

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

This Report on the Observance of Standards and Codes on Data Module for the **Republic of Latvia** 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 **June 22, 2004**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the **Republic of Latvia** or the Executive Board of the IMF.

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

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REPUBLIC OF LATVIA

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

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ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
BMSD	Banking and Monetary Statistics Division (BOL)
BOL	Bank of Latvia
BOPSD	Balance of Payments Statistics Division (BOL)
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
CSB	Central Statistical Bureau
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
ECB	European Central Bank
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual 2001</i>
HBS	Household Budget Survey
IMF	International Monetary Fund
ISO	International Organization for Standards
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
NACE	Standard Classification of Economic Activities within the European Communities
PPI	Producer Price Index
PRODCOM	The European Classification System for Products
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard

EXECUTIVE SUMMARY

This Report on the Observance of Standards and Codes (ROSC) data module provides a review of Latvia'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 Central Statistical Bureau (CSB), Ministry of Finance (MOF) and State Treasury, and Bank of Latvia (BOL). The assessment was carried out by a mission from the Statistics Department that visited Riga, Latvia during September 3–17, 2003.

The quality of Latvia's data is generally good. The authorities follow an open dissemination policy, and make freely available a wide variety of data and metadata through official publications, press releases, and on the Internet. The authorities have made good progress toward the statistical requirements of European Union (EU) membership. Several of the issues raised in the ROSC were already included in the annual program of statistics, with a number now expected to be addressed during 2004–2005.

The mission reached the following main conclusions:

- **SDDS observance/subscription:** Latvia is in full observance of SDDS requirements, taking no flexibility options. The main points of the in-depth quality assessment of six macroeconomic datasets of the SDDS follow.
- **Prerequisites of quality:** All agencies have legal and institutional frameworks that protect confidentiality and ensure statistical reporting. Cooperation among the three agencies is close, supported by a strong legislative framework, interagency agreements, and work practices. All agencies have adequate resources for their statistical programs. The CSB, which is at the heart of the statistical system, the MOF and its State Treasury unit, and the BOL demonstrate awareness of quality as the cornerstone of statistical work. The MOF Treasury has a Quality Management Department and the BOL has adopted a particularly systematic approach to quality management, including external certification of its practices as consistent with the recommendations of the International Organization for Standards (ISO).
- **Integrity:** All three agencies provide assurance of professionalism. They are transparent in their policies and practices, and they provide guidelines on ethical conduct for their staff.
- **Methodological soundness:** Statistics are produced according to the *System of National Accounts 1993 (1993 SNA)* and the *European System of Accounts 1995 (1995 ESA)* as well as the complementary *Balance of Payments Fifth Edition*, *Government Finance Statistics 2001*, and *Monetary and Financial Statistics Manuals*. The national accounts, the consumer and producer price indices, government finance statistics (GFS), monetary statistics and balance of payments generally follow

internationally accepted guidelines on concepts and definitions, scope, classification and sectorization, basis of recording, and valuation. The consumer price index (CPI), however, excludes the dwelling expenditures of owner occupants. The MOF should continue to be supported in its program to adopt the accrual standards of the *Government Finance Statistics Manual 2001 (GFSM 2001)* for expenditures by the 2005 budget year, and in its practice of including and showing all income and expenditure of the general government sector within the Treasury accounting and statistical system. Monetary statistics should provide for greater detail in the classification of the liabilities of depository corporations by subsectors of the general government.

- **Accuracy and reliability:** Subject to completing improvements in process for the national accounts, all macroeconomic datasets get high marks for accuracy and reliability. Source data are adequate, statistical techniques are sound, and assessment and validation of source data and outputs are thorough. The national accounts improvements will address issues the mission found in statistical techniques, assessment of source data, and assessment of statistical outputs. In several datasets including the national accounts, more regular and/or thorough studies of revisions could be conducted and used to improve the statistical output.
- **Serviceability:** Latvian macroeconomic statistics are broadly relevant and available on a timely basis with good frequency, but national accounts and GFS would benefit from establishing user advisory groups. Useful work could be done to enhance the consistency and clarify reconciliation of differences between the corresponding accounts of the public sector and the banking system. Users also want a clearer indication of revised data for the national accounts, government finance, and balance of payments statistics, and of the revision policies followed for these datasets.
- **Accessibility:** All datasets are readily available to the public by electronic and other means at reasonable or no cost. Documentation on methodology is prepared for most datasets, but more could be done in national accounts and GFS to complete the coverage of the main series and make them easily available to users. Support service for users is excellent for all datasets.

I. INTRODUCTION

1. The data dissemination module of this ROSC (Volume I) provides a summary of Latvia's practices on the coverage, periodicity, and timeliness of the data categories respecting the SDDS. It is complemented by a summary 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 Statistics Department. The underlying detailed assessments (published as Volume III of this report) are based on information provided prior to and during a staff mission from September 3–17, 2003,¹ publicly available information, and information from written responses to a survey questionnaire from, as well as face to face consultations with, a variety of data users.

2. Section II includes an overview of the SDDS and an assessment of Latvia'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 Latvia's statistics.

II. DATA DISSEMINATION PRACTICES AND THE SPECIAL DATA DISSEMINATION STANDARD

3. Latvia subscribed to the SDDS on November 1, 1996 and posted its metadata on April 27, 1997. It is in full observance of SDDS requirements, taking no flexibility options. Latvia has disseminated the information on its National Summary Data Page on a timely basis. Since IMF staff began monitoring subscribers' observance of the data and advance release calendar elements of the SDDS in July 2000, there have been no observance related issues. Latvia has provided all 21 summary methodologies, and all have been posted on the Data Standards Bulletin Board (DSBB). The data template on international reserves and foreign currency liquidity was posted to the DSBB on September 28, 1999.

4. Three official institutions are responsible for the compilation and dissemination of the SDDS prescribed data categories:

- CSB: national accounts, production index, labor market, price indices, general government operations (on a 1995 ESA basis), merchandise trade, and population.
- The Treasury of the Republic of Latvia: central and local government operations, and central government debt.

¹ The mission team was headed by Kimberly Zieschang and included Russel Freeman, and Elizabeth Sumar (all STA), David Allen, Alexandra Wesseling (experts), and Janice Irving (STA—Administrative Assistant).

- BOL: analytical accounts of the banking sector, analytical accounts of the central bank, interest and exchange rates, international reserves and foreign currency liquidity, balance of payments, IIP, and external debt.

The Riga Stock Exchange compiles the share price index and disseminates it from its website (<http://www.rfb.lv/>).

These data can be accessed in publications and on the following Internet websites:

Central Statistical Bureau website (<http://www.csb.lv/>)

Bank of Latvia website (<http://www.bank.lv/>)

Ministry of Finance website (<http://www.fm.gov.lv/>)

Treasury website (<http://www.kase.gov.lv/>)

Data dimension: coverage, periodicity, and timeliness

5. As shown in Table 1, Latvia fully meets the coverage, periodicity, and timeliness requirements of the SDDS and exceeds the timeliness requirements for all real sector data sets, government operations, balance of payments, and the international investment position (IIP). Latvia also exceeds the periodicity requirements for balance of payments and the IIP.

Access dimension

6. Advance release calendars, giving at least one-quarter notice of approximate release dates and at least one-week notice of the precise release dates, are disseminated on the IMF's DSBB, as well as on the websites of the BOL and CSB noted above. The public are informed of this in relevant publications of the BOL and the CSB.

7. The data are released simultaneously to all interested parties through press releases and/or on the websites of the relevant agencies and on Latvia's National Summary Data Page.

Integrity dimension

8. As required by the SDDS, information on terms and conditions that govern the collection, compilation, and dissemination of data, including the confidentiality of the data collected, is available to the public. There is no pre-release access to statistics published by the CSB and MOF, and no government access outside the BOL for the statistics it publishes.

Quality dimension

All 21 summary methodology statements have been provided to the IMF and posted on the DSBB. In addition, methodological information is disseminated by the CSB, MOF, State Treasury, and BOL. Latvian data producers also disseminate component detail and additional data series that make possible cross checks and checks of reasonableness for all data categories to the extent permitted by rules preventing disclosure of individual responses.

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

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comment
		SDDS	Latvia	SDDS	Latvia	
Real sector						
National accounts	Yes	Q	Q	Q	70D	Exceeds SDDS requirements
Production index	Yes	M	M (or as relevant)	6W (M encouraged, or as relevant)	6W	
Labor market:						
Employment	Yes	Q	Q	Q	70D	Exceeds SDDS requirements
Unemployment	Yes	Q	M	Q	15D	Exceeds SDDS requirements
Wages/Earnings	Yes	Q	Q	Q	NLT 8W	Exceeds SDDS requirements
Price index:						
Consumer prices	Yes	M	M	M	6WD	Exceeds SDDS requirements
Producer prices	Yes	M	M	M	15D	Exceeds SDDS requirements
Fiscal: sector						
General govt. operations	Yes	A	A	2Q	NLT 1M	Exceeds SDDS requirements
Central govt. operations	Yes	M	M	M	3W	Exceeds SDDS requirements
Central govt. debt	Yes	Q	Q	Q	7W	Exceeds SDDS requirements
Financial sector						
Analytical accounts of the banking sector	Yes	M	M	M	NLT 1M	
Analytical accounts of the central bank	Yes	M (W encouraged)	M	2W (W encouraged)	2W	
Interest rates	Yes	D	D (Bank of Latvia refinancing rate)	¹	D (Bank of Latvia refinancing rate)	
Stock market: Share price index	Yes	D	D	¹	D	
External sector						
Balance of payments	Yes	Q	M	1Q	30 days	Exceeds SDDS requirements
International reserves and foreign currency liquidity	Yes	M (W encouraged)	M	1W	1W for official reserve assets. 15 WD for the reserve template data.	
Merchandise trade	Yes	M	M	8W (4-6W encouraged)	NLT 8W	
International investment position	Yes	A (Q encouraged)	Q	2Q(Q encouraged)	Q	Exceeds SDDS requirements
Exchange rates	Yes	D	D	¹	D	
External debt	Yes	Q	Q	1Q	1Q	
Addendum: Population	Yes	A	M	...	NLT 4W	

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

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

Monitoring of data

9. In accordance with the IMF Executive Board's Third Review of the SDDS, the IMF staff began monitoring subscribers' performance under the SDDS in July 2000. This verifies not only that data coverage, periodicity, and timeliness are disseminated according to the calendar, but also that the data disseminated correspond to the DSBB metadata. During the quarters July 2000–June 2003, Latvia's dissemination practices have been in observance of the SDDS requirements, and the dissemination of data on Latvia's National Summary Data Page has been timely.

III. SUMMARY ASSESSMENT OF DATA QUALITY

10. Interest in assessing the quality of data derives from the objectives of complementing the SDDS with a consideration of the quality of the data being disseminated and of focusing more closely on the quality of the data that underpin surveillance of countries' economic policies. Against this background, the Statistics Department of the IMF has developed a tool, the DQAF, 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

11. An assessment of six macroeconomic datasets (national accounts, consumer price index, producer price index, government finance, monetary, and 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 Latvian 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 (Table 2 of this data module, Volume I, and Tables 1–6 in the Detailed Assessments, Volume III).

Prerequisites of quality

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

12. The **CSB** is established under legislation as the central statistical agency responsible for the collection, processing, and dissemination of most of the official statistics and the CSB

² Information on data quality can be found at the IMF's 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 III.

is recognized as the pre-eminent statistical authority in Latvia. The *Law on State Statistics (Statistics Law)* gives wide access to records, and provides authority for mandatory reporting. Within the institutional environment for statistics, the CSB promulgates statistical standards that are required to be used by all government data-producing agencies and formulates an annual statistical program in consultation with the other agencies. Statistical forms are required to be registered with, and approved by, the CSB each year.

13. Respondents' individual data are required to be kept confidential under the *Statistics Law* and the CSB has a number of procedures in place to safeguard confidentiality. There are legal mandates requiring cooperation by respondents but the CSB relies mainly on persuasion to ensure adequate response levels.

14. Staff resources are generally adequate for the tasks but there is strong competition for qualified professionals. Staff members working on national accounts and price statistics are, in general, well qualified and highly experienced. Professional development of staff is supported by external training and workshops provided by various international organizations. Computing facilities recently have been upgraded, and some recent systems improvements are enhancing productivity. Management emphasizes quality of data and services and processes are in place to ensure good quality in national accounts and prices statistics.

15. The legal and institutional environment set out in the *Law of Budget and Financial Management* and the Regulation of the Treasury gives the **MOF** and the Treasury the responsibility for compiling and disseminating government operations and debt statistics. The legislation makes reporting mandatory and provides for confidentiality of individual data. Regarding resources, the staff compiling GFS source data at the MOF are highly qualified and experienced, but might be insufficient in number to ensure a smooth transition to the latest methodological standard, *GFSM 2001*, linked with the adoption of the *1995 ESA*. This transition will require additional training. Quality awareness is well developed, as evidenced by the rules of staff conduct in the *State Civil Service Law*, the quality of staff recruited by the MOF, and the Treasury, and the focus on accuracy and reliability. The Treasury has a Quality Management Department and has set strategic goals to enhance quality and efficiency.

16. The *Statistics Law* along with the *Law on the Bank of Latvia* set the legal and institutional environment for balance of payments and monetary statistics. They assign the **BOL** clear responsibility for collecting, processing, analyzing, and disseminating monetary statistics and the balance of payments. The BOL's working arrangements are governed by laws, regulations (adopted by the BOL's Board of Governors or Executive Board), orders (issued by the BOL's Governor or Chairperson of the Executive Board), procedures (shaped by the BOL's Quality Management System), and instructions. The BOL produces monetary and balance of payments statistics in its Statistics Department, in cooperation with other units such as its Monetary Operations and Accounting Departments.

17. The BOL has an agreement with the MOF on the exchange of statistical data relating to government finance, international reserves, and foreign currency liquidity. The agreement specifies the shared data categories, their timeliness, their periodicity, and the method of transmitting data. The BOL has an interagency agreement with the CSB on statistical cooperation and information exchange, as well. The official foreign trade statistics compiled by the CSB always have been used in the balance of payments, while the CSB uses balance of payments and IIP data for the national accounts. Besides the CSB, the BOL maintains close contacts with other institutions on balance of payments data sources, such as the ministries of the Republic of Latvia, the Financial and Capital Market Commission, the State Revenue Service, and the State Social Security Agency.

18. The *Statistics Law* establishes the confidentiality and use of official statistical data, including the data the BOL produces. Under Article 3 state statistics shall be based on the principles of statistical confidentiality and transparency. Article 18 deals specifically with confidentiality issues. Article 10 of the *Statistics Law* and Article 8 of the *Law on Credit Institutions* mandates reporting statistical information to the BOL within its areas of responsibility. Penalties for noncompliance can be applied under Article 166.6 of the *Republic of Latvia Code of Administrative Offences*.

19. Statistical resources are sufficient. Overall, the number of the staff is adequate to perform the present scope of duties; however, should the range of statistics collected expand, additional staff would be required. The staff are experienced and competent, with adequate qualifications and technical skills. They have received formal training both from internal and outside experts, including the European Central Bank (ECB) and the IMF. The management of the Statistics Department endeavors to retain a core contingent of the trained staff by motivating and developing employees. The BOL's policy on information systems is to follow modern technologies and introduce them as rapidly as possible and appropriate. Financial resources are commensurate with the requirements of statistical programs.

20. Quality awareness is fully in evidence throughout the BOL's statistical programs. On May 18, 2000, the Bureau Veritas Latvia conferred ISO quality management certification on the BOL. The BOL currently conforms with the ISO 9001:2000 standard. The BOL's quality management system aims to achieve maximum satisfaction of the BOL's clients, comprising its own organizational units and management, credit institutions, and the general public.

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.

21. In support of the professionalism with which statistics are compiled and disseminated, the *Statistics Law* provides that state statistics shall be objective, reliable, relevant, and

efficient. These values are promulgated through the **CSB's** strategic plan and in staff instructions. The CSB promotes professionalism through the active encouragement of staff participation in training, workshops, and seminars (including events sponsored by Eurostat), to ensure awareness and understanding of statistical standards and good statistical practice. A recent survey of users showed that a majority (between 60 and 80 percent) agreed with statements that the CSB was trustworthy and provided information that is valuable to the public. Choices of sources and statistical techniques are informed by statistical considerations at the national and European levels. The staff indicates there have been no attempts at interference from outside the organization in matters of sources, methods, and dissemination. The CSB produces statistics on an impartial basis and staff members state they are free to choose the most appropriate data sources and methods. While the Director General is allowed to comment on any erroneous interpretation of statistics, there have been few instances where a response to public criticism has been required.

22. In promoting transparency, the *Statistics Law* is publicly available and CSB publications provide information about sources and methods. There is no pre-release to government officials of national accounts or prices publications. Some advance information about methodological changes is provided to the public but there is scope for increasing this in the case of national accounts. The *State Civil Service Law* contains a pledge on ethical standards for civil service candidates as well as the basic duties of a civil servant, which are made known to the staff.

23. The professionalism and transparency of central government statistics are ensured by current practices within the **MOF** and included in the *Statistics Law*, which covers all national and local government institutions involved in state statistics. Choices of sources and statistical techniques are made on the basis of statistical considerations and international standards. Laws and regulations governing the compilation and dissemination are freely disseminated to the public on the websites of the MOF and the Treasury. However, major changes in methodology, source data, and techniques are mentioned in the *Monthly Bulletin of Latvian Statistics* only at the time of change and for a period following implementation, but not in advance. Guidelines on ethical standards for staff are in place. The *State Civil Service Law* contains a pledge for civil service candidates as well as the basic duties of a civil servant, which staff must sign when they are recruited.

24. The professional independence of the **BOL's** statistical staff is assured by legislation and the BOL's own practices. The *Statistics Law* addresses the general need for the professional independence of data producing agencies. Article 13 of the *Law on the Bank of Latvia* explicitly establishes the independence of the BOL in fulfilling its responsibilities of producing statistics. Decisions about the choice of data sources and statistical techniques are made solely on the basis of data quality considerations. The main data sources and basic principles used for the balance of payments compilation are disseminated to the public on the BOL's, IMF's, and ECB's website and in hardcopy publications, respectively. Should misinterpretation or misuse of the BOL's statistics come to the attention of the Public Relations Department, it, in cooperation with the other relevant departments, would prepare comments or explanations.

25. The BOL's practices are transparent. The BOL disseminates the terms and conditions for collecting, compiling, and disseminating monetary and balance of payments statistics on its website. No public official outside the BOL has access to monetary or balance of payments statistics prior to publication. The approval processes for the publication of statistics rest entirely with the BOL. Statistics are first released by posting them on the BOL's website in accordance with the advance release calendar. All publications of the BOL clearly display the BOL's logotype. At least one-month advance notice is given regarding changes in methodology via the BOL's website.

26. Ethical standards are part of the employment contract signed between the BOL and its staff. The BOL's Personnel Department has developed an internal regulation on ethical standards to be observed by the staff. The regulation covers the BOL's policies on conflict of interest, information security, and protection from disclosure of source information from individual respondents. In addition, Article 31 of the *Law on the Bank of Latvia* establishes restrictions on holding more than one position by the BOL's Governor, Deputy Governor, members of the Board of Governors and the Executive Board, as well as their responsibilities under the *Law on the Prevention of Conflict of Interest in Activities of Public Officials*.

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.

27. The **national accounts concepts and definitions** and basis for recording are firmly based on the *1993 SNA* and *1995 ESA*. The CSB produces and publishes a wide range of quarterly and annual GDP estimates and the full sequence of accounts. Latvia exceeds the minimum requirements set by the Intersecretariat Working Group on National Accounts. Input-output tables have been produced periodically from 1995 and are planned to be produced annually in future. Classification and sectorization systems conform to international standards. Flows and stocks are recorded at market prices. Government receipts and expenditures are on an accrual basis, in some cases adjusted from a cash basis by the CSB.

28. The **consumer price index** (CPI) follows the concepts and definitions and the basis for recording of international good practice. It is consistent with national accounts concepts for household consumption expenditure. The scope of the CPI covers the monetary consumption expenditures that noninstitutionalized resident households make on their own behalf. However, it excludes coverage of owner-occupied dwellings either on a rental or net acquisition basis. Expenditures follow the COICOP classification which is in line with accepted practice. The overall structure follows the Eurostat regulation for the Harmonised Indices of Consumer Prices.

29. The **producer price indices** (PPIs) follow the concepts and definitions and the basis for recording principles of the national accounts. The scope of the PPIs is all resident market enterprises, and covers the output of mining and quarrying, manufactured goods, and electricity, gas, and water supply. Their coverage of output is consistent with the national accounts for the covered products, with the exception of the adjustment national accountants make for the non-observed economy. The classification of establishments follows the General Industrial Classification of Economic Activities within the European Communities (NACE) and products are classified according to the PRODCOM classification which is in accordance with good practice.

30. For **government finance statistics**, the concepts and definitions used in the Treasury data sources conform with *A Manual on Government Finance Statistics 1986 (GFSM 1986)* and are recorded on a cash basis. The CSB is responsible for accrual-based annual GFS in accordance with the *1995 ESA*. The scope of the statistics is broad, covering operations of all units of central government (including budgetary central government (the State Budget), social security, and extra-budgetary funds), local governments, and consolidated general government. All of these statistics are compiled on a monthly and quarterly basis. Moreover, central government debt is recorded on a quarterly basis. The classification of government operations is closely in line with the *GFSM 1986*, although for the purpose of the IMF's *Government Finance Statistics Yearbook 2003* (cash) data have been submitted according to the classification in *GFSM 2001*. Recording of government operations is still mainly on a cash basis. A migration path is mapped out to adapt the budget classification in accordance with the *1995 ESA* and with the accrual concepts of the *GFSM 2001*. It is planned that, the budget execution in 2005 will be according to the new classification and expenditures will be on an accrual basis. As noted under national accounts, these data are adjusted to an accruals basis by the CSB. Debt data are further broken down by original maturity and mainly recorded at the discounted price (issue value) and face value (as a memorandum item) rather than current market value. GFS are presented on a gross consolidated basis, as is appropriate.

31. The concepts and definitions of **monetary statistics** are in broad conformity with the guidelines of the *Monetary and Financial Statistics Manual (MFSM)*. In compliance with the ECB requirements on pre-accession countries, the Banking and Monetary Statistics Division (BMSD) generally follows ECB regulations in sectorizing the economy, as well as valuing and classifying financial instruments. The scope of the monetary statistics is broadly in line with the guidelines of the *MFSM*. Classification and sectorization are based on the *1995 ESA* and are generally in line with the *MFSM*, except a few accounts need revision (reclassifying IMF-related accounts and including accrued interest in the outstanding value of financial instruments), and the general government subsectors should be identified separately. The basis for recording follows ECB recommendations and thus is largely consistent with the *MFSM*. The deviations from *MFSM* include, data on accrued interest are not available by both instrument and sector, and accounts payable/receivable and financial derivatives are not broken down by institutional sector.

32. The **balance of payments** statistics closely follow the concepts and definitions set out in the *Balance of Payments Manual*, fifth edition (*BPM5*). The scope is in line with

internationally accepted standards. In principle, Latvia's balance of payments covers all transactions between residents and nonresidents, and all institutional units engaged in actions with nonresidents are covered. The classification and sectorization of the accounts are fully consistent with the *BPM5*. The breakdown for the balance of payments components is comprehensive and includes a more detailed classification for services than that of the *BPM5*. The basis for recording is broadly consistent with international standards. Market prices are used to value most flows and stocks, and all foreign currency transactions are converted to lats using the exchange rate prevailing on the day of the transaction. Most transactions are recorded on an accrual basis. Grossing/netting procedures are broadly consistent with the *BPM5*.

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.

33. The **national accounts source data** refer to a wide range of annual and sub-annual surveys and administrative statistics that are compiled to international standards, are subject to various validation checks, and, in general, produce data of acceptable quality. There appears to be a break in the continuity of the household budget survey (HBS) data between the 2000 and 2002 surveys due to the combined effects of improvements in methodology, update of the survey frame with 2000 census data, and a reduced sample size. In estimating household consumption expenditure after 2000, the CSB took account of growth rates in retail turnover as measured in the retail trade survey. In general, the data are available according to timetables that are acceptable for national accounts purposes. Many of the surveys are based on a statistical business register that has been progressively refined in recent years.

34. Regarding statistical techniques, improvements are being made in the measurement of consumption of fixed capital, progressively adopting the perpetual inventory model, and in dwelling services using improved rent data. Constant price estimates are mainly calculated using single deflation of output with Laspeyres chain price indices, but the CSB aims to move progressively to double deflation of value added. In compiling GDP by production appropriate output price indices are used for most economic activities. In some cases, however, volume measures are used to extrapolate base year data. A systematic approach is adopted for estimation of the non-observed economy, which is significant at about 15 percent of GDP. The sources and methodology are being progressively refined. Illegal activities are not included but experimental estimates have been made for some illegal activities. Additional activities that appear significant and merit study include production of illegal alcohol, trade in stolen cars, and smuggling activities generally.

35. The assessment of source and intermediate data is facilitated by estimation of GDP independently from the production and expenditure sides. The statistical discrepancy is incorporated in changes in inventories on the expenditure side. The discrepancy in

2000–2002 has been between -0.5 percent and 0.6 percent of annual GDP. The discrepancy is -2.1 percent to 5.3 percent of quarterly GDP. Standard errors calculated from the HBS and enterprise surveys could be used to better inform survey management. To assess revisions, differences between preliminary and final data are tracked and taken into account in compiling estimates for subsequent periods. It would be desirable to conduct formal studies of revisions.

36. The CSB obtains the weights and prices source data for the **CPI** from comprehensive surveys. The ongoing HBS allows for annual updating of the index, and the monthly price survey comprises about 18,100 prices per month, collected from 2,400 outlets in a representative 15 of the 26 regions. The statistical techniques used in calculating the index are sound. Prices are imputed when products are off-season or temporarily unavailable. The assessment and validation of the weights and prices are systematic and thorough. The CPI is not revised.

37. The weights of the **PPI** are updated annually, and new products are introduced each year when the enterprise sample is updated to replace those that have declined in importance. The source data for the weights are the business surveys which have full coverage for large enterprises, and use a stratified random sample for the remainder. The samples of elementary items on which the CSB collects prices are cut-off samples of establishments' main products, comprising about 1,500 quotes per month from about 400 enterprises. Missing prices are imputed and statistical techniques are generally sound, pending implementation of plans to align the reference period of the price relatives with the reference period of the weights. The assessment and validation of the price data are systematic and effective.

38. For **government finance statistics**, source data are available in a very timely manner and provide an adequate basis to compile statistics. Source data on the budgetary units, extrabudgetary funds, the social security fund, and the local governments are available from the Treasury's State budget execution and local governments data processing systems, which include all the common details on revenue and expenditure, the latter by economic classification as well as according to the COFOG functional classification system. Statistical techniques employed are sound, although estimations and other statistical procedures are rarely necessary. Assessment and validation of source and intermediate data are routinely made. Prior to data release, quality controls are conducted. The GFS data are revised only very exceptionally, for example following methodological changes.

39. The source data for **monetary statistics** are collected under EU regulations and in accordance with the new ECB framework. The source data are derived from comprehensive accounting records of the BOL and other depository corporations. The data capture the full range of financial instruments and economic sectors. Statistical techniques are sound. Electronic reporting and data processing, automated validation procedures, and documentation of data compilation practices contribute to the production of accurate and timely monetary statistics. Regular assessment and validation of source data and intermediate results as well as statistical outputs are robust. While no formal revision studies are

undertaken, revisions between preliminary and final data are investigated and documented to minimize revisions arising from response errors.

40. Source data are broadly sufficient to compile the **balance of payments** statistics in line with the *BPM5* and are kept under continuous review to keep them comprehensive. The main data sources are the BOL's quarterly surveys, ITRS data, banking statistics, BOL's data, and administrative data sources. These sources are timely and reasonably approximate the *BPM5* definitions, scope, classifications, valuation, and time of recording. Adjustments to source data are made where necessary to align them with *BPM5* concepts. In general, the statistical techniques are sound. Bank reports are submitted and compiled electronically. Nonbank reports are processed manually, but built-in checks for internal consistency and logical errors are in place. Data adjustments and transformations are undertaken to derive some balance of payments components. Assessment and validation of data and statistical outputs are generally sound, and have led to statistical improvements. Source data are validated against other independent data sources, whenever appropriate, and the behavior of time series is cross-checked with related series. Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated. Although no formal revision studies are published, the reasons for revisions to the data are investigated and documented.

Serviceability

Serviceability focuses on practical aspects of how well a dataset meets users' needs.

Elements refer to the extent to which data are relevant, produced, and disseminated in a timely fashion with appropriate periodicity, are consistent internally and with other datasets, and follow a predictable revisions policy.

41. Regarding relevance, the **national accounts** program adequately responds to users' needs, although no surveys of users have been conducted for national accounts statistics nor have any working groups or advisory groups been established. The CSB has, however, conducted surveys of users at a more general level and is contemplating creation of user committees, including for the national accounts. The national accounts meet the SDDS periodicity requirement and exceed the timeliness requirement.

42. The GDP data are reconciled by incorporating the statistical discrepancy in the changes in inventories component. In recent years supply-and-use tables have been used to identify major discrepancies and to improve the consistency of the estimates. The national accounts are reconcilable to balance of payments and government finance statistics. Consistent GDP time series are available from 1990. The CSB has the elements of a revision policy in place but this has not been well articulated for the benefit of users. Neither preliminary nor revised data are clearly identified. Revision studies generally are not made public.

43. The **CPI** appears to meet users' needs. The **PPIs** meet the needs of users interested in industrial sectors. The CSB monitors the relevance and consistency of its price indices for users through frequent consultation with government users and through periodic user

surveys. The timeliness and periodicity of the CPI and the manufactured goods PPI meet or exceed SDDS requirements. The revision policy is known to users.

44. The **government finance statistics** are relevant for the main users. For example, GFS are used in the dialog with rating agencies and as a basis for macroeconomic projections made by the Economic Analysis and Forecasting Department of the MOF. They also are the source data for various statistics compiled by the BOL and CSB. Users' needs are monitored via a Treasury electronic mail box. Further liaison with users could be undertaken under a CSB national accounts user group. The timeliness and periodicity on central and general government operations and debt data meet the SDDS requirements. GFS are consistent within the dataset; historical data are rarely revised. Moreover, GFS are broadly consistent with other statistical frameworks, though not fully with the BOL monetary statistics. The revision policy is explained on the DSBB, which is hyperlinked to the MOF's and CSB's websites. The Treasury's monthly data, which are preliminary when first released, are not revised. Preliminary summary annual data are revised later in the year, but revisions are not indicated to users. The CSB's revision policy on GFS follows that of the national accounts.

45. The relevance of **monetary statistics** is supported by a state program on statistics and largely assessed in the context of the ECB's requirements. Users' needs are monitored based on regular contact with users on an informal basis and users' feedback sent regularly to the BOL electronic mail address. BMSD staff regularly participate in international statistical meetings and seminars organized by international organizations. The timeliness and periodicity of the data meet SDDS requirements. Monetary statistics are consistent within the dataset and over time. While monetary statistics are consistent with those of the balance of payments, there are discrepancies with GFS. Revisions to monthly monetary statistics are rare and generally small, and, thus, data are not identified as preliminary. Revisions are identified when they take place and the BOL gives at least one-month notice of revisions on its website. The revision policy is publicly available.

46. The relevance of **balance of payments** statistics in meeting users' needs is supported by a state program on statistics and monitored by the Balance of Payments Statistics Division (BOPSD) staff through regular contact with users on an informal basis. BOPSD staff regularly participate in international statistical meetings and seminars organized by international organizations on balance of payments compilation issues. The timeliness and periodicity of the data exceed SDDS requirements. Balance of payments statistics are consistent within the dataset, with other macroeconomic datasets, and over time since 1992. The official foreign trade statistics compiled by the CSB always have been used in the balance of payments, while the CSB uses balance of payments and IIP data from the BOL in the national accounts. The balance of payments are fully reconciled with the IIP. The revision policy follows a regular pattern and is explained on the Fund's Data Standards Bulletin Board. Revised data need to be more clearly indicated.

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.

47. The accessibility of the annual and quarterly **national accounts data** is generally good. They are published in detail and with adequate time series in a range of publications. National accounts data are also available free of charge on the CSB's website and in other electronic forms. Subscription access to the CSB's web publications provides and incorporates long time series in tabular and spread-sheet format, and incorporates graphical analysis facilities. Publications are clear and comprehensive and the statistical tables are well supported by graphs and charts. However, the publications do not make it clear to users that the statistical discrepancy between the estimates of GDP by the production and expenditure approaches is included in the estimate of changes in inventories. Nonpublished nonconfidential data are available to users on request but this is not publicized. There is a preannounced release schedule which is almost always met. National accounts data are made available to all users at the same time and quarterly data are released at a press conference. Metadata are shown on the DSBB and in publications, although in some publications this is in very summary form.

48. Regarding assistance to users, all publications identify appropriate contact persons. National accounts are mentioned in the annual catalog of data products and are available at an information center where data products and the website may be accessed. Information centers are being established in three regions.

49. The **CPI** and **PPI** are released on a preannounced schedule. The CSB makes the data accessible to all users at the same time, through their website, fax, and e-mail. As with the national accounts, web access via subscription provides detailed, long time series and graphical analysis features. The monthly CPI publication and the quarterly PPI publication provide good detail on the indices and include adequate metadata. Assistance to users on price statistics is provided through a well-equipped information center and catalogs are freely available.

50. Data accessibility for **government finance statistics** is adequate. Detailed data on government operations, revenue and expenditure, are available. Government debt data are available on the Treasury's website but could be included in the *Monthly Bulletin of Latvian Statistics*. The statistics are released to all users at the same time and in accordance with advance release calendars. Although metadata are reasonably complete on the DSBB website, methodological explanation in national publications could be more comprehensive. Assistance to users is provided through the Internet and knowledgeable and supportive service is provided upon request. The MOF Treasury provides a contact person on cash basis source data for GFS on the IMF's DSBB website but not on its own website or in its publications. The CSB provides a contact in its publication containing GFS on a 1995 *ESA*

basis, however. The CSB provides assistance to users on GFS through its information centers and catalogs are freely available.

51. **Monetary statistics** are easily accessible through the BOL's website and publications. Data are presented in a clear format supported by charts that facilitate their use and interpretation. Statistics are released on a preannounced schedule and simultaneously to all users. Metadata accessibility is provided as summary methodology statements for all monetary data categories which are posted on the DSBB and hyperlinked to the BOL's website. Assistance to users is facilitated by provision of a contact telephone number and facsimile in BOL publications and on its website. The BOL also provides a contact person on the IMF's DSBB website and in ECB publications. More commentary and explanations of monetary statistics in BOL publications and on its website would enhance already adequate documentation. All publications are available on the BOL's website and can be requested on hard print free of charge.

52. Data accessibility for **balance of payments** statistics is adequate. The data are presented in a clear manner, forms of dissemination are adequate, and statistics are released to all users at the same time. Statistics are released on the preannounced schedule. Metadata accessibility is good, with detailed information provided in BOL, IMF, and ECB publications as well as on the BOL's and IMF's DSBB websites. Assistance to users is facilitated by provision of a contact telephone number and facsimile in BOL publications and on its website. The BOL also provides a contact person on the IMF's DSBB website and in ECB publications. All publications are available on the BOL's website and can be requested on hard print free of charge.

IV. STAFF'S RECOMMENDATIONS

53. Based on the results of the data quality assessment, discussions with the Latvian authorities in the statistics-compiling agencies, and responses from data users, the following measures are proposed to increase further Latvia's data quality, including adherence to international statistical guidelines.

National Accounts

High priority

- Establish a user advisory group, representing major government, private sector, and academic users.
- Progressively improve measurement of: consumption of fixed capital (using the perpetual inventory model) and dwelling services (adopting the rental equivalence or user cost approach).
- Closely monitor HBS data, and the underlying methodology, to ensure data reliability.
- Review inclusion of the statistical discrepancy with changes in inventories, conduct periodic systematic studies of the statistical discrepancy, and clarify its treatment in publications.
- Clearly identify preliminary and revised data in data releases.

Other key recommendations

- Provide information to users about methodological issues and upcoming changes in sources and methods, and about actions taken to ensure the quality of national accounts statistics.
- Calculate standard errors regularly for major surveys whose designs permit them, and use them to guide survey planning.
- Conduct surveys of user needs for national accounts periodically.
- Conduct and publish analyses of revisions.
- Publicize the availability of electronic and unpublished data.
- Provide more detailed metadata in selected publications.

CPI

High priority

- Develop a survey for measuring dwelling rents.
- Cover owner-occupied dwellings in the index.

Other key recommendations

- Consider introducing the class mean imputation method for imputing the prices of seasonal items.

PPI

Other key recommendations

- Support the CSB's plan to price align reference period of the weights with the base period of the price relatives.
- Support plans to extend the coverage of the index to include services in consultation with the national accounts section of the CSB.

Government Finance Statistics

High priority

- Support the initiatives taken within the MOF, Treasury, CSB, and BOL to update the chart of accounts underlying the GFS classification in accordance with the *1995 ESA* and *GFSM 2001*; draw up a clear implementation calendar and specify the resources needed to keep the process moving.
- Support the development of an Instruction by the Minister of Finance on the adoption of accrual accounting standards for expenditure; during the transition process, all expenses of all government units should be included and shown in the budget execution system.
- Draw up a comprehensive action plan for the transition of government revenue accounting from cash to accrual basis.

Other key recommendations

- Disseminate more detailed descriptions of methodology and procedure, and indicate breaks in time series and revision status of the data. Indicate changes in methodology, source data, and statistical techniques in advance.
- Disseminate comprehensive government debt data in conjunction with regular releases of GFS.
- Continue liaison with other agencies to establish a definitive list of government sector institutions.
- Consider the possibilities for classifying domestic and foreign government debt by the residency of the holder rather than the currency of the instrument.

Monetary Statistics

High priority

- In accordance with *MFSM* guidelines, revise published tables for back dates as far as possible by (1) reclassifying IMF-related accounts in the central bank survey, and (2) including accrued interest in the outstanding value of financial instruments by sector.
- In accordance with *MFSM* guidelines, separately identify subsectors of the general government.
- In cooperation with the MOF, reconcile monetary and government finance statistics, and carry out the reconciliation exercise on a regular basis.

Other key recommendations

- To enhance already adequate documentation, provide more commentary and explanations of monetary statistics in BOL publications and on its website.

Balance of Payments Statistics

High priority

- Support ongoing efforts to revise past data on goods for processing and current transfers as far back as possible, following recent methodological changes.
- Support plans to expand the collection system by introducing a new survey on other services in 2004 and a revised survey on foreign investment collecting flow as well as stock data in 2005.

Other key recommendations

- Support ongoing efforts to ensure that goods for processing be recorded on a gross basis by identifying specific measures through a joint study undertaken by the BOL, CSB, and Customs.
- To avoid import timing distortions, further amend the customs law to record imports on the date of entry rather than when leaving bonded warehouses and free-trade zones.
- Clearly identify revised data together with the revision policy in BOL publications and website.

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

Element	National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics	Comments
0. Prerequisites of quality							
0.1 Legal and institutional environment	0	0	0	0	0	0	
0.2 Resources	0	0	0	0	0	0	
0.3 Quality awareness	0	0	0	0	0	0	
1. Integrity							
1.1 Professionalism	0	0	0	0	0	0	
1.2 Transparency	0	0	0	0	0	0	
1.3 Ethical standards	0	0	0	0	0	0	
2. Methodological soundness							
2.1 Concepts and definitions	0	0	0	0	0	0	
2.2 Scope	0	LO	0	0	0	0	See paragraph 28.
2.3 Classification/sectorization	0	0	0	0	LO	0	See paragraph 31.
2.4 Basis for recording	0	0	0	0	0	0	
3. Accuracy and reliability							
3.1 Source data	0	0	0	0	0	0	
3.2 Statistical techniques	LO	0	LO	0	0	0	See paragraphs 34, 37.
3.3 Assessment and validation of source data	LO	0	0	0	0	0	See paragraph 35.
3.4 Assessment and validation of intermediate data and statistical outputs	LO	0	0	0	0	0	See paragraph 35.
3.5 Revision studies	LO	0	0	0	0	0	See paragraph 35.
4. Serviceability							
4.1 Relevance	LO	0	0	LO	0	0	See paragraphs 41, 44.
4.2 Timeliness and periodicity	0	0	0	0	0	0	
4.3 Consistency	0	0	0	LO	LO	0	See paragraphs 44, 45.
4.4 Revision policy and practice	LO	0	0	LO	0	LO	See paragraphs 42, 45, 46.
5. Accessibility							
5.1 Data accessibility	0	0	0	0	0	0	
5.2 Metadata accessibility	LO	0	0	LO	0	0	See paragraphs 47, 50.
5.3 Assistance to users	0	0	0	0	0	0	

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

INTERNATIONAL MONETARY FUND

REPUBLIC OF LATVIA

Report on the Observance of Standards and Codes (ROSC)

Response by the Authorities

June 22, 2004

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General remarks

Latvia has prepared the joint Response by the Bank of Latvia, the Ministry of Finance, the Treasury and the Central Statistical Bureau.

On September 3-17, 2003 the IMF's mission on *the Observance of Standards and Codes (ROSC)* visited Latvia to assess Latvia's statistical system against international best practices and to detect areas for improvement. The mission explored the situation in statistics and prepared the ROSC report. All involved authorities agreed with the overall assessment of Latvia's statistical system and given recommendations.

The Joint Response consists of the Response of the Bank of Latvia to the Balance of Payments and Monetary Statistics recommendations, of the Ministry of Finance and the Treasury to Government Finance Statistics recommendations and of the Central Statistical Bureau to National Accounts Statistics recommendations.

The Commentaries by the Bank of Latvia

Balance of Payments Statistics

Fund Staff Proposals		Authorities Comments
High priority		
8	Support ongoing efforts to revise past data on goods for processing and current transfers as far back as possible, following recent methodological changes.	The Bank of Latvia plans to revise historical data as far back as the first quarter of 2000 in September 2004.
2.	Support plans to expand the collection system by introducing a new survey on other services in 2004 and a revised survey on foreign investment collecting flow as well as stock data in 2005.	The Bank of Latvia will start to compile data of the new quarterly survey on other services as of the first quarter of 2004. The data will be crosschecked with ITRS (International Transaction Reporting System) data at the level of individual enterprises to monitor their quality. The Bank of Latvia continues to work on amendments to the quarterly survey on foreign investment so as to be ready to introduce the following in 2005: (i) flow statistics for better reconciliation of i.i.p. stocks and b.o.p. flows, and (ii) the Current Operating Performance Concept recommended by the European Central Bank and Eurostat for the valuation of reinvested earnings.
Other key recommendations		
3.	Support ongoing efforts to ensure that goods for processing be recorded on a gross basis by identifying specific measures through a joint study undertaken by the BOL, CSB, and Customs.	The Bank of Latvia will support ongoing efforts to ensure that goods for processing be recorded on a gross basis.
4.	To avoid import timing distortions, further amend the customs law to record imports on the date of entry rather than when leaving bonded warehouses and free-trade zones.	The additional explanations provided by the IMF in paragraph 2.4.2 <i>Recording is done on an accrual basis</i> highlight that this problem has been dealt with, diminishing its significance in the latter part of 2004; and therefore, this recommendation is not topical any more.
5.	Clearly identify revised data together with the revision policy in BOL publications and website.	Starting with the balance of payments for the first quarter of 2004, the revision policy will be given in the relevant publications and on the website.

Monetary Statistics

Fund Staff Proposals		Authorities Comments
High priority		
1.	In accordance with the MFSM guidelines, revise published tables for back dates as far as possible (1) reclassifying IMF-related accounts in the central bank survey, and (2) including accrued interest in the outstanding value of financial instruments by sector.	The Banking and Monetary Statistics Division (BMSD) of the Bank of Latvia, in collaboration with the IMF staff, has started to reclassify IMF-related accounts in the central bank survey. The reclassification will be implemented starting with data for August 2004. In the fourth quarter of 2004, the BMSD will start revising back data from 2000 onwards. As regards the inclusion of accrued interest in the outstanding value of financial instruments by sector, the BMSD will disclose the accrued interest by sector as a separate item starting with data for August 2004, which will allow the data users to obtain the outstanding value of financial instruments inclusive of accrued interest.
2.	In accordance with MFSM guidelines, separately identify the subsectors of the general government.	The BMSD plans to identify separately the local government accounts in the short term by using data already compiled in the Monthly Financial Position Report.
3.	In cooperation with the MOF, reconcile monetary and government finance statistics, and carry out the reconciliation exercise on a regular basis.	The need to reconcile government finance statistics is understood by both the Ministry of Finance and the Bank of Latvia. The Bank of Latvia cooperates, within its competence, with the Ministry of Finance to reach maximum comparability of these statistics. At this stage, the Bank of Latvia sends the statistics on the central and local governments' credits and deposits to the Ministry of Finance for analysis on a regular basis, while the Ministry of Finance provides feedback regarding their findings. A major step towards improving government finance statistics has been the recent adoption of an updated version of the list of public enterprises, produced by the special inter-institutional working group in the first quarter of 2004. The enhanced list is expected to contribute to the reconciliation process.

Other key recommendations		
4.	To enhance already adequate documentation, provide more commentary and explanations of monetary statistics in BOL publications and on its website.	As part of the ongoing process of improving data dissemination, the Statistics Department has initiated a change in the contents of the Bank of Latvia website. To make the website more user-friendly and meet the requirements of the users of statistics, a special section for statistics, which is easy to find due to its discernible location on the main menu, was created in January 2004; and also, all Bank of Latvia regulations in respect of statistics and statistical reporting forms were grouped under one caption. Likewise, the BMSD will continue enhancing the existing documentation, commentaries and explanations of monetary statistics.

The Commentaries by the Ministry of Finance and the Treasury

Government Finance Statistics

Fund Staff Proposals	Authorities Comments
High priority	
<p>1. Support the initiatives taken within the MOF, Treasury, CSB, and BOL to update the chart of accounts underlying the GFS classification in accordance with the 1995 ESA and GFSM 2001; draw up a clear implementation calendar and specify the resources needed to keep the process moving.</p>	<p>The GFS data of Latvia are currently compliant with the methodology set out in the GFSM 1986. MOF has a program to elaborate and adopt the budget classification in accordance with the 1995 ESA and GFSM 2001. This includes reclassification of revenue, expenditure, functions of government and financing for budget recording. A working group composed of representatives of the Budget Department of MOF (Methodology Unit), the Treasury (Reports Department) and the CSB (Government Finance Statistics Unit) has been established to elaborate the new classifications. (In the near future the BOL also will take part in this working group.) The new classifications are planned to adopt by the 2005 budget year. The chart of accounts will be updated after approval of the new GFS classifications by the Ministry of Finance in accordance with the 1995 ESA and GFSM 2001.</p>
<p>2. Support the development of an Instruction by the Minister of Finance on the adoption of accrual accounting standards for expenditure; during the transition process, all expenses of all government units should be included and shown in the budget execution system.</p>	<p>Draft of Accounting Instruction for Central Government and Local Government Institutions is approved by Commission of Methodology of Budgetary Institutions in early 2004. Final decision on transition period necessary for implementation of accruals depends on budgetary funding available.</p>
<p>3. Draw up a comprehensive action plan for the transition of government revenue accounting from cash to accrual basis.</p>	<p>The Treasury's accounting systems and accounting policy are enlightened to ensure readiness of the Treasury for posting of government revenue, accounted on accrual basis. Nevertheless the largest amount of the task and the primary provision of the accounting process of government revenue on accrual basis depends on State Revenue Service.</p>

Other key recommendations		
4.	Disseminate more detailed descriptions of methodology and procedure, and indicate breaks in time series and revision status of the data. Indicate changes in methodology, source data, and statistical techniques in advance.	The section "Methodology" (in Latvian) on the website of the MOF disseminates classifications used in GFS and approved by the order of the MOF in advance. Time series data are already published in the MOF annual "National Budget" and in Statistical Yearbook of Latvia. The section "Normative Documentation" (in Latvian) on the Treasury's website also provides detailed descriptions of methodology and procedures in advance.
5.	Disseminate comprehensive government debt data in conjunction with regular releases of GFS.	Government debt data are available on the Treasury's website. Government debt data are included also in Monthly Bulletin of Latvian Statistics, Chapter 1, Main Indicators.
6.	Continue liaison with other agencies to establish a definitive list of government institutions.	List of government institutions is under development by the CSB.
7.	Consider the possibilities for classifying domestic and foreign government debt by the residency of the holder rather than the currency of the instrument.	The possibilities for classifying domestic and foreign government debt by the residency of the holder rather than the currency of the instrument are under consideration.

The Commentaries by the Central Statistical Bureau

National Accounts Statistics

Fund Staff Proposals		Authorities Comments
High priority		
1.	Establish a user advisory group, representing major government, private sector, and academic users.	At present all results of macroeconomic calculations are discussed with the main users such as the specialists from the Ministry of Economics, the Ministry of Finance, the Bank of Latvia etc., but these discussions are organized so as to solve specified problems. During this year a user advisory group will be re-established, to discuss all major problems and changes in macroeconomic calculations. A working plan for this advisory group will be elaborated by all institutions involved.
2.	Progressively improve measurement of consumption of fixed capital (using the perpetual inventory model) and dwelling services (adopting the user cost approach).	Consumption of fixed capital in the General Government sector as well as the imputed rent of owner-occupied dwellings has been recalculated and the new results are included in GDP beginning with data for 1995, which will be published in the second half of April. Appropriate measures will be undertaken within the foreseen Twinning with a EU member state (not known until the end of 2004) to improve the calculations of imputed rent.
3.	Closely monitor HBS data, and the underlying methodology, to ensure data reliability.	HBS results are regularly discussed by the Board of Methodology of CSB analyzing the problems related to sampling and results received. At present HBS data are used for the calculation of the Private Consumption of Households in combination with information from other data sources (retail trade statistics, information from large producers, etc.).
4.	Review inclusion of the statistical discrepancy with changes in inventories, conduct periodic systematic studies of the statistical discrepancy, and clarify its treatment in publications.	These problems are important for quarterly calculations because the available quarterly information on inventories is limited. We are working on the evaluation of available data sources and refinement of quarterly calculation methods.
5.	Clearly identify preliminary and revised data in data releases.	This is implemented starting with the quarterly publication "Macroeconomic indicators of Latvia" 2003, 3.

Other key recommendations		
6.	Provide information to users about methodological issues and upcoming changes in sources and methods, and about actions taken to ensure the quality of national accounts statistics.	It is intended in late April 2004 to discuss the undertaken revision of GDP and other macroeconomic aggregates. In the future information about methodological changes will be included in major publications.
7.	Calculate standard errors regularly for major surveys whose designs permit them, and use them to guide survey planning.	Standard errors as well as coefficients of variation on the most important selected variables are regularly calculated for all major sample surveys (especially LFS, HBS, structural business statistics, a.o.). The results of analysis are taken into account when sampling design of the next wave of a particular survey is made.
8.	Conduct surveys of user needs for national accounts periodically.	It is intended to conduct such a survey in 2005.
9.	Conduct and publish analyses of revisions.	This will be taken into account when developing publications of macroeconomic indicators.
10.	Publicize the availability of electronic and unpublished data.	The availability of electronic and unpublished data will be explained in our publications in the nearest future. From January 1, 2005 this information will be available on the CSB home page: http://www.csb.lv .
11.	Provide more detailed metadata in selected publications.	Working on further development of macroeconomic publications more attention will be paid to metadata.

INTERNATIONAL MONETARY FUND

REPUBLIC OF LATVIA

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Carol S. Carson and Michael C. Deppler

June 22, 2004

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Latvia's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as appendices the summary of the Special Data Dissemination Standards (SDDS), the Data Quality Assessment Framework (DQAF) generic framework, and the summary of discussions with users.

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ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
BIS	Bank for International Settlements
BMSD	Banking and Monetary Statistics Division (BOL)
BOL	Bank of Latvia
BOPSD	Balance of Payments Statistics Division (BOL)
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CSB	Central Statistical Bureau
CPI	Consumer Price Index
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
EAFPD	Economic Analysis and Fiscal Policy Department (MOF)
ECB	European Central Bank
EU	European Union
FCMC	Financial and Capital Market Commission
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Financial Statistics Manual 2001</i>
<i>GFSY</i>	<i>Government Finance Statistics Yearbook</i>
HICP	Harmonised Indices of Consumer Prices
HBS	Household Budget Survey
IAS	International Accounting Standards
IIP	International Investment Position
IMF	International Monetary Fund
INTRASTAT	Intra Community Trade Statistical Information System
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
ISO	International Organization for Standards
LSIAE	Latvian State Institute of Agrarian Economics
MFPR	Monthly Financial Position Report
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
MPD	Monetary Policy Department (BOL)
MSD	Macroeconomic Statistics Department
NACE	Standard Classification of Economic Activities within the European Communities
NPI	Nonprofit Institution
NPISH	Nonprofit Institutions Serving Households
NSDP	National Summary Data Page
NUTS	Nomenclature of Territorial Units for Statistics

ODC	Other Depository Corporation
OECD	Organisation for Economic Cooperation and Development
PPI	Producer Price Index
PRODCOM	The European Classification System for Products
PSU	Primary Sampling Units
ROSC	Report on the Observance of Standards and Codes
SAO	State Audit Office (MOF)
SBR	Statistical Business Register
SD	Statistics Department (BOL)
SDDS	Special Data Dissemination Standard
SER	State Enterprise Register
SNA	System of National Accounts
SPO	State Planning Organization
SRS	State Revenue Service
VAT	Value Added Tax

DETAILED ASSESSMENT OF LATVIA'S MACROECONOMIC STATISTICS 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 Latvian 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 Latvia's Report on the Observance of Standards and Codes (ROSC)—Data Module. The report was prepared by a mission from the IMF Statistics Department that visited Latvia September 3–17, 2003. The report also includes the results of consultation with data users through an IMF-designed survey conducted by the IMF Office in Riga, which was followed by face to face meetings with data users during the IMF mission (See Appendix III).

The Central Statistical Bureau (CSB) produces or substantially participates in the production of all five of the datasets—national accounts, consumer price index, producer price index, accrual-based government finance statistics, and the goods and services trade component of balance of payments statistics. The Bank of Latvia (BOL) produces and releases the monetary statistics as well as the balance of payments and international investment position statistics. The State Treasury (Treasury) of the Ministry of Finance (MOF) produces cash-based government finance statistics. To avoid repetition, the assessment of the first two principally institutionally-oriented dimensions of the DQAF—Prerequisites of Quality and Integrity—are presented for the CSB only in the national accounts assessment, for the BOL only in the monetary statistics assessment, and for the MOF–Treasury only in the government finance statistics assessment. On these first two dimensions the CPI and PPI assessments refer to the national accounts assessment, while the balance of payments assessment refers to the monetary assessment. The assessments on prerequisites of quality and integrity for the Government Finance Statistics are self contained citing the involvement of the CSB as well as the MOF-Treasury in producing these data.

I. NATIONAL ACCOUNTS

0. Prerequisites of Quality

0.1 *Legal and institutional environment*

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

The *Law on State Statistics of the Republic of Latvia (Statistics Law)*, was adopted on November 25, 1997, with amendments accepted on January 28, 1999. Article 3 (1) (1) of the *Statistics Law* requires the CSB to establish, on the basis of international methodological principles, a uniform system of statistical information on economic, demographic, social and environmental matters. It thus specifies the central role of the Central Statistical Bureau of Latvia (CSB) in the compilation and dissemination of statistics.

Article 3 (1) (4) requires the CSB to provide statistical information necessary for decision making and stimulating research projects and the exchange of views. Under Article 4 the state statistical work is organized and performed by the CSB (and its regional offices), the Bank of Latvia (BOL) and other state or local government institutions dealing with selected areas of state statistics according to the procedures laid down by the Cabinet of Ministers.

Article 17 (1) provides the CSB with the right to approve state statistical questionnaires and instructions and to receive free-of-charge statistical returns completed in compliance with requirements. Article 17 (2) and (3) provide the CSB with the rights to receive free of charge information from the Population Register and other state registers and data bases; and compiled information from ministries and other state or local government institutions involved in state statistics. Article 17 (4) provides the CSB with the right to organize statistical observation of households and conduct surveys of the population.

Under Article 7 (1) the ministries, BOL, and other state and local government institutions are authorized to collect, record and compile statistical information within their fields of responsibility on selected economic, demographic, social and environmental issues.

All of these arrangements appear to work very well in practice and the CSB is clearly recognized as the pre-eminent statistical authority in Latvia.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Under Article 5 (2) (1) of the *Statistics Law* the CSB carries out a uniform state policy in the field of organization, aggregation, storage, analysis, and dissemination of statistical information. Under Article 5 (2) (3) the CSB develops a state statistical information program and disseminates information according to this program. The state statistical program is approved by the Cabinet of Ministers. This “Annual State Programme of Statistical Information” is developed by the CSB through informal and formal contact with all Ministries involved in the collection, processing, and dissemination of statistics.⁴ The CSB must be satisfied with the questionnaires, concepts, and methodologies for all proposed ongoing and new statistical collections before surveys and inquiries can be included in state statistical program.

Article 5 (4) requires the CSB to establish a uniform system of mandatory classification and coding of economic data that is aligned with international standards. This is binding on all relevant government institutions and there appears to be a high level of acceptance and compliance with the prescribed standards and classifications. The CSB issues annually an updated catalog on the status of classifications and coding systems, including contact persons and notifications of changes. The same information is posted on the CSB’s website. Those classifications under the direct responsibility of the CSB are published in the official

⁴ The demands of other users are also taken into account in determining the annual program.

newspaper of the Latvian Government and disseminated in paper form. Compliance with classifications and standards in Latvia is reported to be very good.

Under Article 5 (5), the CSB coordinates all statistical data flows at the national level and ensures the consistency of indicators included in state registers and other information systems. Under Article 5 (6), the CSB coordinates the activities of ministries, other state institutions, and local governments in the area of statistics.

Article 7 (2) provides that the statistical survey forms and questionnaires, as well as methodological instructions, are to be registered with the CSB every year. Under Article 17 (1), the CSB approves state statistical questionnaires and instructions. Each government institution is required to supply annually to the CSB a copy of each statistical questionnaire it uses or intends to use, and to obtain the CSB's approval before commencing a new survey. The survey questionnaire, when developed, must indicate that it has been approved by the CSB and nonapproved questionnaires are not legally binding.

The CSB has entered into agreements with a number of agencies regarding the regular supply of data to the CSB, including the products to be supplied, the form of presentation, and timetables for supply of data. Agencies subject to agreements include the BOL, the Ministry of Finance (MOF), and the State Revenue Service. As noted in 3.1.1. on source data, the CSB has been addressing a disparity between the *Statistics Law* and the *Law on Taxes and Duties* with the aim of being able to obtain data from the Taxpayer's Register on Value Added Tax (VAT) and turnover for individual enterprises.

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

Article 18 of the *Statistics Law* requires that data from individual respondents must be kept confidential. Statistical data must be deemed confidential if they allow identification of the respondent, other natural or legal persons (including organizational units) about which individual data have been collected. Confidential data must be used for statistical purposes only; that is, for aggregation, grouping and analysis, and may not be divulged in such a way that directly or indirectly identifies a natural or legal person.

The CSB is required to take necessary administrative, technical, and organizational measures to protect the confidentiality of individual data and to prevent unauthorized access to information, distortion of information, or unauthorized destruction of information. Staff of the CSB (including its regional offices) and staff of other state and local government institutions involved in state statistics must not divulge information about natural or legal persons that have come to their notice in the course of their duties.

The CSB takes a number of steps to ensure that the confidentiality provisions of the *Statistics Law* are strictly adhered to. Every staff member is required to sign a document pledging adherence to the confidentiality provisions of the law. All CSB questionnaires stress the confidentiality and protection of individual data. There is restricted access to the CSB's premises and these are currently being further tightened. Computer safeguards are in place to ensure protection of all confidential data. There have been no breaches by staff of

confidentiality provisions of the *Statistics Law*. Penalties would apply if any breaches were to occur but these penalties are not specified in the *Statistics Law*.

The *Law on Personal Data Protection*, applying to all government institutions, reinforces the confidentiality of personal data. This law provides that data processing is permitted only in certain prescribed cases. One of these is the CSB, defined as a system controller. The data processing must be necessary for the purpose of the controller's lawful duties. Processing of sensitive personal data is prohibited except where the processing is necessary for statistical investigations carried out by the CSB. The CSB has registered six personal data processing systems in the State Data Inspection. These are: demographic statistics; population census; agricultural census; register of agricultural farms; book-keeping ; and personnel accounting.

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

Article 10 of the *Statistics Law* states that respondents must supply complete, accurate, reliable, and timely data as required by the documents prepared or approved by the CSB. Submission of statistical information is a mandatory obligation to be performed free of charge.

In practice the CSB relies almost entirely on persuasion to achieve acceptable response levels in its surveys. A number of brochures of a public relations nature have been produced for the benefit of respondents and the community generally. These provide summary data from specific surveys and information about the importance and uses of the statistics being produced, and stress the responsibilities of respondents and the confidentiality provisions of the *Statistics Law*.

Reminder letters are sent to nonrespondents to surveys when deadlines for submitting questionnaires have been reached. At about three-monthly intervals, selected nonrespondents are sent a letter signed by the President of the CSB inviting them to participate in an administrative proceeding. About one half participate in this and subsequently comply with requirements. The remainder are subject to application of an administrative fine by the President of the CSB under the provisions of the Administrative Penalty Code.

0.2 Resources

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

The CSB has 644 staff of which 440 are staff employees, 134 are temporary employees such as interviewers and price collectors, and 53 are technical personnel. Of the 440 staff employees, about 300 are located in the central office in Riga. Of these 300 about 70 percent have tertiary qualifications. The text table provides a distribution of staff by type across CSB units.

There are 16 persons working in the national accounts section, of which 10 are permanent employees and six are working on a contract basis. There are also other persons in the

National Accounts

Table 1. Staff of the Central Statistical Bureau of Latvia

Type of staff [May follow the administrative classification of the CSB if different from below]	Macroeconomic Statistics Department					Price Statistics Department			Business Statistics Department	All other Departments and units	Regional statistical offices	Total
	National Accounts Division	Government Finance Statistics Division	Enterprise Finance Division	Foreign Trade Statistics Division	Total (incl. dept. director and vice head)	Producer Price Indices Division	Consumer Price Indices and International Comparison Programme Division	Total (incl. dept. director)				
1. Permanent employees	10	5	3	13	33	9	9	19	79	164	145	440
1.1. Civil servants	8	4	3	7	24	9	6	16	50	82	58	230
-managers	1	1	1	2	7	1	1	3	15	34	53	112
-senior civil servants	2	1	1	3	7	3	4	7	14	23	5	56
1.2. Other permanent employees (no civil servants)	2	1	-	6	9	-	3 (work for price collection)	3	29	82	87	210
1.3. Employees on contract bases	6	-	-	2	8	5	-	5	9	19	-	41
1.3.1. Long time contract bases	2	-	-	2	4	-	-	-	9	13	-	26
1.3.2. Short time employees/persons assist to different projects	4	-	-	-	4	5	-	5	-	6	-	15
1.4. Interviewers and price collectors	-	-	-	-	-	-	1	1	-	80	12	93
1.4.1. Interviewers Service	-	-	-	-	-	-	-	-	-	44	-	44
1.4.2. Interviewers for survey of Persons crossing the border	-	-	-	-	-	-	-	-	-	36	-	36
1.4.3. CPI price collectors	-	-	-	-	-	-	1	1	-	-	12	13
1.5. National PHARE funding	-	-	-	-	-	-	-	-	-	17	-	17
1.6. Technical personal	-	-	-	-	-	-	-	-	-	32	21	53
Total	16	5	3	15	41	14	10	25	88	312	178	644

Macroeconomic Statistics Department (MSD) and other units of CSB, the equivalent of about nine full time equivalents, working on national accounts. There has been an increase of only one staff in MSD in the past five years. This has not been commensurate with the increase in the work demands including those relating to statistical requirements for accession to the European Union (EU). Three national accounts section staff have

Begun their careers during the past five years; none are expected to retire in the next five years. There has not been significant staff turnover in national accounts. 19 professional staff work in the Price Statistics Department. 17 of the 93 collection staff in Riga and the regional offices are price collectors. For the Price Statistics Department there has been an increase in staff of two during the past five years. Three employees are expected to retire during the next five years. There has not been any significant staff turnover in recent years.

The computing facilities within both the MSD and Price Statistics Department are adequate with all staff having access to their own computing facilities. In recent years, there has been much improved access, by staff, to computers, e-mail/Internet facilities and internal and external databases.

The CSB has been reasonably successful in obtaining adequate funding for ongoing and new projects in recent years. It is worth noting that the range and quality of statistical data produced by the CSB is impressive in relation to the relatively small numbers of staff deployed and the need to adapt to a rapidly changing economy and society generally.

0.2.2 Measures to ensure efficient use of resources are implemented

Staff training is given an appropriate priority in the CSB. There has been much effective staff development through participation in Eurostat working groups and training courses. Opportunities are taken to send staff for training at the Joint Vienna Institute and at Training for European Statisticians (TES) courses conducted by Eurostat. Other training opportunities are provided by the Latvian School of State Administration. A number of study visits have been made in order to evaluate methods used in other statistical organizations. A human resource development plan is currently being established.

An improved financial and accounting system has recently been introduced to provide for a more efficient distribution of financial resources among the statistical projects and to increase work efficiency. The CSB has adopted a Working Time Accounting System and regularly updates financial plans for the ensuing three years.

There have been some productivity improvements within the CSB that have had particular impact on the MSD. The main improvement has been the establishment of the integrated statistical data management system that allows approved staff in the MSD (and other departments) to access electronically the metadata and individual data reported by respondents in about 40 surveys. This is a valuable tool enabling the MSD to readily access data to assist in verifying or adjusting estimates provided by other departments of the CSB.

An internal e-communication system is to be introduced during 2003 to improve data sharing, communication, and sharing in decision-making processes within the CSB.

The CSB has embarked on a reorganization of its regional operations. There are currently 25 regional offices and it is planned that these will be closed and three data collection and processing centers will be created. Each of these centers will be responsible for the territory previously handled by several of the former regional offices. The reorganization plan will be implemented in stages. Pilot tests have established that the new approach is generally well accepted by staff and the local communities, including respondents and users; response rates have in fact improved. Some staff savings will result and these will be used to effect improvements in priority statistical areas. Regional information centers will also be established at the district level in order to provide improved statistical services for districts. The CSB maintains a database of reporting requirements for specific respondents in order to inform respondents about their responsibilities and to monitor respondent burden. Work has commenced on the introduction of a methodology for obtaining data from respondents by electronic means with the objectives of reducing respondent burden and improving internal efficiency. The CSB actively reviews possibilities for increased use of administrative data as a means of reducing respondent burden.

All macroeconomic and prices statistics use consistent methodologies and classifications as specified by Eurostat and source data are generally consistent with those requirements, leading to efficiencies in data handling.

0.3 *Quality awareness*

0.3.1 Processes are in place to focus on quality

Management places emphasis on quality of data products and services, and continuous improvement in processes. The CSB plans to introduce a Total Quality Management model. Quality reports are prepared from time to time for some statistical fields and this would be useful for national accounts and price statistics also.

0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics

Some recent surveys of users of the CSB's data have provided the CSB with information on degree of satisfaction with the CSB's products and services, the usefulness of the CSB's data, use of specific services, desired improvements, public recognition and perception of the CSB. These surveys and outcomes are discussed in 4.1.1 below.

The MSD addresses the quality of national accounts data through extensive checks on the validity of data supplied from the wide range of sources accessed. The data are analyzed for internal consistency and for comparability over time and also, wherever possible, they are checked for consistency with other data sources. In addition, broad national accounting and other aggregates are reconciled.

The Price Statistics Department carries out extensive comparability checks on the CPI and PPI, both from period to period and from region to region.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The *Statistics Law* does not provide for the establishment of a statistical advisory council. This is a matter under consideration. The CSB has a general preference for less resource-consuming approaches than an overall statistical advisory council. Senior management is contemplating the establishment of a business advisory committee and possibly a scientific advisory committee focusing on methodological and systems issues. Working groups have been effective in a few statistical areas and these are likely to continue. A user advisory group on national accounts statistics would appear to be worth serious consideration.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Article 3 (2) of the *Statistics Law* states that state statistics shall be objective, reliable, relevant and efficient, and based on the principles of statistical confidentiality and transparency. Article 3(3) requires that the methods and procedures of data collection to be scientifically substantiated, and that users should be informed about sources and methods.

Professionalism is promoted through the active encouragement of staff participation in training opportunities, workshops and seminars, to ensure awareness and understanding of statistical standards and good statistical practices.

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

The sources and methods for compiling the national accounts statistics and component statistics are fully under the control of the CSB and concepts and standards follow international standards. Appropriate sources appear to be used throughout the system of national accounts. Staff indicated there has been no outside interference or attempted interference in matters of sources, methods, and dissemination.

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

National accounts publications produced by the CSB provide explanations of the basis for compiling the accounts, and identify the main factors underlying unusual figures and movements, in order to improve user understanding and reduce the likelihood of any misinterpretation. The Director General is allowed to respond to public criticism of statistics

or instances of misuse of statistics. There have been few instances where response to public criticism has been required.

National accounts data are presented to users and the media at press conferences held each quarter at the time of release of the quarterly Gross Domestic Product (GDP) estimates. This assists in educating users and reducing misunderstandings about the nature of the data.

The quarterly press releases provide analytical comment about the statistics in terms of main trends and factors contributing to trends, but do not contain comments about methodological issues.

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 published in Latvian in the official government newspaper. The public may obtain a copy of the law, and an unofficial translation into English, from the CSB's information center. The law is also available on the CSB's website,⁵ in Latvian and in English.

National accounts and price statistics publications show information about sources and methods. The publications show the site address and the e-mail address of the CSB, and the name of the appropriate contact persons for further information (but not the telephone number in the case of national accounts publications).

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

There is no pre-release access to the national accounts and prices statistics.

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

All national accounts and prices data releases are clearly identified as being produced by the CSB.

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

Significant changes to the basis for compiling national accounts and price indices have been announced in advance, including through press briefings. There appears to be some scope for increasing the amount of advance information in the case of national accounts. While it

⁵ <http://www.csb.lv/Satr/aorg.htm>

might be argued that some users are not particularly interested in knowing about upcoming changes, it is also fair to say that advance notice of this kind can be useful in improving user knowledge and heading off criticisms based on misunderstandings.

1.3 Ethical standards

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

A manual of instructions is issued to each staff member; this provides guidelines about staff behavior. The *State Civil Service Law* specifies an oath to be taken by all civil servants and outlines basic duties for civil servants and contains rules of staff conduct.

2.2 Scope

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

The CSB has produced a wide range of national accounts tables that is well in excess of the minimum requirements for the implementation of the *1993 SNA*, as determined by the Inter-Secretariat Working Group on National Accounts (ISWGNA):

The national accounts statistics for Latvia encompass the following annual accounts and tables:

- Value added and GDP by type of economic activity at current and constant prices (2000 =100).
- Expenditure components of GDP at current and constant prices.
- Income components of GDP at current prices.
- Production account.
- Distribution and use-of-income accounts.
- Allocation of primary income account; secondary distribution of income account; use of disposable income account.
- Accumulation accounts.
- Capital account.
- Financial account.
- Revaluation account.
- Balance sheets.
- Other changes in assets accounts.
- Rest-of-the-world account.

The following quarterly national accounts estimates are produced:

- Value added and GDP by type of economic activity at current and constant prices;
- Quarterly GDP by category of expenditure at current and constant prices;

- Quarterly GDP by income category at current prices.

The accounts are compiled and published for the following institutional sectors:

- S.1. Total economy
- S.11. Nonfinancial corporations
- S.12. Financial corporations
- S.13. General Government
- S.14. Households
- S.15. Nonprofit institutions serving households
- NS Not allocated to sector
- S.2. Rest of the world.

Input-output tables have been produced and published periodically, commencing with data for 1995. The latest tables, published in 2001, refer to 1997. Input-output tables for 1998 are planned to be published shortly, and work is now proceeding on tables for 2000. The intention is to compile supply-and-use tables annually in future; this is a Eurostat requirement for member countries.

The delineation of the constituent units of the economy is generally in accordance with the *1993 SNA*. The following are included as part of the economy:

- Territorial enclaves in the rest of the world.
- Bonded warehouses.
- Workers who work part of the year in a foreign country.

Coverage includes all transactions determined by the *1993 SNA* as lying within the production boundary.

Annual estimates of exhaustiveness are made for the various sectors of the economy and are based on a variety of data sources and special surveys. Ratios are calculated and applied to the quarterly data to take account of undercoverage and underreporting of legal activities.

Illegal activities are not included in GDP estimates. However, some pilot studies have been undertaken and experimental estimates made in respect of prostitution and trade in drugs as part of a Eurostat project.

Estimates of valuables and historical monuments are not within the scope of the assets boundary.

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 Standard Classification of Economic Activities within the European Communities (NACE Rev. 1) is used to classify the principal economic activity of enterprises.
- The EEC Combined Nomenclature (CN) of products is used to classify individual products.
- The Latvian Combined Nomenclature is used to classify international merchandise trade transactions. (This distinguishes products at the nine-digit level and is derived from the EEC's Combined Nomenclature; it is identical to the Harmonised System for Trade Statistics at the six-digit level.)
- The EU product classification of industrial production PRODCOM is used in industrial statistics.
- The Classification of Products by Activity (CPA) is also used to classify industrial products.
- The Classification of Functions of Government (COFOG) is used to classify government output and expenditure.
- The Classification of Individual Consumption by Purpose (COICOP) is used to classify household final consumption expenditure and expenditure of nonprofit institutions serving households (NPISH).
- The Nomenclature of Territorial Units for Statistics (NUTS) is used in compiling statistics for regions within Latvia.

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*.

- Market output, gross value added, and inventories are valued at basic prices.
- Output for own-use is valued at equivalent market prices.
- Excise taxes are included in the valuation of intermediate consumption.
- Intermediate consumption is valued at actual purchaser's prices, excluding deductible VAT.
- Stocks of fixed assets are valued at purchasers' prices.

- Consumption of fixed capital is mainly recorded at historical values or residual values after deduction of accumulated depreciation. (the CSB is moving progressively towards use of perpetual inventory models.)
- Dwelling services are valued at the rental value of comparable structures.
- Other nonmarket services are valued at cost.
- Household expenditures are valued at purchasers' prices.
- Imports are adjusted to an f.o.b. basis using f.o.b./c.i.f. coefficients based on an analysis conducted in 1999.

Data obtained in the CSB's questionnaires and, in particular the enterprise financial surveys questionnaires, are underpinned by the basic laws regulating bookkeeping and financial reporting in Latvia; that is, the *Law on Accounting* and the *Law on Annual Reports of Enterprises*. The *Law on Accounting* outlines the basic principles and rules which must be followed in accounting records, stock taking, and annual reporting. It applies to all enterprises and nonprofit organizations registered in the Enterprise Register, to permanent establishments (subsidiaries, departments) of foreign-owned enterprises registered with the Enterprise Register, and to institutions and organizations financed from the state and municipal budgets. The *Law on Annual Reports of Enterprises* applies to all enterprises and thus to all units on the Enterprise Register of the Republic of Latvia, except for banks, credit institutions and insurance companies, which are regulated by special acts of parliament.

The *Law on Annual Reports of Enterprises* includes specifications for balance sheets formats and profit-and-loss accounts; valuation rules; and auditing and reporting requirements. The annual report must include a balance sheet, a profit-and-loss statement, a cash flow statement, a statement of changes in equity, and explanatory notes, consistent with the *Law on Accounting* and the *Law on Annual Reports of Enterprises*. All the items in the annual report are to be valued according to prescribed accounting principles.

The *Law on Annual Reports of Enterprises* provides standard definitions of net turnover (net sales); other income from economic activity; purchase value of goods sold; changes in stocks of finished goods and work in progress, and these are broadly consistent with national accounting concepts.

Transactions are recorded in domestic currency only; therefore there is no need to make adjustments to convert from foreign currency.

2.4.2 *Recording is done on an accrual basis*

The timing rules used for recording flows are generally in accordance with the *1993 SNA*:

- Transactions and flows are generally recorded on an accrual basis.
- Work in progress is recorded in the period when it is produced.

Recording of government operations in Treasury accounts is still mainly on a cash basis but the MSD makes adjustments in order to convert the data to an estimated accrual basis.

International transactions are recorded at the time the goods enter or leave the economic territory as documented on the corresponding customs declarations.

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. Value added and disposable income are compiled both on a gross basis and net of consumption of fixed capital.

Data are collected from enterprises through the enterprise financial survey but questionnaires also include information about products manufactured by the enterprise and intended for further processing consumption or sale by establishments of the same enterprise. This information is taken into account in calculation of gross output, intermediate consumption and value added by kind of activity. Therefore transactions are recorded in the national accounts on a gross basis.

3. Accuracy and Reliability

3.1 Source data

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

Source data are collected through a variety of data collection programs, including:

- Annual and quarterly enterprise financial surveys.
- Quarterly surveys of large farms and all state and statutory farms.
- Half-yearly sample surveys of peasant farms, household plots, and private subsidiary farms.⁶
- Quarterly surveys of construction work.
- Quarterly surveys of wholesale and retail trade establishments and hotels and restaurants.
- Volume data from transport providers.
- Annual and quarterly surveys of financial intermediation and real estate.
- Monthly consolidated budget data and quarterly employment data.

⁶ Household plots are generally attached to dwellings and private subsidiary farms are rural farms, including kitchen gardens, that are leased to individuals.

- Other administrative data sources.
- Monthly household budget survey.
- Quarterly survey of employed persons and wages.

Statistical business register

The sample frame for the enterprise surveys is the statistical business register (SBR) maintained by the CSB which is in turn largely based on the State Enterprise Register (SER) administered by the Ministry of Justice. The SBR includes all legal units registered with the Enterprise Register, and central and local government institutions and nonprofit institutions irrespective of their main kind of activity (including seasonal enterprises).

The SBR covers public and government institutions, and physical persons registered on the SER as individual enterprises. It does not include physical persons performing work on the basis of licenses and patents, and peasant farms and fisherman's farms not registered on the SER as legal persons.

Updating of the SBR data is made using a special register survey so that each unit on the SBR is contacted when economic activity is commenced and then once every 18 months. In addition, updates to the SBR are made with reference to a number of sources including: the SER (monthly); the Taxpayer's Register (quarterly); the structural business surveys, or enterprise surveys (annually); the official Latvian Government newspaper (weekly); bankruptcy and insolvency information from courts (continuously); and other CSB surveys (as available).

The SBR contains the name and identification number of enterprises and institutions as well the information on the actual addresses of enterprises and the indicators include:

- Status of activity (active, temporary cessation, bankrupt, insolvent, in liquidation, liquidated).
- Date when activity started, ceased, or was temporarily stopped.
- The form of ownership/entrepreneurship.
- Contact details.
- Years when included in structural business surveys.
- Date when enterprise was last in the register survey.
- The main and two secondary kinds of activity by code of NACE Rev.1, four-digit level.
- Number of persons employed.
- Turnover.
- Statutory capital.

In order to identify active enterprises the Business Register Division of the CSB regularly reviews official publications and advertisements of enterprises in the main newspapers. If the

enterprise is advertising but is shown as inactive in the register it is included in the next register survey.

There were 177,000 enterprises registered with the SER at the end of 2002. There were 42,500 active enterprises on the SBR at that date and 66,000 local kind of activity units. The records in the SBR are classified by the primary economic activity undertaken by the enterprise (NACE Rev. 1 at the four-digit level), based on net turnover.

Latvia fully accords with EU Regulation 2186 of 1993 on the maintenance of business registers.

The CSB has been addressing a disparity between the *Statistics Law* and the *Law on Taxes and Duties* with the aim of being able to obtain data from the Taxpayer's Register on Value Added Tax (VAT) and turnover for individual enterprises. At present the CSB is not among the institutions that have direct access to individual records from the Taxpayer's Register. This proposed development would be of great benefit in terms of further enhancement of the SBR and would also be of value in compilation of the national accounts estimates.

Enterprise financial surveys

The CSB conducts a census of all central and local government enterprises and companies with central or local government participation of 50 percent or more, as well as companies of other forms of ownership that employ more than 20 persons or whose net turnover in the previous year exceeded 300,000 lats. The completely covered enterprises represent more than 80 percent of total gross turnover. Central and local government institutions (i.e., budgetary institutions) and social organizations (parties, associations, etc.) are also completely covered.

Data for other enterprises are obtained from annual and quarterly sample surveys based on stratified simple random sampling, determined according to their main economic activity. For enterprises located outside the capital city of Riga, stratification also takes account of the location of the enterprise, in terms of 32 administrative territories.

The response rate for the enterprise financial surveys is 95 percent. The returns are subjected to analysis and query action to ensure reliability of final results. The MSD regard the enterprise financial surveys data (both annual and quarterly) as generally of sufficient reliability for national accounts purposes.

The annual survey was formerly conducted as two related surveys, one with a due date of February 15 and the other with a due date of April 30. Effective 2003, these are conducted as a single survey with a due date of April 30.

The quarterly questionnaires for the enterprise financial surveys for quarters 1 to 3 request data for key items and the questionnaire for quarter 4 requests data for quarter 4 and very detailed data for the full year. Less detail is obtained from small enterprises. The financial survey questionnaires are sufficiently detailed to provide data for calculating gross output,

intermediate consumption and gross value added, including details of the structure of intermediate consumption. Data are also obtained annually for component establishments (local kind of activity units) within enterprises. Data from the enterprise surveys cover the whole economy and special adjustments are subsequently made for the nonobserved economy, as discussed under 3.2.2 below.

Investment survey

The quarterly survey of investments incorporates, inter alia, a survey of investment in nonfinancial assets and a survey of private investment in the construction of family houses. The survey of investment in nonfinancial assets relates to investment in tangible fixed assets and intangible assets. The survey covers all government enterprises and institutions, and companies that employ more than 50 persons and with turnover of the preceding year exceeding 300,000 lats. Data on other companies are obtained by sampling. The concepts and classifications used in the survey are broadly in accordance with the *1995 ESA*. The MSD makes estimates for unincorporated enterprises (mainly small farms) using volume data on acquisition of fixed assets.

Household budget survey

A continuous household budget survey (HBS) is conducted using monthly nonoverlapping subsamples that are distributed equally over the year. The survey covers nearly 4000 households each year; this is the equivalent of about 340 responses each month. In 2002, 3949 households were surveyed, of which 2744 were in urban areas and 1205 in rural areas. Participation is voluntary and the survey has a response rate of about 65 percent. No substitution is allowed.

The survey uses a two-stage random sampling method based on the 2000 Population Census. The annual household sample is randomly distributed over time (i.e., the same number of households participates in the survey within each of the 52 weeks). In Stage 1 primary sampling units (PSUs) are selected within each stratum using systematic probability sampling. In Stage 2 households from each sampled PSU are selected by simple random sampling.

The sample represents the whole Latvian population except for collective households such as elderly and nursing homes, student hostels, hotels, soldiers' barracks, hospitals, sanatoria, and prisons. Households are stratified only by the degree of urbanization (Riga, the capital city; six other large cities; towns, and total areas).

Detailed data are collected on expenditures, incomes, purchases of consumer goods, purchase of durable goods, and production for own-consumption, using a combination of diary, interview, and annual recall methods. Purchases of valuables and own-account fixed capital formation are not included.

Household consumption expenditures and acquisitions of fixed assets are valued at purchasers' prices actually paid for particular goods and services. The HBS approximates the consumption approach; own production and benefits in kind are measured at producer's and retail prices, and imputed rents are derived for principal residences.

Sampling errors have been calculated but not on a regular basis due to resource constraints in the methodological area. Past analyses have indicated that the accuracy of estimates is lower for expenditures on housing, restaurant meals, and education.

Analysis indicates that the following categories are underrepresented: high income households; entrepreneurs and self-employed households; and homeless people. No corrections are made for these biases by the department responsible for this survey or by the MSD.

There was a major break in continuity in the HBS data between the 2000 and 2002 surveys due to the combined effects of improvements in methodology, update of the survey frame with 2000 census data, and a reduced sample size. The result was a very large increase in expenditures per household between the two years. (Most of the changes took effect from May 2001 and data for 2001 have not been released.) This large increase was not reflected in trends of comparable aggregates from the retail trade survey. Household final consumption expenditure estimates for 2001 and 2002 rely largely on data on growth in retail trade as measured in the retail trade survey. The CSB should continue to monitor the results of the HBS survey to ensure comparability of the estimates over time and quality of the data generally.

Financial intermediation

Data for leasing companies and money exchange bureaus are obtained from surveys conducted by the CSB. The remainder of the financial intermediation data comes from other agencies and administrative sources (see below).

Administrative data sources

The MOF compiles statistics of central and local government revenue and expenditure. Data are available monthly by government function and economic classification. The data are adjusted by the MSD to include the operations of extra-budgetary funds. Detailed data on revenue and expenditure of the State Social Security Fund and the Compulsory Health Insurance Fund are also reported monthly. The CSB obtains supplementary data on intermediate consumption for government authorities, for the purposes of compiling supply-and-use tables. The MOF also provides data on government debt and foreign assistance.

The BOL provides quarterly reports on its operations and the operations of commercial banks. The BOL also provides data on exchange rates. Monthly aggregate data for insurance companies, commercial banks, investment funds, and pension funds are also obtained from the FCMC.

The State Revenue Service provides aggregate information on taxes collected from legal units and private persons, and information on social contributions of employers and employees. The CSB hopes to be able to obtain individual data for use in national accounts estimates and the statistical business register updating.

The Customs Department provides data on foreign merchandise trade compiled from customs declarations documents submitted by traders. While the foreign trade data are regarded by the MSD as quite reliable for national accounts purposes, there is one area that needs to be carefully monitored. This relates to goods imported into Latvia for processing, mainly textiles, that are subsequently exported as finished garments. There have been instances in the past where the exports have been reported on a net basis (i.e., reflecting only the value added from the activity occurring in Latvia), and thus understating exports. Discussions with the CSB and BOL indicate that the BOL conducts analyses of such transactions and has made adjustments where necessary to reflect more correct values. An examination of recent data suggests that this is not a current problem. However the matter requires monitoring and appropriate actions need to be taken when the Intra Community Trade Statistical Information System (INTRASTAT) is fully introduced (see below).

With the expected accession to EU the coverage of customs documents will exclude transactions between Latvia and other EU member countries. In preparation for this, the CSB is at present implementing INTRASTAT which will obtain data on international merchandise trade transactions based on a sample survey of enterprises.

Apart from the administrative data discussed above, a large number of single indicators are provided by various administrative units for use in national accounts estimates. For example, data on numbers of registered cars are provided by the Road Traffic Safety Directorate and these are used in the compilation of household final consumption expenditure.

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

Source data are generally consistent with the definitions, scope, classifications, valuation and time of recording required for national accounts statistics. The data compiled through the enterprise financial surveys are sufficiently detailed to allow adjustments to be made for national accounts purposes. Enterprises are classified by main type of economic activity at the four-digit level of NACE, in keeping with the industry classification of the production accounts. Data on government expenditure are available in sufficient detail to allow for the classification according to COFOG.

The MSD reviews the questionnaires used for the enterprise surveys and the HBS on a regular basis in order to ensure conformity with national accounts concepts and definitions.

In general, source data are available on a calendar year basis in keeping with the guidelines for national accounts compilation, and the pro-rating of fiscal data is not normally required.

Data are collected at the enterprise level, but with key data collected for local kind of activity units.

3.1.3 Source data are timely

Source data are compiled on a timely basis. Data for state enterprises are generally available within three months of the end of the reference year. Preliminary data from the annual enterprise survey are compiled and made available to the MSD within five months of the end of reference year, with final data available within eight months. However with the changes made to this collection system effective 2003 (mentioned in 3.1.1 above under Enterprise financial surveys) preliminary data are planned to become available within eight months and final data within nine months.⁷

The quarterly and annual data from the HBS are compiled and available to the MSD within 90 days of the end of the period. Required balance of payments data from the BOL are also generally available within 90 days of the end of the quarter. These delivery dates are a major contributing factor to the lag in releasing the GDP estimates according to expenditure approach; these are published about 40 days after the GDP estimates by the production approach, or about 110 days following the end of the quarter.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The data compilation techniques are generally sound.

Production approach procedures

Estimates of output and intermediate consumption are recorded mainly at the two-digit level of NACE Rev. 1. Output, intermediate consumption and gross product estimates are published for NACE sections (one-digit level) with the exception of agriculture, hunting and forestry activities which are disseminated at the two-digit level. The CSB will need to move towards publication of estimates at two-digit level in all cases, as required by Eurostat.

Fixed ratios of intermediate consumption to gross output based on the 1997 input-output table are used in the compilation of quarterly GDP estimates. Some quarterly intermediate consumption data are available from surveys and the CSB contemplates analyzing these data to examine the feasibility of making quarterly estimates of intermediate consumption for at least some activities, so that there is not full reliance on use of annual ratios.

⁷ While this represents some decrease in timeliness, advantages are expected in terms of efficiency and improved integration of data sources.

Specific issues related to the production approach

Agriculture

Economic accounts for agriculture, including estimates of gross product, are compiled by the Latvian State Institute of Agrarian Economics (LSIAE). The Institute uses basic agriculture and livestock data compiled by the CSB, together with its own surveys. The Institute estimates are compiled in accordance with System of National Accounts (SNA) principles.

Work in progress

The procedure for estimating work in progress is broadly in accordance with the guidelines of the 1993 SNA. Data are derived from the enterprise surveys to estimate large construction projects and output of large equipment. Estimates of growing crops, standing timber, and livestock reared for food, and stocks of fish are produced by the LSIAE, largely based on data collected and compiled by the CSB.

Inventory valuation adjustment

Estimates of inventories are available from the enterprise financial surveys. Under the accounting law, enterprises are required to revalue their opening inventories using values applicable at the end of the year. This simplifies the estimate of adjustments for holding gains/losses although it also requires an assumption that businesses do in fact carry out the prescribed adjustments.

International and Eurostat standards require holding gains/losses to be estimated for quarterly GDP estimates but the accounting law does not require this in the quarterly accounts of businesses. The MSD will therefore need to establish a method for making quarterly estimates of holding gains/losses although in the current circumstances of low inflation this will not have significant impact on overall estimates.

Dwelling services

In the past, the MSD has estimated the output of dwelling services through a simple price-volume grossing procedure, carried out at the total economy level. Dwelling stock data, classified by ownership, are available and are of reasonable quality. Data on rents charged, rents collected, and maintenance expenses for public sector landlords have been collected using a special survey. (However, as a number of tenants are not able to make the rent payments, an adjustment, equal to the difference between the actual rent and the paid rent, is made in the financial account). A small additional allowance has been made for publicly owned summerhouses. Private dwelling rents have been estimated using dwelling stock data and the rents applicable to public sector dwellings, resulting in some understatement. Information from the rent survey is applied to the owner-occupied sector to estimate output. Intermediate consumption has been calculated from data obtained from annual questionnaires.

Through participation in a Eurostat project on dwelling services the MSD has developed a refinement of this method involving estimates using survey data for regions, to take account of varying maximum rent levels set by different municipal authorities. The estimates for 1998 resulted in private sector rent payments 12 percent higher than those of the former method.

From 2001 special surveys of rent payments in privately-owned dwellings have been conducted and the MSD is using these data to further refine its methodology and to develop a user-cost method for calculating of imputed rent of owner-occupied dwellings. This will result in much higher estimates for this component. The MSD also plans to make more use of appropriate HBS data.

Cash versus accrual recording

Data are recorded on an accrual basis. For some government transactions the MSD makes adjustments to an accrual basis, as mentioned in 2.4.2 above.

Issues relating to volume measures of GDP

The primary method used for deriving constant price estimates is the single indicator method where output at current prices is deflated using a price index, and the resulting volume indicator is used to extrapolate value added. For some sectors volume indicators are used to extrapolate gross output.

For quarterly estimates intermediate consumption is generally estimated as a fixed proportion of output using the relevant annual data.

Constant price estimates-production approach

The Table 2 outlines the indices used to derive constant price estimates by type of economic activity. Double deflation methods are not used for deriving estimates of GDP at constant prices. However, Eurostat encourages the use of double deflation methods and the MSD has made some experimental estimates using double deflation, based on supply-and-use tables compiled for 1996 and 1997. The MSD contemplates gradual introduction of double deflation over the next few years, with emphasis on activities where there is reasonable price data for inputs.

In keeping with international guidelines, volume measures of taxes on products are estimated by applying base year tax rates to the quantity data for the products.

Chain indices are not used but the base year for constant price estimates is changed every five years in line with international guidelines. The present base year is 2000.

Table 2. Derivation of GDP by Type of Economic Activity at Constant Prices

Activity	Index/Method Used
Agriculture, hunting and forestry	Agricultural price indices; volume index for forestry and hunting.
Fishing	Producer price index (PPI) for fish products.
Mining and quarrying	PPI for mining and quarrying.
Manufacturing	Relevant components of the PPI (2 digit level of NACE).
Electricity, gas and water supply	Relevant components of the PPI (3 digit level of NACE).
Construction	Building cost index (materials and labor).
Wholesale and retail trade	Retail turnover deflated by appropriate components of CPI price index. Wholesale turnover deflated by appropriate imports price indices and unit value indices; estimates of trade margins are made using ratio of margins to turnover from annual data.
Hotels and Restaurants	Volume indices.
Transport and storage	Volume indices of kilometers travelled and goods transported.
Communications	Volume indices and CPI for communications services.
Financial intermediation	Volume indicators, based mainly on employment, with approximate adjustments for changes in productivity.
Real estate	Deflated by indices charges per square meter for dwellings and commercial buildings.
Public administration, defence, education, health, social work	Output extrapolated using employment indices; adjustments for productivity changes based on average wages data; intermediate consumption deflated by CPI for main products; gross product in constant prices calculated as the difference between output and intermediate consumption.
Other services	Dwelling services calculated from current data on housing stock and maintenance costs. Other services mainly deflated using appropriate CPI components.

Income approach

GDP estimates according to the income approach largely use the same data sources as those for GDP according to the production approach. Use is also made of data from the survey of employed persons and wages, and aggregate data from State Revenue Service on social tax payers and changes in tax debt.

Compensation of employees

Compensation of employees comprises wages and salaries, employers' actual social contributions and employers' imputed social contributions. The main data source for wages and salaries is the survey of employed persons and wages which covers enterprises, state institutions financed from budget, and nonprofit institutions serving households. Wages and salaries, as measured in the survey, include payments in kind.

Survey data on wages and salaries are adjusted by the MSD to take account of “envelope salaries;” i.e., wage payments that are not recorded in the accounts of businesses in order to avoid payment of social taxes. These adjustments have been made with reference to indicative data from a special household survey data (entitled a “survey on the evaluation of the size of the informal sector”) and through analysis of data for small enterprises that report average wages that are below the minimum wage set by law. Envelope salaries are currently estimated at about 24 percent of total wages and salaries in the nonfinancial corporations sector.

Consumption of fixed capital

The main data source for estimates of capital stock, gross fixed capital formation, and consumption of fixed capital is the survey of nonfinancial investments and construction. This is a stratified sample survey covering all active legal economic units. All large enterprises (greater than 50 employees and/or greater than 300,000 lats annual turnover) are covered, as well as all government units. The other units are covered by samples. Large units are surveyed quarterly and small units are surveyed annually.

The survey asks for data on the stock of assets at the beginning and at the end of the period, changes during the period, and depreciation. Data are obtained for five categories of tangible fixed assets. Some additional data sources, such as balance sheets of banking institutions and budgetary data, are used for checking purposes. Fixed assets of private farms and other unincorporated enterprises (self-employed) are not included and are calculated indirectly.

The estimates of consumption of fixed capital for market producers in the national accounts have been based on depreciation at historic prices as reported in the investment survey. Survey data are analyzed at the enterprise level and clearly unrealistic figures are recalculated using average shares of depreciation calculated from surveys in the same kinds of activity and assets. For general government, consumption of fixed capital is calculated using rates similar to those used by enterprises or allowed by income tax laws.

The investment survey records the stock of assets at historic prices after deduction of accumulated depreciation (i.e., residual values). ‘Pure’ budgetary institutions report data at full historic prices. However, government units registered in the Enterprise Register, but receiving budgetary subsidies (e.g., public hospitals) report residual values.

Following participation in a Eurostat project the MSD is now working to improve data on fixed assets through the use of data from a new survey that was implemented from quarter 1, 2000. Fixed assets are required to be valued at full historical values in this survey. These survey data will result in improved data on consumption of fixed capital and stocks of fixed assets in the balance sheets of the SNA. It is planned to start using the perpetual inventory method based on current replacement cost data for the purposes of calculating consumption of fixed capital. The MSD plans to complete the first stage, covering government asset and nongovernment buildings, by April 2004.

Fixed ratios of consumption of fixed capital derived from the annual estimates are used to derive quarterly estimates for government services.

The introduction of the new methodologies for owner occupied dwellings (discussed above) and consumption of fixed capital will substantially improve the quality of these estimates. The MSD has made an estimate, on the basis of preliminary figures, that the combined effect of the new methods will result in an increase in the level of GDP for Latvia of the order of 4 to 6 percent.

Expenditure approach

The categories of expenditure on GDP are derived independently but adjustments are made in order to reconcile GDP estimates. GDP according to the production approach is compared with GDP according to the expenditure approach. The former measure is generally considered to be the more reliable. In balancing the two approaches for annual data, following verification of all aggregates, adjustments tend to be made to individual components of GDP according to the expenditure approach (e.g., household consumption expenditure, or gross capital formation). In the balancing process particular attention is directed to items that are calculated indirectly or based on less reliable data or changed primary data sources. Any remaining statistical discrepancy is then included in the estimate of changes in inventories on the expenditure side.

Based on annual figures, the discrepancy in the past three years has been equal to or less than 0.6 percent of GDP. Based on quarterly figures, the discrepancy during that period has been between -2.1 and +5.3 percent of GDP. The statistical discrepancy has been much larger in the first quarter of each year than in the other quarters. No systematic analysis has been made of the statistical discrepancy and this would seem to merit closer examination in order to determine if there are any systematic biases in the contributing data, in the balancing processes, or in the estimation methods.

The quarterly national accounts are adjusted to add to the annual estimates by inspection of the individual quarterly data following the availability of annual data. If data for a specific quarter are obviously incorrect (e.g., some enterprises have incorrectly reported in a specific quarter), the MSD revises the data for the specific quarter. If there are no specific amendments to quarterly data the MSD makes pro-rata adjustments to data for the four quarters to achieve reconciliation. Quarterly estimates are generally finalized following the finalization of annual data; i.e., about 15 months after the end of the reference period.

This is the general procedure adopted for current price estimates and also for constant prices estimates. However, the MSD sometimes elects not to revise constant price estimates; e.g., in cases where the deflation of current price estimates involves a certain amount of subjectivity.

The MSD is now making more use of supply-and-use tables in the reconciliation process. These data are useful in improving overall data consistency. However due to the timing of

supply-and-use table production, this reconciliation needs to occur at a later stage and following the initial publication of annual estimates.

The following comments relate to individual categories of GDP according to the expenditure approach.

Government final consumption expenditure is classified according to COFOG at the one-digit level for the annual estimates. Household final consumption expenditure estimates are made with reference to a number of data sources. A prime source is the HBS. However, extensive use is also made of retail trade data for some commodities, making assumptions about the proportion of retail sales made to nonhouseholds. Reference is also made to data for suppliers of energy services, rents, dwelling stocks and car registrations. Commodity flow estimates are made for some commodities based on data for production, net imports, and inventories, making allowance for consumption by nonhouseholds).

Fixed capital formation is classified according to the *1993 SNA* and data are compiled, but not published, for seventeen main activities and six asset groups as specified in the *1995 ESA*. Changes in inventories are classified according to NACE Rev. 1 but this dissection is not published.

Valuables are not estimated. Items considered stores of wealth are excluded from consumption expenditure and capital formation to the extent that they can be identified.

Exports and imports of goods are calculated in accordance with the balance of payments methodology. Exported and imported goods data are sourced from Customs documents and use is also made of data on electricity and natural gas exports and imports, and information on extra-territorial trade from fishing vessels.

Foreign trade data are compiled in accordance with the Special Trade System, which means that imports to, and exports from, customs warehouses of goods produced abroad are excluded. However certain goods which enter and leave customs warehouses are included in the balance of payments statistics. These are goods which have entered customs warehouses from Latvian sources and are subsequently exported. These goods are valued at the prices that applied upon entering customs warehouses.

The main data source for exports and imports of services is the special survey on external settlements of enterprises conducted by the BOL. Other sources are: the Financial and Capital Market Commission (FCMC) and the commercial banks. Information on the earnings and expenditures of Latvian foreign representations is obtained from the Ministry of Foreign Affairs. The MOF supplies data about services regarded as foreign assistance; this is recorded as imports of services by General Government.

Information on Latvian residents traveling abroad is derived from sample survey of travelers, conducted by the CSB. Travelers are questioned once a quarter about expenditures made abroad.

Fixed ratios derived from benchmark surveys are generally not used in compiling estimates of GDP according to the expenditure approach. However there are a small number of exceptions. These include the use of c.i.f. /f.o.b. ratios to adjust imports, based on an analysis made on 1999 data, and estimates based on data from the population census and subsequent intercensal estimates.

Constant price estimates—expenditure approach

Categories of expenditure relating to domestic purchases in household final consumption expenditure are deflated using the relevant components of the CPI.

Government final consumption expenditure is deflated using appropriate volume indicators and labor inputs, and adjusted for productivity changes using average wages data.

For exports of goods and services the following deflators are used:

- Exports of goods—relevant unit value indices and price indices.
- Exports of transportation and communications services—volume indicators.
- Construction services—building cost index.
- Travel—appropriate CPI components.
- Other services—volume indicators.

For imports of goods and services the following deflators are used:

- Imports of goods—relevant unit value indices and price indices.
- Imports of services—volume indicators, adjusted for changes in exchange rates.

GDP quarterly series for Latvia have recently been seasonally adjusted using DEMETRA with TRAMO/SEATS. Seasonally adjusted series have been published, for quarters from 1993 onwards, relating to GDP by the production approach, classified by economic activity (17 NACE categories). Seasonally adjusted data have also been calculated for GDP by expenditure categories, and these will be published shortly. At present the data are shown only in graph form but the MSD plans to publish the actual data.

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

Latvia has been participating in Eurostat's pilot project on exhaustiveness, which is aimed at improving estimates of the nonobserved economy in candidate countries. As a result,

estimation is now undertaken at a detailed level based on pilot project on exhaustiveness methods used in EU member states and candidate countries.

In earlier years the MSD made estimates for the nonobserved economy focusing on nonregistered producers in the household sector. Subsequently, attention was also directed to the activities of registered small enterprises. This methodology has been progressively refined and extended, in cooperation with the Italian National Institute of Statistics (ISTAT), and through participation in a Eurostat project on measurement of the nonobserved economy.

A systematic estimation approach is used, including the following elements:

- A general comparison between GDP calculated from the production and expenditure approaches.
- A comparison of the nonfinancial accounts with the financial accounts and balance sheets to evaluate the extent of under-recording of incomes in the household sector.
- Supplementary estimates of production by the households sector.
- Adjustments related to nonregistered labor.
- Estimates of activities that are not registered and not surveyed.
- Adjustments to survey data to take account of nonresponse and underreporting under the production approach).
- Adjustments to account for under-reporting of wages (e.g., envelope salaries) and profits, under the income approach.
- Adjustments to expenditure-based estimates based on analyses such as volume data on consumption of alcoholic beverages (for household consumption estimates) and transit cargo data (for estimates of exports and imports of goods and services).
- Comparison of employment data from enterprise surveys and surveys of labor and wages.
- Estimates for gross fixed capital formation in the household sector not covered by surveys.
- Adjustments for exports of services not included in surveys relating to payments for services done by nonresidents.
- Adjustments for exports and imports of goods to eliminate undervaluation of goods that have entered customs warehouses from Latvian sources and subsequently exported.
- Adjustments to consumption expenditure for repairs of dwellings, transportation services, repairs of cars and repairs of household appliances, as well different private services, based on special additional survey of households.

Adjustments related to exhaustiveness in 2000 amounted to 15.1 percent of GDP according to the production approach. Further development and enhancement of estimates for the nonobserved economy are highly desirable.

As mentioned in 2.2.1, illegal activities are not included in GDP estimates. However, some pilot studies have been undertaken and experimental estimates made in respect of prostitution

and trade in drugs as part of a Eurostat project. Further enhancement and extension of estimates of illegal activities would appear desirable. In particular, activities that appear significant and where measurement is worth closer study include: the production of illegal alcohol; trade in stolen cars; and smuggling activities generally.

3.3 Assessment and validation of source data

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

Household budget survey

Sampling errors are estimated for the HBS but not on a regular basis. Results are not used on a regular basis to guide planning for future surveys. Sampling errors are not published for the benefit of users. Imputations are made for missing data in the HBS by appropriate adjustments to the grossing up ratios. No imputations are made for nonresponse by specific households.

The MSD participated in a Eurostat project designed to estimate the effect on household consumption expenditure of the under-representation of high income households in the household budget survey. This resulted in a slight increase in total household consumption expenditure but very little impact on the distribution of that expenditure between COICOP categories.

The MSD considers that a more important issue is the significant break in continuity in data for expenditures per household that occurred in 2001 (as noted in 3.1.1).

Enterprise financial surveys

Sampling errors are not estimated on a regular basis for the enterprise financial surveys and are therefore not used to improve the survey process. Sampling errors are not published for the benefit of users.

The MSD makes various checks on trends in enterprise financial surveys data. Data for large enterprises are checked manually for errors and inconsistencies, and sometimes queries are raised directly by the MSD with respondents to verify reported data. Some comparisons are made with administrative data; for instance, data produced by State Revenue Service (SRS), based on VAT data. However the SRS data are at a fairly aggregated level and comparisons are not always conclusive.

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

3.4.1 *Main intermediate data are validated against other information where applicable*

Data obtained from the enterprise surveys are checked against data on output estimates derived from administrative sources, including data from budgetary sources and from Customs documentation, where relevant. In compiling household consumption estimates comparisons are made between HBS estimates and estimates from the retail trade survey and other sources, as discussed in 3.2.1 above.

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

Discrepancies in intermediate data are assessed and major differences are investigated and corrected by adjusting survey data that are assumed to be less reliable. Examples include the comparison of HBS data and retail trade data, and the further comparisons, for some items, with the results of commodity flow estimates.

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

There have been no systematic studies of the nature and extent of the statistical discrepancy between GDP by type of economic activity and by expenditure components. However with greater experience in compiling supply-and-use tables and more regular tables becoming available the MSD is now in a stronger position to make a systematic study of statistical discrepancies and possible implications for source data and/or national accounts estimates.

3.5 *Revision studies*

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

No systematic and routine studies are carried out in respect of the direction and magnitude of revisions between preliminary and final national accounts data for Latvia. Some other revision studies have been made but not on a regular basis. Revision studies are planned when revised estimates have been made of consumption of fixed capital and dwelling services, as discussed in 3.2.1 above. Initially, revised estimates will be made for 2000 and 2001 and then revisions will be made for subsequent years and for earlier years, possibly back to 1995.

It would be desirable for the MSD to make routine systematic studies of the direction and magnitude of revisions occurring between preliminary and final data, and endeavor to ascertain sources of errors and reasons for fluctuations in the data. These findings could be used to improve preliminary estimates.

4. Serviceability

4.1 *Relevance*

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

Some recent surveys of users of the CSB's data have provided the CSB with information on degree of satisfaction with CSB products and services, the usefulness of the CSB's data, use of specific services, desired improvements, public recognition and perception of the CSB. While these provide user views at a broad level they do, however, provide useful benchmarks about user satisfaction and a further survey is planned for 2004.

The latest survey shows:

- About 80 percent of respondents were very satisfied or quite satisfied with the ability and responsiveness of staff and the overall services provided.
- About 70 percent of respondents were very satisfied or quite satisfied with: the ability of staff to comprehend user needs; time taken to fulfill orders; and subscription procedures.
- About 50 percent of respondents were very satisfied or quite satisfied with information about the availability of data and services; timeliness of data; and comparability with previous data.
- About 40 percent of respondents were very satisfied or quite satisfied with comparability with data of other countries, and usefulness of data in users' work.

Results of these surveys have been presented to managers and staff throughout the CSB and have led to some improvements in data products and dissemination practices. It would be useful to conduct specific user surveys in specific fields including national accounts and prices and, in particular, to focus on data dissemination aspects.

The MSD has not undertaken any surveys of users of national accounts nor has it established any working group or advisory group on national accounts. The relevance and practical utility of the data therefore are not monitored on a regular basis. The MSD does obtain useful comments from time to time on content and presentation of national accounts data from major users such as the BOL, MOF and the Ministry of the Economy.

As noted in 0.3.3, it would be useful if a user advisory group on national accounts statistics were to be established, representing government, private and academic users.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The CSB currently exceeds the SDDS requirement on timeliness. Quarterly estimates of GDP according to the production approach are disseminated about 70 days after the end of the reference quarter. GDP quarterly estimates according to the expenditure approach are published about 40 days later than the production-based estimates.

Preliminary annual GDP estimates are derived from the sum of the four quarters and are available about 70 days after the end of the reference year. Final annual GDP data are published following balancing of the annual national accounts. In practice, final GDP estimates according to the production approach for year t are presented simultaneously with the preliminary GDP data for the year $t+1$.

4.2.2 Periodicity follows dissemination standards

The CSB meets the SDDS requirement on periodicity. It disseminates estimates of quarterly GDP by type of economic activity, by income category, and by expenditure category, in both current and constant prices.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

GDP estimates according to the production, income and expenditure approaches are reconciled through the incorporation of the statistical discrepancy in estimates of changes in inventories, within the expenditure approach.

Quarterly and annual estimates are broadly consistent, with differences arising primarily from the higher availability and reliability of annual source data.

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

Consistent time series are available from 1990 for both annual and quarterly series. When changes are made to statistical and methodological techniques, or new data sources are introduced, the series are revised backwards as far as is reasonably possible. There are no breaks in the time series of annual or quarterly estimates.

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

The statistics are consistent and reconcilable with the balance of payments statistics, merchandise trade statistics, and GFS.

An important part of the balancing process involves the reconciliation between general results (B.9-net lending/net borrowing) of financial and nonfinancial parts of the national accounts. In this process, financial assets and liabilities calculated using information from balance sheets of banking institutions are generally assumed by the MSD to be more reliable than information from statistical surveys of enterprises.

4.4 *Revision policy and practice*

4.4.1 Revisions follow a regular, well established, and transparent schedule

Annual estimates are subject to revision following release of more final source data. In practice, annual data are revised when there is a serious reason for such revisions and when changes are numerically significant. Other changes to data, resulting from methodological refinements in calculation of particular items, are stockpiled and implemented when all published time series are revised. Generally, these revisions are implemented simultaneously with the introduction of a new base year for constant price estimates; e.g., revisions of this kind were implemented in 2001, following the introduction of constant price estimates on a base year of 2000. A certain amount of stockpiling of potential revisions is acceptable (e.g., where potential revisions are insignificant) but revisions should normally be implemented in the publication following detection.

Quarterly estimates of GDP according to the production approach are released 70 days after the end of the quarter and are subject to revision at the time of release of the following quarterly estimates; for instance, quarter 1 estimates are subject to revision at the time of release of quarter 2 estimates. Further revisions may be made to component quarterly series at the time of first release of the following annual GDP estimates. Similarly, further revisions may be made to quarterly estimates at the time of release of final annual data or indeed in subsequent periods. Revisions may also occur following finalization of supply-and-use tables.

Finally, revisions may result from new benchmark data becoming available (such as population census data) and from methodological changes (such as the inclusion of additional variables in the enterprise survey in 2001, and the planned revisions to reflect changes in the estimation of dwelling services and consumption of fixed capital).

In summary, the MSD has a number of elements of a revisions policy in place but has not yet coordinated these in a coherent statement of revisions policy and practice for the benefit of users.

The CSB uses a standard notation to identify revised data in its publications. However, this convention is not used in most of the national accounts publications and revised data generally are not readily apparent to users.

4.4.2 Preliminary data are clearly identified

The *Monthly Bulletin of Latvian Statistics*, which includes some GDP estimates, contains a statement that published data are subject to revision “due to corrections in the submitted reporting forms and the inclusion of newly established enterprises in the surveys.” Users are therefore alerted to the fact that revisions may occur. However, this statement does not appear in most of the national accounts publications. Preliminary data for national accounts are not clearly identified as such in press releases, or on the CSB’s website.

4.4.3 Studies and analyses of revisions are made public

As noted in 3.5.1, no systematic and routine studies are conducted in respect of the direction and magnitude of revisions between preliminary and final data. Some other studies of revisions have been undertaken and used mainly for internal purposes. Main aspects are often highlighted at press conferences held at time of release of national accounts estimates but detailed revision studies are not released in publications. The MSD recognizes the desirability of publishing such studies (e.g., in the context of the forthcoming revisions to consumption of fixed capital and dwelling services).

5. Accessibility

5.1 Data accessibility

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

Annual and quarterly national accounts estimates are released, together with a number of informative charts and graphs. Tables are clearly specified and presented in both Latvian and English. Some publications also include a brief analysis of the estimates. The publications contain brief notes on methodology, concepts, and definitions to guide the user.

5.1.2 Dissemination media and formats are adequate

The CSB has developed a public access database that is available from the CSB’s website at a cost of 9 lats (about US\$15) per annum. This provides comprehensive and detailed statistical time series across all subject matter fields, together with graphs, charts, mapping, and downloading facilities.

Dissemination practices for national accounts statistics are generally sound. The data are disseminated through press releases, on the official website of the CSB, and in annual and quarterly publications. Data are also available in electronic form (e-mail, diskettes and CD-ROM). This availability is publicized in the CSB’s *Catalogue of Statistical Publications* but is not well advertised in national accounts publications. Separate press releases are disseminated in Latvian and in English. The text in publications tables is presented in both languages, usually within the same table, or as separate tables on facing pages. Metadata are

also presented in both languages. Separate web pages in Latvian and in English are presented on the website.

No detailed data are disseminated on the website; the data disseminated on the website are identical to those in the press release. It is the official policy of the CSB that disaggregated data are not disseminated in any form prior to the release of the relevant hardcopy publication.

Five main publications are issued containing national accounts data:

1. *National accounts in Latvia* (latest issue 2002, containing 2000 data).
2. *Macroeconomics of Latvia in Figures* (latest issue 2002).
3. *Macroeconomic Indicators of Latvia* (latest issue 2003).
4. *Latvia's Regions in Figures* (latest issue 2002).
5. *Input-Output Tables for Latvia* (latest issue 2001, containing 1997 data).

The main distinguishing features of these publications are:

1. This is for the serious user of national accounts data; it contains a number of general indicators but the main bulk of the publication covers the sequence of accounts (data for 2000) as articulated in the *1993 SNA*.
2. This contains a range of annual national accounts estimates and also includes a variety of indicators including: population, employment, unemployment, financial and monetary data, and price indices; together with detailed data for the various economic branches of the economy.
3. This provides a more detailed treatment of national accounts statistics, including quarterly series on: output, intermediate consumption and GDP by activities (NACE categories), at current and constant prices; implicit price deflators; GDP by income and expenditure approaches; seasonally adjusted series; balance of payments data, detailed foreign trade data; and government budget and debt data.
4. This provides data for the five regions of Latvia according to level 3 of the NUTS. The data relate to GDP, investment, population and economic indicators.
5. The input-output tables publication comprises three types of inter-related tables: supply-and-use tables, cross-classification tables linking supply and use tables with the national accounts; and symmetric input-output tables).

There is substantial overlap between the first three publications, and their titles do not convey a clear indication of their contents or the differences between them. It is not immediately clear that publication (3.) mainly contains quarterly data. The three publications are all quite large and there would appear to be scope for some rationalization, in consultation with major users, to produce more concise and more focused publications.

Quarterly national accounts estimates are published in a press release on the day of release and are placed on the CSB's website. Quarterly estimates are also published in *Macroeconomic Indicators of Latvia*, as noted above, and in the *Monthly Bulletin of Latvian Statistics*

Annual series in summary form are published from 1990 onwards. A large number of quarterly series are published covering the years from 1995 onwards.

The statistical discrepancy between the estimates of GDP according to the production and expenditure approaches is not explicitly published. As noted earlier, it is included in estimates of changes in inventories. However, this is not highlighted in the notes accompanying the national accounts statistics. Furthermore, the notes do not refer to methods for compiling estimates of changes in inventories.

5.1.3 Statistics are released on a preannounced schedule

An advance release calendar is available on the IMF's DSBB, detailing the precise dates for the release of the national accounts estimates. The CSB is usually able to adhere to the target dates for release although small occasional delays may occur.

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

There is no prerelease of data to any group or agency.

5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request

Unpublished, nonconfidential subaggregates are made available to users upon request but this availability is not well 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

Information on concepts, standards, sources and methods used in compiling the estimates is published in the annual and quarterly national accounts publications. A summary of national accounts methodology is posted on the IMF's DSBB. This summary is reviewed and updated regularly.

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

Metadata are available at different levels of detail depending on the degree of aggregation of the disseminated data and the medium of dissemination. Some of the national accounts publications have very brief metadata and would benefit from a more detailed description of concepts, sources and methods.

Comprehensive and reasonably up-to-date documents detailing sources and methods have been compiled in collaboration with the Organisation for Economic Cooperation and Development (OECD) and Eurostat. The relevant OECD publication is titled *Quarterly National accounts in the Baltic States: Sources and Methods of Estimation*. This is the only publicly available description of national accounts sources and methods for Latvia that is sufficiently detailed for serious users. The other detailed document, produced in collaboration with Eurostat and completed in March 2001, is an internal reference document.

Prior to accession to the EU, Latvia is required to produce a very comprehensive description of sources and methods for the national accounts and this work is planned to commence in the near future. When this is completed, it would be very useful if it, or some modified version, could be published for the benefit of serious users of national accounts statistics.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The main contact persons for the national accounts statistics are publicized in all national accounts publications and on the CSB's and IMF's websites. However, it would be helpful if telephone numbers and e-mail addresses were included. Specific enquiries are directed to other persons within the CSB where necessary, based on subject matter knowledge and staff availability.

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

As noted earlier, the CSB produces an annual *Catalogue of Statistical Publications*. This contains a listing of publications planned for release during the year. The catalog provides a brief description of the data contained in each publication as well as the price, periodicity, expected date of release, dissemination format (printed, CD-ROM, diskette, etc.), number of pages, and the languages of dissemination.

The CSB also operates an information center, library and bookshop, all of which are located on the ground floor of the CSB headquarters building. These facilities are easily accessible to the general public. The full range of data and metadata are also available from the regional offices of the CSB.

The CSB's *Catalogue of Statistical Publications* is available on the official CSB website and from the information center and regional offices.

Table 3. Latvia: Data Quality Assessment Framework—Summary of Results for National Accounts
(*Compiling Agency: Central Statistical Bureau*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Quality awareness		X				National accounts and prices user groups would be very useful
1. Integrity						
1.1 Professionalism		X				More information on methodology issues/changes desirable
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Statistical techniques			X			Further improvements needed in holding gains adjustment, dwelling services, consumption of fixed capital, and estimates of exhaustiveness.
3.3 Assessment and validation of source data			X			Standard errors should be regularly calculated and used in survey planning.
3.4 Assessment and validation of intermediate data and statistical outputs			X			Systematic studies of statistical discrepancies needed.
3.5 Revision studies			X			Undertake and disseminate periodic analysis of revisions between preliminary and final data.
4. Serviceability						
4.1 Relevance			X			Establish NA user group and user surveys.
4.2 Timeliness and periodicity		X				
4.3 Consistency		X				
4.4 Revision policy and practice			X			Preliminary data should be clearly specified and revision studies published.
5. Accessibility						

Table 3. Latvia: Data Quality Assessment Framework—Summary of Results for National Accounts
(*Compiling Agency: Central Statistical Bureau*)

Element	NA	Assessment			Comments
		O	LO	LNO	
5.1 Data accessibility		X			
5.2 Metadata accessibility			X		Publish more detailed metadata and a detailed sources and methods publication.
5.3 Assistance to users		X			

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

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

For assessments of the Prerequisites of quality (0.) and Integrity (1.) dimensions, see the National Accounts section.

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 used in the Latvian CPI are generally in line with internationally accepted standards as defined by the International Labor Organization, the IMF and others in the *Consumer Price Index Manual (Draft)*. The prices and weights of the Latvian CPI broadly follow the national accounts concepts—based on the 1993 *SNA/1995 ESA*—for all monetary household consumption expenditure. The only departure from accepted practice is the exclusion of owner-occupied dwellings from the weights, either on an imputed rent basis or acquisitions less disposals (capital formation) basis.

2.2 *Scope*

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

The expenditure aggregate used to derive the weights for the Latvian CPI covers a subset of the national accounts actual household consumption expenditure comprising the monetary consumption expenditures that households make directly.⁸

The consumption of nonmonetary goods such own-produced agriculture products and goods provided by employers as income in kind are excluded. Also excluded is the value of the rent of owner-occupied housing, although materials used in housing repairs are incorporated in the weights. This latter exclusion is a departure from standard international practice but the Latvian CPI still complies with the requirements of the EU's Harmonised Indices of Consumer Prices (HIPC)⁹ which are not expected to include this component until around 2007. The consumption of illegal goods could be included in the weights as such purchases are included, in theory, in the HBS.

⁸ The CPI expenditure subset of actual household consumption thus excludes NPISH and Government expenditures on households' behalf, as well as compensation in kind paid by employers in addition to cash wages.

⁹ The calculation of the HICP involves only a simple reweighting of the index to include the expenditure of tourists in Latvia. The weighting and the price collection methodology comply in all other respects.

The CPI weights cover the expenditures of all resident households in the country with the exception of those comprised of individuals residing in institutions such as elderly people living in care centers, hospital patients, school boarders, personnel living in police and military installations, and jail inmates. The inclusion of such institutions is optional in standard compilation practice, and a study was undertaken which showed that the inclusion of these had negligible effect on the weighting patterns. Thus all in-scope urban and rural households are covered, as are households of all income levels and occupation type. However, as is common in many household budget surveys, there is concern about possible bias against high-income households and those headed by self employed persons because of their refusal to participate.

Prices are collected in 15 of the 26 regions in Latvia and this sample, together with the range of outlets covered in each district, is considered representative of the pricing structure throughout the country.

2.3 Classification/sectorization

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

The CPI covers noninstitutionalized Latvian households comprising an almost exhaustive subset of all households resident in Latvia and, with that proviso, is consistent with the 1993 SNA household sector. The items are classified using the COICOP which is consistent with international guidelines.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The prices in the CPI are market prices. The CSB records prices at the amounts actually paid by consumers including taxes less discounts and rebates. Sale prices are used as long as they are available to all customers. The HBS, which is the primary data source for the CPI weights, measures consumption at market purchasers' prices.

2.4.2 Recording is done on an accrual basis

The CPI records prices in the month transactions in consumption goods and services occur. The weights are based on to the market price valuations.

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

The HBS collects purchases and sales data for both used cars and other durables and the consumption of these goods is recorded net of sales and this value is reflected in the CPI

weights. Insurance premiums are measured net of claims as required by international guidelines.

3. Accuracy and Reliability

3.1 Source data

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

The CPI weights are derived principally from the HBS. The sample covers the whole Latvian population other than those living in institutions such as elderly people living in care centers, hospital patients, school boarders, personnel living in police and military installations, and jail inmates. Detailed data are collected on expenditures, incomes, purchases of durable goods, and production for own-consumption using a combination of diary, interview and annual recall methods. As is common in many household budget surveys, there is concern about possible bias against high-income households and those headed by self employed persons because of their refusal to participate.

The HBS sample up to 2000 was selected from a survey frame based on the 1989 population census. From 2002 forward, the HBS uses a survey frame based on the 2000 population census. Both the old and new survey designs explicitly represent degree of urbanization (with three city size strata and a rural stratum) and the five regions of Latvia. Both designs guarantee sample in each urbanization stratum. The old design also guaranteed sample in each of the five regions, while the new design represents each region probabilistically within each urbanization class. The 2002 survey also uses a new rotating panel design to provide continuous data over time and spread survey effort over the year to more efficiently utilize the CSB's survey staff and resources. The first panel of households was started in May 2001, the second in September 2001, and the third in January 2002. Thus January 2002 was the first month in which the full sample was fielded under the new design. This explains the hiatus of data for 2001.

Estimates of totals and means from the both the old and new surveys use "calibration weights" for the household responses on the relevant variables. The calibration weights represent the household's inverse probability of selection adjusted for nonsampling error. The nonsampling error adjustment uses a statistical technique to make the survey sample estimates of the number of persons by age and sex similar to or the same as the corresponding post censal population counts or control totals. These population control totals are updated by vital statistics compiled by age and sex on births and deaths, as well as net migration into Latvia. The nonsampling adjustment helps to account for aging of the census frame (from 1989 for the old design and from 2000 for the new design) that determines in part the household probabilities of selection. It also helps to correct the estimates for nonresponse. Overall nonresponse is around one third, somewhat higher than the roughly 25 percent experienced in other modern household budget surveys.

Notwithstanding apparently modern, good practice in survey design, management, and estimation methodology in both 2000 and 2002, the 2002 survey has produced noticeably higher results for average household total expenditure. The 2002 results are comparable to 2000 in expenditure shares. Differences are reasonable in the context of Latvia's rapid economic growth, e.g., the 2002 survey shows a small decline in the share of food in total expenditure from 2000. The survey collection instrument comprises a self-completed diary component and an interview component administered by a CSB agent. The higher food results may be due in part to a change in the design of the self-completed "diary" component of the survey instrument, which is capturing greater expenditure detail than experienced in the past. The CSB's Social Statistics Department attributes the different results to the numerous improvements and changes in the HBS survey design, management, and survey collection methodology between 2000 and 2002, and believes the most recent results give a clearer picture of the pattern of household expenditure in Latvia.

In calculating the CPI weights, adjustments are made to HBS data based on the commodity flow technique and are done in consultation with the macroeconomic division. In the current weighting pattern adjustments have been made to the value of purchases of cars—incorporating data from an ad hoc survey undertaken in 2001—alcohol, tobacco, clothing and footwear—using import data—and purchases from restaurants and hotels. For the latter adjustment a special survey was undertaken to obtain additional commodity breakdown. In addition, retail trade data were used to adjust the level of food consumption indicated by the most recent HBS.

The availability of continuous annual data allows the CPI weights to be updated annually, and thus reflect the rapid changes occurring in the Latvian economy.

Price surveys are undertaken in 15 of the 26 regions,¹⁰ which are considered to be a good purposive sample for the CPI as the survey points are, to varying degrees, market centers serving not just the town but also the surrounding region. The unsurveyed regions are represented by prices from a "similar" region and prices are then weighted together using population data¹¹ to obtain a national average price which is incorporated in the index.

It would be statistically desirable to use an expenditure based weighting pattern to combine regional prices, but the current HBS sample size of 3,949 precludes accurate regional data. If in the future a larger sample is used (possibly 2005) then this could provide the basis for not only improved national average pricing but also regional indices, which would be useful for users, especially those interested in poverty analysis.

¹⁰ The selected pricing points are those where the CSB currently has regional office and field staff working on price surveys.

¹¹ This method was recommended at the time the present CPI was developed, with the IMF's assistance in June 1992. It was recognized that regional expenditure data would have provided a more appropriate weighting pattern, but data were not available at that time.

Pricing outlets are selected using purposive sampling based on three main criteria: popularity with consumers, significant consumer sales, and the availability of the range of goods and services included in the CPI “basket.” The selected outlets also cover all sub-regions and zones within each region, which ensures the coverage of some small outlets. Item selection is done on the basis of purchase volume. Within each item group, specific varieties are selected on the basis of stable and significant sales activity. The sample size is approximately 18,100 prices collected from 2,400 outlets each month. Prices are collected between the 10th and the 20th of the month, and during the harvest season prices are collected weekly for a selection of fruit and vegetables.

Both missing prices and seasonal unavailability are dealt with by carrying forward the previously observed price, but this technique is used sparingly as goods are selected for their availability, and items are substituted if they become unavailable.

Prices are cross checked against other data sources such as published tariff prices and producer prices for processed food. Individual commodity prices are cross checked between adjacent regions and against national average item prices.

The collection of accurate rent prices is a matter of concern although the levels of maximum allowable rent are controlled. Government rents are controlled, and at present private sector rents are considered to move in the same way. An experimental rent survey is being developed using data from rent agencies advertising on the Internet, and analyzing the various qualities of accommodation available. The approach used by Estonia and Slovenia is also being studied to determine its usefulness in the Latvia situation.

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

The HBS was designed with the CPI in mind, and incorporates the required scope of household coverage, expenditure classification, purchaser price valuations, and recall or diary reporting of expenditure in the month it was actually made.

Adjustments are made to HBS-based estimates if other data sources such as the retail trade survey indicate these are necessary, in consultation with the MSD.

3.1.3 Source data are timely

The HBS data are collected on a continuous basis and are available in a little more than two months from the end of each period, and thus are available for the annual update of CPI weights which is based on the price-updated data covering the period from October to September. The general price survey is undertaken between the 10th and the 20th of the month, and weekly prices are collected during the harvest season for some fruit and vegetables. This schedule allows the CPI to be released no later than the 6th working day after the end of the month.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

The HBS collects data at the four-digit level of COICOP which is in line with CPI requirements, and values transactions at market prices. The CPI expenditure aggregate is a standard subset of the 1993 SNA household consumption expenditure aggregate. (See 2.2.1)

The lowest level indices are based on the ratios of the arithmetic mean of item prices for the current month to those for December of the previous year. Individual item indices are aggregated using Laspeyres-type formulae and base period weights. The weights for the current index are based on HBS data for the period October 2001-September 2002, ‘price updated’ to December 2002. This approach provides an unbiased estimate of the CPI as a Laspeyres index, as otherwise the effective weight reference period would differ from the reference period of the price relatives. The index is an annual chain index with an overlapping period each December.

Where necessary, prices are imputed either using the carry over approach or using prices of similar items in adjacent regions.

Items are replaced as required—there were around 10 items replaced this year—and outlets are updated, normally on an annual basis. Quality adjustments are made using either judgmental adjustment or the “bridged overlap” approach whereby the group mean is used as the price increase and the difference assumed to be a quality change.

New items are introduced as they gain market share. This year some 30 new items were introduced—including internet services—and 19 were removed. Mobile telephones have been included now for some years.

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

The proportion of the target population of households that the CPI does not cover—the institutions—is very small, in the order of 2 percent, and considerably less for the relative value of such expenditure.

The series is not seasonally adjusted.

3.3 *Assessment and validation of source data*

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

Sampling errors are calculated for the HBS on a regular basis, and used internally to monitor the accuracy of the estimates (e.g., in 2000 consumption expenditure was measured with a 2 percent standard error) but they are not published on a regular basis. Otherwise, the HBS data quality is constantly monitored and efforts are made to reduce nonresponse. The results are continually cross-checked against other data sources and adjusted if required.

The MSD participated in a Eurostat project designed to estimate the effect on household consumption expenditure of the underrepresentation of high-income households in the HBS. This resulted in a slight increase in total household consumption expenditure but had very little impact on the distribution expenditure between COICOP categories.

In 2002, a study of price collection was undertaken with the aim of controlling the sampling procedure of outlets and items and to optimize the number of price quotations.

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

3.4.1 Main intermediate data are validated against other information where applicable

The Price Statistics Department routinely checks collected prices against other data sources such as published tariff prices, and producer prices such as those for processed food. Individual commodity prices are crosschecked between adjacent regions, and the CPI is also checked against the domestic component of the Producer Price Index (PPI).

The HBS data used in the calculation of weights are cross checked against supply data and appropriate adjustments are made where necessary.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The processing software routinely identifies those subindices with a significant contribution to change in the total index, which allows these to be crosschecked for possible errors. It also quickly identifies large individual price changes which are similarly crosschecked.

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

The CPI is consistent in aggregation by item, but unusual index movements are investigated as in 3.4.2 above.

3.5 Revision studies

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

The CPI is not revised, but new weights are subject analysis and validation prior to being incorporated in the index.

4. Serviceability

4.1 Relevance

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

Frequent discussions are held with the MSD regarding their requirements and inquiries from the public also indicate where statistics might be lacking. The CSB regularly conducts surveys to determine user satisfaction with CSB products, although the questions are of a general nature and do not specifically mention price indices. Prices staff regularly attend international statistics meetings where they can share the experiences of other Baltic countries and those of the EU.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The target date for release is six working days after the end of the reference month. This is generally met and so is well within SDDS requirements.

4.2.2 Periodicity follows dissemination standards

The CPI is monthly and meets SDDS periodicity requirements.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The CPI is a consistent aggregation of the subgroup indices.

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

The CPI has been produced in its present form since June 1992 and has been annually chain linked since 1996 which provides a consistent series of over ten years.

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

The CPI expenditure aggregate is a subaggregate of household final consumption in the national accounts and the CPI is used to deflate this.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established, and transparent schedule

The monthly CPI is not revised after first publication. The annual rebase is an established pattern, and scheduled release dates for the current and the next quarter are published on the internet at: www.csb.lv. The standard January rebase is announced at the press conference for the December index, so users have one-month notice of the change. In addition, a comparison of the old and new weights structure is outlined in the January issue of *Consumer Price Indices*.

4.4.2 Preliminary data are clearly identified

The official CPI is not revised once published.

4.4.3 Studies and analyses of revisions are made public

Revised weights are published in the monthly CPI publication but otherwise the annual weight updates do not imply possible revision to back series. In January each year—when the index is rebased—an analysis is done of the effect of both the new weights and the new items on the index.

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)

CPI data are published in the monthly publication *Consumer Price Indices* which contains time series of CPI changes both in table and chart form, and comparisons with other Baltic countries. Subindices and weights are published at the three- and four-digit COICOP level, and there is an analysis of the main reasons for the monthly variations in the index. The general CPI methodology is also outlined. The *Monthly Bulletin of Latvian Statistics* includes CPI data as one of the basic socio-economic indicators.

The CPI publication is supplemented by a quarterly publication: *Consumer Prices* containing weighted average prices of 125 selected items from the CPI pricing list.

CPI data are also available on the CSB's website, which is where the first release is made.

The data are not seasonally adjusted.

5.1.2 Dissemination media and formats are adequate

The CPI is first released via the Internet with simultaneous release by e-mail, fax or post to registered users.

5.1.3 Statistics are released on a preannounced schedule

The CPI is released regularly on the 6th working day of the month and the release schedule is announced on the CSB's website for the current and the next quarter.

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

The CPI is released to all users simultaneously at 1 p.m. on the day of release, with no preferential access to the information prior to that time.

5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request

Further detail is available to the public upon request to the Information, Publishing and Printing Department of the CSB. This is publicized both on the website and in the *Catalogue of Statistical 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

An outline of CPI methodology is included in each monthly *Consumer Price Indices* publication, and metadata are posted on the IMF's SDDS website in the CPI Summary Methodology.

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

The monthly CPI publication contains detailed breakdowns which meet users requirements.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The name of the contact person and telephone number are included with the monthly news release on the CSB's website, and in addition the site includes a general contact e-mail and

phone number. Visitors wishing to subscribe to the CSB's publications are referred to the CSB's information center with its own fax number and e-mail address.

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

There is an annual publication *Catalogue of Statistical Publications* which contains contact information, publication dates, prices and other relevant information on all the CSB's products. This information is also contained on the CSB's website.

Table 4. Latvia: Data Quality Assessment Framework—Summary of Results
Price Statistics (Consumer Price Index)
(*Compiling Agency: Central Statistical Bureau*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				National accounts and prices user groups would be very useful
0.2 Resources		X				
0.3 Quality awareness		X				
1. Integrity						
1.1 Professionalism		X				More information on methodology issues/changes desirable
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				Owner-occupied dwellings or equivalent not included.
2.2 Scope			X			
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Statistical techniques		X				
3.3 Assessment and validation of source data		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Relevance		X				
4.2 Timeliness and periodicity		X				
4.3 Consistency		X				
4.4 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

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

III. PRICE STATISTICS (PRODUCER PRICE INDEX)

For assessments of the Prerequisites of quality (0.) and Integrity (1.) dimensions, see the National Accounts section.

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 prices and weights of the PPIs follow the production account concepts used in the Latvian national accounts for all covered industries and the latter, in turn, are based on the 1993 SNA/1995 ESA, which is in accordance with internationally accepted standards as defined in the *Producer Price Index Manual* now in preparation.

2.2 *Scope*

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

The PPI is a *monthly* index covering the output of the mining and quarrying, manufacturing, and electricity, gas, and water industries. In addition, separate monthly indices are produced for production for domestic and export markets by 150 NACE¹² classes. Detailed indices by product are not compiled but further aggregations by the following main industrial groupings:

- Intermediate goods
- Capital goods
- Consumer durables
- Consumer nondurables
- Energy

are produced, by total, and split into export and domestic production, in a form consistent with the industry indices.

¹² Nomenclature générale des activités économiques dans les Communautés européennes which is the General Industrial Classification of Economic Activities within the European Communities.

In addition, *quarterly* construction cost indices are produced based on the cost of representative projects in the following subcategories:

- Industrial, agriculture and trade objects
- Transport objects
- Private residential houses
- Underground pipelines
- Education and health care objects
- Renovation of office buildings

A total construction cost index is also produced.

These indices cover some 25 percent of contribution to Gross Domestic Product (GDP) in the national accounts. While the agriculture industry is adequately covered for price data, there is a need to extend the coverage of the PPI to include a selection of service industries to support improved national accounts volume estimates.

2.3 *Classification/sectorization*

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

The CSB designs the PPIs to cover all resident establishments in the target product classes and, by implication, the population of institutional units that own them. The PPIs thus cover *1993 SNA* enterprises (institutional units engaged in production) for those products. There is no detail by *1993 SNA* institutional sector, however.

Establishments are grouped using an industry classification based on the European industry classification, the Nomenclature générale des activités économiques dans les Communautés européennes or NACE, at the four-digit level, and the product classification is the European Production Communautaire (PRODCOM) classification at the 10-digit level. These are in accordance with accepted good practice.

2.4 *Basis for recording*

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

Prices are measured at producer prices, excluding VAT, excise duty on products, and separately invoiced transport charges. Transfer pricing is not considered to be a problem.

2.4.2 *Recording is done on an accrual basis*

The business surveys used to establish the weights record output and work-in-progress in the period in which they are produced.

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

There is no netting of inter-establishment transactions in the PPI weighting calculations.

3. Accuracy and Reliability

3.1 Source data

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

The PPI weights are derived from data collected in the annual business activity surveys which cover a full range of industries throughout the economy.

They are a census of all central and local government enterprises and companies with central or local government participation of 50 percent or more, as well as other companies employing more than 20 persons or whose net turnover in the previous year exceeded 300,000 lats. Central and local government institutions and social organizations (parties, associations, etc.) are also completely covered. In total these represent over 80 percent of gross turnover.

Data for other enterprises are obtained from sample surveys based on simple random sampling, stratified according to main economic activity. For enterprises outside of Riga, stratification also takes account of the location of the enterprise within the 32 administrative territories.

The response rate for these surveys is 95 percent and returns are subject to analysis and queries to ensure the reliability of the data. The results are considered by the MSD to be of sufficient quality for national accounts purposes, and the questionnaires collect sufficient detail to calculate gross output, intermediate consumption, and gross value added according to the principles of the 1993 *SNA*. In addition, data are collected on structure of intermediate consumption which, amongst other things, provides the basis of product selection for the PPI. Data are also obtained for component establishments—local kind of activity units—within enterprises.

The SBS underpinning these surveys contains information on more than 61,000 kind of activity units and is regularly updated by sampling. The scope of the data collected from each enterprises is in the process of being expanded to ensure compliance with Eurostat's requirements.

The PPI weighing patterns are based on sales data from the above surveys.

The products are selected using two stage cut-off sampling. Establishments are chosen on the basis of having stable production and sales activity, and a large share of production in the respective NACE class. From these selected establishments, products with the highest

production value are chosen for pricing. The sample size is approximately 1,500 prices collected from around 400 (2002) enterprises each month, representing 69.4 percent of total sales as measured by the business surveys. Prices are collected as a mix of prices at the 15th of the month and monthly average prices.

Both nonresponse and seasonal unavailability are dealt with by carrying forward the previously observed price, but this technique is used sparingly as products are selected for their continuous availability. New and replacement products are introduced each year during the annual process of updating the sampled enterprises, which need to be constantly reviewed because of changes in contract arrangements, bankruptcies, etc.

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

The source data for the covered industry and product strata closely approximate the definitions, scope, classification, valuation, and time of recording principles of the *1993 SNA*.

3.1.3 Source data are timely

The annual business enterprise data are available around August/September of the year following the surveys and are thus available for the annual update of PPI weights at the end of the year. Prices are collected monthly, and allowing the time taken to follow up slow respondents, the PPI is released around the 20th of the following month.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The business surveys collect data in sufficient detail for the PPI to be compiled at the four-digit level of NACE and value transactions at market prices.

The lowest level indices are based on the ratios of the arithmetic mean of item prices for the current month to those for December of the previous year. Individual product indices are aggregated using Laspeyres-type formulae and base period weights. The weights for the current index are derived from business survey data for 2001. The weights are not 'price updated' to the price reference period of December 2002, but this updating process will be incorporated in the next and subsequent estimates. The index is an annual chain index with an overlapping period each December.

Where necessary, prices are imputed, generally using the carry over approach. The use of prices of similar products as an indicator, while preferred, is seldom possible because of the dissimilarity between products.

New and replacement products are introduced each year during the annual process of updating the sampled enterprises, which need to be constantly reviewed because of changes in contract arrangements, bankruptcies, etc.

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

The proportion of the target population of businesses the PPI covers is essentially 100 percent, excluding of course, those in the unrecorded economy whose value added is to be about 16 percent of GDP.

The series is not seasonally adjusted.

3.3 *Assessment and validation of source data*

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

Price changes are carefully checked. The compilation software identifies any significant price movements—plus or minus 20 percent—and these are validated.

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

3.4.1 Main intermediate data are validated against other information where applicable

PPI prices are crosschecked against other data sources where possible. However, the import- and export-unit value indices are generally not used for checking as they are produced only every quarter.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated and available to guide users.

The processing software routinely identifies those subindices with a significant contribution to changes in the total index, which allows these to be crosschecked for possible errors. It also quickly identifies large individual price changes which are similarly crosschecked.

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

The PPI is consistent in aggregation by NACE class, but unusual index movements are investigated as in 3.4.2 above.

3.5 Revision studies

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

The PPI is not normally revised, but new weights are subject analysis and validation prior to being incorporated in the index.

4. Serviceability

4.1 Relevance

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

Inquiries from the public are reviewed to indicate where statistics might be lacking. The CSB regularly conducts surveys to determine user satisfaction with the CSB's products, although the questions are of a general nature and do not specifically mention price indices. Prices staff regularly attend international statistics meetings where they can share the experiences of other Baltic countries and those of the EU.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The target date for release is 20 days after the end of the reference month. This is generally met and so is within SDDS requirements.

4.2.2 Periodicity follows dissemination standards

The PPI is monthly and meets SDDS periodicity requirements.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The PPI is a consistent aggregation of the subgroup indices.

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

The PPI has been produced in its present form since 1995, and has been annually chain linked since that time. In 1997 the classification was revised from ISIC to NACE which are consistent at the two-digit level. Thus, there is a consistent series of over seven years for two-digit industries and above.

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

The PPI weights are derived from the same data sources as the national accounts production accounts. The national accounts use the PPI to deflate the output of appropriate industries.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established, and transparent schedule

The PPI is not revised after first publication, except on rare occasions to correct for errors having a measurable impact on the published index—once so far. The annual rebase is an established pattern, and scheduled release dates for the current and the next quarter are published on the Internet at: www.csb.lv.

4.4.2 Preliminary data are clearly identified

The official PPI is not normally revised once published.

4.4.3 Studies and analyses of revisions are made public

There is no release of information to the public on the effects of weight changes on the occasion of weight updates in the PPI.

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)

PPI data are published in the quarterly publication *Producer Price Indices* which contains time series of PPI changes both in table and chart form, and comparisons with Lithuania and Estonia. Subindices and weights are published at the three- and sometimes four-digit NACE level, and there is an analysis of the main reasons for the monthly variations in the index. The general PPI methodology is also outlined. The *Monthly Bulletin of Latvian Statistics* includes PPI data as one of the basic socio-economic indicators.

PPI data are also available on the CSB's website, which is where the first release is made.

5.1.2 Dissemination media and formats are adequate

The PPI is first released via the internet with simultaneous release by e-mail, fax, or post to registered users.

5.1.3 Statistics are released on a preannounced schedule

The PPI is released around the 20th of the month and the release schedule is announced on the CSB's website for the current and the next quarter.

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

The PPI is released to all users simultaneously at 1 p.m. on the day of release, with no preferential access to the information prior to that time.

5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request

Further detail is available to the public upon request to the Information, Publishing and Printing Department of the CSB. This is publicized both on the website and in the *Catalogue of Statistical 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

An outline of PPI methodology is included in each quarterly *Producer Price Indices* publication, and metadata are posted on the IMF's SDDS website under the PPI Summary Methodology.

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

The quarterly PPI publication contains detailed breakdowns at the three- and four-digit level of NACE which meet users requirements. There is some suppression of series for confidentiality reasons.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The name of the contact person and telephone number are included with the monthly news release on the CSB's website, and in addition the site includes a general contact e-mail and phone number. Visitors wishing to subscribe to the CSB's publications are referred to the CSB's information center with its own fax number and e-mail address.

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

There is an annual publication *Catalogue of Statistical Publications* which contains contact information, prices and other relevant information on all the CSB's products. This information is also contained on the CSB's website, together with a schedule of publication dates.

Table 10. Latvia: Data Quality Assessment Framework—Summary of Results
Price Statistics (Producer Price Index)
(Compiling Agency: Central Statistical Bureau)

Element	NA	Assessment			Comments
		O	LO	LNO	
0. Prerequisites of quality					
0.1 Legal and institutional environment		X			
0.2 Resources		X			
0.3 Quality awareness		X			National accounts and prices user groups would be very useful
1. Integrity					
1.1 Professionalism		X			More information on methodology issues/changes desirable
1.2 Transparency		X			
1.3 Ethical standards		X			
2. Methodological soundness					
2.1 Concepts and definitions		X			
2.2 Scope		X			
2.3 Classification/sectorization		X			
2.4 Basis for recording		X			
3. Accuracy and reliability					
3.1 Source data		X	X		Base period is lagged one year, but will be price updated from 2004.
3.2 Statistical techniques					
3.3 Assessment and validation of source data		X			
3.4 Assessment and validation of intermediate data and statistical outputs		X			
3.5 Revision studies		X			
4. Serviceability					
4.1 Relevance		X			
4.2 Timeliness and periodicity		X			
4.3 Consistency		X			
4.4 Revision policy and practice		X			
5. Accessibility					
5.1 Data accessibility		X			
5.2 Metadata accessibility		X			
5.3 Assistance to users		X			

IV. GOVERNMENT FINANCE STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The compilation and dissemination of data on central and general government operations is governed by the *Law on Budget and Financial Management* (as amended on December 19, 2002), the Regulation on the Treasury of the Republic of Latvia (approved on March 29, 1996, as amended December 27, 2002) and the *Statistics Law* (adopted on November 6, 1997). The *Law on Budget and Financial Management* stipulates that the State Treasury (Treasury) is responsible for the central government budget financial accounting (Article 29). Article 32 of that law stipulates that the Minister of Finance submits to the State Audit Office (SAO) a report on the general government budget execution on the financial year by July 1 of the year following the financial year. Based on the *Law on the State Audit Office* (adopted on May 9, 2002) the SAO shall provide an opinion for Parliament regarding the financial report submitted by the MOF concerning the implementation of the central government budget and the budgets of the local governments. Together with the opinion of the SAO, the Minister shall submit the report to the Cabinet, which subsequently will submit the report to Parliament by October 15. The *Law on Budget and Financial Management* (Article 14) also requires that the main reports on the central and local government budget shall be made accessible to the public.

The Treasury compiles (1) summary monthly¹³ and annual government finance statistics (GFS) data on consolidated general government operations, broken down by budgetary central and local government, extra-budgetary funds, and social security funds, and (2) quarterly and annual data on central government debt. GFS data are released on the Treasury website on the first working day 15 days after the reference month. The Treasury also compiles the detailed annual consolidated central and local government data that are sent to the International Monetary Fund (IMF) for publication in the *Government Finance Statistics Yearbook (GFSY)*. The CSB publishes the monthly Treasury data on general government operations in the *Monthly Bulletin of Latvian Statistics* and the *Statistical Yearbook of Latvia*, which both cover also other economic data. The CSB therefore plays a central role in disseminating GFS. Moreover, the CSB compiles general government sector data according to the *European System of Accounts 1995* ([1995 ESA] for the purpose of the National Accounts). These statistics are published annually, about a quarter after the reference period.

¹³ Monthly data are prepared on a cumulative year-to-date basis.

According to the *Law on Budget and Financial Management* (Articles 16 and 17) the MOF has the responsibility to draw up the draft annual central government budget law. Moreover, it is responsible for formulating explanations to be attached to it. Internal ministerial decrees delegated these responsibilities to, respectively, the Budget Department (BD) and the Economic Analysis and Fiscal Policy Department (EAFPD). In the draft budget law information is presented in the budget classification format (on the program and sub-program level of each line ministry) and moreover set up according to the economic and functional GFS classification. By October 1 of the relevant year the Cabinet shall submit to Parliament the draft annual central government budget law for the next fiscal year, including the explanations mentioned above.

In the context of preparations for EU accession and in accordance with the Excessive Deficit Procedure notifications requests, GFS are compiled by the CSB in cooperation with the MOF, the Treasury, and the BOL. Starting from 2004, this information must be submitted each year by March 1 and September 1 to the European Commission and to Eurostat and is available on request.

0.1.2 Data sharing and coordination among data producing agencies are adequate

The CSB and MOF have established a number of specific arrangements for the exchange of data. The Treasury (Reports Department) compiles data on budgetary central and local government operations and central government debt. These data are used in the compilation of the data on the general government sector in the CSB's national accounts. The CSB collects the other needed information directly from other government entities (which are government-controlled nonprofit institutions [NPIs]).

Also, the BOL and MOF have established specific arrangements for the exchange of data, mainly as input for financing data and balance sheet data of government, as described in internal documents. Source data used from the BOL refer to the balance of accounts of the Treasury held with the BOL and with deposit money banks. Moreover, input from the Treasury is used by the BOL to compile statistics on balance of payments, external debt, and the international investment position (IIP).

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

The *Statistics Law* (Article 18) specifies the principle of confidentiality of statistics. Statistical data shall be deemed confidential if, directly or indirectly, they allow identification of the respondent, other natural or legal persons (including organizational units) about which individual data have been collected thus divulging the individual information. Moreover, it is mentioned that confidential data that were collected only for statistical purposes shall be used for statistical purposes only, and that the obtained statistical data shall under no circumstances be published or divulged in such a way that would allow either direct or indirect identification of a natural or legal person.

Moreover, data on physical and legal persons are also protected by the *Freedom of Information Law* (adopted on October 29, 1998) and the *Law on Data Protection of Physical Persons* (adopted on March 23, 2000), which includes provisions related to the disclosure of data on physical persons.

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

The collection of the budgetary data for central and local government is governed by the *Law on Budget and Financial Management* and by the Regulation on the Treasury of the Republic of Latvia, and Instructions issued by the MOF and Treasury (see also 0.1.1). The *Law on Budget and Financial Management* specifies that authorities financed from the budget, budgetary institutions, and local governments shall, in accordance with orders and instructions of the Treasury, submit accounting statements and reports on the implementation of the budget, by May 1 of the year following the reporting year (Article 30).

0.2 Resources

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

Within the Treasury, the Reports Department is the main department responsible for compilation and reporting of GFS. However, it requests input from other departments of the Treasury, notably the Operations Department, the Quality Management Department, and the Information Department. The Reports Department consists of 17, in general highly educated, staff. Moreover, training programs at international organizations (e.g., IMF and Eurostat) on GFS/debt management/the *1995 ESA* are extensively used to build and maintain staff's skills. For current activities this is seen as sufficient. However, little time is left for special projects, most importantly the transition from the *A Manual of Government Finance Statistics 1986 (GFSM 1986)* framework to the *Government Financial Statistics Manual 2001 (GFSM 2001)* framework for statistics. The department is well equipped with modern IT equipment. In this field specific projects, for example on data warehousing, are under way.

The Budget Department of the MOF has a staff of 45 people, divided among seven units (including a Methodology unit). The number of staff was increased recently by two. More expansion would be needed in view of the preparation for EU membership, to fulfil EU requirements varying from applying for contributions from the EU Structural Fund to the transition from the *GFSM 1986* to *GFSM 2001* and the adoption of the *1995 ESA*. Staff resources could become problematic without this expansion.

Table 6. Staff of the State Treasury of Latvia involved in Statistics

Type of staff	Number
1. Permanent employees	16
1.1. Head of Department	1
1.2. Deputy Director	2
1.3. Senior Expert	10
1.4. Expert	1
1.5. Head of Control Unit	1
1.6. Senior Expert	1
2. Employees on contract bases	1
2.1. Consultant	1
Total	17

¹Technical support is provided by other departments of the Treasury, notably the Operations Department, the Quality Management Department, and the Information Department.

0.2.2 Measures to ensure efficient use of resources are implemented

The personnel department of the MOF has various instruments in place to promote the efficient use of resources, including an annual plan of development for each department within the MOF (e.g., the Budget Department and EAFD) as well as for the Treasury as a whole. These plans are updated quarterly and monitored by the manager of the unit and the personnel department. Moreover, personnel plans are in place with tasks for every employee. Explicit reference is made to the development of the classification of GFS according to the 1995 ESA and the new GFSM 2001.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Quality is recognized as a cornerstone of statistical work as evidenced by the general provisions of the *State Civil Service Law* (adopted on September 7, 2000), the quality of staff recruited by the MOF and the Treasury for this work, and the focus on accuracy and reliability. Moreover the State Budget Accounting Policy of the state Treasury establishes the basis of state budget accounting in accordance with the International Accounting Standards (IAS) as well as guidelines of several international institutions, for example the IMF and European standard setters.

0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics

Formal processes are in place to monitor the quality of collection, processing, and dissemination of GFS data. Within the Treasury, a Quality Management Department and an Internal Audit Department have been established. All transactions and procedures of the Treasury are approved by the State Treasurer, monitored by responsible officials, and updated when relevant.

GFS data are compiled essentially on the basis of the state budgetary execution system of the Treasury that combines all financial transactions of budgetary central government and local governments. These are audited by the SAO, which reports to the Parliament. In addition, a procedure for the verification of reports by the Treasury to ensure quality and correctness of the information included in these reports is in place.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The Treasury has formulated strategic goals for the organization of the work of the Treasury's departments in order to improve quality and efficiency. These include the establishment of a data warehouse of the financial management system at the Treasury and the development of a unified database of the Treasury that would consolidate all data of the systems operating within the Treasury and ensure necessary data analysis and preparation of surveys.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Specific laws and regulations support the compilation and dissemination of GFS data. These include:

- The *Law on Budget and Financial Management* (1994; as amended on December 19, 2002).
- The *Statistics Law* of the Republic of Latvia (adopted on November 25, 1997).
- The *Law on Accounting* (as amended on April 6, 2000).
- The Regulation of the Treasury (approved by the Minister of Finance on March 29, 1996, as amended December 27, 2002).
- The Regulation of the Ministry of Finance (not available in English).

The impartiality of data and independence from political interference are supported by the laws and regulations mentioned above. For example, Article 3 of the *Statistics Law* states:

- State statistics shall be objective, reliable, relevant and efficient; they shall be based on the principles of statistical confidentiality and transparency (paragraph 2).
- The methods used in state statistics and the prepared information shall be impartial and independent of political processes and interest groups (paragraph 4).

The *Statistics Law* refers to all state and local government institutions involved in state statistics (Article 2).

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

Staff indicated that methodological choices are motivated by statistical considerations. This is supported by Article 3 of the *Statistics Law*, which provides that:

- State statistics shall provide a true picture of the investigated phenomena and processes. The methods and procedures of data collection and processing shall be scientifically substantiated. The users of statistical data shall be informed about these as well about the sources of data (paragraph 3).

Changes in international standards, like the introduction of a new framework based on the *1995 ESA* and *GFSM 2001*, motivate methodological changes.

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

GFS compilers provide expert advice on technical aspects of GFS. Public response to misinterpretation of GFS is routinely provided.

1.2 Transparency

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

Relevant laws and regulations (as mentioned under 1.1.1) are disseminated to the public and are accessible on the websites of the MOF, the Treasury and the CSB, are published in the official government newspaper (*Latvijas Vestnesis*, i.e., Latvian Official Newspaper), and are available in public libraries.

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

GFS data are simultaneously released within government agencies and to the public.

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

The publications of fiscal data disseminated on the MOF's and Treasury's websites identify the agency and department that prepared the publication.

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

Notice of major changes in methodology, source data, and techniques is given at the time of the change or following implementation in the *Monthly Bulletin of Latvian Statistics*, in the form of a footnote to the table. Breaks on changes in longer series are provided in the *GFSY*.

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 *State Civil Service Law*. Moreover, an internal document on ethics was developed and approved by the Treasury. The purpose of the law is determine the legal status of a loyal, professional, and politically neutral state civil service, which ensures the legal, stable, efficient and transparent operation of the administration of the law. To this end the law formulates the pledge a candidate who is appointed to a civil service position shall give and sign (Article 13) as well as the basic duties of a civil servant (Article 15).

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 GFS data of Latvia are currently compliant with the methodology set out in the *GFSM 1986*. The MOF established the "Working group for development of system of budgetary revenues, expenditure, and government functions classifications in compliance

with EU and IMF requirements” in decree number 635 on July 8, 2003. This working group, composed of representatives of the MOF (Economic Analysis and Fiscal Policy Department and Tax Policy Department), and the State Revenue Service has been established to revise the classification of expenditure, revenue, and financing for budget recording in accordance with *1995 ESA* as well as the migration of the GFS framework from *GFSM 1986* to the *1995 ESA*, which broadly conforms with the *GFSM 2001*.

The changeover to the *1995 ESA* also includes the transfer from cash to accrual based recording, toward which steps also have been taken (see 2.4.2).

2.2 Scope

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

Monthly GFS data of general government compiled and disseminated by the Treasury cover all units of general government, namely:

- Budgetary central government [the Basic budget]¹⁴ (Parliament, the President’s office, the Prime Minister’s office, ministries, and other budgetary institutions).
- The Social Security Fund.
- Five extra-budgetary funds: the Environment Protection Fund, Fishery Fund, Port Development Fund, Public Road Fund, Special Budget for Health Care, as well as a few small funds. These extra-budgetary funds will be merged with the central government basic budget in 2004.
- Local governments (regions, small rural territorial units, towns, the Municipal Privatization Fund, and other special funds).

Detailed monthly and annual data are presented on the following categories: (1) total revenue; (2) tax revenue; (3) nontax revenue; (4) total expenditure; (5) current expenditure; (6) capital expenditure; (7) lending minus repayments; (8) expenditure by functional classification; (9) deficit (balance); (10) domestic financing (bank); (11) domestic financing (nonbank); and (12) foreign financing. These data are also reported to the IMF for publication in the *GFSY*.

Annual general government sector data, which are compiled and disseminated by the CSB for the purpose of National Accounts according to the *1995 ESA*, in addition cover NPIs serving the general government sector. In accordance with *1995 ESA* and *GFSM 2001*, ‘Nonmarket NPIs are members of either the nonprofit institutions serving households sector or the general government sector, depending on which units control and mainly finance the NPI,’ (see *GFSM 2001*, p.9). In the Latvian situation about 300 NPIs are surveyed and included in the general government sector. This means an addition of about 12 percent to the government budget. These NPIs mainly belong to the sectors health, education and culture.

¹⁴ Including grants provided through foreign assistance programs.

2.3 Classification/sectorization

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

Revenue, expenditure, and financing transactions are currently classified according to the methodology set out in the *GFSM 1986*. However, an interagency working group (the CSB, BOL, and MOF) is currently updating the chart of accounts underlying GFS in accordance with the *1995 ESA* (see 2.1.1). According to the MOF's action plan, the budget classification included in the budget execution of 2005 will be in accordance with the *1995 ESA*.

For the purpose of the 2003 *GFSY*, the Latvian GFS data, although still recorded on a cash basis, have been submitted according to the classification included in the *GFSM 2001* framework. In fruitful cooperation with the Statistics Department of the IMF, some minor technical problems have been resolved.

GFS data are provided separately for each level of government, i.e., central and local, as well as for consolidated general government, which is in accordance with *GFSM 2001*. In order to be compliant with *1995 ESA*, for the purpose of National Accounts, the CSB includes NPIs that are controlled and mainly financed by the general government sector.

Classification of central government debt data is not fully on accordance with the *GFSM 1986*. The monthly and annual data on central government debt disseminated by the MOF classify both the domestic debt and foreign debt on the basis of currency, as an approximation to the residency of the holder. Data are further broken down by original maturity.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Government securities are valued at the discounted price (issue value) rather than market value; face value is available as a memorandum item (footnote). Foreign-currency-denominated debt in local currency terms is valued quarterly at the relevant end-of-period exchange rates. Foreign currency transactions are converted into denominated currency at rates approved by the BOL, applicable at the time of the transaction.

2.4.2 Recording is done on an accrual basis

Monthly central and local government operations are still recorded and the budget execution is still carried out on a cash basis. However, the transition to recording government transactions on accrual basis as recommended in the *GFSM 2001* is under way. According to a draft 'Instruction' of the Ministry of Finance prepared by the Treasury in cooperation with local governments, line ministries, certified auditors, and the auditor general office, accrual accounting will have to be implemented for government transactions in accordance with IAS, International Public Sector Accounting Standards and other international standards. The Instruction is currently in preparation by the Ministry of Finance and the Treasury. It is to be approved by the end of 2003. The year 2004 will be spent on training and preparation, in the

various institutions. It is planned that the 2005 budget execution will be on an accrual basis for expenses. Accrual accounting for government revenue has not yet been planned. This will require close co-operation of the Treasury with the State Revenue Service of the MOF.

For National Accounts purposes the CBS compiles annual GFS on an accrual basis. Accrual expenditure data on an annual basis are available from statements of the various government institutions, the social security fund, extrabudgetary funds and local government institutions. Annual accrual revenue data are calculated by the CSB, mainly through correcting for tax revenue arrears.

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

In line with the international standards, the GFS data are recorded on a gross basis. Revenues collected by budget executors of the Treasury are not netted from their expenditure. The expenditure and revenue of extra-budgetary funds and the social security fund are also recorded on a gross basis. In line with the *GFSM 1986* (and *GFSM 2001*) recommendations, transactions between the various elements of government, for example, local and central government units, are eliminated through the process of consolidation.

Central government debt data are also recorded on a gross basis, and the gross liabilities are not netted against liquid assets held by the MOF. As is appropriate, financial transactions are shown on a net transaction basis, i.e., incurrence of liabilities minus repayments, or acquisitions of assets minus disposals. Transactions involving nonfinancial assets are recorded on a gross basis, as is also prescribed in *GFSM 2001*.

3. Accuracy and Reliability

3.1 Source data

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

Two main primary data sources exist for revenue and expenditure. (1) Data collection by budgetary units (line ministries, tax collecting agencies, etc.), social security fund, extra budgetary funds and local government units is supported by appropriate software systems for recording of monthly and annual data. Revenue and expenditures are recorded in a detailed way, the latter by economic classification as well as according to the COFOG functional classification system. (2) Daily data are recorded by the Treasury units in the State budget execution accounting system, as budget institutions have to keep an account with the State Treasury. The single treasury account system and the state budget execution system provide centralized accounting of budget revenues and expenditures. Data from both sources are reconciled after every month. The daily, monthly, and annual information retrieved from the single treasury account and the state budget execution system is used by the Reports Department of the Treasury to prepare GFS reports.

Central government debt data are provided through the Treasury's financial management system (using SAP/R3 commercial software), which records transactions in financial assets and liabilities.

The information available in the Treasury (Reports Department) permits a complete consolidation of transactions between central and local government units, including interest and financial transactions and stocks, i.e., Treasury bills held by government units and intra-governmental loans.

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

The chart of accounts currently used corresponds to the budget classification and is intended to match the *GFSM 1986* classification categories. An interagency working group led by the Budget Department is presently working on the draft revision of the classifications of budgetary revenue, expenditure, and functions of government to follow the new *1995 ESA* and the *GFSM 2001* classification format. Reclassifications that are necessary to obtain GFS according to the *GFSM 2001*, in particular pertain to the functional classification of expenditure. In 2004 the Treasury will revise the chart of accounts after approval of the new classifications.

There is no automated system of deriving the GFS data for the purpose of reporting to the IMF directly from the budget items, although the structure of the two datasets is relatively close. An automated system has however been created to derive GFS for national statistical purposes from the source data. Moreover, a data warehouse of the financial management system at the Treasury and a unified database of the Treasury are under development that would consolidate all data of the systems operating within the Treasury and ensure necessary data analysis and preparation of surveys.

The timing of recording and the valuation of source data are consistent with the GFS methodology, and the accounting records of the appropriation managers (budget executor of budgetary units) are compiled both on a cash basis and on an accrual basis. The social security funds also provide the Treasury with data that have already been prepared in a GFS format. Although the social security fund chart of accounts is established on an accrual basis, it also records transactions on a cash basis.

No complementary period is used.

3.1.3 Source data are timely

The budgetary central government data are available on an extremely timely basis to the Operations Department as well as to the Reports Department. Data are available on a daily, monthly and annual basis as recorded by the Treasury units in the single treasury account and in the state budget execution system, as mentioned under 3.1.1.

The detailed source data recorded by the central government units (line ministries, extra budgetary and social security fund) and local government units are in general available within ten days after the reference month.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

Because the GFS data compiled in Latvia rely extensively on accounting records, the Reports Department generally does not need to make estimations. Data recorded by the various budgetary units are generally complete. Monthly data are recorded on a cumulative year-to-date basis, which means that year-to-date data through December data are preliminary and do not equal annual data. This however is not well explained in publications (see 4.4.2).

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

The use of other statistical procedures is rarely necessary.

3.3 Assessment and validation of source data

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

The Internal Audit Department of the Treasury verifies the validity, completeness, and timeliness of financial information on a regular basis. The most timely data that are sufficiently accurate for fiscal analysis are used for preliminary GFS. Monthly data that are preliminary when first released are not revised. Preliminary summary annual data that are published in January are replaced by final summary data later in the year.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

The balances of accounts available from the Treasury information system are reconciled with the statements of accounts provided by the BOL and commercial banks on a daily, monthly and annual basis.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Statistical discrepancies, for example between financing and deficit or between grants received and paid from different levels of government are rare. Consistency, however, is checked regularly and solved. At all levels of government, any unexpected values are investigated.

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

The Reports Department compares the financing data compiled by the Treasury with the information on bank accounts provided by the BOL. Discrepancies are addressed immediately.

3.5 Revision studies

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

The Reports Department does not produce revision studies. Monthly GFS data are prepared on a cumulative year-to-date basis, which means that data revisions in previous months are covered by the latest month's data. In case a methodological change occurs, are also revised and an explanatory footnote would be included in the annual publication and the monthly report.

4. Serviceability

4.1 Relevance

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

GFS data are relevant for the main users. For example, budget execution data are used for the budgetary process by the Parliament. By October 1 of the relevant year the Cabinet submits to the Parliament the draft annual central government budget law for the next fiscal year, based on budget execution data. Moreover, GFS are used as the basis for macroeconomic projections, e.g., on general government debt, expenditure, and revenue. The Treasury makes the general government debt projections, the EAPD makes the revenue projections, and the Budget Department makes the expenditure projections of the MOF. GFS is also used in the dialog with rating agencies. Moreover, the EU and Eurostat are increasingly important users of Latvian GFS. Finally, the BOL and CSB are main users of GFS source data in compiling their own statistics.

The CSB and BOL are contacted for user needs (as intermediate users of GFS) for their preparations of statistics. There is no systematic effort to solicit needs of other users (for example in the academic world). Although the Treasury notes frequent inquiries from users via the Internet, and from regular contacts with rating agencies, the GFS would benefit from establishing a user advisory group, possibly in coordination with the CSB.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The timeliness of fiscal data meets or exceeds SDDS requirements. Monthly central government operations are disseminated within one month after the reference period (although these rely on the budget classification rather than the *GFSM 1986*). Annual general government operations are disseminated within six months after the reference period. Quarterly central government debt—and its breakdown—is disseminated within about seven weeks after of the reference period.

4.2.2 Periodicity follows dissemination standards

The periodicity of fiscal data meets or exceeds SDDS requirements. Central, local and consolidated general government operations are disseminated monthly and annually. Central government debt and its breakdown are disseminated quarterly.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Data are internally consistent within a dataset and the deficit data is consistent with the financing data. Monthly data are presented on a cumulative year-to-date basis.

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

The historical data are revised in the rare instances of changes in the methodology, where possible, and for changes in classification, in particular. Longer time series are available upon request and published in the IMF's *GFSY*. The *GFSY 2002* identifies and explains breaks in time series. Time series data also are published in the MOF annual publication *National Budget* and in the *Statistical Yearbook of Latvia*. Due to space limitations the *Yearbook* provides short time series in successive issues that can be assembled into a long series of five years or more.

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

For national accounts purposes, the CSB includes government-controlled NPIs in the general government sector (see 0.1.2). The main source data for government institutions however, are budget execution data prepared by the Treasury.

Monetary accounts provide data on domestic financing of central and local government from the central bank and from commercial banks. These data are reconciled daily with financing data provided by Treasury units.

GFS on foreign government financing recorded by the Treasury is the main data source for compiling the IIP and external debt data compiled by the BOL. These data classify both the domestic and the foreign government debt on the basis of currency, rather than on the basis of residency, whereas debt data of the private sector are classified by residency.

Discrepancies appear between GFS and monetary statistics, which could be the resulting from the use of a different definition of government by the BOL and MOF. This problem has been identified and an interagency working group is currently working on the establishment of a definitive list of government sector institutions.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established, and transparent schedule

The revision policy is explained on the DSBB, which is hyperlinked on the MOF's and CSB's websites. Although the monthly data are preliminary when first released, they are not revised. Preliminary summary annual data are released to the public, usually in January. Final summary data on the general government budget are released to the public no later than the end of July and detailed final data in November-December.

4.4.2 Preliminary data are clearly identified

The policy on revisions mentioned under 4.4.1 is stated in metadata on the DSBB, but not in national publications. However, the status of the data, preliminary or final, is not clear from the actual publications.

4.4.3 Studies and analyses of revisions are made public

Monthly GFS data are prepared on a cumulative year-to-date basis, which means that data revisions in previous months are covered by the latest month's data. Revisions induced by methodological changes are rather exceptional, and would be explained in a footnote in the annual publication or the monthly report. However, in general, publications give little description of methodology and procedures, and indication of breaks in time series. More documentation on methodology, procedures and revisions would be an important step toward enhancing the relevance of government finance statistics for professional users.

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)

Data are shown following the consolidated presentation recommended in the *GFSM 1986*. Separate tables show general government (and its breakdown) and central government (and its breakdown), but statistics for a given subsector differ somewhat in the two tables. GFS are presented in a way that allows major aggregates of revenue and expenditure, and balancing items to be identified.

All datasets are readily available to the public by electronic and other means at reasonable cost.

Quarterly and annual debt data are disseminated, but not consistently within the same monthly publication as other GFS.

5.1.2 Dissemination media and formats are adequate

Monthly data are presented in the *Monthly Bulletin of Latvian Statistics*, and annual data are presented in *Public Finances of Latvia* and the *Statistical Yearbook of Latvia*, all published by the CSB. Moreover, the Treasury releases data on the website on a regular basis (freely accessible).

5.1.3 Statistics are released on a preannounced schedule

A release calendar is published by the CSB. The actual date of publications is met. The website of the Treasury does not mention the DSBB or provide a hyperlink to it, although the website of the CSB does.

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

Statistics are made available to all users simultaneously. There is no preferential access by any user, and this is mentioned on the DSBB.

5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request

Treasury fills the occasional requests for more detailed data or for longer time series. Treasury's ability to fill these requests, however, depends on the costs and the resources that are needed.

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 are relatively complete in Latvian publications and methodological documentation is given on the DSBB page and in national publications in English. Treasury staff noted that the section "Normative Documentation" (in Latvian) on Treasury's website provides information on laws, orders, regulations, and instructions relevant to GFS. It also covers the definitions underlying the information requested on the forms received from central and local government units to compile the government finance statistics. The section "Methodology" (in Latvian) on the website of the MOF covers the classifications used in GFS and approved by order of the MOF. Bridge tables between GFS methodology and budget data are available upon request in Latvian.

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

The summary methodology available on the DSBB is only available in English and might not fully meet and reach domestic users.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

A contact person for GFS is provided on the DSBB and in the CSB's publications. The Treasury's website only mentions the specific responsible department for data release. Elsewhere on the website, staff lists of the various Treasury departments are available.

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

The websites of the Treasury, MOF, and CSB list publications published by the respective agencies. Moreover, the CSB provides assistance to users of GFS through its information centers. Catalogs on available information are freely available.

Table 7. Latvia: Data Quality Assessment Framework—Summary of Results for Government Finance Statistics
(*Compiling Agency: Ministry of Finance*)

Element		NA	Assessment				Comments
			O	LO	LNO	NO	
0. Prerequisites of quality							
0.1	Legal and institutional environment		X				
0.2	Resources		X				
0.3	Quality awareness		X				
1. Integrity							
1.1	Professionalism		X				
1.2	Transparency		X				
1.3	Ethical standards		X				
2. Methodological soundness							
2.1	Concepts and definitions		X				
2.2	Scope		X				
2.3	Classification/sectorization		X				
2.4	Basis for recording		X				
3. Accuracy and reliability							
3.1	Source data		X				
3.2	Statistical techniques		X				
3.3	Assessment and validation of source data		X				
3.4	Assessment and validation of intermediate data and statistical outputs		X				
3.5	Revision studies		X				
4. Serviceability							
4.1	Relevance		X	X		The effort to solicit user needs could be more systematic.	
4.2	Timeliness and periodicity			X		There are inconsistencies with monetary statistics.	
4.3	Consistency			X		Status of data (preliminary or final) not mentioned; revisions are not explained.	
4.4	Revision policy and practice			X			
5. Accessibility							
5.1	Data accessibility		X				
5.2	Metadata accessibility			X		No metadata provided with data tables. Metadata in national publications could be more comprehensive.	
5.3	Assistance to users		X				

V. MONETARY STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The *Statistics Law*, adopted November 6, 1997 and amended in 1999, defines the organization of the statistics in the Republic of Latvia and the rights and obligations of state and local government institutions in producing statistics, as well as the rights and obligations of respondents and other natural and legal persons in the field of statistics. Under Articles 4 and 7 of this law, the BOL is authorized to organize and perform statistical work in accordance with the *Law on the Bank of Latvia* (adopted on May 19, 1992 and subsequently amended in 1997, 1998, 1999, 2000, 2001, and 2002) and to collect, record, and compile statistics within its fields of responsibility. Pursuant to Article 40 of this law, the BOL collects, registers, and compiles financial statistics and balance of payments statistics, and publishes the compiled statistics. Article 39 authorizes the BOL to adopt statistical reporting forms and the procedures for submitting such reports.

The main activities of the central bank, set by the *Law on the Bank of Latvia*, also are the core processes under the BOL's Quality Management System, which complies with ISO 9001, Quality Systems—Model for quality assurance in design/development, production, installation, and servicing of the International Organization for Standards (ISO). Moreover, a set of criteria (process criteria) has been established for each process to verify whether the process is followed and the objective of the process is achieved. Each process has at least one and as many as several criteria and corresponding objectives.

The BOL's working arrangements thus are governed by laws, regulations (adopted by the BOL's Board of Governors or Executive Board), orders (issued by the BOL's Governor or Chairperson of the Executive Board), procedures (shaped by the Quality Management System), and instructions. The BOL's Statistics Department (SD) prepares and disseminates timely monetary and balance of payments statistics by adhering to the procedures prescribed by the Quality Management System. The BOL is the sole producer of monetary and balance of payments statistics. Within the BOL, the Balance of Payments Statistics Division (BOPSD), Banking and Monetary Statistics Division (BMSD), Accounting Department, Monetary Policy Department (MPD), and Market Operations Department are involved in producing the monetary and balance of payments statistics.

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

The BOL undertakes substantial amounts of data sharing using information technology systems. Only authorized users have access to the data collecting systems and the databases.

The BOL's *Security Guidelines and Regulation for Classifying, Using, and Protecting Information (Security Guidelines)* regulates access and allocation of user rights.

The BOL has signed an agreement with the FCMC, which supervises most Latvian financial institutions on sharing statistics. The BOL provides the FCMC with individual and aggregated data on credit institutions (commercial and universal banks) and credit unions. The BOL also has an agreement with the MOF on the exchange of statistical data relating to government finances, international reserves, and foreign currency liquidity. The agreement specifies data categories, timeliness, periodicity, and the method of transmitting data.

Where coordination is needed to produce regulations and reporting forms for collecting monetary statistics and standardizing the reporting process, the BMSD of the SD cooperates with the FCMC on an ad hoc basis. The FCMC receives adequate explanations with regard to the BOL's data requirements that apply to credit institutions and credit unions. Moreover, such coordination is of particular importance, as both institutions share statistics and need to organize their activities so as to achieve the desired results with the least effort and with the reporting burden as reasonable as possible.

To compile the balance of payments statistics, the BOL cooperates closely with other Latvian authorities. The BOL has an interagency agreement with the CSB on statistical cooperation and information exchange. The official foreign trade statistics compiled by the CSB always have been used in the balance of payments, while the CSB uses balance of payments and international investment position (IIP) data for the national accounts. The two organizations discuss methodological issues and developments in joint task force meetings. Besides the CSB, the BOL maintains close contacts with other institutions on balance of payments and IIP data sources, such as the ministries of the Republic of Latvia, the FCMC, the State Revenue Service, and the State Social Security Agency.

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

The *Statistics Law* establishes the confidentiality and use of official statistical data, including the data the BOL produces. Under Article 3, state statistics shall be based on the principles of statistical confidentiality and transparency. Article 18, which has five parts, deals with confidentiality issues. Part 1 establishes that statistical data are to be deemed confidential if they allow identifying directly or indirectly the respondent and other natural or legal persons. Part 2 states that confidential data collected only for statistical purposes shall be used only for statistical purposes. Part 3 stipulates that statistical data may not be published or disclosed in such a way that would allow to either direct or indirect identification of a natural or legal person. Part 4 orders all state or local government institutions involved in state statistics to take the necessary administrative, technical, and organizational measures to ensure the confidentiality of individual statistical data, and to prevent unauthorized access to such information, its distortion, or dissemination, as well as unintentional or unauthorized destruction. Part 5 prohibits the staff of institutions involved in official statistics from disclosing any information about natural and legal persons to which they have had access

while performing their professional duties. This clause also covers persons who are temporarily involved in the collection and compilation of state statistical information.

The BOL's confidentiality obligations are reinforced by the *Law on the Bank of Latvia*. Article 40 stipulates that the statistics compiled by the BOL may not be published in a way that would make it possible to identify, directly or indirectly, any natural or legal person. In addition, Article 33 prohibits the BOL's Governor, Deputy Governor, members of the Board of Governors and the Executive Board, and employees from disclosing confidential information that has become known to them as a consequence of their service or function to any unauthorized person. This confidentiality obligation also persists after the expiration of the term in office or the termination of the employment relationship. Moreover, the BOL has adopted numerous internal regulations to reinforce and detail the requirements of Latvian laws on the security and confidentiality of information. The BOL has drawn up a list of classified information and a list of its employees holding such information.

Article 16 of the *Statistics Law* gives respondents the right to be informed about the legal background of the survey, the purpose of data collection, and measures taken to protect the information. In the preamble of its regulations, the BOL states the purpose of the statistics it collects and that statistical reports from individual respondents on its balance of payments surveys are confidential. Furthermore, Article 22 of the *Statistics Law* deals with penalties for disclosing statistical information; it provides for disciplinary action or prosecution of employees of state or local government institutions involved in state statistics for the breaching confidentiality rules established under Latvian law, as well as persons temporarily involved in data collection and compilation.

Security being one of the BOL's priorities, a number of internal regulations have been adopted to reinforce and detail the requirements of the Republic of Latvia laws with respect to the security and confidentiality of information. The BOL's Regulation for Classifying, Using, and Protecting Information adopted by the Executive Board March 22, 2001 (resolution No. 487/9) defines classified information and obligates staff not to disclose it to unauthorized recipients. Under this regulation, if a BOL employee's disclosure of classified information results in losses or detriment to the BOL or any natural or legal person, or if the legally justified interests of the above persons have been impaired, the employee is held responsible and subject to disciplinary action. Moreover, termination of a working relationship with the BOL does not discharge a BOL employee from the obligation not to disclose the classified information that they have had access to in discharging their tasks.

The BOL does not release any breakdowns that would allow identifying individual respondents. Before dissemination, each data category is checked so as to verify that indirect disclosure of individual data is prevented.

The BOL has documented its procedure for receiving, processing, and aggregating statistical reports received from credit institutions and credit unions. It identifies individual employees (working stations) involved in carrying out the procedure and the succession of events making up the process, thus ensuring its transparency. This clearly documents who has

access to individual data, and makes it possible to verify whether the prescribed procedure is observed. The holders of information, as well as of information systems, are responsible for classifying the relevant information or information systems, analyzing risks, and determining procedures for their protection, access rights, and usage. Further, the procedure specifies the use of regulations and other related documents in the process of organizing statistical data processing. The BOL's procedures thus protect the confidentiality, availability, and integrity of information.

The physical security of all BOL's premises is guaranteed by the BOL's Security Department. The physical security of the BOL's information and information systems is ensured by organizing an adequate storage of information and restricting entry into the premises where information systems are located. Likewise, the BOL logically protects its information systems by software controls limiting access to authorized users of these systems. Information systems are protected against viruses and use licensed software. Records that are in paper form are adequately stored in lockable cabinets for specified periods according to the BOL's records retention policy.

On February 14, 2002, the BOL's Executive board adopted the Regulation for Managing the Flow of Non-Banks' Statistical Documents (regulation No. 528/3), establishing the procedure for managing the flow of reporting forms for compiling the balance of payments and IIP, as well as procedures for processing and storing the forms to ensure individual data are held confidential.

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

Article 10 of the *Statistics Law* mandates reporting statistical information without charge to authorized agencies. Moreover, Article 21 of the *Statistics Law* establishes the liability of natural persons or officials at enterprises (business companies) or other institutions to penalties for violating procedures of statistical data collection, delaying submission of data, or refusing to submit information in compliance with the procedures laid down by the normative acts. There are no conflicts between the legal authority to produce monetary, balance of payments, or IIP statistics and other laws or provisions.

In addition, Article 7 of the *Law on Credit Institutions*, adopted on October 5, 1995 and amended in 1996, 1997, 1998, 2000, and 2002, obligates credit institutions to observe the regulations adopted by the BOL. Likewise, Article 8 of the *Law* establishes credit institutions' obligation to submit all information requested by the FCMC and the BOL within the time periods specified by these institutions, provided the information requested is necessary for the FCMC and the BOL to perform their functions as specified by law. Article 61.2 of this law requires credit institutions to submit statistical information on payments between residents and nonresidents to the BOL, while article 61.3 grants to the BOL the right to submit the compiled information to the CSB.

Penalties for noncompliance can be applied under Article 166.6 of the *Republic of Latvia Code of Administrative Offences*, as adopted on December 7, 1984. If a legal or natural person does not observe reporting requirements, he may be asked to attend a session at Latvia's CSB, where a representative from the BOL would also participate. To date, no serious cases of noncompliance with the reporting requirements have been observed.

The BOL's cooperation with respondents is manifold: the BOL provides consultations on how to compile the reporting forms, seeks the opinion of respondents when working out new reporting forms, and provides the aggregated information needed by respondents. Telephone numbers for consultations are indicated on all balance of payments statistical reporting forms. Likewise, when mailing reporting forms and requesting submission of data, the BOL adds a cover letter explaining to the respondents the purpose of the requested data. Whenever a new reporting form is worked out, the BOL consults respondents and hears out their proposals. This is done with the aim of making the BOL's requirements as clear as possible. In mid-2002 the BOL launched a pilot project in which a selected number of nonbanks submitted source data for the balance of payments electronically. The pilot was successful and the SD will recommend implementation of electronic reporting for nonbanks to the BOL's Executive Board. To facilitate receipt of inquiries from respondents, a special e-mail address has been created for the needs of the BMSD (stp.bmsd@bank.lv). Moreover, there is an ongoing cooperation between the BOL and the Association of Latvian Commercial Banks, the Association of Credit Unions and the Association of Accountants.

0.2 Resources

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

Overall, the number of the staff is adequate to perform the present scope of duties; however, should the range of statistics collected expand, additional staff would be required. The SD's BMSD employs nine professionals and the BOPSD 23 professionals, who are involved with developing methodology and data reporting formats, and in collection, compilation, analysis of data, and information technology support.

The staff are experienced and competent, with adequate qualifications and technical skills. They have received formal training both from internal and outside experts. Nearly the entire BMSD staff and six BOPSD staff have participated in the training programs organized by the IMF. Likewise, a number of employees participates in seminars held by the European Central Bank (ECB) and Eurostat. The BOL emphasizes learning the experience of other European central banks. Moreover, the Personnel Department regularly conducts surveys to identify the staff's needs regarding training programs. The Personnel Department has developed a special set of training programs held in Latvia and staff are also encouraged to undertake academic programs at universities. This allows the staff to bring the Latvian methodology for monetary and balance of payments statistics and the related regulations in line with international guidelines. In view of Latvia's prospective accession to the EU, the staff of the BMSD and BOPSD have worked diligently to introduce those ECB requirements that were not in place in Latvia's monetary and balance of payments statistics.

Table 8. Staff of the Bank of Latvia Involved in Statistics

Type of staff	Management of Statistics Department	Banking and Monetary Statistics Division	Balance of Payments Statistics Division	General Economic and Financial Statistics Division	Total
1. Permanent employees	3	9	23	6	41
1.1. Head of department	1	-	-	-	1
1.2. Deputy head of department	1	-	-	-	1
1.3. Secretary – file keeper	1	-	-	-	1
1.4. Head of division	-	1	1	1	3
1.5. Deputy head of division	-	1	2	-	3
1.6. Chief economics statistician	-	-	1	-	1
1.7. Senior economics statistician	-	-	2	-	2
1.8. Senior financial statistician	-	2	3	2	7
1.9. Mathematician - senior analyst	-	-	-	1	1
1.10. Senior methodology expert	-	-	-	1	1
1.11. Methodology expert	-	1	-	1	1
1.12. Database administrator	-	1	1	-	1
1.13. Senior report statistician	-	-	2	-	3
1.14. Report statistician	-	3	6	-	9
1.15. Junior report statistician	-	-	5	-	5
2. Employees on contract bases	-	-	-	2	2
Total	3	9	23	8	43

The management of the SD put in every effort to retain the core contingent of the trained staff by motivating and making employees feel that they are part of the team. Thus far these efforts have been successful, and there are employees who have worked for the SD since its formation in 1993.

The BOL's policy on information systems is to follow modern technologies and introduce them as rapidly as possible and appropriate. The SD revises and prepares two consistent plans. The more significant of the two is the SD's five-year working plan, which is approved by the Executive Board. The other is a three-year plan on SD's information systems and software. The latter is incorporated in the BOL's strategic plan for developing information systems, approved by the Board of Governors. The SD has gradually modernized the collection and compilation of statistics by developing special software and computerized systems that allow for automated receipt, processing, and aggregation of data, as well as checking the consistency of reports with the given criteria and verifying the logical and accounting consistency of the reports. Requests and proposals by users of statistics are incorporated into the information technology plan, as appropriate.

The BOL's budget, approved by the Board of Governors, provides the financial resources for compiling monetary and balance of payments statistics. The BOL's Executive Board, together with the heads of all departments, regularly monitors current and capital expenses to meet the annual budget. When making a budget, forecasts regarding income, expenditures, and long-term investments, including those of the BOL's SD are taken into account. Important new initiatives are part of these long-term plans. For example, the Strategic Plan for Developing the BOL's Information Systems provides for information systems to compile financial accounts, an important extension to Latvia's institutional sector accumulation accounts.

0.2.2 Measures to ensure efficient use of resources are implemented

The SD's management visions and directions are shared with the staff. Given Latvia's prospective EU accession, the SD works continuously to align BOL statistical requirements with those of the ECB. With this in mind, the SD has formulated its vision for a statistical system that is responsive to emergent, urgent, and ongoing data needs. At the SD, all methodologies and concepts are documented so that they could be referred to at any point in time.

Several systems of codes have been introduced by the BOL to minimize processing errors. For example, a list of codes of credit institutions and credit unions has been developed to identify statistical units. Moreover, the BOL has assigned codes for all items it collects from these units on its report forms to allow fast and accurate data processing.

Under ISO 9001:2000, working processes are reviewed on a regular basis to improve the existing procedures and introduce new ones where appropriate. The BOL's experts follow the latest developments in the field of information systems and adopt the best international practices as far as possible.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

The BOL SD's quality management program focuses on the integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility of the information it disseminates. An important task of the SD is to follow new regulations and requirements on the monetary and balance of payments statistics adopted by the ECB and Eurostat, as well as the IMF's standards in the *Balance of Payments Manual*, fifth edition (*BPM5*) and the *Monetary and Financial Statistics Manual (MFSM)*.

To minimize the risks inherent in central banking, in May 1999 a special working group for introducing and maintaining the BOL's quality management system was established. This project involved the BOL's 16 organizational units. The BOL's quality management system was developed in cooperation with a professional consultant. The system, easy to modify and use, is maintained on the BOL's local area network and can be accessed by all employees. In January 2000, the first internal audit of the BOL's quality management system was conducted by specially trained BOL employees in advance of an ISO certification audit. On May 18, 2000, the Bureau Veritas Latvia conferred ISO certification on the BOL. The BOL currently conforms with the ISO 9001:2000 standard.

The BOL's quality management system is subject to continuous improvement to achieve maximum satisfaction of the BOL's clients, comprising its own organizational units and management, credit institutions, credit unions, and the general public. As the BOL produces both monetary statistics and balance of payments statistics using some of the same source data, cross-checking is a routine quality assurance activity.

0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics

The BOPSD and BMSD undertake reviews to identify problems at various stages of collecting, processing, and disseminating data. Input data are logically cross-checked. The cross-checking process may involve verifying data with the reporting institutions. Moreover, data of the current reporting period are compared to those of the preceding one, and where significant changes are observed, explanations from the reporting institutions are sought. The BMSD also verifies that data reporting practices followed by other depository corporations are consistent with the BOL's regulations.

The CSB, which is the main user of the balance of payments and IIP, closely follows the quality of the statistics it receives from the BOL.

The FCMC, the main user of the BOL's monetary statistics, closely follows the quality of the statistics it receives from the BOL, as it conducts onsite and offsite supervision of credit institutions and credit unions. Other than the FCMC, monetary statistics are used primarily by other governmental institutions. Every year the CSB revises the *State Program for Statistics*, which is subject to approval of the Republic of Latvia Cabinet of Ministers and

which is subsequently disseminated to all relevant governmental and state institutions. Section 3 covers the balance of payments statistics, while section 4, covering *Government Finance, Banks and Other Financial Institutions, and Money Circulation*, contains information on the annual monetary statistics program.

External data users regularly employ the BOL's website to submit their comments on data quality issues on the statistics produced by the BOL. Likewise, they may communicate their comments to the BOL's Public Relations Department or directly to the BMSD or BOPSD. Internal users of monetary and balance of payments statistics may directly contact the BMSD or BOPSD, respectively.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

BOL management emphasizes timeliness subject to keeping subsequent revisions to the data within acceptable limits. The BOL applies explicit revision policies that are communicated to the reporting institutions. The first data reporting institutions submit are considered preliminary, and a specified period of time is allowed to make revisions to the preliminary data. Further, if revisions are made after the monthly publication, they are marked as such and are accompanied by explanatory notes to users. Quarterly data that are published are final.

The SD maintains a focus on data quality. The BOPSD and BMSD monitor new regulations and requirements on the balance of payments and monetary statistics from the IMF, ECB, and Eurostat. Emergent requirements are discussed among the relevant BOL departments. For example, the regulation for compiling the Monthly Financial Position Report (MFPR) of credit institutions and its appendixes have been amended with effect as of January 1, 2002, introducing a more precise institutional breakdown and a wider range of financial instruments and their maturity breakdown. Thus, the quality of monetary statistics has been improved, the relevant requirements of the ECB have been fulfilled, and the calculations regarding the banking sector's transactions for the country's balance of payments and IIP have greater precision.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The *Statistics Law* addresses the general need for the professional independence of data producing agencies. Article 3 defines the tasks of state statistics; stipulates that state statistics shall be objective, reliable, relevant, efficient, and based on the principles of statistical confidentiality and transparency; provides that state statistics shall give a true picture of the investigated phenomena and processes; and establishes that the methods used in state statistics shall be impartial and independent of political processes and interest groups.

Article 13 of the *Law on the Bank of Latvia* explicitly establishes the independence of the BOL in fulfilling its responsibilities of producing statistics as follows. "In fulfilling its tasks and performing control in accordance with the Republic of Latvia *Law on Credit Institutions* and this law, the BOL shall neither seek nor take instructions from the Government or any other institution and shall not be subject to the decisions and regulations adopted by the Government or any other institution. The BOL shall be independent in the adoption of its decisions and in their practical implementation."

All staff recruited into the SD must be qualified for the work. The minimum requirement is higher education, i.e., a university degree such as bachelor's or master's degree. Attention is paid to candidates' experience. The BOL routinely organizes seminars for professionals across departments. The BOL also promotes the professional qualifications of its staff by exchanging experiences with the staffs of other central banks and with international organizations. An ongoing effort of the SD's management is to encourage the staff who compile monetary and balance of payments statistics to enhance their skills by taking part in working group meetings, seminars, courses, and workshops held by the ECB and Eurostat. Another key factor in promoting the staff's capabilities is participation in courses on monetary statistics and balance of payments provided by the IMF.

Each BOL employee must meet quality standards in their work. In 2001, the BOL started developmental discussions with its staff. All staff meets with their direct managers at least once a year. During the meetings, managers analyze job performance in the past period, consider tasks for the next period, and discuss the employee's interests regarding career and building professional skills.

Research or analyses undertaken by an employee or a group of employees are subject to internal review and coordination with appropriate officials before public dissemination to maintain the BOL's reputation for professionalism.

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

Decisions about the choice of data sources and statistical techniques are made solely on the basis of statistical techniques. Article 39 of the *Law on the Bank of Latvia* states that the BOL approves statistical reporting forms and the procedure for submitting such reports, so it specifies the independence of the BOL in resolving issues affecting the preparation, implementation, and organization of new surveys and reporting forms needed to compile the monetary and balance of payments statistics.

Information on the reasons for the choice of data sources is discussed with specialists and analysts from interested agencies. The main data sources and basic principles used for the compilation are disseminated to the public on the BOL's, IMF's and ECB's website and in hardcopy publications respectively.

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

Communication with the public and the media is the task of the Public Relations Department. To date no misinterpretation or misuse of monetary or balance of payments statistics has come to the attention of the department. In case any such misinterpretations or misuse occurs, the Public Relations Department, in cooperation with the other relevant departments, would prepare comments or explanations.

To prevent erroneous interpretation of monetary statistics, the BOL publishes analytical text in the monthly *Monetary Bulletin* and the quarterly *Monetary Review*. The BOL provides analytical text on the balance of payments in *Latvia's Balance of Payments (Key Items) Monthly Bulletin*, *Latvia's Balance of Payments quarterly Press Release*, *Latvia's Balance of Payments Quarterly Bulletin*, and quarterly *Monetary Review*. All these publications are on the BOL's public website. A clipping service is provided at the BOL, to keep staff informed about publications on the BOL and its fields of activity in 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 principal law that governs production of statistics in the Republic of Latvia, the *Statistics Law*, is available on the website of the CSB, which is the principal statistical authority in the Republic of Latvia. The terms and conditions for collecting, compiling, and disseminating monetary and balance of payments statistics are contained on the BOL's website. In addition, because Latvia subscribes to the Special Data Dissemination Standard (SDDS), it also disseminates the methodologies to compile monetary and balance of payments statistics through the IMF's Dissemination Standards Bulletin Board (DSBB).

The BOL's monthly *Monetary Bulletin* contains a note which states that the IMF's DSBB (<http://dsbb.imf.org>) publishes the release dates for monetary indicators of the Latvian banking system, monetary indicators of the BOL, and international reserves, and that the data are first made available on the BOL's website (<http://www.bank.lv>). *Latvia's Balance of Payments Quarterly Bulletin* contains a similar notice for statistics. Statistics disseminated by the BOL on the IMF's DSBB website are supplemented by information on the contact persons, who can be approached to receive any additional information.

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

No public official outside the BOL has access to monetary or balance of payments statistics prior to publication. The approval processes for the publication of statistics rest entirely with the BOL. Statistics are first released by posting them on the BOL's website in accordance with the advance release calendar. Data are also sent to the ECB, Eurostat, the IMF, the Bank of International Settlements (BIS) and other institutions.

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

All publications of the BOL, which contain statistics, are designed to clearly display the BOL's logotype and the ISSN number. On the website of the IMF's DSBB, the BOL is clearly identified as the source for monetary and balance of payments statistics. Where publications are based on a number of data sources, the BOL's metadata identify each source. The BOL requests citation as the source whenever its statistics are used or reproduced. All BOL publications have a copyright statement.

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

At least one-month advance notice is given regarding changes in methodology via the BOL's website. The BOL provides information about changes in methodology, source data, and statistical techniques at the time the data compiled using the new sources and/or methods are first released and for as long as the period of the change is visible in the published tables.

1.3 Ethical standards

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

The behavior of the staff is governed by the employment contract signed between the BOL and its employees. The BOL's Personnel Department has developed an internal regulation on ethical standards to be observed by the staff. The regulation covers the BOL's policies on conflict of interest, information security, and protection from disclosure of source information from individual respondents. In addition, Article 31 of the Law on the Bank of Latvia establishes restrictions on holding more than one position by the BOL's Governor, Deputy Governor, members of the Board of Governors and the Executive Board, as well as their responsibilities regarding the prevention of conflict of interest in conformity with the Law on the Prevention of Conflict of Interest in Activities of Public Officials.

BOL's management follows all guidelines on personnel and meets the requirements of the *Law on the Bank of Latvia* and other relevant laws. Likewise, BOL's management is vigilant that the ethical guidelines are followed by all the BOL's staff. When new staff joins the BOL, they must attend a special seminar introducing the principal policies and responsibilities of the BOL, as well as the internal ethical guidelines to be observed by the staff. All BOL guidelines for the staff are available on its internal local area network.

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 monetary statistics are in broad conformity with the guidelines of the *MFSM* and with the IAS. As a pre-accession country to the EU, Latvia is in the process of adopting the guidelines of the ECB for compiling monetary statistics, as prescribed in ECB/2001/13.¹⁵ Thus, the BMSD of the Statistics Department of the BOL generally follows guidelines set by ECB regulations in sectorizing the economy, as well as valuing and classifying financial instruments.

The BMSD compiles the following separate aggregated sectoral balance sheets for monetary statistics (1) the monthly BOL balance sheet and (2) report forms called MFPRs for other depository corporations (ODCs). In Latvia, ODCs consist of credit institutions, which comprise licensed banks with domestic headquarters and branches of foreign banks, and credit unions. The BMSD compiles a depository corporations survey by consolidating data from the sectoral balance sheets of the BOL and ODCs and, also, a consolidated balance sheet of banks. The depository corporations survey is denominated monetary survey in the BOL's publications. The BMSD also compiles and disseminates tables with adequate detail on components of the monetary base and monetary aggregates as well as their counterparts. It also collects and disseminates data on interest rates from banks.

The BMSD compiles the following three monetary aggregates. Narrow money (M1), which comprises currency outside banks and demand deposits denominated in domestic currency. Domestic money supply (M2), which comprises M1 plus term deposits in domestic currency, domestic currency deposits redeemable at notice, and domestic currency repurchase agreement (repo) balances. Broad money (M3), which comprises M2 plus deposits denominated in foreign currency.¹⁶ These monetary aggregates exclude local government deposits, which are being compiled on a net basis (credit minus deposits). Some inconsistencies may occur in classifying local government credits and deposits because of an incomplete institutional list of the nonfinancial public sector. The BMSD plans to address these issues in the short term. A working group led by the MOF is in the final stage of completing the institutional list of the nonfinancial public sector.

¹⁵ The legal framework for the provision of depository corporations balance sheet information is set out in the ECB Regulation (EC) No. 2423/2001 of November 22, 2001 concerning the consolidated balance sheet of the Monetary Financial Institutions Sector (ECB/2001/13). Depository corporations are denominated monetary financial institutions in ECB regulations. The ECB's *Guidance Notes to the Regulation ECB/2001/13 on the Monetary Financial Institutions Balance Sheet Statistics* (November 2002) provides recommendations on the preferred statistical practices with respect to accounting and netting rules.

¹⁶ In BOL publications, M1, M2, and M3 are denominated M1, M2D, and M2X, respectively.

2.2 *Scope*

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

The scope of the depository corporations survey is consistent with the *MFSM's* principles, but could be expanded to include liquid investment pools (comprising mutual funds, which are called investment companies in Latvia) despite their comparatively low value of monetary liabilities. Depository corporations are institutions with liabilities in the form of transferable deposits, other deposits, or close substitutes for deposits included in the definition of broad money. The depository corporations survey presents positions of most resident depository corporations vis-à-vis other sectors of the economy and with nonresidents. As of September 2003, the depository corporations sector in Latvia covered (1) the BOL, (2) 23 commercial and universal banks (called credit institutions in Latvia), (3) 28 credit unions, and (4) 12 liquid investment pools.

The BMSD currently does not include data from the liquid investment pools in the monetary survey. It should be noted, however, that the ratio of investment funds liabilities to ODC liabilities is insignificant (about 0.4 percent at end-March 2003). The FCMC has received monthly data from these institutions since December 2001, although not with the same detail as reported by the rest of the ODCs. Latvia's investment pools attract resources from the public through highly liquid instruments, such as investment fund units that are very close substitutes for money, as well as savings and time deposits. The investment fund units can be redeemed by the holders at any time or on very short notice, subject to loss of interest (dividends) not yet credited, and, therefore, are similar to term deposits.

The BMSD does not include data from banks in liquidation in the depository corporations survey either, but this is consistent with the ECB framework under which banks in liquidation are not considered ODCs. In addition, the ratio of total assets/liabilities of banks in liquidation compared to those of the ODCs is very low (about 1.3 percent at end-June 2003). From 1995 to 2000, 31 Latvian banks became insolvent or ceased to exist as a result of reorganization or voluntary liquidation. As of July 2003, 12 banks whose licenses have been revoked were in the process of liquidation. The BMSD classifies banks in liquidation as other financial corporations, rather than as ODCs, and, thus, it has excluded banks in liquidation from the broad money survey since 1995. According to the *MFSM* methodology, however, data on banks in liquidation should be included in the monetary statistics as long as their assets and liabilities have not been fully disposed of as part of the liquidation process. Most of their deposit liabilities would be reclassified as restricted deposits and excluded from narrow measures of money.

While leasing companies are currently considered other financial corporations and thus are not included in the depository corporations survey, the BMSD should monitor their liabilities to be aware if they were to start issuing short-term/liquid liabilities in the future.¹⁷ If this

¹⁷ Other financial corporations are financial intermediaries that obtain funds by incurring liabilities on their own behalf, with a view to lending or acquiring financial assets; however, their liabilities are not in the form of

(continued)

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were to happen, these institutions would need to be reclassified as ODCs and the BMSD would need to compile leasing companies' data to incorporate them in the ODC survey. As of September 2003, there were 27 financial leasing companies, and seven of them were subsidiaries of universal banks. The financial leasing companies are subject to the Latvian commercial law, but no financial supervisory agency monitors them.

2.3 *Classification/sectorization*

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

The classification of instruments and the sectorization of institutional units are based on the *1995 ESA* and are generally consistent with *MFSM*, with some exceptions described in this section. The sectorization first distinguishes between residents and nonresidents, and then delineates the various domestic sectors and subsectors. The delineation between resident and nonresident institutional units is in accordance with the *1993 SNA* and the *BPM5* and, thus, is in conformity with the *MFSM*.

The following resident sectors and subsectors are identified in accordance with *1995 ESA*¹⁸: (1) the financial sector S12, which comprises the BOL–S121, other depository corporations–S122 (composed of banks and credit unions), and nonbank financial institutions/other financial corporations (composed of financial intermediaries, which comprises other financial intermediaries S123 and financial auxiliaries S124, and insurance corporations and pension funds S125); general government S13 (composed of budgetary and extrabudgetary central government S1311, budgetary and extrabudgetary local governments S1313, and social security funds S1314); nonfinancial corporations S11 (composed of public (S11001) and private (S11002 and S11003) nonfinancial corporations); and households S14 and nonprofit institutions serving households S15.

The sectorization practices deviate from the *1995 ESA* and *MFSM* guidelines in that the accounts of the general government are recorded on a net basis and do not show a breakdown for the local governments in the depository corporations survey. The *MFSM* recommends that credit to the general government be recorded separately from deposits by subsector, i.e., central government, including the State Social Security Agency, and local governments. It is important to identify separately the deposits of government entities that are not part of the central government to classify them appropriately in the monetary aggregates, since only their deposits should be included in the measurement of broad money. Central government deposits are normally excluded from the monetary aggregates. Also, an appropriate

deposits or other liquid financial instruments. Other financial corporations comprise insurance companies and pension funds, other financial intermediaries, and financial auxiliaries. In Latvia, the other financial intermediaries include financial leasing companies and pawnshops, and the financial auxiliaries include insurance agents, brokerage companies, securities brokers, currency exchange houses, and financial advisory agents.

¹⁸ The codes refer to economic sectors as defined by *1993 SNA/1995 ESA*.

sectorization of the general government accounts would facilitate the reconciliation between the monetary and the government finance statistics. The BMSD plans to identify separately the local government accounts in the short term by using data already compiled in the MFPR forms.

The BMSD uses a classification of financial instruments for monetary statistics that is in line with ECB regulations and is broadly consistent with the *MFSM*. As a general principle, positions on each financial instrument are always disaggregated by sector and by national/foreign currency position. In conformity with the *MFSM*, securities repurchase agreements (repos) and securities resale agreements (reverse repos) are recorded as deposits on the liability side and as collateralized loans on the asset side. Accounts payable/receivable and financial derivatives are not broken down by sector, which is recommended by the *MFSM* but not by the ECB's guidelines.

While there are no gold swaps, the BOL enters into gold interest rate swap arrangements with foreign financial institutions, which do not involve an exchange of notional amounts implied in the respective contracts. These derivative financial instruments are recorded in off-balance sheet accounts at their notional amounts. Financial assets and liabilities arising from gold interest rate swap arrangements are revalued on a regular basis and reported in the balance sheet as derivative financial instruments under the balance sheet item *other foreign assets* or *other foreign liabilities*, as appropriate, at their fair value, without affecting the balance sheet item of *gold*. Changes in the fair value of the aforementioned swap arrangements are recorded in the balance sheet item *valuation account*.

The classification practices deviate from the recommendations of the *MFSM* in the following aspects (1) the total quota to the IMF, including the reserve position in the Fund, is included in foreign assets in the BOL balance sheet, rather than showing separately the reserve position in the Fund from the rest of the quota in the IMF. This information needs to be separately classified since the reserve position in the Fund is part of international reserves while the rest of the quota is not (it is considered part of other foreign assets). Also, the IMF securities account is not included in other foreign liabilities in the BOL balance sheet; and (2) accrued interest are included in other assets and liabilities, rather than in the outstanding value of deposits and loans broken down by sector with separate subaccounts maintained to record accrued interest for purposes of control.¹⁹

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The basis for recording follows the ECB's regulations and is largely consistent with the *MFSM*. In general, valuation rules follow the principle of market valuation in conformity

¹⁹ The *MFSM* recommends the accrual accounting principle, in which interest due on financial instruments but not paid should be incorporated into the outstanding amount of the financial asset/liability, rather than being treated as part of other accounts receivable/payable.

with guidelines outlined in the *MFSM*. The policy for valuing financial instruments is based on the fair value or market value.²⁰ Given Latvia's prospective accession to the EU, the basis for recording also follows the ECB's guidelines.

At present, the convergence between the guidelines of the *MFSM* and the EU's regulations is increasing, as shown, for instance, by the Guideline ECB/2002/10 regarding the legal framework for accounting and financial reporting in the European System of Central Banks (ESCB).²¹ This Guideline emphasizes basic accounting assumptions including that transactions shall be accounted for in accordance with their substance and economic reality and not merely with their legal form. Also, it indicates that because of the principle of prudence, unrealized gains shall not be recognized as income, but transferred directly to a reserve revaluation account. Likewise, the Guideline establishes that current market prices shall be used for balance sheet valuation purposes. Moreover, the Guideline considers provisions as part of liabilities and deals with the treatment of financial derivatives.

Financial assets and liabilities are valued as follows: (1) tradable financial assets are measured at their fair value, including transaction costs; (2) bank loans and other claims, other than tradable assets and held-to-maturity investments with a fixed redemption date, are reported at their amortized cost applying the effective interest method. Financial assets with no fixed redemption date are recorded at their effective purchase value; (3) holdings in the share capital are valued, where appropriate, applying the equity method or the cost method (taking into account impairment losses); (4) all financial liabilities other than negotiable liabilities are disclosed at their amortized cost; (5) negotiable financial liabilities are recorded at their fair value. Loans are valued without adjustment for expected loan losses arising from anticipated defaults by borrowers in monetary statistics.

If financial assets are not valued at market prices, stocks of financial assets and liabilities are valued as if they were acquired in market transactions on the reporting date of the balance sheet, with a view to using "fair values." To this effect, if a financial asset is not actively traded on the market, the latest available market price is adjusted so as to obtain a realistic measure of the fair value. In cases where there are no market prices available, the proxy for financial assets market value is based on the discounted present value of future cash flows.

Valuation adjustments, including holding gains and losses on instruments, are not presented in valuation changes in the MFPR submitted by the ODC. For internal purposes, items in the banks' aggregated balance sheet are adjusted for valuation effects arising from changes in the exchange rate of the lats against foreign currencies. In 2004, the BMSD will start collecting

²⁰*Fair Value* is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing, and independent parties. When a financial instrument is traded in an active market, its quoted market price provides the best evidence of fair value. Otherwise, i.e., when a quoted market price for a financial instrument is not available, estimation techniques may be used to determine fair values.

²¹The scope of application of this Guideline is confined to the accounting and reporting regime of the ESCB and, therefore, it does not lay down binding rules for national central banks' national reports and financial accounts.

data on valuation adjustments (changes in prices of securities and write-offs and write-downs of loans) following the ECB's requirements.

Consistent with the *MFSM*, monetary gold is recorded at its market value in the balance sheet. Specifically, monetary gold is valued daily using the London Stock Exchange closing price of the day. Also, the official exchange rate announced by the BOL is used for translating foreign exchange transactions into domestic currency on the transaction date. Foreign-currency-denominated assets/liabilities are translated into lats using the BOL's official exchange rate applicable to the balance-sheet date.

2.4.2 Recording is done on an accrual basis

The BOL, banks, and credit unions follow accrual accounting and, thus, record financial transactions and other flows at the moment that the economic value is created, transformed, exchanged, transferred, or extinguished. Consequently, financial transactions are recorded simultaneously between parties for the compilation of monetary statistics.

In accordance with the general principle of accrual accounting, the amount of interest payable/receivable is recorded on the balance sheet as accrued interest. Pursuant to the ECB's regulations concerning the consolidated balance sheet of the depository corporations, accrued interest on loans and deposits is recorded in the balance sheet item *Other assets/Other liabilities*, except for accrued interest on zero coupon securities which is recorded together with the underlying securities. Data on accrued interest are not available by instrument and sector. This practice deviates from the accrual accounting principle recommended in the *MFSM*.

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

Data are collected on a gross basis in the BOL's balance sheet and in the MFPR. Pursuant to the FCMC's Regulation for Annual Accounts, ODCs' assets and liabilities may not be offset or netted. Moreover, the BOL *Regulation for Preparing the MFPR* states that assets and liabilities shall not be offset and the net amount reported unless there is a legally enforceable right to set off the recognized amounts or there is an intention to realize the asset and settle the liability simultaneously.

In the aggregated balance sheet of an ODC, financial assets and financial liabilities are classified in conformity with Tables 7.2. and 7.3. of the *MFSM*. However, in the banks' consolidated balance sheet, claims on the central government and claims on the local government are presented on a net basis. In accordance with internationally accepted standards, the depository corporations survey shows foreign assets, domestic assets, and other items on a net basis. Some of the underlying information for data presented on a net basis in the BOL's publications is shown in a gross basis.

3. Accuracy and reliability

3.1 Source data

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

Source data are adequate and contain sufficient information for classification by financial instrument, economic sector of counterparty, currency of denomination, and maturity. The source data for compiling the central bank survey are the accounting records of the BOL, which are the responsibility of the Accounting Department. The basic source data for the ODC survey are the MFPRs submitted by banks and credit unions. The BOL's reporting requirements are comprehensive, because data from MFPRs reports are also used for supervisory purposes. These sources, thus, contain very high levels of detail.

Currently, the BMSD is developing a new reporting system for the ODCs which will be introduced in 2004. This reporting system will comprise report forms and methodological instructions for compiling flow data needed to fully implement the ECB's framework for monetary data as well as for meeting the *MFSM's* requirements.

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

Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required. Monetary statistics are derived from the BOL's balance sheets and the MFPRs reported by ODCs. As noted in section 3.1.1, the currently available source data provide sufficient information for classification of the balance sheet accounts by financial instrument, economic sector of the counterparty, currency of denomination, and maturity. Therefore, there is generally no need for approximations or other adjustments.

3.1.3 Source data are timely

The source data are timely. The accounting records of the central bank and ODCs are received quickly enough to meet the timeliness requirements for monetary statistics. ODCs are required to report their data by the sixth working day after the end of the reference month, which provides sufficient time for the BMSD to verify and process the data for the compilation of the monthly monetary statistics. Most ODCs report their data on time. On very exceptional cases, when an ODC institution cannot comply with the deadline, they call the BMSD staff to request an extension. The BMSD has preliminary data for internal purposes nine working days after the end of the reference month and final data for dissemination 18 working days after the end of the reference month.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

Data compilation procedures are sound and minimize processing errors. In accordance with ISO 9001:2000, the BMSD follows a documented process governing the production of statistics. The BMSD receives and processes banking reporting forms electronically, while the credit unions' forms are received in hardcopy and entered manually.

After the reported data have been updated, data are checked for internal consistency and errors. If the BMSD staff detects any respondent errors, they call the respondent bank to clarify the nature of the error. Once data are correct, they are saved and confirmed for further processing. The original documents are stored. Data are checked once more. If no errors are identified, data are cleared for aggregation. Aggregate data are evaluated and validated by the head of the BMSD and the head of the Statistics Department. After validation, data reports are produced, stored, and printed out. Finally encrypted data are sent to the final users.

The BMSD has introduced several systems of codes with the aim of minimizing processing errors. There is a list of codes for banks and credit unions, as well as for all accounts included in the MFPR. Also, computerized checks identify abrupt trend changes in balances, and compare balances reported in the MFPR with those reported in the MFPR appendices which contain a detailed breakdown of certain balance sheet positions.

The BMSD in collaboration with FCMC has designed all reporting forms in a way that makes them easy to complete and appropriate for electronic submission and processing.

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

The balance sheet data are not subject to statistical adjustments. Seasonal adjustment on certain monetary aggregates is performed for internal analytical purposes only, and these seasonally-adjusted monetary aggregates are not part of the officially published monetary statistics.

3.3 *Assessment and validation of source data*

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

Source data are routinely assessed for coverage and response errors, as explained in item 3.2.1. Also, when checking assets/liabilities denominated in foreign currencies reported by banks, the BMSD staff ensures that they have been converted to lats using the BOL's exchange rate corresponding to the last day of the reporting month. In addition, the BMSD staff continuously reviews the data sources to ensure that they meet the statistical needs of the BOL, the ECB, and the IMF.

The BMSD follows developments in financial markets by monitoring the financial press, research papers, and the websites of news agencies, as well as by maintaining contact with financial institutions, and associations of Latvian banks and credit unions. As soon as new institutions or instruments emerge and they become significant, the BMSD extends the coverage of the statistics it collects to include them. For example, the BMSD started capturing data on financial derivatives as soon as these instruments gained popularity in Latvia. At present, the BMSD is closely following the progress of investment funds, which are at an early stage of development, to include them in the ODC survey at a later stage.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

The main intermediate data are validated against other information, where applicable. For example, monthly data on the BOL's transactions with ODCs are cross-checked to evaluate their consistency with ODCs' balance sheet data.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Where statistical discrepancies occur in intermediate data, the BMSD staff clarifies the nature of discrepancies by calling the reporting institutions.

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

Procedures are in place to detect sources of fluctuations or discrepancies. The BMSD software produces month-on-month changes in each ODC's data. Where the month-on-month change in any item of the MFPR exceeds 15 percent and 500 thousand lats, a credit institution has to fill out a special form explaining the nature and reasons for the movement.

3.5 Revision studies

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

As a rule, revisions that occur between preliminary and final data are minor. Nonetheless, any revisions that occur between preliminary and final data are investigated and documented, although no formal revision studies are published.

Studies investigate the sources of omissions and fluctuations in the data. The results of revision studies are taken into account when compiling statistics for the subsequent periods.

4. Serviceability

4.1 Relevance

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

The BMSD conducts reviews to assess users' data requirements. Regular contacts are maintained with the main users of monetary statistics: the MPD, which uses and analyzes monetary statistics, the FCMC, the CSB, the Association of Latvian Commercial Banks, and the Association of Credit Unions. These institutions are requested to provide their comments when the BMSD develops new regulations or reporting forms. In addition, the BMSD staff continuously reviews the data sources to ensure that they meet the statistical needs of the ECB, and the IMF. Private sector users regularly use the BOL's website to submit their comments on monetary statistics as well as contact the BOL Public Relations Department or the BMSD directly. The BOL's Public Relations Department also conducts regular opinion polls to ascertain the public's satisfaction with the BOL's activities and services; the last poll was undertaken in 2002.

In addition, the relevance of monetary statistics in meeting users' need is supported by a state program on statistics. There is an established process of review to assess whether the statistical program meets the needs of users of monetary statistics. Every year the CSB revises the State Program for Statistics, which is subject to the approval of the Cabinet of Ministers and which is subsequently disseminated to all relevant governmental and state institutions. Section 3 of the State Program for Statistics called *Government Finance, Banks and Other Financial Institutions, and Money Circulation* contains information on the monetary statistics collected in Latvia. Any government institution may request additional information or detail related to the monetary statistics.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The central bank survey is disseminated on the last business day of the second week after the end of the reference month, and the depository corporations survey is disseminated within one month following the end of the reference month, which fully meets the SDDS requirements.

4.2.2 Periodicity follows dissemination standards

The central bank survey and the depository corporations survey are disseminated on a monthly basis, which meets the prescribed periodicity of the SDDS.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Overall, the monetary statistics are internally consistent. The records of the BOL and the ODCs for claims on, and liabilities to, are consistent between each other. Also, the main MFPR items and the more detailed data reported in the MFPR appendices are reconcilable.

After the new survey to collect flow data is introduced in 2004, the BMSD will also be able to reconcile stock and flow data.

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

Data are fully consistent over time. When accounts need to be reclassified or revised, data are revised as far back as reasonably possible. The largest revision made to date relate to the removal of trust assets and liabilities from the ODCs' balance sheets to reclassify them as memorandum items. This was done in early 2001 and monthly data were reclassified since 1997, when the data started being included in the depository corporations survey.

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

The net foreign assets in monetary statistics are generally consistent with the corresponding measure derived from the international investment position and with the flow data in the balance of payments statistics, as the source data is the BOL's balance sheet and the MFPRs which are collected by the BMSD.

There are discrepancies between the monetary and the government finance statistics compiled by the Treasury, which are not being analyzed and monitored by either the BMSD or the Treasury. A working group comprising the BOL and the Treasury should be set up to analyze and monitor these intersectoral inconsistencies.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established and transparent schedule

Revisions to monthly monetary statistics are rare and generally small. Preliminary data are only used for internal purposes between the ninth and the 15th working day after the end of the reference month, prior to finalizing and disseminating the data on the 18th day after the end of the reference month. Although revisions to these data are rare and generally small, revisions are identified in footnotes to the tables included in the BOL's publications and website. In the case of major methodological changes or reclassification of accounts, they would be announced in advance and explained in the BOL's publications and website.

4.4.2 Preliminary data are clearly identified

Since revisions to monthly monetary statistics are rare, data are not identified as preliminary. Nonetheless, revisions are identified when they take place.

4.4.3 Studies and analyses of revisions are made public. (See also 3.5.1)

Revisions to correct erroneous data tend to be of small magnitude and rarely affect major statistical aggregates. In light of this, no revision studies are undertaken and made public. In the case of major methodological changes or reclassification of accounts, studies and analysis revisions would be undertaken and published.

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 are easily accessible and published in a clear manner. The BOL's *Monthly Bulletin* and quarterly *Monetary Review* publications, which are also posted on the BOL's website, include clear and well-presented charts and tables that facilitate analysis. While both publications include analytical text, the quarterly publication provides a more detailed analysis of developments than the monthly publication. Excel files containing monthly monetary time series dating back to 1993 are also available on the BOL's website.

5.1.2 Dissemination media and formats are adequate

The BOL disseminates data on monetary statistics on its website www.bank.lv and in the *Monthly Bulletin* and quarterly *Monetary Review* publications, which are available in Latvian and English. The website also provides free access to Excel files containing detailed time series on monetary aggregates dating back to 1993, and to 1998 for the banks' consolidated balance sheets. All BOL's publications are available to the public in Latvian and English and are free of charge.

5.1.3 Statistics are released on the pre-announced schedule

Monetary statistics are released according to a preannounced schedule. An advance release calendar, which gives one-quarter-ahead notice of the precise release dates, is disseminated on the IMF's DSBB website and on the BOL's website. A reference to these websites is included in the BOL's *Monthly Bulletin*.

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

Data are simultaneously released parties through posting of the data on the BOL's website according to the date indicated in the advance release calendar posted on the IMF's DSBB

website and on the BOL's website. No officials outside the BOL have access to the data prior to their release to the public.

5.1.5 Nonpublished (but nonconfidential) sub-aggregates are made available upon request

Nonpublished and nonconfidential data are provided to interested users upon request free of charge. The availability of nonpublished statistics and the terms and conditions on which they are made available are publicized on the BOL's 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, including summary methodology statements for all monetary data categories, are available on the IMF's DSBB website and a hyperlink is available on the BOL's website. These metadata contain information on the data coverage, periodicity, timeliness, access by the public, integrity, quality and dissemination formats. The summary methodology contains information on the analytical framework, concepts, definitions and classifications, scope of the data, accounting conventions, and the nature of the basic data sources, and compilation practices. The BMSD staff reviews and updates the SDDS metadata and summary methodologies—if necessary—every three months.

Also, the BMSD prepared a description of the methodology used for compiling monetary statistics that was included in the ECB's *Money and Banking Statistics in the Accession Countries: Methodological Manual* annual publication. The manual is updated every year. Users can access this information through the ECB's website and the BMSD provides the article upon request.

The section *Laws, Regulations* on the BOL's website also provides information on the regulations and definitions underlying the information requested in the MFPR forms from ODCs to compile the monetary statistics. The information provided includes definitions, terms, and classifications used in compiling monetary statistics.

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

The detailed description of the metadata mentioned in 5.2.1. allow users to obtain information on sources and methods used to compile monetary statistics, both in Latvian and English.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The BOL's hard-copy publications provide a contact facsimile, telephone number, and address for data requests. Contact person references are provided for each data category on

the BOL's website and the IMF's DSBB website. More commentary and explanations of monetary statistics in BOL publications and on its website would enhance already adequate documentation.

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

In view of the Bank of Latvia policy to minimize hardcopy publications and enhance the dissemination of information and data through its website, the BOL does not publish a hard-copy catalog of publications, documents, and other services to users. However, a complete list of publications is available on the BOL's website in the section *Publications*. The BOL's policy is to provide statistical information free of charge. The advance release calendar contains, in essence, a catalog of all data categories and release dates. In addition, the main page of the BOL's website includes the sections *News* and *Releases*, which contain information on the latest publications. It is also possible to receive updates via electronic mail by subscribing on the website through the section called *What's New*. All hard-copy publications are available on the website. The BOL updates all information contained on its website on a continuous basis.

Table 9. Latvia: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(*Compiling Agency: Bank of Latvia*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Quality awareness		X				
1. Integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X	X			Record general government subsectors separately and some accounts need revision.
2.3 Classification/sectorization						
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Statistical techniques		X				
3.3 Assessment and validation of source data		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Relevance		X				
4.2 Timeliness and periodicity		X	X			There are inconsistencies with government finance statistics.
4.3 Consistency						
4.4 Revision policy and practice		X				

Table 9. Latvia: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(*Compiling Agency: Bank of Latvia*)

Element	NA	Assessment			Comments
		O	LO	LNO	
5. Accessibility					
5.1 Data accessibility		X			
5.2 Metadata accessibility		X			
5.3 Assistance to users		X			

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

VI. BALANCE OF PAYMENTS STATISTICS

For assessments of the Prerequisites of quality (0.) and Integrity (1.) dimensions, see the Monetary Statistics and National Accounts sections.
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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 statistics closely follow the concepts and definitions set out in the *Balance of Payments Manual*, fifth edition (*BPM5*). In view of Latvia's prospective accession to the EU, Latvia also implements the more specific European statistical requirements.

2.2 *Scope*

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

In principle, Latvia's balance of payments statistics cover all transactions between residents and nonresidents, and all institutional units engaged in transactions with nonresidents are covered. While migrants' effects, which should be recorded in goods as well as in capital transfers, are not being compiled, these transactions are not considered to be significant. Resident institutional units are defined in broad conformity with the *BPM5*'s concepts of economic territory and center of economic interest.

Although the coverage for goods seems to be appropriate at present, there were some problems with the timing of recording and the coverage of goods going through the free-trade zones prior to amendments in the Customs law that went into effect in July 2002. This was so because the free-trade zones, which are located in Latvia's three main ports, were treated as foreign countries for Customs purposes. Goods moving into the free-trade zones from the rest of Latvia were treated as Latvian exports and goods moving into the rest of Latvia from the zones as Latvian imports. Nonetheless, the trade value going through the zones has been relatively low: only about 6 percent of total exports and about 2 percent of total imports.

The treatment of the free-trade zones in trade statistics had the following implications (1) it distorted the timing of trade flows when there were delays before goods "exported" from the rest of Latvia were really exported from the zones; (2) exports were underestimated to the extent that the zones were "importing" goods and services, adding value, and then exporting a higher value product (however, the CSB is reported to have made adjustments to these data by contacting enterprises, since only very few enterprises in the free-trade zones process goods); (3) imports were overstated to the extent that goods were being imported into the rest of Latvia via the zones, after value had been added in the zones (the CSB reported

that these amounts were not significant); and (4) both exports and imports were overstated in cases where goods that had been “exported” into the zones from the rest of Latvia were re-imported (the CSB reported to also have made some adjustments to these data by contacting enterprises).

Since July 2002, the *Customs Law* was amended to require that exports going through the free-trade zones be recorded when placed on board the ship, rather than when goods enter the zones from the rest of Latvia. Imports, however, will continue to be recorded when moving into the rest of Latvia from the zones, which would produce timing distortions when there are delays before goods imported into the zones are taken into the rest of Latvia and recorded as imports. Imports stored in the about 180 customs-bonded warehouses have also been recorded on this same basis; they account for about 22 percent of total imports. To avoid import timing distortions, the *Customs Law* would need to be further amended to record imports on the date of entry rather than when leaving customs-bonded warehouses and free-trade zones.

When Latvia becomes a EU member in May 2004, customs borders with other EU countries would no longer apply and the INTRASTAT system used in all EU countries (including the nine other new member states joining in 2004) for collecting foreign trade data will be introduced for collecting over three fourths of both exports and imports. The source data then will be enterprise monthly reports on trade with other EU countries.

2.3 Classification/sectorization

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

The classification of the accounts is fully consistent with the guidelines provided in the *BPM5*. Further, the detail for all balance of payments components is comprehensive and includes the Extended Balance of Payments Services Classification recommended in the *Manual on Statistics of International Trade in Services* issued by an international interagency task force including the IMF in 2002. In 1996, the OECD and Eurostat, in consultation with the IMF, developed this more detailed classification for services from that of the *BPM5* and the Central Product Classification for the use of their members. The extended classification in the *Manual on Statistics of International Trade in Services* recommends a further breakdown of services that allows for the provision of information required in connection with the General Agreement on Trade Services (GATS).

The sectorization of the accounts is also fully consistent with the guidelines provided in the *BPM5*. Consequently, portfolio investment and other investment transactions are broken down into the four recommended institutional sectors: monetary authorities, general government, banks, and other sectors. Also, the components of other investment and debt securities under portfolio investment are classified according to their maturity into long term and short term.

The institutional coverage for the general government and for the banking system is consistent with the ones used in the monetary and fiscal accounts. The institutional coverage for the general government comprises the central government, including the State Social Security Agency, and the local governments. The institutional coverage for the banking system comprises banks, branches of foreign banks registered in Latvia, and credit unions. The banking system is referred to as other depository corporations in the section on monetary statistics following the terms introduced in the *MFSM* issued in 2000.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Balance of payments statistics are compiled in lats. Market prices are used to value most flows and stocks. The main exception is that equity capital for direct investment in Latvia and debt securities (liabilities) are recorded at book values. Starting with 2004 data, however, the BOPSD plans to estimate the market value of foreign direct investment equity capital in Latvia by using information from the Latvian stock market and the equity capital approach recommended by the ECB for unlisted enterprises.

Foreign currency transactions are converted into domestic currency following the guidelines outlined in the *BPM5*. The exchange rate has been pegged to the SDR since February 1994 and, since then, the BOL has been announcing the exchange rate of lats to about 35 foreign currencies on a daily basis. Survey data are provided in lats, for which reporting enterprises convert assets and liabilities denominated in foreign currency by using the exchange rate for the reference period announced by the BOL. The ITRS data for nonbanks are reported in the currency in which the settlement was made and converted into lats using the BOL's exchange rate prevailing on the day of the transaction.

The value of foreign trade statistics are recorded in foreign currency in the customs declaration forms and converted into lats by applying the BOL's exchange rate prevailing on the day when the customs cargo declaration was filled out. Imports, which are recorded on a cost, insurance, and freight (c.i.f.) basis in customs forms, have been adjusted to a f.o.b. basis since January 2000 using the average c.i.f./f.o.b. ratio of 1.05 estimated by the CSB for 1998 and 1999. The information for this adjustment was obtained from customs declaration forms, which at that time allowed for separate recording of imports also on a f.o.b. basis.

International reserves and other foreign currency assets are translated into national currency by using the daily rates of exchange announced by the BOL. For dissemination purposes, the data are also translated into U.S. dollars using the end-of-period exchange rate announced by the BOL.

2.4.2 Recording is done on an accrual basis

In principle, transactions are recorded on an accrual basis as recommended by the *BPM5*. In particular, accrued interest is recorded based on information collected through the quarterly survey on foreign investment and through the administrative records of government

agencies. Transactions measured through the ITRS are based on the time of settlement. Consequently, other services are recorded on a settlement basis, rather than when services are rendered, but a quarterly survey on other services will be introduced at the beginning of 2004.

Also, while the change of ownership rule is largely applied in Latvia's balance of payments statistics, about 22 percent of imports going through about 180 customs-bonded warehouses and about 2 percent of imports going through the free-trade zones are recorded when leaving the bonded warehouses and free-trade zones, rather than on the date of entry. For most merchandise trade, good practice in operationalizing the change of ownership date for goods is to use the date of entry into the economic territory of a country. Latvia's use of the special system of trade recording, if unadjusted, thus causes timing distortions because the date the goods enter the rest of Latvia from free trade zones and bonded warehouses may not be close to the date of territorial entry. As noted above, however, free trade zones account for only a small percentage of imports. The importance of the bonded warehouse issue depends on the average time imports spend in bonded inventory. These timing issues can be expected to diminish somewhat in the latter part of 2004, after Latvia joins the European Union, since over three fourths of its imports is from EU member states. Imports and exports with EU partners then will be recorded via the INTRASTAT system rather than customs. See item 2.2.1. for more information on the recording of goods going through the bonded warehouses and free-trade zones.

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

Grossing/netting procedures are broadly consistent with the *BPM5*. Current and capital account transactions are recorded on a gross basis, while financial account transactions are recorded on a net basis, separately for the individual asset and liability components. However, a few transactions on the current account, such as telecommunication services, are recorded on a net basis, but a quarterly survey on other services will be introduced at the beginning of 2004.

In principle, goods for processing are recorded on a gross basis consistent with the *BPM5*. At the beginning of 2002, the BOPSD staff did some comparative analysis of Customs-trade statistics (including goods for processing) and ITRS data. They concluded that the majority of the textile enterprises involved in processing goods were declaring only the value added component of their exports while declaring the gross value of their imports. Consequently, the BOPSD adjusted the data on textile goods for processing to include the full value of goods exported after processing, in those cases when incorrect values had been reported in customs declarations. This adjustment has been done since the first quarter of 2002 and data continues to be adjusted as required. In this context, it would be important to undertake further efforts to ensure that goods for processing be recorded on a gross basis by identifying specific measures through a joint study undertaken by the BOL, CSB, and Customs.

3. Accuracy and Reliability

3.1 Source data

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

The data collection system to compile balance of payments statistics is adequate. The data sources are broadly sufficient to compile the balance of payments statistics in conformity with the *BPM5* and are kept under continuous review to ensure that the data collection program remains comprehensive. The main components of Latvia's balance of payments collection system are the BOPSD's quarterly surveys, ITRS data, banking statistics, BOL's data, and administrative data sources.

Surveys conducted by the BOPSD are the main source of quarterly data for other sectors. The two main quarterly surveys are (1) a survey on foreign investment that captures stocks on direct investment and related income flows broken down by country, as well as stocks on portfolio investment and other investment and related income flows, and (2) a survey on transportation and intermediary services that captures data on transportation services rendered/received by resident enterprises (including affiliates of nonresident enterprises) by mode of transportation.

Monthly ITRS data supplement the data from surveys and constitute the main data source for the compilation of monthly balance of payments statistics. The ITRS consists of an open settlement system comprising indirect reporting from banks registered in Latvia and direct reporting from enterprises.

The indirect reporting component of the ITRS collects information from all banks registered in Latvia on their customers' transactions with nonresidents for values above the threshold of 1,000 lats. The data are supplied electronically to the BOL. The banks identify the residence of the payer/payee from the banks' database and report the country of residence according to the ISO country code. For resident enterprises, the banks also report the enterprise identification number associated to Latvia's enterprise register. Residents are classified into central government, local governments, nonfinancial public enterprises, public and private financial institutions, private enterprises, private individuals, social and religious organizations. Banks classify the type of transaction according to the List of External Payments Codes (three-digit payment codes), which was introduced by the BOL in 1998. The codes are classified into nine groups in accordance with the standard components of the balance of payments.

The direct reporting component of the ITRS collects data from enterprises on payments received through the banking system for which no information is available on the nature of the transaction. Enterprises also report international settlements undertaken through their accounts with nonresident banks located outside the Latvian banking system. These data are provided with transaction codes associated to the List of External Payment Codes, as well as with country and currency codes.

In addition, the BOPSD obtains information from other departments and divisions in the BOL, such as (1) the Accounting Department for data on the monetary authorities and reserve assets, the latter broken down by country and currency, and (2) the BMSD for information on banks' balance sheet items broken down by residency and with country and currency breakdown for the main items.

The BOPSD also obtains data from (1) the CSB on foreign trade statistics, labor statistics (wages and salaries paid to nonresidents), and data on travelers based on the border survey; (2) the Ministry of Foreign Affairs for data on revenue and expenditure of Latvian embassies, representative offices, and consulates abroad; (3) the MOF for technical assistance data; (4) the Treasury for statistics on the state budget revenue and expenditure, general government external debt, and technical assistance; (5) the FCMC for data on premiums and claims for reinsurance, investment in the equity capital of banks, data on banking institutions' annual profit/loss, and its distribution, and data on securities traded on the secondary market; (6) the State Social Security Agency for pensions received/paid in accordance with inter-governmental agreements; and (7) the State Revenue Service for data on the value added tax repaid to and social security contributions paid by foreign embassies, representative offices, and consulates in Latvia. Information from newspapers is also monitored for information on international transactions.

The main data sources for the major components of the balance of payments are as follows:

Goods. The CSB compiles monthly foreign trade statistics from source data provided by Customs. The BOPSD compiles goods by supplementing these data with information from (1) the BOPSD's quarterly survey on transportation and intermediary services (the 3-MB survey); (2) the CSB's quarterly data on extraterritorial trade of shipping vessels; (3) the monthly BOL's profit-and-loss statement data on costs for the production of paper money and coins; and (4) the BOPSD's monthly ITRS data .

Transportation. The BOPSD compiles transportation services from (1) the BOPSD's quarterly survey on transportation and intermediary services (the 3-MB survey); (2) the BOPSD's monthly ITRS data on sea, air, rail, road, and pipeline transport; and (3) the CSB's monthly foreign trade statistics for data on freight and insurance.

Travel. The CSB compiles the data for travel services based on (1) the monthly data on the number of travelers provided by the State Border Guard and (2) the quarterly estimates of average daily travel expenditure from the Travelers Border Survey that the CSB conducts at over 20 border check points. The daily average travel expenditure is based on two surveys which are undertaken at the border during one week every three months: the first one surveys resident travelers returning from abroad and the second one surveys nonresident travelers leaving Latvia.

Other services. The main sources of information are (1) the BOPSD's monthly ITRS data on all types of services, (2) the BOL's monthly banking statistics and the BOL's profit-and-loss statement on telecommunications, construction, financial, computer, accounting and auditing

(including tax consulting), and other business services; (3) the FCMC's quarterly data on premiums and claims for reinsurance; (4) the Ministry of Foreign Affairs' data on monthly revenue and quarterly expenditure of Latvian embassies, representative offices, and consulates abroad to compile government services n.i.e.; and (5) the monthly State Revenue Service data on value added tax repaid to foreign embassies, representative offices, and consulates in Latvia to compile government services n.i.e.

Compensation of employees. The primary data sources are (1) the CSB's quarterly labor statistics on wages and salaries paid to nonresident workers; (2) the BOPSD's monthly survey on residents working abroad (mainly sailors); (3) the Ministry of Foreign Affairs' data on monthly revenue and quarterly expenditure of Latvian embassies, representative offices, and consulates abroad to derive salaries paid to nonresident workers; (4) the monthly State Revenue Service's data on social security contributions made by foreign embassies, representative offices, and consulates in Latvia for their local staff; and (5) the work permits issued to Latvian residents in 13 countries provided to the BOPSD by foreign embassies in Latvia, which together with estimates for average salaries are used to derive the credit entries. Estimates are also made for the income obtained abroad by Latvian sportsmen and foreign sportsmen in Latvia.

Investment income. The primary data sources are (1) the BOPSD's quarterly survey on foreign investment (the 1-MB survey); (2) the BOL's monthly banking statistics and BOL's profit-and-loss statement; (3) the FCMC's quarterly data on investment in the equity capital of banks; (4) the FCMC's annual data on banking institutions' profit/loss, and their distribution; (5) the Treasury's administrative records; and (6) the monthly ITRS data.

Current transfers. The primary data sources are (1) the BOPSD's monthly ITRS data on transfers; (2) the CSB's monthly foreign trade statistics on grants in kind; (3) the MOF's data on technical assistance funds committed under registered projects financed by other countries and international organizations; (4) the Ministry of Foreign Affairs' data on monthly revenue and quarterly expenditure of Latvian embassies, representative offices, and consulates abroad; (5) the Treasury's monthly data on government contributions to international organizations and use of technical assistance funds received from other countries and international organizations; (6) the BOL's monthly banking statistics and BOL's profit-and-loss statements for extraordinary receipts and expenses; and (7) the CSB's quarterly labor statistics on taxes paid by nonresident workers.

Capital account. The primary data sources are (1) the MOF's monthly data on technical assistance funds committed under registered projects financed by other countries and international organizations; (2) the Treasury's monthly data on the use of technical assistance funds received from other countries and international organizations; and (3) the BOPSD's monthly ITRS data on capital transfers by other sectors and transactions in nonproduced nonfinancial assets.

Direct investment. Direct investment data are compiled on a directional basis. The primary data sources are (1) the BOPSD's quarterly survey on foreign investment (the 1-MB survey); (2) the BOL's monthly banking statistics; (3) the FCMC's quarterly data on investment in the

equity capital of banks; (4) the FCMC's annual data on banking institutions' profit/loss, and their distribution; and (5) the BOPSD's monthly ITRS data on direct investment abroad and in Latvia.

Portfolio investment. The primary data sources are (1) the BOPSD's quarterly survey on foreign investment (the 1-MB survey); (2) the BOL's monthly banking statistics; (3) the FCMC's quarterly data on investment in the equity capital of banks; (4) the Treasury's administrative records; and (5) the BOPSD's monthly ITRS data on equity and debt securities (assets and liabilities).

Financial derivatives. The primary data sources are (1) the BOL's monthly balance sheet; (2) the BOL's monthly banking statistics; (3) the FCMC's monthly data on securities traded in the secondary market; and (4) the BOPSD's monthly ITRS data on transactions in futures, forwards, options, and other derivatives (assets and liabilities).

Other investment. The primary data sources are (1) the BOPSD's quarterly survey on foreign investment (the 1-MB survey); (2) the BOL's monthly banking statistics; (3) the BOL's monthly balance sheet; (4) the Treasury's administrative records; and (5) the BOPSD's monthly ITRS data on long-/short-term loans, financial leasing (assets and liabilities), and resident's deposits.

Reserve assets. The data source is the BOL's balance sheet.

Regarding the survey framework, the sampling frame for the two main quarterly surveys appears to be dependable. The BOPSD's quarterly survey on foreign investment samples 900 enterprises representing a target population of 4,000-5,000 enterprises that have financial liabilities to/claims on nonresidents. Its annual survey includes another 1,200 enterprises. The quarterly sample frame is built up using the State Enterprise Register, the CSB's register of economically active enterprises, a regularly updated list of enterprises based on ITRS data, and the annual survey on foreign investment of around 1,200 enterprises. Enterprises are classified into three size groups based on the total value of their cross-border transactions. The first group comprises those enterprises that are engaged in the largest value of financial transactions with nonresidents (450 enterprises) and all of them are included in the sample. The BOPSD applies stratified simple random sampling to select enterprises from the second and third size groups. The BOPSD updates the frame constantly, as large new enterprises start operating, some enterprises take up an increased value of financial transactions with nonresidents (as recorded in the ITRS), and some others cease operating. The sampling frame is revised once a year.

The BOPSD's quarterly enterprise survey on transportation and intermediary services samples 450 resident enterprises and agents of nonresident enterprises representing a target population of around 1,200 enterprises. The selection of enterprises for the survey is based on the following three sources (1) the ITRS data from which relevant enterprises are identified based on the List of External Payment Codes associated with transportation services (about 300 enterprises for which total credit and debit transactions exceeded LVL 100,000 in 2002); (2) the data the Road Transport Directorate provides on enterprises that receive permits for

international road transportation (about 1,100 enterprises in 2002); and (3) the Customs data on enterprises that provide ships and aircraft with fuel and other goods in ports (Liepāja, Rīga, Ventspils) and at the Riga airport (about 50 enterprises in 2002).

Regarding the ITRS, which covers all banks registered in Latvia, respondents appear to have no difficulty in providing the requested information, since the structure of the reporting system for banks is consistent with the accounting practices employed by them. Data are automatically extracted from banks' operational records using electronic systems. The BOPSD undertakes onsite bank inspections to ensure data are reported properly and to monitor transaction volumes under the exemption threshold of 1,000 lats. ITRS transactions are classified following the standard classification of balance of payments components, except settlements made by individuals, which are recorded under current transfers. Banks report settlements on a gross basis.

Finally, the BOPSD monitors developments in the external sector and incorporates relevant transactions into the balance of payments statistics. The press is monitored on a daily basis and information on international transactions followed up with the relevant entity as necessary. Close relationships are maintained with the financial community to identify new developments, and the BOPSD staff regularly participate in conferences and seminars related to the improvement of data sources and, as an accession country to the EU, those organized by the ECB and Eurostat, in particular.

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 prescribed in the *BPM5*. Adjustments to source data are made, where necessary. As with other collection systems that are partly based on ITRS data, the time of settlement and not the time of change of ownership determines when some transactions are recorded.

The BOPSD adjusts the CSB's foreign trade statistics (which include electricity and gas) to improve the coverage, valuation, and classification of the data. The coverage adjustments add transactions from fishing vessels, the free-trade zones, parcel post, and on purchase/sale of ships, and aircraft. Although the authorities are aware smuggling exists, the BOPSD does not adjust for it because it is difficult to estimate with any accuracy. Valuation adjustments are done to some exports to CIS countries that are considered to be regularly undervalued. The CSB adjusts imports from a c.i.f. basis to a f.o.b. basis using the information from 1998–99 customs declaration forms, which at that time included information on imports on a c.i.f. and f.o.b. basis; imports started to be recorded only on a c.i.f. basis in 2000. The BOPSD has adjusted goods for processing since the first quarter of 2002 to include the gross value of exported textiles; only the valued added of exports has been reported for these goods in customs declarations forms. Classification adjustments are done to reclassify freight and insurance included in the c.i.f. value of imports.

3.1.3 Source data are timely

Reporting requirements are compulsory and the source data are timely. The survey forms clearly indicate the reporting deadlines and most respondents comply with those deadlines. Follow-up telephone reminders are made shortly after the deadlines, which are effective in securing data from the late reporters. The response rate for the BOL surveys conducted is above 92 percent.

The cooperation agreement between the BOL and the CSB clearly states deadlines for reporting data. There are internally approved schedules for the timeliness of the source data and for processing the input data.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

Data compilation procedures are sound. The reporting forms have been designed to make them easy to complete. The BOPSD receives and processes ITRS data from banks electronically. The system checks the reported data for internal consistency and logical errors. When errors are detected, the BOPSD staff calls the respondent bank to clarify the nature of the error.

Data from enterprises are reported in hardcopy mostly by facsimile and entered manually. There are built-in checks for internal consistency and logical errors. Errors are flagged if a data-entry error occurs. Follow-up telephone calls to respondents are done as needed. To facilitate the submission of data by enterprises, the BOPSD launched in mid-2002 a pilot project for reporting data for balance of payments statistics in electronic form. The pilot was successful and the BOPSD will recommend implementation of electronic reporting for non-banks to the BOL's Executive Board.

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

The BOPSD adjusts for missing observations in surveys. Also, some data adjustments and transformations are undertaken to derive some balance of payments components, such as imports on a f.o.b. basis, government services n.i.e., and compensation of employees.

Imports, which are recorded on a c.i.f. basis in customs forms, have been adjusted by the CSB to a f.o.b. basis since January 2000 using the average c.i.f./f.o.b. ratio of 1.05 estimated by the CSB for 1998 and 1999. The information for this adjustment was obtained from customs declaration forms, which at that time allowed for separate recording of imports also on a f.o.b. basis. Insurance and freight are reclassified taking into account the mode of transport and country of origin of the goods.

Government services n.i.e. are estimated using (1) the monthly State Revenue Service data on the value added tax repaid to foreign embassies, representative offices, and consulates in

Latvia, and (2) the Ministry of Foreign Affairs' data on monthly revenue and quarterly expenditure of Latvian embassies, representative offices, and consulates abroad.

Compensation of employees (credit entries) are estimated based on (1) the monthly State Revenue Service data on social security contributions made by foreign embassies, representative offices, and consulates in Latvia, and (2) the work permits issued to Latvian residents in 13 countries as reported by foreign embassies in Latvia, together with estimates for average salaries.

3.3 Assessment and validation of source data

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

The BOPSD routinely assesses the accuracy of survey data. Information is available about sampling errors for the quarterly enterprise survey on foreign investment, which are regularly reviewed. All high-value transactions and significant changes in the reported data are confirmed with respondents. Different logical controls are built-in the data entry programs, which allow to review the adequacy of the reported data and detect inconsistencies between the current and the preceding quarterly data.

Certain information is available about nonsampling errors. Overcoverage is negligible and occurs only when some enterprises cease to operate. It is much more difficult to determine the level of undercoverage. Nonetheless, undercoverage concerns mostly small enterprises—medium-sized enterprises in only exceptional cases. This is so because the BOPSD continuously monitors cross-border transactions of enterprises and enterprises identified as having a significant value of cross-border transactions are immediately included in the sample frame.

In general, the response rate for surveys is high at over 92 percent. Nonetheless, when some responses are delayed, these data are estimated using supplementary information sources, such as the ITRS, data from the State Enterprise Register, etc. The reported data are always reviewed to identify any high-value transactions or fluctuations in the data.

The BOPSD routinely assesses also the accuracy of ITRS data. High-value transactions are confirmed with respondents. ITRS data are always compared with the quarterly survey data at the individual enterprise level to prevent miscoding. The BOPSD undertakes onsite bank inspections to ensure that the data are reported properly. In addition, annual ITRS data for the biggest exporters and importers are compared with the foreign trade statistics.

Finally, the BOPSD routinely assesses source data to ensure adequate coverage and that changes be made to address any identified problems. The sampling frame is revised once a year. In addition, during the year enterprises that have taken up a significant volume of foreign settlement, as shown in ITRS data, are added to the sampling frame. The BOPSD

staff analyze trends in time series when reviewing source data, and also compare survey and ITRS data.

Starting in 2004, the BOL will introduce (1) a new survey to collect other services on a gross basis, and (2) estimates of the market valuation of the foreign direct investment equity capital in Latvia by using information from the Latvian stock market and the equity capital approach for unlisted enterprises. Starting in 2005, amendments to the existing survey on foreign investment will include (1) introducing flow statistics for reconciling better the IIP stocks and the balance of payments flows, and (2) introducing the Current Operating Performance Concept recommended by the ECB and Eurostat for the valuation of reinvested earnings.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Main intermediate data are validated against other information where applicable

A number of validations on intermediate data and statistical outputs are in place.

ITRS data are compared with the survey data at the individual enterprise level to prevent miscoding. Cross checks between survey and ITRS data are performed for nonbank transactions. The position "account balances in credit institutions registered abroad" included in the quarterly and annual survey on foreign investment is used to monitor enterprises that should report settlements made through accounts in banks located abroad.

The BOPSD uses the annual survey on foreign investment to review the accuracy of the estimates obtained using the quarterly surveys data during the year. The data provided in the annual survey on foreign investment is used also to obtain updated stocks for the IIP at the beginning of the calendar year. Information from mass media is used as supplementary information to verify high-value transactions.

The data obtained from the quarterly survey on foreign investment are compared with data from the State Enterprise Register, the FCMC, and the CSB.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The behavior of series is cross-checked with related series/indicators. For example, income from direct investment and other investment are assessed in relation to the corresponding stock data. The CSB compares estimates of the travellers' border survey with information from surveys of hotels, motels, and camping places. The BOPSD compares travel estimates with information from banks registered in Latvia on payments made abroad with credit cards issued to residents and payments made in Latvia with credit cards issued by foreign banks. Also, the discrepancies between foreign trade statistics and the associated ITRS financial flows are reviewed. Latvia's external debt and claims are derived from IIP data.

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

The BOPSD closely monitors the size of net errors and omissions and makes an effort to understand the reasons for changes. In a number of instances, the monitoring process has resulted in the identification and correction of reporting errors prior to dissemination of the data. The trend on errors and omissions is also closely monitored to determine whether these are persistently positive or persistently negative, either of which would be a cause of concern.

External debt data (especially government sector debt) are compared with the Joint BIS-IMF-OECD-World Bank statistics on external debt.

3.5 Revision studies

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

The reasons for significant revisions to the data are investigated and documented. The results of investigations and adjustments made in the statistical processes are taken into account in compiling the data for the subsequent periods.

4. Serviceability

4.1 Relevance

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

The relevance of balance of payments statistics in meeting users' need are supported by a state program on statistics and monitored by the BOPSD staff through regular contact with users on an informal basis. The Cabinet of Ministers approves every year a State Program on Statistical Information which covers all type of statistics and ensures that the balance of payments statistics continue to address issues of concern to users by including requests on additional detailed information to be produced according to government agencies' requests.

Also, the BOPSD staff consult regularly with the CSB staff who use the balance of payments statistics as a major data source for national accounts to ensure that the balance of payments data meet their needs. While there is no formal user advisory group involving other agencies or representatives from the private sector, nor a users' survey, the BOPSD has a high level of contact with users on a less structured basis in the form of telephone calls and electronic mail. The BOL's Public Relations Department also conducts regular opinion polls to ascertain the public's satisfaction with the BOL's activities and services; the last poll was undertaken in 2002.

The BOPSD staff regularly participate in international statistical meetings and seminars organized by international organizations on balance of payments compilation issues. They

also attend meetings of the ECB and Eurostat Joint Committee on Monetary, Financial, and Balance of Payments Statistics, the Eurostat Working Group on Balance of Payments, and the ECB Working Group on Balance of Payments and International Reserves, all of which discuss issues affecting the relevance and practical utility of the balance of payments data. In addition, the BOPSD staff attend annual seminars organized by the central banks of the three Baltic countries to examine balance of payments compilation issues and developments affecting their region.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The timeliness of the data either meets or exceeds SDDS requirements. The BOPSD disseminates quarterly balance of payments statistics within one quarter after the reference period, which meets the SDDS requirements. Monthly balance of payments data are disseminated on the 30th working day after the end of the reference month in accordance with ECB requirements, which exceeds the SDDS requirement. Annual IIP data are disseminated within one quarter after the end of the reference period, which is faster than the SDDS requirement of two quarters. Quarterly IIP data, which are only encouraged by SDDS, are also compiled and disseminated within one quarter after the end of the reference period, which meets the SDDS encouraged requirement.

4.2.2 Periodicity follows dissemination standards

Periodicity either meets or exceeds SDDS requirements. The BOPSD compiles and disseminates monthly and quarterly balance of payments statistics. The monthly frequency exceeds the SDDS requirement of quarterly data. The IIP data are compiled and disseminated on a quarterly basis, which exceeds the annual periodicity requirement of the SDDS.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Concepts, definitions, and classifications for producing quarterly and annual statistics are the same and are in line with the *BPM5*. Published monthly, quarterly, and annual data are consistent. The size of errors and omissions has been reasonable in recent years.

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

Consistent quarterly balance of payments time series are available from 1992 onwards. When changes in source data, methodology, or techniques are introduced, the BOPSD reconstruct historical series as far back as reasonably possible. When this is not possible due to source data constraints, detailed methodological notes identify and explain the main breaks and discontinuities in the balance of payments time series.

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

Latvia's balance of payments data are broadly consistent with international merchandise trade statistics, national accounts, government finance, and banking data. The balance of payments data on trade in goods is reconciled with the international trade statistics. The balance of payments data are fully consistent with national accounts statistics, as they form the primary data source for the external sector of the national accounts statistics. Balance of payments statistics on cross-border transactions of banks are consistent with monetary statistics to the extent that the BOPSD uses banking statistics compiled by the BOL's BMSD.

Transactions data in the balance of payments are fully reconciled with the stock data in the IIP, since balance of payments are source data for the IIP. Discrepancies between flow and stock data are explained by exchange rate changes, price changes, and other changes. There were a few large discrepancies, which are explained by reclassification of some accounts. A revised quarterly survey on foreign investment will be introduced in 2005 to collect data on transactions, valuation, price, and other changes in addition to stocks.

4.4 Revision policy and practice

4.4.1 Revisions follow a regular, well-established, and transparent schedule

Revisions follow a regular pattern. The quarterly balance of payments data may be revised, if needed, when data for the next quarter are published. Also, according to the harmonized revision policy of the ECB and Eurostat, time series up to three years long may be revised in September and March. This revision policy is explained on the IMF's DSBB website. Also, the BOL's *Latvia's Balance of Payments* publication indicate that data may be subject to revision. Revised data are identified in footnotes and major changes in methodology are explained in the BOL's hardcopy publications and on its website.

4.4.2 Preliminary data are clearly identified

Monthly balance of payments data are preliminary when first released but not identified as such in the BOL's publications and website. The data sources for quarterly data are not considered to be preliminary, but some revisions are undertaken after the data are first released to reflect updated data. When data are published, minor revisions are not clearly identified. Revised data are disseminated with the same level of detail as previously published for the data being revised.

4.4.3 Studies and analyses of revisions are made public

Explanations of large revisions are provided at the time of their data dissemination through footnotes on the BOL's website and in the BOL's publications.

5. Accessibility

5.1 Data accessibility

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

The balance of payments statistics are presented in a clear manner. The BOL's monthly and quarterly *Latvia's Balance of Payments* publications, which are also posted on the BOL's website, include clear and well-presented charts and tables that facilitate analysis. While both publications include analytical text, the quarterly publication provides a more detailed analysis of developments than the monthly publication. Datasets are published according to the standard components of the *BPM5* and ECB requirements. No data are seasonally adjusted. The BOL staff explain economic trends in the analytical text included in balance of payments publications.

5.1.2 Dissemination media and formats are adequate

The dissemination media and formats are adequate for user needs. The major components of quarterly balance of payments data are first released in a quarterly press release with a short analysis of developments. At the same time of the press release, all the tables included in the BOL's quarterly *Latvia's Balance of Payments* publication are posted on the BOL's website in Excel format, both in Latvian and English. The hard-copy version of the publication is released about 10 working days later and the analytical text is also posted on the BOL's website at that time. Longer time series are available on the BOL's website. Monthly balance of payments are first released on the BOL's website and the hard-copy version of the BOL's monthly *Latvia's Balance of Payments* is also published about 10 working days later.

5.1.3 Statistics are released on a preannounced schedule

Balance of payments statistics are released according to a preannounced schedule. An advance release calendar, which gives one-quarter-ahead notice of the precise release dates, is disseminated on the IMF's DSBB website and on the BOL's website. A reference to these websites is included in the BOL's quarterly *Latvia's Balance of Payments* publication.

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

The data are released simultaneously to all interested parties through a press release and the posting of the data on the BOL's website according to the preannounced schedule. A notice to this effect is published in the BOL's quarterly *Latvia's Balance of Payments* publication. No officials outside the BOL have access to the data prior to their release to the public.

5.1.5 Nonpublished (but nonconfidential) subaggregates are made available upon request

Although the data disseminated are extensive and detailed, additional nonpublished and nonconfidential data are available upon request.

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, including information on concepts, definitions, classification, and data sources used for compiling balance of payments statistics are published in each issue of the quarterly *Latvia's Balance of Payments* publication, which is also posted on the BOL's website. Metadata are also available on the IMF's DSBB website, in the IMF's *Balance of Payments Statistics Yearbook, Part 3: Methodologies, Compilation Practices, and Data Sources* publication, and in the ECB's *Accession Countries Balance of Payments/International Investment Position Statistical Methods* publication. The description of the metadata is detailed and described in almost seven pages in the different dissemination media, both in Latvian and English. The SDDS summary methodologies and other related metadata are regularly reviewed and updated.

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

The detailed description of the metadata mentioned in 5.2.1. allows users to obtain information on sources and methods used to compile balance of payments statistics, both in Latvian and English. This information includes the list of codes of the NACE by section and division.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The BOL's hard-copy publications provide a contact facsimile, telephone number, and address for data requests. Contact person references are provided on the IMF's DSBB website and in the ECB's *Accession Countries Balance of Payments/International Investment Position Statistical Methods* publication.

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

All publications are available on the BOL's website and can be requested on hard print free of charge.

Table 10. Latvia: Data Quality Assessment Framework—Summary of Results for Balance of Payments Statistics
(Compiling Agency: Bank of Latvia)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Quality awareness		X				
1. Integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Statistical techniques		X				
3.3 Assessment and validation of source data		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Relevance		X				
4.2 Timeliness and periodicity		X				
4.3 Consistency		X				
4.4 Revision policy and practice			X			Preliminary data not identified.
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

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 21 data categories, including component detail, covering the four main sectors 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:

- post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and

- maintain an Internet website, referred to as the National Summary Data Page (NSDP), which contains the actual data described in the metadata and to which the DSBB is electronically linked.

At the March 29, 2000 meeting of the IMF's Executive Board, Directors approved the incorporation of a new SDDS data category on external debt. The transition period for implementing this data category expires in March 2003.

As a result of the IMF Executive Board's Third Review of the SDDS in March 2000, the IMF staff began monitoring observance of the Standard through NSDPs maintained on the Internet. Monitoring commenced at the beginning of July 2000 and is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: Guide to the SDDS, February 2002: <http://dsbb.imf.org>

Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)

Quality Dimensions	Elements	Indicators
<p>Prerequisites of quality¹</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics.</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Quality awareness—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data producing agencies are adequate.</p> <p>0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, financial, and computing resources are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 Processes are in place to focus on quality.</p> <p>0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics.</p> <p>0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs.</p>
<p>1. Integrity</p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are compiled on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness</p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions— <i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization— <i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices: see dataset-specific framework</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>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, guidelines, or good practices.</p>

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<p>3. Accuracy and reliability</p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.</i></p>	<p>3.1 Source data—<i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p>3.3 Assessment and validation of source data—<i>Source data are regularly assessed and validated.</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are collected from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Data compilation employs sound statistical techniques.</p> <p>3.2.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.3.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide planning.</p> <p>3.4.1 Main intermediate data are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes.</p>

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Quality Dimensions	Elements	Indicators
<p>4. Serviceability</p> <p><i>Statistics are relevant, timely, consistent, and follow a predictable revisions policy.</i></p>	<p>4.1 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>4.2 Timeliness and periodicity – <i>Timeliness and periodicity follow internationally accepted dissemination standards.</i></p> <p>4.3 Consistency—<i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.4 Revision policy and practice—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 The relevance and practical utility of existing statistics in meeting users’ needs are monitored.</p> <p>4.2.1 Timeliness follows dissemination standards. 4.2.2 Periodicity follows dissemination standards.</p> <p>4.3.1 Statistics are consistent within the dataset (e.g., accounting identities observed). 4.3.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.3.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>4.4.1 Revisions follow a regular, well-established and transparent schedule. 4.4.2 Preliminary data are clearly identified. 4.4.3 Studies and analyses of revisions are made public.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>5. Accessibility</p> <p><i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility—<i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility—<i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users—<i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).</p> <p>5.1.2 Dissemination media and formats are adequate.</p> <p>5.1.3 Statistics are released on the preannounced schedule.</p> <p>5.1.4 Statistics are made available to all users at the same time.</p> <p>5.1.5 Nonpublished (nonconfidential) subaggregates are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines or good practices are annotated.</p> <p>5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact person for each subject field is publicized.</p> <p>5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</p>

Note: The elements and indicators included here bring together the “pointers to quality” that are applicable across the five identified dimensions of data quality.

Summary of Discussions with Users

With the assistance of the IMF Office in Riga, the mission surveyed 19 users from business, academia, government, and international organizations by mail and fax, held follow-up meetings with nine of these respondents, and met with two more who had not returned a survey form. The “sample” was not random. Indeed, it was made up of very active users of the macroeconomic data that the CSB, MOF, and BOL produce. Of these, a majority were government users. The second largest group was financial institutions, and the third largest comprised researchers and academics. (The agenda used for the discussions is in Box 1.)

These users rated the overall quality of Latvian macroeconomic statistics as very good on the average. On a scale of 1 to 5, with 5 being “excellent” and 1 being “poor,” Latvian national accounts, price, government finance, monetary and financial, and balance of payments statistics each scored about 4. Researchers and academics tended to be somewhat more variable in their views, from highly satisfied to not so satisfied, while government and financial users were more uniformly less critical.

Key points among the views expressed about macroeconomic statistics are as follows:

- The coverage and amount of detail is generally satisfactory. Several users wished that more detail could be made available by region and by industry. They recognized, however, that confidentiality issues are important in explaining some of the lack of detail in view of the relatively small populations of establishments and households in the most detailed groupings of interest. Further detail in the composition of capital formation expenditure was important to some users.
- Accuracy is generally regarded as high and most users noted their respect for the competence of the agencies collecting and compiling Latvian statistics.
- Timeliness was an important issue to all users. By and large, timeliness is viewed as satisfactory, but although Latvia exceeds SDDS national accounts timeliness requirements by about 20 days most users would welcome still more timely data. Periodicity is viewed as satisfactory.
- Views on documentation of methodology and information about quality were mixed. Even when critical of the lack of documentation online or in hard copy, however, users spoke highly of the knowledgeable, responsive staff of the data-producing agencies who were easy to access on the phone.
- Some felt that they did not get enough information about past revisions. They noted that preliminary, revised, and final data often are not marked in the tables, making detecting revisions a matter of comparing figures in tables from issue to issue. The documentation on breaks in series, such as data on government finance statistics, was often inadequate in their view.

As to special strengths, all users expressed appreciation for the attentive customer service provided by the statistical staffs of providers of official statistics, and noted the generally

improving quality of information about Latvia's economy even as they lamented data deficiencies in their own areas of interest.

Box 1. Meeting with Data Users: Agenda

An IMF team will visit Riga during September 3–17, 2003 to prepare an assessment of Latvia's macroeconomic statistics as part of the program on Reports on the Observance of Standards and Codes. The team will focus on national accounts, prices, balance of payments, monetary statistics, and government finance statistics. As background, the team is seeking statistics users' views on these datasets. The names of individuals and organizations who provide views will not appear in the team's report.

I. **Quality in statistics** can be viewed in terms of coverage and detail, accuracy, timeliness, etc. Often these dimensions must be traded off against each other. Further, quality comes at a cost, including response burden. Nevertheless, users' views on the following questions would be useful. Brief specifics would help the team follow up.

- a. Statistical products: are you satisfied with...
 - Coverage (the range of statistics) and amount of detail?
 - Accuracy?
- b. Dissemination: are you satisfied with...
 - Timeliness (lag in availability after reference period)?
 - Periodicity?
 - Ease of access to numbers?
- c. Documentation: are you satisfied with...
 - Explanatory notes and other documentation on methodology?
 - Information about quality?
 - Information about planned revisions? Explanation of past revisions?

II. **Overall assessment** of official macroeconomic statistics

- a. How do you compare Latvia's statistics with those of other countries: Better? Same? Worse?
- b. On a scale of 1 to 5, with 1 being poor and 5 being excellent, how do you assess the overall quality of Latvia's statistics?

III. **Additional comment:** Special strengths? Areas needing improvement or change?

