;" shows capital and reserves separately; and indistinguishably include deposits with loans on the asset side of the balance sheet, and loans with deposits on the liability side.

In terms of instrument classification, the HMS follows ECB guidelines, which are consistent with the *MFSM*, except in the following aspects: (1) Loan-loss provisions are classified with capital and reserves in HMS,⁶ but as part of other liabilities in the *MFSM*;⁷ (2) financial derivatives are indistinguishably included under other assets/liabilities in HMS but as a separate category in *MFSM* because of their distinct category as a financial instrument; and (3) deposits are indistinguishably included with loans on the asset side of the balance sheet, and loans with deposits on the liability side, while the *MFSM* recommends that loans and deposits be kept as separate categories because of their different marketability and liquidity characteristics.

⁵ The NMS monetary survey does not explicitly show financial derivatives and capital and reserves as separate categories. Both are indistinguishably included in other assets/liabilities, net or other items, net.

⁶ Loan-loss provisions are not shown as a separate subcategory in the NMS monetary survey; as with financial derivatives and capital and reserves, loan-loss provisions are indistinguishably included in other items, net.

⁷ The *MFSM* treats provisions for loan losses as part of the system's financial accounts. It follows international accounting standards that recommend recording provisions against loan losses (called "allowances" rather than "provisions" in international accounting standards) as a separate liability item. In principle, the *1993 SNA* methodology does not make use of loanloss provisions, which are subsumed within the capital account. In contrast, the *MFSM* methodology explicitly accounts for provisions for loan losses (under other liabilities) and reserves (within shares and other equity). For reference, in the ECB framework, provisions represent internal funds of the reporting institution, accumulated from nondistributed profits, and, hence, are classified under the liability item "capital and reserves."

Finally, the NMS, HMS, and the *MFSM* all agree that repos should be classified as collateral loans (or as deposits if the repos are included in broad money) rather than as outright purchases or sales of securities.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Valuation rules are largely the same for the NMS and HMS. In general, they follow international accounting standards (IAS), in particular IAS 39, which provides guidelines for the reporting of financial instruments, and which banks in the Slovak Republic were required to implement from January 2003. While IAS 39 prescribes market prices or fair valuation for many instruments, it also allows certain instruments to be valued at nominal value, historical cost, or amortized cost. Thus, valuation rules under NMS and HMS vary across different types of financial instruments.

Financial instruments that are valued at market prices under the NMS and HMS in line with *MFSM* recommendations include monetary gold, financial derivatives, and securities (including both securities other than shares, and shares and other equity) that are held in "trading portfolios" or are "available for sale." However, securities other than shares that are deemed to be "held to maturity" are valued at amortized cost, and shares and other equity in subsidiary or affiliated companies are in general valued at historical cost, contrary to *MFSM* recommendations.⁸

In line with *MFSM* recommendations, shares and other equity on the liability side of the balance sheet are valued at historical cost or book value; loans are recorded gross of provisions; and foreign currency-denominated stocks of assets and liabilities are converted into domestic currency at market exchange rates, that is the mid-point exchange rate quoted by the NBS on the balance sheet date.

2.4.2 Recording is done on an accrual basis

Both the NMS and HMS are derived from accounting records that follow accrual accounting. In general, transactions are recorded on the settlement date (in line with ECB guidelines) which may differ marginally from the change of ownership date, as recommended in the *MFSM*. The NMS incorporates accrued interest into the value of loans and deposits in line with *MFSM* recommendations but the HMS classifies accrued interest on loans and deposits

⁸ Securities other than shares "held to maturity" are valued at historical cost plus an accrued premium or discount, related to whether the security is purchased at a price below or above its face value.

Monetary Statistics

as part of other assets/liabilities (contrary to *MFSM* recommendations—but in line with ECB requirements).⁹

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

As recommended in the *MFSM*, source data are collected on a gross basis in the NMS and HMS. In particular, claims on particular transactors are not netted against liabilities to those transactors.¹⁰

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 register of financial sector institutional units, including depository corporations and other financial intermediaries, is available as core data sources. This comprises information from the register of credit institutions and branches of foreign banks licensed by the NBS and from the register of the Financial Market Authority, an agency recently established to supervise the capital market. The institutional and geographic coverage for depository corporations is complete.

The source data for compiling the balance sheet of the NBS are the accounting records of the NBS, which are prepared by its Accounting Department. The data are available on a daily basis. The source data for the commercial banks are the report forms transmitted

⁹ On the issue of incorporating accrued interest into the value of the financial instrument, the *MFSM* approach provides an economically meaningful way to obtain an accurate measure of the value of an asset/liability at a given point in time. The value of an instrument at any moment equals the discounted value of future payments (including interest and/or capital). Therefore, an instrument that is valued to include accrued interest reconciles past economic flows with future expected economic flows. The ECB framework results in inconsistencies in the valuation of different types of financial instruments (e.g., loans and deposits versus zero coupon bonds). The *MFSM* approach is also consistent with the *1995 ESA*, although the *1995 ESA* states that national practices can differ.

¹⁰ In compiling the monetary survey (or depository corporations survey), data on financial assets and liabilities are aggregated into major categories (e.g., claims by debtors and liabilities by instruments). While such data are generally compiled on a gross basis, some categories are presented on a net basis because of the analytical usefulness of data in this form (for example, net foreign assets and net claims on central government). Whenever data on a net basis are shown in the surveys, the underlying gross data should also be presented.

- 94 -

electronically by each bank to the NBS; and the source data for money market funds are the report forms submitted by asset management companies. These report forms are comprehensive and contain sufficient information for classification of data by financial instruments and by economic sector, as defined in the MFSM. In addition to information obtained from these report forms, the NBS is legally empowered to collect supplementary information outside the regular reporting cycle, as needed, to support the core compilation.

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

Source data are broadly in line with the required definitions, scope, classifications, valuation, and time of recording principles, as outlined in the MFSM and other internationally accepted good practices. In line with efforts to meet ECB requirements for monetary statistics, the statistical reporting requirements for source data were again underscored by two NBS decrees to credit institutions and asset management companies in 2003 (Decrees No.10/2003 and Decree No. 9, respectively). 11 In general, there has been no need for approximations or other adjustments to source data. Decree No. 9 ensures that any supplementary information from asset management companies on money market funds adhere to the same statistical reporting requirements as for source data from banks.

3.1.3 Source data are timely

The accounting records of the NBS and commercial banks are timely. The balance sheet of the NBS is available on a daily basis, while banks report their data to NBS by close of business on the 15th calendar date following the end of the reference month. Any delays in reporting are immediately followed up by the NBS with the nonreporting bank. All reporting by banks to the NBS is by electronic means via a secure network, and delays in updating individual records are not significant.

3.2 Assessment of source data

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

Sample surveys are not used in compiling monetary statistics. Detailed balance sheet records reflecting the statistical reporting requirements of the NBS constitute the source data for compiling monetary statistics. Automated procedures are in place for source data validation through the NBS's computer programming system (APS STATUS) and various supplementary computerized procedures. Upon receipt of data, the APS STATUS program

¹¹ Decree No. 9 also covers requirements under the NMS.

analyses the internal consistency of data reported by each institution and checks consistency across banks, such as for interbank positions. Supplementary computerized programs developed by the SD are also used to identify out-of-trend movements in data and missing values. Findings of data inconsistencies and out-of-trend values are immediately followed up with the respondents. High value transactions are also confirmed with the reporting institutions, and source data are analyzed when data are revised. Once the reported source data have passed the validation procedures, they are made available for statistical compilation.

Bank report forms are reviewed and revised on an annual basis in order to take into account new developments in financial markets and new data requirements. These reviews are undertaken in consultation with users such as the Monetary Policy Division of the NBS, the SOSR, and the MOF.

3.3 Statistical techniques

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

The use of automated data processes has minimized processing errors during coding, editing, and tabulation. The bank report forms are designed to facilitate computer processing, and the structure of report forms are uniform across reporters. Balance sheet data are reported in full, and, in general, compilation of monetary statistics does not require estimated, imputed, or adjusted data. Aggregation of the reported balance sheet data is performed electronically and is robust.

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

Data are reported by all depository corporations and are not subject to coverage or other statistical adjustments. Seasonal adjustments on certain monetary aggregates is performed for internal analytical purposes only, using the ARIMA X12 computer program, but at this point, these seasonally-adjusted series are not part of the officially published monetary statistics.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Secondary data sources are often consulted to verify the accuracy of depository corporations balance sheets. For instance, data from financial markets are used to verify data on money market fund positions, and data on government bonds and bills from the NBS's Banking Operations Department are used to verify data on depository corporations' holdings of such instruments.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Where reasonable doubt exists as to the correctness, completeness, or changes in data (e.g., exceptionally large changes) the NBS contacts the reporting agents to investigate the sources of such behavior. The relevant reporting banks are then required to provide the NBS with supporting materials and explanations within a set deadline. In addition, as noted in Section 3.4.1, reported data are often cross-checked with information in other databases, such as data on outstanding government bonds and bills.

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

As noted in Section 3.4.2, large fluctuations in monetary or credit aggregates in the detailed monetary accounts are routinely investigated for their causes, including classification or sectorization errors. Also, reported financial flow data are reconciled with the corresponding stock data and inconsistencies are investigated with the relevant reporting agents.

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)

Monthly monetary statistics published in NBS monthly bulletins and disseminated through its website are usually final, reflecting the nature of the data obtained from bank report forms. Thus, there is no set schedule for revisions, except for December data, which are revised when audited data become available the following March. In practice, revisions are undertaken whenever the need arises, or when there is a change in the accounting system or in methodology, which affects the compilation system. Unless the latter occurs, revisions to monthly monetary statistics tend to be rare, of small magnitude, and not significant for the major aggregates.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The NMS data on the analytical accounts of the central bank and of the banking sector (monetary survey) are disseminated on a monthly basis, in line with Special Data Dissemination Standard (SDDS) requirements. In addition, the major aggregates in the central bank's accounts are disseminated on a 10-day basis, exceeding SDDS requirements. HMS data are disseminated on a monthly basis.

4.1.2 Timeliness follows dissemination standards

The NMS data on the detailed analytical accounts of the central bank and of the banking sector (monetary survey) are disseminated within one month following the end of the reference month. The 10-day major aggregates of the central bank are disseminated within two weeks of the reference date. The timely dissemination for both the detailed accounts and major aggregates meets SDDS requirements. HMS data are disseminated in line with ECB requirements.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The NBS strives to ensure the accuracy of the information used to compile monetary statistics through internal consistency checks. In particular, data on the central bank's and other depository corporations' claims on, and liabilities to each other are regularly checked to ensure that the positions are internally consistent. Staff of the Statistics Department has detailed data from each of the other depository corporations on its asset and liability positions with the NBS, and vice versa. If any significant discrepancies are noted, the staff immediately investigate the reasons and contact the institution concerned to resolve the problem.

Since January 2004, banks have been required to complete new report forms designed to compile monetary flow data, such as on reclassifications, revaluations, and exchange rate changes. Information from these new report forms have allowed the NBS to check the consistency of stocks and flow data.

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

Consistent time series are available for a period of at least eight years. When methodological changes are implemented, data are revised as far back as the available detailed information permits. When there is discontinuity in data, methodological footnotes are provided. An example can be found in recent monthly bulletins, where footnotes explain changes in time series in part because of the exclusion of data for banks that ceased to operate in 2000, 2001, and 2002. In addition, comparable time series, one including and the other excluding data for the nonoperating banks, were provided for users to assess the impact of the changes.

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

Banking data in the balance of payments cannot be reconciled with monetary stock data, given the information presently available. However, these two sets of data are in principle reconcilable because they are both drawn from the same source data collected from bank report forms. There appear to be material differences between financing data from government finance statistics (GFS) and the corresponding data from monetary statistics,

specifically between domestic bank financing of government in the GFS and the net claims on government in the monetary statistics.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Monthly monetary statistics published in NBS's monthly bulletins and disseminated on its website are usually final, reflecting the nature of the data obtained from bank report forms. Thus, there is no set revision schedule for these data. As noted in Section 3.5.1, the exception is December data, which are revised when audited data become available the following March. No information is provided regarding the schedule for revising December data, although the latter is always clearly identified as preliminary in nature. Prior to the mission's departure, the NBS implemented a change in policy by announcing on its website that data for December are regularly revised every year to take into account final data from audited financial statements; and that the revised data will be published by the end of the second quarter of the following calendar year.

4.3.2 Preliminary and/or revised data are clearly identified

When data are disseminated, preliminary or revised data are clearly indicated, so that users are aware of the nature of the data. Preliminary data are indicated with an asterisk (*). This typically applies only to monthly data for December.

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

The NBS does not provide studies of revisions to the public. Such studies are kept for internal analysis. As noted in Section 3.5.1, revisions to monthly monetary statistics are rare and usually insignificant, ameliorating the need for in-depth studies. Where revised data reflect methodological or other sizeable adjustments, footnotes are provided to inform users of the underlying reasons for the revisions. Although revision studies are not published, the NBS has published ex-ante and ex-poste time series so that users can compare data under both the old and the new methodology, and be informed on the extent of the revisions.

5. Accessibility

5.1 Data accessibility

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

Monetary statistics in the NBS monthly bulletin (called the *Monetary Survey*) and the NBS website are generally presented in a clear manner. In the monthly bulletin, charts accompany tables to facilitate analysis, and explanatory footnotes accompany the tables. Data for the monetary survey are presented in a time series format for the past 13 months, while

supplementary tables that calculate growth rates for M2 and give further breakdowns of developments in loans and deposits are also provided. In addition, the major monetary and credit aggregates are included in a "Selected Indicators" table along with other economic indicators, thus facilitating the analysis of monetary developments in relation to developments in the other sectors of the economy. The monthly bulletin also provides commentaries that analyze the current monetary developments exhibited by the data.

In the NBS website, data on the monetary survey, and the balance sheet and analytical accounts of the central bank are provided. Data are also provided monthly, but for longer periods (several years) than in the monthly bulletin. In addition to data, the website also provides a "Situation Report" which is a summary of major monetary and other sectoral developments during the month.

Detailed HMS data on a sectoral basis are available on the website. However, detailed sectoral data are not available for the NMS in the monthly bulletin or on the English version of the website; they are only available in the Slovak version of the website and in the NBS Annual Reports.

In both the monthly bulletin and the website, data on general and central government are presented only on a net basis, making it difficult to identify the gross positions of either level of government; and, while the National Property Fund is discussed in the analytical text of the monthly bulletin as a part of general government, it is shown in the attached monetary table as an entity outside of general government, which can be confusing to readers (see 2.3.1).

5.1.2 Dissemination media and format are adequate

The dissemination media and format for monetary statistics are broadly adequate. The NBS disseminates monetary statistics in hard copy (NBS monthly bulletin) as well as in electronic format on the NBS website. The entire monthly bulletin is also posted on the website. Data on the website are presented in tabular form and a time series format, which can be easily downloaded and redisseminated if needed. These monthly data are also available for relatively long time periods.

5.1.3 Statistics are released on a preannounced schedule

A preannounced schedule for release of both the analytical accounts of the banking sector (monetary survey) and of the central bank is prepared annually. This schedule is disseminated through the NBS website.

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

Statistics are made available to all interested users simultaneously through publication on the NBS website following the preannounced schedule.

- 100 -

5.1.5 Statistics not routinely disseminated are made available upon request

Additional information is available upon request and offered as a service to the public. Users can request additional information in two ways—by posing their queries on the NBS website or by contacting the Public Relations Department of the NBS, which will forward the inquiries to the relevant department for response. In general, queries will be answered in 14 days or less.

5.2 Metadata accessibility

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

Documentation on the concepts, scope, classifications, basis of recording, and other methodological aspects of the analytical accounts of the banking sector and the central bank is available on the NBS website for both the NMS and HMS. The NMS documentation is linked through the NBS website to the SDDS metadata page for the Slovak Republic on the IMF website. Important additional information needed on the SDDS metadata page for NMS is: that the net foreign assets of the banking system includes not only "state securities in Sk held by nonresidents" but also other foreign liabilities of the government in foreign currency; and that the definition of the NMS broad money includes Sk deposits held by nonresidents. This information together with the rationale for these practices are needed so that the definition of NMS broad money and differences in the net foreign assets of the banking system between NMS and HMS—owing to the rerouting of foreign liabilities of the government sector to the central bank under NMS—can be made fully transparent. Prior to the mission's departure, the NBS provided these more detailed metadata on the definitions of NMS money and net foreign assets in the NMS (the Slovak version).

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

The SD has prepared and updated a document on the Slovak Republic's practices in the compilation of monetary statistics for the ECB's *Money and Banking Statistics in the Accession Countries: Methodological Manual.*¹³ The HMS presentation on the NBS website contains (through hyperlinks) substantial methodological detail on sectorization and instrument classification as required for monetary analysts in the ECB member countries.

¹² The metadata describing the nature of NMS net foreign assets would no longer be necessary, once the staff's recommendation to discontinue the practice of treating foreign liabilities of government as those of the NBS is implemented.

Monetary Statistics

¹³ The latest edition of the manual is May 2003.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

Prompt and knowledgeable support is available to users of monetary statistics, who can pose queries through the NBS website or through the NBS's Public Relations Department. Users may also reach the SDDS contact persons for monetary statistics, whose telephone numbers and e-mail addresses can be accessed through the NBS website.

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

Catalogs of publications, documents, and other services are not available. However, lists of available data and documentation are available on the NBS website.

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

Element Brerequisites of quality	O I Taction Langerly Cost von	
Prerequisites of		derive angely coorted, in a tracker burger, in a tracker late observed, 5000 compiled that 5000 compiled tha
	NA Assessment	Comments
-		
0.1 Legal and institutional environment	X	
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	In the NMS, government foreign liabilities to nonresidents (in domestic and foreign currency) are treated as foreign liabilities of the NBS
2.2 Scope	×	Money market funds are excluded from NMS coverage.
2.3 Classification/sectorization	X	
2.4 Basis for recording	X	Market valuation is not applied to certain financial instruments.
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	X	
3.5 Revision studies	X	
4. Serviceability		
4.1 Periodicity and timeliness	X	
4.2 Consistency	×	Banking data in the balance of payments cannot be reconciled with currently available
		monetary stock data. Dank imaneing of government nom monetary data is not consistent with financing data from the GFS.
4.3 Revision policy and practice	X	
5. Accessibility		
5.1 Data accessibility	×	Gross positions of government are not shown; sectorization of National Property Fund in table is different from in the text of NBS Monthly Bulletin.
	×	
5.3 Assistance to users	X	

VI. BALANCE OF PAYMENTS

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

Balance of payments statistics are collected, compiled, and disseminated by the National Bank of Slovakia (NBS), the central bank of the Slovak Republic. The Statistics Department (SD) of the NBS is responsible for the collection of data for the purposes of compiling balance of payments and other external sector statistics, and the Balance of Payments Section (BPS) of the Monetary Policy Department (MPD) is responsible for compilation and dissemination of these statistics. Data are collected and compiled under the legal basis of the National Bank of Slovakia Act (No.566/1992) and subsequent amendments, the Banking Act (No. 483/2001), and the Foreign Exchange Act (No. 202/1995).

Article 34a of the NBS Act requires state authorities, local self-governing bodies, any other public bodies, and other legal persons and natural persons to submit to the NBS, free of charge, complete, correct, true and timely information, reports, statements and other supporting documents and explanation, that the NBS needs to perform its task under this Act and under special regulations; the content, form structure, deadlines and method of presentation shall be stipulated by the NBS through decrees promulgated in the Collection of Laws of the Slovak Republic.

The legal authority to collect information from the banking sector is specified in the Banking Act, which defines the reporting requirements of commercial banks. Article 42 of the Banking Act requires banks (including domestic branch offices of foreign banks) to produce and present to the NBS returns, notifications and other reports, within specified deadlines; the content, form, arrangement, deadlines, method and place of their presentation shall be stipulated by the NBS in a directive promulgated in the Collection of Laws.

The Foreign Exchange Law (No. 202/1995) with subsequent amendments defines the reporting obligation for nonbanking sector entities. Article 8 of the Foreign Exchange Law states that residents are obliged to notify authorities of the facts related to assets and liabilities vis-à-vis nonresidents and residents abroad; and collection from and payments to residents in respects of direct and other investment, financial credits and securities.

The NBS may also conduct surveys solely in accordance with Article 34 of the NBS Act. In addition, statistical reporting requirements and procedures for reporting to the NBS may be set by decrees of the NBS.

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

While most of the data used for the compilation of balance of payments statistics are obtained directly by SD from respondents, some data are obtained from the Statistical Office of the Slovak Republic (SOSR) and the Ministry of Finance (MOF). There is a formal agreement in place with the SOSR that contains both general principals and specific addenda that detail the specific data to be shared. The agreement is updated annually. NBS provides the SOSR with data for the compilation of the national accounts' Rest of the World Account, and contains data on merchandise trade and compensation of employees. Data are exchanged free of charge. The NBS cooperates with the MOF and the Agency for State Debt Management in the field of government debt statistics. This cooperation is based on provisions contained in the NBS Act.

There are no legal obstacles to hinder effective cooperation.

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

The confidentiality of individual respondent's data is guaranteed by the NBS and that guarantee is widely known. Article 40 of the NBS Act regulates banking secrecy at the NBS, and states that banking secrecy is to be observed in all banking operations of the NBS. Article 41 lays down the obligation to observe confidentiality in NBS official matters. Accordingly, members of the Bank Board and other employees of the NBS are obliged to observe confidentiality with regard to internal matters.

The Governor's Instruction No. 11/1997 and subsequent amendments ensures the confidentiality of individual bank data, so that only aggregate information is available to the public.

The confidentiality of individual respondent's data from the nonbanking sector is guaranteed by the Foreign Exchange Law (Article 8(6)). Respondents are informed that the information they provide will be used only for the purpose of producing statistics.

The NBS has internal rules and principals according to which the authorizations for access to the various databases are granted. Aggregation rules are used to prevent residual disclosure when aggregations of survey or other confidential data are processed and disseminated. The NBS stipulates internal rules to secure the premises of the data producing agency and its computer systems to prevent unauthorized access to individual data.

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

The NBS Act provides the overall legal basis for the collection of statistical data used in the compilation of balance of payments statistics. Data collection is carried out consistently with this legal authority. The NBS may take corrective measures and require penalties for

noncompliance with reporting requirements through the measures stipulated in the Banking Act, Part 9 for the banking sector and in the Foreign Exchange Law, Part 3 for the nonbanking sector.

0.2 Resources

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

The data needed to compile the balance of payments statistics are collected in two sections of the SD (Foreign Exchange Statistics Section and Non-banks Statistics Section). Twenty-five staff are available to collect the International Transactions Reporting System (ITRS) and other data that are used to compile the balance of payments statistics. Processed data are passed to the BPS, which is situated in the MPD. The BPS is then responsible for the compilation, analysis, and dissemination of the balance of payments, international investment position, and external debt statistics. Current staff resources of nine are adequate to perform the existing functions (compiling, disseminating, and analyzing balance of payments, international investment position, and external debt statistics), but these may need to be augmented in the context of European Union (EU) accession and more particularly with the enhanced requirements of the European Central Bank (ECB) in the context of eventual participation in the European Monetary Union.

An appropriate level of funding is available to support the compilation and dissemination of balance of payments statistics. Staff are knowledgeable in balance of payments statistics concepts and compilation methods, as well as data collection. Most of the staff have more than five years of experience in their work areas, and many have participated in domestic and international training courses.

Staff are equipped with appropriate computer resources and technical backup from the Information Technology Department of the NBS. The physical working environment is also adequate.

0.2.2 Measures to ensure efficient use of resources are implemented

Periodic reviews of staff performance were previously not conducted, but beginning in 2004, half yearly reviews of individual performance accompanied by a personal merit rating system will be implemented. In addition, there will be annual reviews to determine education and training needs of staff. Appropriate budgeting practices are in place. For example, travel must be approved by the Director of the Department, and cost savings are sought by requiring traveling staff to use economy flights and low cost accommodation. The budget is approved by the Bank Board each September.

Major decisions on methodological approaches take into account the costs of implementation.

0.3 Relevance

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

The relevance of the statistics produced is safeguarded by regular consultations with data users. Within the NBS, the SD consults frequently with the MPD for inputs into the types of data needed for policy analysis. Outside NBS, BPS and SD consult with the SOSR and the MOF as appropriate (for example, when the ITRS codes are reviewed). Interaction with other outside users is undertaken through the NBS's Public Relations Section, which will channel user enquiries to the relevant part of the NBS. In addition, the NBS regularly participates in statistical meetings and seminars involving International Monetary Fund (IMF), ECB, and Statistical Office of the European Communities (Eurostat) in order to monitor the new regulations, requirements, and initiatives relating to external sector statistics.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

Management and staff within the NBS are sensitive to the importance of reliable balance of payments statistics. Management promotes a shared concern for data quality throughout the NBS. Statistical data are compiled and released in a timely and reliable manner. Computerized and other procedures are in place to ensure thorough checking of both input data and the final statistics.

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

Managers are informed about the quality achieved for ongoing statistical activities. Monitoring processes are in place to measure response rates, editing activities, revisions history, and timeliness. Adherence to international statistical standards is monitored systematically in order to identify steps necessary to maintain quality.

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

There is regular contact with users within NBS, from other public sector agencies, and from the public in order to gauge the relevance of the balance of payments statistics. This interaction also affords regular opportunities for the SD and BPS to obtain feedback on quality issues and new and emerging data requirements. SD, in planning its statistical program, has work towards greater specialization of the staff. Efficiency gains will result in increased resource availability to SD without needing trade-offs from other dimensions of quality, such as timeliness, and accuracy/reliability.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Article 12(2) of the NBS Act defines the independence of the NBS to fulfill its tasks independently of instruction from state authorities, self-government bodies, any other public bodies, and from legal persons and natural persons. The NBS supports professionalism in its staff through its recruitment and training policies. Staff may participate in training seminars, courses, and workshops organized by the Institute of Bank Education within the NBS. They also obtain training from IMF Institute courses, and participate in seminars and workshops with IMF, Eurostat, and the ECB that include discussions on new developments in the international standards and guidelines.

Detailed documentation for staff on the balance of payments methodology is given in the Methodical Handbook for Compilation of Statistical Reports on Banks' Foreign Exchange Statistics and the Methodical Handbook for Compilation of Statistical Reports on Business Foreign Exchange Statistics (available in Slovak).

The public is informed of each methodological change in a note in the NBS monthly *Monetary Survey* bulletin when the change is introduced.

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

The choice of source data and statistical methods for compiling balance of payments statistics are generally based on statistical considerations, although the regulations of the Directorate of Customs have an impact on valuation in the merchandise trade statistics.

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

The NBS has the right to comment on instances of erroneous interpretation of the balance of payments statistics. The NBS's Public Relations Department usually monitors the information published by the press, and comments are usually made through this department and in the monthly *Monetary Survey* bulletin.

1.2 Transparency

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

The terms and conditions under which the balance of payments statistics of the Slovak Republic are collected, processed, and disseminated are available to the public on the NBS

website. This includes the relevant legislation, the questionnaires and reporting instructions that are used to collect data from the nonbank enterprises.

The NBS also provides users with advance notification of dissemination dates, analysis of balance of payments developments and major changes in methodologies. The NBS provides assistance to users and responds to their requests.

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

There is no internal government access to statistics prior to their release.

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

The balance of payments data are disseminated on the NBS website and in the monthly *Monetary Survey* bulletin. Thus the statistics are clearly identified as a product of the NBS.

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

When changes in methodology are introduced, the NBS provides an explanation of the change and provides information on the change in the statistics that is due to the change in methodology.

While changes are explained when they are introduced, no advance notice of methodological changes is given to users. The NBS provides information and assistance to users on request.

1.3 Ethical standards

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

Ethical standards for staff behavior are part of the NBS employment contract. New NBS staff are required to sign an agreement to adhere to confidentiality and secrecy rules while working at the NBS. The Governor's Instruction No. 11/1997 establishes clearly the rules relating to the confidentiality of individual bank data while the confidentiality of data provided by individual respondents in the nonbank sector is guaranteed by the Foreign Exchange Law (Article 8(6)). New staff are made aware of the standards when they join the NBS and the standards are reinforced during training courses that provide guidance on staff behavior and the ethical standards expected of NBS staff.

2. Methodological soundness

2.1 Concepts and definitions

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

The balance of payments in the Slovak Republic are compiled following the concepts and definitions set out in the fifth edition of the IMF's *Balance of Payments Manual (BPM5)*.

2.2 Scope

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

In principle, the balance of payments covers all transactions between residents and nonresidents as specified in *BPM5*; no major component is excluded. No estimates are made for any illegal activities (except that the estimates for compensation of employees include illegal workers) or for unrecorded trade (shuttle trade is not recorded in the Customs data). In practice, there are some small deviations from the *BPM5* guidelines: no estimates are made for students who study in another country for more than one year; and noncash current transfers are not included.

2.3 Classification/sectorization

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

Institutional units and transactions are for the most part classified according to the *BPM5*. However, the data disseminated on the NBS website are at a more aggregate level than the standard components recommended in *BPM5*. The more detailed data are available from the NBS on request. The only exception is that capital transfers of the general government are not separated from those of the other sectors of the economy in the national presentation (although this information is available).

The major deviation from *BPM5* is that long-term construction projects by nonresidents are not classified as direct investment activity; rather the output is treated as an import of services. No estimate is made for the expenditure in the Slovak Republic by the nonresident construction companies. Once sufficient data are available from the annual survey of direct investment, the feasibility of including long-term construction projects in direct investment will be examined.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Imports and exports of goods are based on Customs data and are valued on an f.o.b. basis. Foreign currency transactions in goods are converted into Slovak crowns (Sk) at the exchange rate for the second to last Wednesday of the reference month. Current, capital, and financial account transactions that are recorded through the settlements system, or ITRS, are converted into Sk at the average midpoint exchange rate declared by the commercial bank or NBS and prevailing on the day of the transaction. Respondents to the enterprise surveys are instructed to use the exchange rate valid at the day on which the transaction take place, and the end-period rate to value stocks in Sk. The commercial banks also follow this practice.

Financial assets and liabilities that are traded on a regular basis are valued at market prices by directly using price quotations from the markets. Book value is used in the case where market prices are not available. Nontradable financial instruments are valued at nominal value. Monetary gold is valued at market prices.

Where barter transactions occur, market prices are used to value the transactions.

2.4.2 Recording is done on an accrual basis

Merchandise trade data are based on customs data. Other current account transactions are obtained from the ITRS, which means that transactions are recorded at the time of banking intermediation and are therefore mostly on a cash basis. While income transactions are recorded primarily on a cash basis, an adjustment is made to estimate the accrual of interest on government bonds denominated in domestic currency. Dividends are recorded either at the date payable or the date declared payable. Except government transactions, transactions in direct investment, portfolio investment, loan disbursements and repayments, and currency and deposits are recorded on an accounting rules basis. (The commercial banks are required to apply accrual principles on a monthly basis, while nonbanks are required to follow accrual principles on an annual basis.) Thus the final data for nonbank enterprises are on an accrual basis, while for banks data are on an accrual basis. Government transactions are on a cash basis with the exception of government bonds denominated in Sk, for which accrual principles are followed.

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

In line with the recommendations of *BPM5*, current account transactions are recorded on a gross basis, with the exception of insurance transactions. Up until the end of 2003, insurance premiums flows are included in services, while insurance claims flows are included in current transfers. From 2004, an estimate of insurance services will be made, using premiums and claims data from the ITRS and an insurance service charge ratio produced by the SOSR. Financial account transactions are recorded on a mixed basis—loans and trade credits are

recorded on a gross basis (net transactions can be derived) and other components on a net basis. Asset and liability components are separately identified, and the directional principle for direct investment is applied.

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 data sources used to compile balance of payments statistics in the Slovak Republic provide very good coverage of balance of payments transactions. The primary data sources are as follows:

• The cash-based settlements system, or an ITRS, is a closed system that captures all foreign exchange transactions that are conducted through the banking system. Data on individual transactions are supplied on a monthly basis by each of the 22 commercial banks, classified according to a list of codes that cover the current account, capital account, and financial account, as well as transactions that are out of scope for balance of payments purposes.

Data are classified according to the sector of the resident transactor unit—own account transactions of banks, nonfinancial enterprises, financial enterprises, insurance companies and pension funds, general government, self employed individuals, nonprofit institutions serving households, natural persons, and nonresidents. The coding list is updated every two years. Each commercial bank supplies detailed data on a monthly basis, by transaction, classified according to a detailed list of codes. There is no threshold for transactions reporting at present—all transactions are reported. This will be reviewed when Slovakia joins the EU in May 2004.

The report forms have been in place for 11 years, although they have been updated regularly during this period—the banks do not indicate any difficulties in reporting.

- This is supplemented by information on *transactions through accounts held abroad* by enterprises, and from the beginning of 2004, of accounts held abroad by individuals (who are required to register with the NBS). Transactions through accounts held by nonresidents in the Slovak Republic are also collected.
- Data on merchandise trade are on an f.o.b. basis and are obtained monthly through the SOSR. While the SOSR staff make coverage adjustments to these data for national accounts purposes, these adjustments are not included in the balance of payments statistics.

- The business register is updated on an ongoing basis. It is based on the official business register of the SOSR, and updated in several ways: the commercial banks identify new reporters each month; the SOSR provides an update to the official register each quarter; the newspapers and financial press are reviewed on an ongoing basis; the Ministry of Economy provides information on new foreign direct investment activity in Slovakia; and embassies also provide information about potential new investors. New respondents are contacted as soon as they are known; they are obliged to report on their assets and liabilities immediately, and are then included in the monthly survey if they are within scope.
- The *monthly survey of enterprises* covers approximately 4,500 enterprises. It covers all transactions as well as stocks of financial assets and liabilities. Reporting units are financial institutions other than banks, securities trades, and nonfinancial enterprises. There is a threshold of Sk1 million in holdings of assets or liabilities; this will be reviewed during 2005. The survey has full coverage for all enterprises that are above the threshold.
- The quarterly and annual surveys of direct investment enterprises covers 1,500 direct investment enterprises. The enterprises are included in the monthly survey; however data on geographic and sector of economic activity are obtained quarterly and more detailed data are obtained on an annual basis, in particular regarding reverse investment and reinvested earnings. The annual survey was first conducted for the year 2002.
- *Direct reporting by commercial banks* covers their own-account transactions in both domestic and foreign currency with nonresidents and stocks.
- *Transactions of the NBS*, including in reserve assets, are obtained directly from the Settlements Department of the NBS.

These data sources are supplemented in several areas:

- Six of the 22 commercial banks act as *custodians* for the nonresident holders of domestic securities; they report activity related to these securities.
- The disbursement and repayment of government borrowing is obtained directly from the NBS (which conducts these transactions on behalf of the government). The MOF provides data on the stock of liabilities of the government—this is used to compile the international investment position, but also as a cross-check with the transactions.
- Estimates of *compensation of employees* transactions, both credits and debits, are obtained from the SOSR. These cover both legal and illegal workers, Slovak resident employees of foreign embassies, and nonresidents working in Slovakia. Data are cross-checked with Eurostat, which is working on a project related to migration.

• Some additional data are collected on a regular or irregular basis as needed, such as data relating to the transit of gas across Slovakia.

Where appropriate, data are also used to compile the international investment position data and are used for Slovakia's participation in the Coordinated Portfolio Investment Survey.

BPS and SD work together in close cooperation to answer respondents' queries.

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

The source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required to meet the *BPM5* recommendations. Adjustments are made to replace the ITRS-based estimates for compensation of employees, *current transfers*, *and travel services* to ensure correct counterparty entries and no double counting. For direct investment, imports and exports on a noncash basis (between affiliates) are also identified in the enterprise surveys.

Once enterprises close their books of account for the year and make year-end adjustments, these adjustments are reported as revisions in the enterprise surveys, and the published statistics are revised accordingly.

In 2004, NBS staff will review possible alternatives for the compilation of the travel services component; currently the ITRS is used as the data source. The Institute of Tourism has carried out some surveys. Discussions will be held in 2004 with the Institute, and also with the Ministry of Economy and the Travel Agency Association.

3.1.3 Source data are timely

The source data are generally timely. Banking data within the ITRS are reported on a monthly basis, 15 days after reference period and the banks generally report on time. The monthly data for foreign trade produced by SOSR are available one month after the reference period. Non-banking entities are requested to report within 20 days of the end of the reference period for most of the reporting forms. NBS staff follow up by telephone with late respondents approximately two weeks after the due date. These are followed by reminder letters, if necessary.

3.2 Assessment of source data

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

The ITRS is a closed system, and the outputs are routinely assessed by checking aggregate transactions against the change in the total positions of the banks. The accuracy of the source data reported by individual banks is routinely assessed by automated (computerized) procedures by the NBS's own automated application system (APS STATUS) and also by supplementary computerized procedures. The monitoring system APS STATUS, consisting of Lotus Notes and Oracle databases, tests the internal consistency of each bank's data (formal internal and external cross-checks). Supplementary computerized procedures identify out-of trend movements (plausibility checks), missing values and internal consistency. Formal data inconsistencies and out-of-trend values are confirmed with banks. The source data are routinely analyzed for underreporting and misreporting, in particular to check for temporal consistency and consistency with other related data sources. High-value transactions are confirmed with the reporting financial institutions. In addition, commercial bank staff contact NBS staff if they are unsure about the appropriate code to use for any transaction. Unallocated transactions are monitored and remain very small as a percentage of gross transactions in goods and services.

The effects of changes to report forms are assessed by supplementary computerized procedures. Procedures are established for addressing data compilers' queries concerning source data. Source data are analyzed in the context of revisions.

The system for processing and checking the data obtained through the surveys is also computerized, thus allowing assessment of the accuracy of the reported data. High values or reporting that is inconsistent with previous periods are identified through this processing system and confirmed with respondents. The source data are routinely analyzed for underreporting and misreporting, in particular to check for consistency over time and consistency with other related data sources, particularly with the output of the ITRS system for appropriate institutions. Unusual responses are queried with the respondents.

The SD works with respondents to ensure accurate responses through the various data collection methods. The commercial banks contact NBS staff if they have queries about coding for the ITRS collection and similarly, SD staff may contact the banks to enquire about any unusual individual transactions. Instructions provided with the enterprise survey questionnaires clearly identify points of contact if respondents require assistance. SD staff contact individual respondents if there a queries about responses to the surveys. The surveys and associated instructions are also available on the NBS website.

Merchandise trade data are cross-checked with aggregate results from the ITRS and also with partner country data, particularly for the Czech Republic.

3.3 Statistical techniques

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

In general, the methods used to compile the data are sound. The ITRS reports are provided by the commercial banks in electronic form and processed electronically. Data compilation procedures through the automated data processing system minimize processing errors such as coding, editing, and tabulation errors. Unclassified ITRS transactions are monitored and remain small.

For other reports, the data are reported in paper form, typed by hand and processed electronically. While this offers opportunity for transcriptions errors, there are comprehensive edit checks in the processing system to minimize such risks. Staff are well trained and experienced, and are required to provide explanations and commentary on the data (after consultation with reporters).

- 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques
- Adjustments are made to record interest from government bonds in Slovak crowns on an accrual basis using information from the Central Depository.
- Data on transactions in compensation of employees in the ITRS are adjusted by using statistical information about the number, and the professional and territorial structure of Slovak workers abroad and their nominal wages. Appropriate adjustments are made to other current account components.
- In 2004, alternatives for improving the travel services estimate will be reviewed.
- The annual survey of direct investment enterprises was first introduced for the 2002 reference year, and the process of reconciliation with the monthly data is still underway. The questionnaires for 2003 will be sent to respondents in mid-2004. A new system is being developed for the reconciliation of the monthly and annual data.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

A number of validation procedures are in place.

- Trade statistics based on Customs declarations are cross-checked with transactions reported by banks and by nonbank entities.
- The primary data source for most of the other current account transactions is the ITRS. For nonbank entities, these are checked at the aggregate level with survey

- aggregates Aggregate results are cross-checked with Customs data and trade credits (for goods) and with the enterprise survey (for income).
- The financial account data are derived primarily from the government transactions through the NBS and through the enterprise surveys. These data are cross checked with the aggregate results from the ITRS, and also reconciled with the International Investment Position (IIP) statements.
- Cross-checks between flows and stocks data are performed for the commercial banks' financial transactions. Time series checks are performed for each bank and for each main item.
- The financial press is monitored for information on relevant corporate activity and to verify high-value direct investment as well as other investment transactions.
- 3.4.2 Statistical discrepancies in intermediate data are assessed and investigated
- Differences in the various datasets are small. Any unusual results are checked back with the commercial banks (in the case of ITRS or banks' own account transactions) or with survey respondents.
- Reported data on investment income transactions are assessed in relation to the corresponding stock data in the IIP for both commercial banks and for nonbank entities
- Reported financial transactions are compared with corresponding data from the MOF for debt of the government and for other sectors.
- Data on freight earnings from the ITRS are reviewed in relation to information relating to the difference between the c.i.f. and f.o.b. valuations of imports of goods from merchandise trade data.
- 3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated

Net errors and omissions in the balance of payments statement are monitored each month as an indicator of unrecorded transactions. The absolute size, direction and periodicity act as an indirect indicator of the item or sector to be researched if needed; however, in general the size of this indicator is small in comparison to gross transactions in goods and services (generally less than one percent).

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 NBS monitors revisions between preliminary and subsequent changes of data submissions as part of the regular processes of data entry and processing. However, no formal revision studies are conducted.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The NBS compiles monthly balance of payments statistics, with the quarterly statistics being the sum of the three relevant months. The SDDS requirement is met.

4.1.2 Timeliness follows dissemination standards

Monthly and quarterly data are disseminated three months after the end of the reference period on the NBS website. Monthly data are also disseminated in the monthly *Monetary Survey* publication.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The concepts, definitions, and classifications for compiling monthly, quarterly, and annual data are the same; monthly data are aggregated to give quarterly and annual data. In the future, when data are available from the annual survey, any changes to data introduced will be allocated back to the monthly data. Transactions in the balance of payments are consistent also with the IIP data. Net errors and omissions have not been large in recent years, that is, not more than 1 percent of total transactions in goods and services over the past three years.

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

Historical data from 1993–96 are not consistent with the data for the later periods. When changes in data sources, methodology, or techniques are introduced, historical data series are not usually reconstructed. Major changes in methodology are explained as notes in the monthly *Monetary Survey* bulletin and twice a year in the *Report on Balance of Payments development of the Slovak Republic* which is accessible on the NBS and the government websites. Also included in the monthly *Monetary Survey* bulletin is a commentary on the balance of payments data.

- 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks
- The balance of payments data on trade in goods are reconcilable with the merchandise trade data.
- The balance of payments data are consistent with the IIP and external debt statistics—common data sources are used where appropriate. Statistics are reviewed for consistency on an ongoing basis.
- The balance of payments current account data are an input into the national accounts, although the national accounts make adjustments to goods and to travel services that are not included in the balance of payments. Data are reconcilable, although the SOSR does not publish detailed data on the adjustments and users are not able to reconcile these data on their own.
- Although the commercial banks report transactions and positions data for balance of
 payments purposes separately from the monetary survey report, the balance of
 payments reports are reconcilable with the banks' balance sheets and thus the balance
 of payments statistics for the banks sector are believed to be consistent with the
 monetary statistics. However, users are not able to reconcile the published statistics.
- Transactions of the government are obtained independently of the government finance statistics, so may not be consistent. Data are not reconcilable and users would not be able to reconcile the published statistics for balance of payments and government finance.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The revision schedule for the monthly data is established and has followed the same pattern for several years. The NBS considers that the user community is familiar with the revision cycle, although no public statement of this policy is available on the website or in the NBS publications. The data are preliminary when first released and are revised on monthly basis (for revisions to trade data). Revision for all items takes place for all monthly cumulative data on an annual basis—the data are revised only once at the end of the next year. All revisions are allocated to the appropriate month, so that discrete monthly and quarterly data can be derived. However, if the need arises, extraordinary revisions are made although data were considered final.

Once data from the annual survey of direct investment enterprises is introduced, the policy will be reviewed

When new methodology is introduced, resulting in changes to the level of an aggregate, there is no published comparison of the old and new series; the effects of changes to methodology are individually identified in the commentary that is published in the monthly *Monetary Survey* bulletin. An example is the revision to the compensation of employees component that was introduced in 2003. While there was no published overlap of the old and the new estimates, estimates were calculated on both bases for each month of 2003, and information on the effect of the new methodology was published in the bulletin each month.

4.3.2 Preliminary and/or revised data are clearly identified

The preliminary status of the monthly data is clearly indicated. In the monthly *Monetary Survey* bulletin of the NBS, the balance of payments statement includes an annotation that indicates that data are preliminary. The revised status of the data is identified by the date of revision in the data tables on the NBS website.

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

In the monthly *Monetary Survey* bulletin, the balance of payments commentary includes information on the effect of revisions to the methodology for individual components of the balance of payments for one year after a change is introduced. Tables showing the data on "old" and "new" bases are not provided.

There is no public statement of the revisions policy, and revisions analyses are not made public. Although not disclosed, revisions due to improved data are typically small.

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)

NBS presents the summary balance of payments on its website. The monthly *Monetary Survey* bulletin includes detailed commentary (including charts and tables) on the monthly balance of payments developments by major component, the summary table, and detailed tables on foreign direct investment in Slovakia. As well as being available in hard copy in Slovak, the bulletin is published on the NBS website in both Slovak and English, and is thus fully accessible by the public.

In addition, semiannual reports on balance of payments developments for the Slovak government are prepared and published regularly. Balance of payments statistics are also included in the report on monetary developments that is produced twice each year for the Slovak Parliament

5.1.2 Dissemination media and format are adequate

The NBS considers that dissemination formats and media are appropriate for simple accessibility by data users. Summary data for balance of payments, IIP, foreign exchange reserves and international reserves and foreign currency liquidity template (this last according to the IMF's template) are published on the NBS website (either in the Special Data Dissemination Standard (SDDS) categories or in the monthly bulletin.

Balance of payments statistics are published on a cumulative monthly basis. Revisions to data are allocated to the appropriate month, so that discrete monthly and quarterly data may be derived by users.

A special database of users has been developed, according to which users are automatically provided with prompt information when the latest monthly bulletin in published on the website. A variety of institutional users receive the monthly bulletin in hard copy.

In addition, NBS staff provide special tables on request to users.

5.1.3 Statistics are released on a preannounced schedule

An advance release calendar for quarterly releases, following SDDS requirements, is published on the NBS website. Users are aware that the statistics are approved within the NBS by the Bank Board for publication. As the schedule of meetings of the Bank board is known, users know when the data will be published.

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

Statistics are made available to all users at the same time. SOSR staff have access to selected data prior to their public release.

5.1.5 Statistics not routinely disseminated are made available upon request

More detailed data are available on request to the NBS, provided such requests do not breach the confidentiality of individual respondent 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

The enterprise survey questionnaires and associated methodology are available on the NBS website.

The SDDS metadata are available on the NBS website. Detailed documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available as special material developed only for internal use within the NBS. The material is not accessible in general, but may be made available upon individual request.

In light of the Slovak Republic's pending accession to the EU, the NBS has prepared a chapter in the ECB's publication *Accession Countries: Balance of Payments/International Investment Position Statistical Methods* on the Slovak balance of payments and international investment position statistics, in which the basis for the collection and dissemination of the data is presented. The NBS provides a hyperlink from its balance of payments statistics webpage to this ECB publication. Additionally, the publication is available in hardcopy. Further, the NBS provides a hyperlink to the IMF's balance of payments and international investment position webpage.

Some more specialized information (such as background papers) is available to the public.

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

General use information is not available in written form, although NBS staff are able to provide guidance to users on request.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

Two contact persons are available and identified, along with contact details, on the NBS website.

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

No hard copy catalog is available—information is available through the website or by request to the NBS.

Table 6. Slovak Republic: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics (Compiling Agency: National Bank of Slovakia)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO =	ved; LO		ce Larg	gely Observed; 1	Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria
Flement	Z		Asse		Comments
	1111	0	Γ O	LNO NO	
0. Prerequisites of quality					
0.1 Legal and institutional environment		×			
0.2 Resources		×			
0.3 Relevance		×			
0.4 Other quality management		X			
1. Assurances of integrity					
1.1 Professionalism		X			
1.2 Transparency			×		No advance notice of changes in methodology is given to users.
1.3 Ethical standards		×			
2. Methodological soundness					
2.1 Concepts and definitions		×			
2.2 Scope		×			
2.3 Classification/sectorization			×		Long term construction projects are not included in direct investment.
2.4 Basis for recording			×		Not all transactions are recorded on an accrual basis. In particular, for the most part
					interest transactions are recorded on a cash basis. Merchandise trade data are converted
					to Sk using one exchange rate for each month.
3. Accuracy and reliability					
3.1 Source data		×			
3.2 Assessment of source data		×			
3.3 Statistical techniques		×			
3.4 Assessment and validation of		×			
intermediate data and statistical outputs					
3.5 Revision studies		×			
4. Serviceability	ļ			ļ	
4.1 Periodicity and timeliness		×			
4.2 Consistency			×		Users are not able to reconcile the published statistics for balance of payments with the
					government finance, national accounts, and monetary data.
4.3 Revision policy and practice			×		There is no pubic statement of the revisions policy and revisions analyses are not made public.
5. Accessibility				_	
5.1 Data accessibility		X			
5.2 Metadata accessibility			×		Detailed sources and methods documentation is not easily obtained by all users.
5.3 Assistance to users		×			
				-	

- 123 - 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 one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to perform the following:

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

- 124 - APPENDIX I

• 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 NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: http://dsbb.imf.org

- 125 - APPENDIX II

DATA QUALITY ASSESSMENT FRAMEWORK—GENERIC FRAMEWORK (JULY 2003 FRAMEWORK)

Quality Dimensions	Elements	Indicators
0. Prerequisites of quality	0.1 Legal and institutional environment —The environment is supportive of statistics	0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified. 0.1.2 Data sharing and coordination among data-producing agencies are adequate. 0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only. 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.
	0.2 Resources —Resources are commensurate with needs of statistical programs.	0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs. 0.2.2 Measures to ensure efficient use of resources are implemented.
	0.3 Relevance —Statistics cover relevant information on the subject field.	0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.
	0.4 Other quality management —Quality is a cornerstone of statistical work.	 0.4.1 Processes are in place to focus on quality. 0.4.2 Processes are in place to monitor the quality of the statistical program. 0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.
1. Assurances of integrity The principle of objectivity in the collection, processing, and	1.1 Professionalism—Statistical policies and practices are guided by professional principles.	1.1.1 Statistics are produced on an impartial basis. 1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations. 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.
dissemination of statistics is firmly adhered to.	1.2 Transparency —Statistical policies and practices are transparent.	1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public. 1.2.2 Internal governmental access to statistics prior to their release is publicly identified. 1.2.3 Products of statistical agencies/units are clearly identified as such. 1.2.4 Advanced notice is given of major changes in methodology, source data, and statistical techniques.
	1.3 Ethical standards —Policies and practices are guided by ethical standards.	1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

- 126 - APPENDIX II

Quality Dimensions	Elements	Indicators
2. Methodological soundness	2.1 Concepts and definitions— Concepts and definitions used are in accord with	2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.
The methodological basis for the	internationally accepted statistical frameworks.	5 m m m, gm m m, gm m
statistics follows internationally accepted standards,	2.2 Scope—The scope is in accord with internationally accepted standards, guidelines,	2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.
guidelines, or good practices.	or good practices. 2.3 Classification/ sectorization—Classification and sectorization systems are in accord with internationally accepted standards, guidelines,	2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.
	or good practices. 2.4 Basis for recording—Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good	2.4.1 Market prices are used to value flows and stocks.2.4.2 Recording is done on an accrual basis.2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards,
3. Accuracy and	practices 3.1 Source data – Source data	guidelines, or good practices. 3.1.1 Source data are obtained from comprehensive
reliability Source data and statistical techniques are sound and	available provide an adequate basis to compile statistics.	data collection programs that take into account country-specific conditions. 3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.
statistical outputs sufficiently portray reality	3.2 Assessment of source data—Source data are regularly	3.1.3 Source data are timely. 3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely
	assessed.	assessed, for instance, for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.
	3.3 Statistical techniques— Statistical techniques employed conform to sound statistical procedures	3.3.1 Data compilation employs sound statistical techniques to deal with data sources. 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical
	3.4 Assessment and validation of intermediate data and statistical outputs—	analysis) employ sound statistical techniques. 3.4.1 Intermediate results are validated against other information where applicable. 3.4.2 Statistical discrepancies in intermediate data
	Intermediate results and statistical outputs are regularly assessed and validated.	are assessed and investigated. 3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.
	3.5 Revision studies— Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.	3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).

- 127 - APPENDIX II

Quality Dimensions	Elements	Indicators
4. Serviceability Statistics, with adequate periodicity and timeliness, are	4.1 Periodicity and timeliness— Periodicity and timeliness follow internationally accepted dissemination	4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.
consistent and follow a predictable revisions policy.	standards. 4.2 Consistency— Statistics are consistent within the dataset, over time, and with major datasets.	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
	4.3 Revision policy and practice —Data revisions follow a regular and publicized procedure.	statistical frameworks. 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).
5. Accessibility Data and metadata are easily available and assistance to users is adequate.	5.1 Data accessibility— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 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.
	5.2 Metadata accessibility — Up-to-date and pertinent metadata are made available.	5.1.5 Statistics not routinely disseminated are made available upon request. 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
	5.3 Assistance to users— Prompt and knowledgeable support service is available.	intended audience. 5.3.1 Contact points for each subject field are publicized. 5.3.2 Catalogs of publications, documents, and other services, including information on any changes, are widely available.

USERS' SURVEY

Summary of results of survey of data users

With the assistance of the authorities and the IMF's Resident Representative in Bratislava, and as a complement to the mission's own assessment of the quality of the statistics in the Slovak Republic, a survey was conducted among users of macroeconomic statistics. The survey asked users to evaluate a range of aspects of national accounts, prices (consumer price and producer price indices), fiscal, monetary, and balance of payments statistics. Out of 86 questionnaires sent, the mission received 53 responses, a response rate of 62 percent. A follow-up meeting was also held with users who participated in the survey.

The results of the survey and the follow-up discussion with users indicated that, in general, most users were satisfied with the coverage, periodicity, timeliness and underlying methodology of the official statistics, although a number of users noted that they would appreciate more timely national accounts and government finance statistics, even if these were identified as preliminary. Several users requested that more detailed national accounts and government finance data be disseminated. For most aspects, there was more dissatisfaction with government finance statistics than with the other statistics.

Users were, in large part, familiar with the advance release calendars that are available in all areas, and statistics were generally felt to be accessible. Almost all respondents noted the use of the internet to obtain data, but several noted that they would like more detailed data to be available through the various websites. They further noted that the option to download time series would be very useful. Many users also use hardcopy publications and make special data requests.

Most users believed that official macroeconomic statistics of the Slovak Republic were at about the same level of quality as those of other countries in the region. Users in general consider official statistics to be unbiased and accurate.

The major deficiencies in the Slovak data practices in most users' view relate to revisions to data. In general, there is no advance notification of revisions to methodology, and many users felt that there is not sufficient information available about revisions (both the reasons for revisions and comparisons of revised and previously published statistics).

Table 7. Questionnaire Results Analyzed by Type of User February 24, 2004

Type of Respondent	Total Sent	Total Received ¹⁴	In % Received
Banks and insurance companies	10	8	80
Press agencies accredited in the Slovak Republic, auditing			
and consulting companies, and financial companies	23	8	35
Chambers of commerce and industry, and embassies	9	3	33
Academic community and research institutions	10	13 ¹⁵	130
Associations and unions, confederations, and institutes	8	3	38
Enterprises and other	16	7	44
Ministries, government of the Slovak Republic, Parliament,			
and other central government authorities	10	9	90
Total	86	53	62

¹⁴ An additional three respondents indicated that they did not use statistics.

¹⁵ Two organizations provided more than one response.

- 130 - APPENDIX III

Table 8. Results of the Slovak Republic's User Survey February 24, 2004

General Information about Uses of Official Macroeconomic Statistics of the Slovak	Republic
	Total
	Number of
	Responses
1. Which official statistics do you use regularly?	
a. National accounts (NA)	37
b. Prices	41
c. Government finance statistics (GFS)	34
d. Monetary statistics (Monetary)	37
e. Balance of payments (BOP)	34
f. Other:	
 Production indices 	32
Labor market	35
Merchandise trade	25
International reserves and foreign currency liquidity	15
• External debt	24
International investment position	18
• Other	
2. Where do you obtain the official statistics?	<u>.</u>
a. Official press releases and publications on macroeconomic statistics	47
b. Private sector summaries and analyses	19
c. Official policy papers	25
d. Publications from international organizations about the country	29
e. Other sources	12
3. Do you refer to official descriptions of the sources and methods that were used to	
compile the official statistics?	
 Yes 	42
• No	6
4. For what purposes do you use the official statistics?	<u>.</u>
a. Analysis of current developments for short-term decision making	37
b. Analysis of trends for longer-term policy formulation?	32
c. Econometric model building and forecasting	25
d. Economic research	19
e. Comparison with economic developments in other countries	35
f. General economic background	34
g. Other	9

	NA	Prices	GFS	Monetary	BOP	Other
5. Coverage and detail	•	•			•	•
In general, are you satisfied with						
the coverage of official statistics?	1	1	T	T 2 2	1	
• Yes	36	39	23	36	34	11
• No	1	4	14	0	0	3
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?						
•Yes	33	38	20	34	31	10
• No	5	4	14	0	3	3
6. Periodicity and timeliness		'	11	1 0]]	
6.1 Are you satisfied with the						
frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly,						
annual)?	1.20	1 20	20	26	1 22	111
• Yes	30	39	28	36	33 2	14
• No 6.2. In general, do you consider that the	/	2	δ	1	2	U
appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)? • Yes	16	33	19	29	21	11
• No	22	7	15	6	13	1
7. Other dissemination practices	1	-	- L	1	· L	
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dates on which the various official statistics will be disseminated?			_	_		
• Yes	30	32	21	30	25	10
• No	11	8	20	8	11	2
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?						
• Yes	29	31	19	29	22	9
• No	0	0	0	0	0	0
7.3 Is there enough information about revisions to official statistics?	_	_		_		
• Yes	14	19	12	17	14	6
• No	20	14	21	12	16	3
8. Accessibility						
3.1 Can you easily access the official statistics?						
• Yes	32	34	22	34	31	10
- 1 63	7	5	15	2	4	0

	NA	Prices	GFS	Monetary	BOP	Other
8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, methodological descriptions, reference concerning concepts, classification, statistical practice)?		,	- 12	,	, -	,
• Yes	24	27	19	22	23	9
• No	12	11	15	10	11	1
					Yes	No
8.3 Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you?					27	16
8.4 How do you get access to official statistics?						
 Official releases Hard copy publications Data specifically requested Official website Other E-mail requests 					29 40 22 51 3 23	
• E-man requests	NA	Prices	GFS	Monetary	BOP	Other
9. Overall assessment	11/1	111003	GIB	Wionetary	DOI	Other
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?						
• Yes	32	32	28	30	29	10
• No	0	1	2	0	0	2
9.2 In general, do you consider the official statistics to be unbiased and accurate?						
• Yes	22	26	21	26	23	6
• No	6	2	4	0	1	1
9.3 How would you compare the quality of official statistics of the country with those of other countries in the region?						
• Better	2	4	3	3	3	
• Same	12	15	13	16	13	
- Barne	l _	1 4		0	2	1
• Worse	5	1	6	U	2	

NA = National Accounts; Prices refers to: CPI (Consumer Price Index) and PPI (Producer Price Index); GFS = Government Finance Statistics; Monetary = Monetary Statistics; and BOP = Balance of Payments Statistics