

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

This Report on the Observance of Standards and Codes on Data Module for the Kingdom of the Netherlands—Netherlands 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 December 21, 2007. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Kingdom of the Netherlands—Netherlands or the Executive Board of the IMF.

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

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KINGDOM OF THE NETHERLANDS—NETHERLANDS

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

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December 21, 2007

The Report on the Observance of Standards and Codes (ROSC)—Data Module provides an assessment of The Netherlands' macroeconomic statistics against the *Special Data Dissemination Standard (SDDS)* complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework (DQAF), July 2003 version. The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data-producing agencies to practices specific to datasets.

The datasets covered in this report are national accounts, consumer and producer price indices, government finance, and balance of payments statistics. The agencies that compile and disseminate the datasets assessed in this report are Statistics Netherlands (CBS) and the Netherlands Bank (DNB). Data compiled and disseminated by the Ministry of Finance (MOF) were assessed as source data for the government finance statistics compiled and disseminated by the CBS.

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

CBS: <http://www.cbs.nl/>

DNB: <http://www.dnb.nl/>

MOF: <http://www.minfin.nl/>

This report is based on information provided prior to and during a staff mission during October 3–17, 2007 and publicly available information. The mission team comprised Edgar Ayales (Head), Tobias Wickens, Antonio Galicia, and Josefina Gavino (all STA), and Ross Harvey and John Greenlees (Experts).

The CBS is a member of the European Statistical System (ESS), which comprises the Statistical Office of the European Communities (Eurostat) and the statistical offices and ministries that collect statistics in the countries of the European Economic Area. These countries presently comprise the European Union (EU) member states, Iceland, Liechtenstein, and Norway. The DNB is a member of the European System of Central Banks (ESCB).

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ABBREVIATIONS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
<i>BPM5</i>	<i>Balance of Payments Manual, fifth edition</i>
CBS	Statistics Netherlands (<i>Centraal Bureau voor de Statistiek</i>)
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPA	<i>1995 ESA</i> Classification of Products by Activity
CPI	Consumer Price Index
DNB	Netherlands Bank (<i>De Nederlandsche Bank</i>)
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
ECB	European Central Bank
EEA	European Economic Area
ESS	European Statistical System
ESCB	European System of Central Banks
EU	European Union
FISIM	Financial Intermediation Services Indirectly Measured
GFS	Government Finance Statistics
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HBS	Household Budget Survey
HICP	Harmonized Index of Consumer Prices
HS	Harmonized System of Commodity Description and Coding
ISWGNA	Inter-Secretarial Working Group on National Accounts
ITRS	International Transactions Reporting System
MOF	Ministry of Finance
NACE	Statistical Classification of Economic Activities in the European Communities
PPI	Producer Price Index
PRODCOM	List of Products of the European Communities
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
STA	IMF Statistics Department

I. OVERALL ASSESSMENT

1. The Netherlands subscribed to the IMF's Special Data Dissemination Standard (SDDS) on June 11, 1996, and started posting its metadata on the Dissemination Standards Bulletin Board (DSBB) on September 19, 1996. The Netherlands has met all the SDDS requirements since April 26, 2000 and is currently in full observance of the SDDS. It meets the SDDS specifications for coverage, periodicity, and timeliness for all data categories. The SDDS data categories are disseminated on the Netherlands' National Summary Data Page, which is hyperlinked on the DSBB, and is updated on a timely basis. Appendix I provides an overview of the Netherlands' dissemination practices compared to the SDDS.
2. The membership of Statistics Netherlands (CBS) and the Netherlands Bank (DNB) in the European Statistical System (ESS) and the European System of Central Banks (ESCB), respectively, shape official statistical policies and practices. The legal requirements of the ESS and the ESCB drive much of the Netherlands' statistical work program. Statisticians from the CBS and the DNB participate with colleagues from other member countries in working groups, committees, and other forums leading to close cooperation on statistical matters, increasing opportunities for sharing good practices, and enhancing professionalism.
3. In applying the IMF's Data Quality Assessment Framework (DQAF), July 2003 version, the remainder of this section presents the mission's main conclusions. The presentation is done at the level of the DQAF's quality dimensions, by agency for the first two dimensions, and across datasets for the remaining four. Section II provides a summary assessment by agency and dataset based on a four-part scale. This is followed by staff recommendations in Section III. The authorities' response to this report and a volume of Detailed Assessments are presented in separate documents.
4. The Report on the Observance of Standards and Codes (ROSC) data module contains the following main observations.

Prerequisites of quality and assurances of integrity

5. **Statistics Netherlands** (CBS) has the responsibility for collecting, processing, and disseminating all macroeconomic statistics (excluding balance of payments and monetary statistics). The *Statistics Netherlands Act* of November 2003 (*Statistics Act*), supported by other Dutch and European regulations, establishes an adequate legal mandate to require the necessary data and protect confidentiality. Effective and well-established procedures are in place to ensure adequate data sharing among data-producing agencies and coordination between the CBS and providers of source data.
6. The CBS staff resources have been reduced significantly in recent years and further cuts are envisaged. While staff resources are generally commensurate with the current statistical programs, planned staff cuts and measures to reduce response burden will preclude maintaining current practices in the compilation of the PPI (e.g., sample size) and hamper taking on new projects (e.g., compiling government finance statistics (GFS) according to the *Government Finance Statistics Manual (GFSM 2001)*, improving the quality of local government source data, improving the data on services, and enhancing CPI methods).

7. Regular contacts with the main users of official statistics are maintained through seven high-level advisory boards and bilateral meetings with strategic users at managerial and technical levels. The CBS clearly demonstrates awareness of quality as the cornerstone of its statistical work, applies strict technical procedures in the compilation and dissemination of statistics, and promotes a culture of professionalism and high ethical standards.

8. The terms and conditions under which statistics are produced and disseminated are available on the CBS website and in publications. Information on internal government access to data before their release to the public, as established in the *Statistics Act*, is made known to the public. The CBS's *Code of Practice* guides the staff on ethical conduct.

9. The responsibility for compiling statistics by the Netherlands Bank (DNB) is embedded in the *Bank Act* of 1998. More specifically, the responsibility for compiling balance of payments statistics is clearly stated in the *External Financial Relations Act* of 1994, which supports mandatory data reporting and the confidentiality of the reported data. While the legislation does not prescribe data dissemination responsibilities, the DNB has a long-standing and unchallenged tradition of disseminating the data as a public service. The DNB also subscribes to the *Public Commitment with respect to the ESCB's Statistical Function*, which states that ESCB statistics are governed by the principles of impartiality, scientific independence, cost-effectiveness, statistical confidentiality, non-excessive burden on respondents and high output quality. The DNB compiles the balance of payments in close cooperation with the CBS. An agreement between the CBS and the DNB was formally ratified in 2006 to further strengthen the decades-long cooperation between the two institutions.

10. Despite a significant reduction in staff resources dedicated to the compilation and dissemination of balance of payments statistics in recent years, they are commensurate with the current work program. Staff turnover is relatively low, contributing to a core staff with a great deal of experience. The current budget framework allows for a timely anticipation of needed changes. The DNB maintains regular contacts with users and has well-established procedures to monitor data quality.

11. Professionalism of staff is actively promoted by the DNB, and choices of data sources and statistical techniques are strictly made on the basis of data requirements by internationally accepted guidelines, availability of sources, and cost-benefit considerations. The terms and conditions under which the data are compiled and disseminated are available to the public. Integrity is at the core of the DNB's *Code of Conduct*, representing an integral part of its professional culture.

Methodological soundness

12. Dutch macroeconomic statistics are generally in accordance with internationally accepted standards and guidelines on concepts and definitions, scope, classification and sectorization, and basis for recording.

13. The national accounts are compiled according to the *European System of Accounts 1995 (1995 ESA)*, the CPI and PPI follow the relevant international manuals and European

regulations, and the balance of payments is compiled according to the *Balance of Payments Manual*, fifth edition (*BPM5*) and the legal requirements of the ECB and Eurostat. The CBS produces annual and quarterly GFS covering the consolidated general government sector based on *1995 ESA* and the *1995 ESA Manual on Government Deficit and Debt*, and the MOF compiles monthly GFS on the same basis, covering the budgetary central government. However, the compilation and presentation of fiscal data in an integrated framework following the *GFSM 2001* would support comprehensive fiscal analysis and broaden the scope of GFS to include, for example, a cash flow statement and a complete balance sheet that would include liabilities for the unfunded and nonautonomous government employee pension scheme. Plans to disseminate data in line with the *GFSM 2001* have not been developed.

14. There are some deviations from international standards in classification and sectorization. For example, CPI classification is largely based on COICOP, but there are some deviations, notably the definition of separate categories for consumption-based taxes and for spending by Dutch residents abroad. In GFS, a detailed breakdown of tax revenue, as recommended in *GFSM 2001*, is lacking and swaps are misclassified as accounts payable/receivable in the GFS sector accounts.

Accuracy and reliability

15. The macroeconomic statistics of the Netherlands get high marks for accuracy and reliability. The range of annual source data for national accounts is extensive. Production statistics are available for many industries and provide a rich data source with detailed information on intermediate inputs being collected every year for manufacturing. However, there are no quarterly collections from enterprises for gross fixed capital formation or inventories. With respect to price statistics, the source data for the CPI are broadly adequate, but the five-year rotation process in the PPI can lead to company and product samples that are out-of-date.

16. Although source data are broadly adequate for compiling GFS, there is room for improvement. The quality of source data for local governments is often compromised by not always following the required definitions and classifications. Adequate source data for some accounts payable/receivable in the quarterly financial accounts are not available. The source data for BOP statistics come from comprehensive data collection programs, based primarily on direct reporting of banks and nonbank enterprises, and government units.

17. Statistical techniques and the procedures for assessing the source data and statistical outputs are sound across the five macroeconomic datasets, and are under continuous review to ensure that the statistics generally portray reality.

Serviceability

18. Dutch macroeconomic statistics are available with periodicity and timeliness that always meet, and sometimes exceed, SDDS requirements. Users are generally very positive in their assessments of the statistics. Consistency within and across datasets is adequate and the data series are comparable over time.

19. Clear and transparent information about the revisions schedule and about the revisions is generally provided across the five datasets, though there is room for improvement in balance of payments statistics. The policy followed by the DNB for data revisions is not made known to the public, and preliminary or revised data are not clearly identified in the publications.

Accessibility

20. The Dutch macroeconomic statistics are readily accessible and are disseminated simultaneously to all users. The official websites provide comprehensive data in a variety of formats to allow proper interpretation and meaningful comparisons. There is some room, nevertheless, to make the CBS website more user friendly, which is consistent with the results of the users' survey. Although detailed breakdowns of major aggregates of the national accounts are disseminated and long time series are available, more seasonally adjusted series should be disseminated. Also, the BOP data lack a detailed breakdown for the classification of services and on reverse investment flows. All statistics are released following a preannounced schedule that is posted on the CBS and DNB websites.

21. The websites and publications provide adequate information on definitions and methods, including analytical and background papers. Prompt and knowledgeable support is provided to users of the five assessed datasets. The official websites and publications clearly identify contacts for each dataset and the timeliness and quality of assistance to users is routinely monitored by the agencies.

22. The remainder of this report is organized as follows: Section II provides a summary assessment by agency and dataset based on a four-point rating scale. This is followed by staff recommendations in Section III. Dutch practices compared with the SDDS are summarized in Appendix I. The authorities' response to this report and a volume of detailed assessments are presented in separate documents.

II. ASSESSMENT BY AGENCY AND DATASET

23. Assessments of the quality of five macroeconomic datasets—national accounts, consumer price index, producer price index, government finance, and balance of payments statistics—were conducted using the DQAF, July 2003. In this section, the results are presented at the level of the DQAF elements and using a four-point rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions “0” and “1” of the DQAF) are presented in Tables 2a and 2b. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF) are shown in Tables 3a–e.

24. An informal survey of users of macroeconomic statistics was conducted with the support of the CBS and DNB to complement the IMF's assessment. Questionnaires were sent to a wide range of users, including international agencies, government agencies, research institutes, media, associations, enterprises, and banks. Surveys were sent to 129 targeted users and 50 responses were received (39 percent). Users were asked to evaluate the

coverage, periodicity, timeliness, dissemination practices, accessibility, and overall quality of the official statistics.

25. On a five point scale (1 = poor and 5 = excellent), the average rating for the **overall quality** of all official statistics was 4.0. There was very little variation across datasets, with a 0.5 difference between the sector that scored the highest (balance of payments) and the one that scored the lowest (national accounts). The large majority of respondents (74 percent) felt that the official statistics of the Netherlands are at least as good as those of other countries in the region, and a significant number (23 percent) considered them to be better.

26. In terms of the different elements of data quality, respondents expressed the most satisfaction with the **methodological soundness and accuracy** of price and national accounts statistics, and believe that there is room for improving those elements in government finance and balance of payments statistics. There was broad satisfaction with the **periodicity, timeliness** and **accessibility** of the statistics and related metadata. However, only one-third of the respondents were aware of the existence of **advance release calendars**, which have been available on the websites of the CBS and DNB, as well as on the IMF's Data Standards Bulletin Board, for several years.

27. Many respondents took advantage of the survey to provide additional comments and suggestions. Among these, users expressed interest in more disaggregated data on prices, production, foreign direct investment, trade in services, and government finance statistics. They also felt that the lag between the preliminary and final national accounts was too long and that the timeliness of hard copy publications could be improved. Some users mentioned that the official websites were quite adequate, but they could be more user-friendly. Also, users commented that there was room for improving the revisions policy and practices.

28. A more detailed analysis of the Users' Survey and tabulated results are included in Appendix III of the accompanying document *Detailed Assessments Using the Data Quality Assessment Framework* (DQAF).

Table 1. The Netherlands: Data Quality Assessment Framework July 2003—Summary Results

Datasets		National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Balance of Payments Statistics
Dimensions/Elements						
0. Prerequisites of quality						
0.1	Legal and institutional environment	O	O	O	O	O
0.2	Resources	O	O	LO	O	O
0.3	Relevance	O	O	O	O	O
0.4	Other quality management	O	O	O	O	O
1. Assurances of integrity						
1.1	Professionalism	O	O	O	O	O
1.2	Transparency	O	O	O	O	O
1.3	Ethical standards	O	O	O	O	O
2. Methodological soundness						
2.1	Concepts and definitions	O	O	O	LO	O
2.2	Scope	O	O	O	LO	O
2.3	Classification/sectorization	O	LO	O	LO	O
2.4	Basis for recording	O	O	O	O	O
3. Accuracy and reliability						
3.1	Source data	LO	O	LO	LO	O
3.2	Assessment of source data	O	O	O	O	O
3.3	Statistical techniques	O	O	O	O	O
3.4	Assessment and validation of intermediate data and statistical outputs	O	O	O	O	O
3.5	Revision studies	O	O	O	O	O
4. Serviceability						
4.1	Periodicity and timeliness	O	O	O	O	O
4.2	Consistency	O	O	O	O	O
4.3	Revision policy and practice	O	O	O	O	LO
5. Accessibility						
5.1	Data accessibility	LO	O	O	O	LO
5.2	Metadata accessibility	O	O	O	O	O
5.3	Assistance to users	O	O	O	O	O

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

Table 2a. The Netherlands: Assessment of Data Quality—Dimensions 0 and 1—Statistics Netherlands

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment The responsibility for collecting, processing, and disseminating all macroeconomic statistics (with the exception of balance of payments and monetary and financial statistics) rests with the CBS, as clearly defined in the <i>Statistics Act</i>. Membership in the European Union (EU) largely shapes official statistical policies and practices. Commendable well-established procedures are in place to ensure adequate data sharing and coordination between the CBS and providers of source data. The legislation protects the confidentiality of individual reporters' data and their use for statistical purposes only. The CBS has a strong legal mandate and adequate measures to ensure reporting from all nongovernmental units. For local governments, specific measures are incorporated in the <i>BBV Regulation of 2004</i>. No measures are needed for other government units.</p> <p>Resources In recent years, the CBS budget has been reduced significantly and further cuts are envisaged. Thus, special attention is paid to the efficiency of statistical processes and meeting users' needs, as evidenced by an ongoing internal audit program and efforts to streamline the national accounts compilation procedures. Staff resources are generally commensurate with the CBS's current statistical programs, but are tightening. Planned staff cuts and a policy to reduce response burden will preclude maintaining current practices in the compilation of the PPI (e.g., sample size) or taking on new projects (e.g., compiling government finance statistics (GFS) according to the <i>Government Finance Statistics Manual (GFSM 2001)</i>, improving the quality of local government source data, improving the data on services, and enhancing CPI methods). Staff have adequate computing resources and physical facilities available to perform their required tasks and, under a transparent multi-year budgeting program, funding of the CBS is adequate to perform the required tasks.</p> <p>Relevance Regular contacts with users of official statistics are maintained through seven high-level advisory boards and meetings with strategic users at managerial and technical levels.</p> <p>Other quality management In 2000, a separate unit dedicated to quality verification was established within CBS. Other processes to monitor the quality of the statistical programs include respondent and user surveys, and verification by the EC according to EU regulations.</p>	<p>1. Assurances of integrity</p> <p>Professionalism By law, the CBS is an autonomous agency under the aegis of the Ministry of Economic Affairs. A <i>Code of Practice</i> has been adopted with its main focus on promoting trust and confidence in the independence of the CBS. EU legislation states that Community statistics should be free from political or other pressures, particularly as regards techniques, methodologies, and definitions. The <i>Statistics Act</i> also makes provisions for this independence. CBS staff regularly and actively participate in seminars, courses, and workshops arranged by regional and international organizations. Internal guidelines are available to all staff for appropriate procedures to be followed for acting (or not acting) on erroneous interpretation and/or misuse of its statistics.</p> <p>Transparency All information on the legislation and regulations governing the CBS are available on its website and in its publications. There is no internal government access to statistics prior to their release, except that some "strategic relations" of the CBS have access to relevant statistics prior to public release under very specific conditions, as provided for in the <i>Statistics Act</i>. This information is communicated to the public on the CBS website and also on the IMF's Dissemination Standards Bulletin Board. Advance notice is always given of major changes in methodology, sources, and/or statistical techniques.</p> <p>Ethical standards The <i>Code of Practice</i> guides the behavior of CBS staff relating to impartiality, reliability, relevance, cost effectiveness, statistical confidentiality, and transparency. The <i>Code</i> is made known to the staff.</p>
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Table 2b. The Netherlands: Assessment of Data Quality—Dimensions 0 and 1—Netherlands Bank

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment The responsibility for compiling statistics by the DNB is embedded in the Bank Act of 1998. Specifically, the responsibility for compiling balance of payments statistics is clearly stated in the <i>External Financial Relations Act</i> of 1994. The legal mandates do not prescribe data dissemination responsibilities, but the DNB has a long-standing and undisputed tradition of disseminating the data as a public service. The DNB compiles the balance of payments in close cooperation with the CBS. An agreement between the CBS and the DNB was formally ratified in 2006 to enhance the decades-long cooperation between the two institutions. Data collection activities ensure confidentiality to all reporters consistent with mandates in the laws. The compilation is supported by a helpdesk system available on weekdays. Formal monthly reminders are used and fines are imposed on negligent reporters.</p> <p>Resources Resources dedicated to the compilation and dissemination of balance of payments statistics are commensurate with the DNB’s statistical programs. Staff turnover has been relatively low, which has contributed to the existence of a core staff with a great deal of experience. The current budget framework allows for a timely anticipation of needed changes.</p> <p>Relevance Data relevance is sought through communications with various groups of users, some of which are scheduled three or four times a year. The DNB also monitors the questions to the helpdesk and regularly improves the set of <i>questions and answers</i>.</p> <p>Other quality management The DNB has robust procedures to support data quality, including data outlier checks, monthly quality indicators on response rates, and data analysis before releases. Economies of scale and interrelations among datasets are well recognized, and the annual work program explicitly takes into account quality issues. The DNB has a legal obligation to the ECB and Eurostat to assess and monitor the quality of national contributions to the Euro area and the EU balance of payments aggregates.</p>	<p>1. Assurances of integrity</p> <p>Professionalism Section 108 of the <i>Treaty Establishing the European Union</i> (EU) and Section 7 of the <i>Statutes of the European System of Central banks (ESCB)</i> regulate the independence of central banks. Section 2 of the <i>External Financial Relations Act</i> of 1994 allows the Minister of Finance attributions to provide general directions to DNB, only to the extent that these do not conflict with the EU Treaty. The DNB’s Statistics Department has a strong and long-standing tradition of independence and professionalism. The DNB also subscribes to the Public Commitment with respect to the ESCB’s statistical function. Professionalism of staff is actively promoted through its involvement in professional bodies, working groups, the organization of seminars, regional/international committees, and the provision of technical assistance. Choices of data sources and statistical techniques are made on the basis of statistical and cost-benefit considerations.</p> <p>Transparency The DNB publications and website provide extensive documentation on the terms and conditions under which external sector statistics are compiled and disseminated. There is no internal access to the data prior to their release. Advance notice of major changes in methodology, data sources, and statistical techniques was given to direct reporters prior to the abolition of the settlement system in 2003. Other changes are communicated to users when they are introduced.</p> <p>Ethical standards Integrity is at the core of the DNB’s <i>Code of Conduct</i>, representing an integral part of its professional culture. Staff are reminded of the compliance to the <i>Code of Conduct</i> regularly.</p>
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Table 3a. The Netherlands: Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The national accounts follow the concepts and definitions of 1995 <i>ESA</i>.</p> <p>Scope The scope of the national accounts includes, in addition to the range of annual and quarterly national accounts tables recommended by the Inter-secretariat Working Group on National Accounts (ISWGNA), various extensions such as regional accounts, social accounting matrices, labor accounts, environmental accounts, and tourism satellite accounts.</p> <p>Classification/sectorization Classification/sectorization are broadly in line with internationally recommended systems. Institutional sector accounts are produced for all sectors and also for several sub-sectors of financial corporations and general government.</p> <p>Basis for recording The basis for recording is in accordance with the 1995 <i>ESA</i>.</p>	<p>Source data The range of annual source data is extensive. Production statistics are available for many industries and provide a rich data source with detailed information on intermediate inputs being collected every year for manufacturing. However, there are no quarterly collections from enterprises for gross fixed capital formation or inventories.</p> <p>Assessment of source data Source data are regularly assessed for coverage, misreporting, and sampling errors and feedback provided to data suppliers.</p> <p>Statistical techniques Statistical techniques are in accordance with good practice. Supply and use tables are compiled at a detailed level and are balanced simultaneously in current prices and in the prices of the previous year. Chain volume measures are compiled. Detailed adjustments are made to ensure that hidden activities are included in GDP. FISIM is allocated to users. No inventory valuation adjustment is calculated for manufacturing.</p> <p>Assessment and validation of intermediate data and statistical outputs Systematic procedures are used to assess and eliminate discrepancies in intermediate data.</p> <p>Revision studies Revisions studies are undertaken on an annual basis and the results are published in the quarterly national accounts.</p>	<p>Periodicity and timeliness Quarterly and annual accounts meet SDDS requirements.</p> <p>Consistency Consistent annual time series are generally available from 1969 and quarterly series from 1977. However, following a comprehensive revision, such as in respect of 2001, the historical series are revised progressively. The quarterly national accounts releases are always consistent with the latest annual accounts. The national accounts statistics can be reconciled with other datasets.</p> <p>Revision policy and practice Revisions follow a regular and a well-publicized schedule. Comprehensive revisions are undertaken approximately every five years and are well documented. Both the annual and quarterly accounts include detailed explanations of revisions to the previously published estimates.</p>	<p>Data accessibility National accounts data are readily accessible via printed publications and on the website, and are released simultaneously to all users. The statistics are presented in a clear manner and current period developments are analyzed. Detailed dissections of major aggregates are disseminated and long time series are available. However, more seasonally adjusted series should be disseminated.</p> <p>Metadata accessibility Useful metadata is included in the regular publications. In addition, detailed concepts, sources and methods publications are made available in printed form and on the website. Occasional Papers on national accounting topics are regularly produced and made available to users.</p> <p>Assistance to users CBS has one contact point for all users, Infoservice, which is well-publicized on its website and in all publications. All publications and services are catalogued on the CBS website.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The CPI generally follows internationally accepted concepts and definitions as specified in the <i>CPI Manual</i> and for the <i>SNA 1993</i> and <i>HICP</i>.</p> <p>Scope The overall CPI scope is defined in broad accord with approved practice. The index corresponds to a consumption CPI by employing imputed rental value as the measure of shelter cost for owner-occupants.</p> <p>Classification/sectorization CPI classification is largely based on COICOP, but there are some deviations, notably the definition of separate categories for consumption-based taxes and for spending by Dutch residents abroad.</p> <p>Basis for recording The basis for recording generally follows procedures consistent with international standards. Consumption expenditures are measured at purchaser's prices and are recorded for the period of purchase.</p>	<p>Source data The CBS maintains a detailed and innovative program for price collection, including a significant use of supermarket scanner data. For the most part, price collection is spread over the first three full weeks of the reference month. Expenditure weights are drawn primarily from the national accounts, with the household budget survey used to disaggregate below the COICOP four-digit level.</p> <p>Assessment of source data Source data are regularly and rigorously assessed.</p> <p>Statistical techniques Appropriate statistical techniques are employed in index calculation, imputation of missing values, and quality adjustments. The index weights are updated annually and products are introduced on a continuous basis.</p> <p>Assessment and validation of intermediate data and statistical outputs Index results are reviewed by a separate analysis unit and assessed against available information.</p> <p>Revision studies The CPI is final after one month and seldom revised. Weight updates are analyzed and documented.</p>	<p>Periodicity and timeliness Periodicity and timeliness of the CPI meet SDDS requirements.</p> <p>Consistency Within any rebasing period the CPI is consistent in aggregation. Base period revisions are documented and explained. The use of national accounts weights ensures that CPI indexes can be reconciled with corresponding national accounts series as well as with the HICP.</p> <p>Revision policy and practice The CPI is preliminary for one month and this is clearly identified in data releases. Any revisions of published data outside this normal schedule are announced and explained.</p>	<p>Data accessibility The CBS website makes detailed data available with the CPI release. A brief discussion accompanies the data, highlighting major contributors to the monthly change and comparing the CPI to the HICP. Data series can be downloaded from the website in a variety of formats. A published schedule of CPI release dates is presented through June 2008.</p> <p>Metadata accessibility The CBS website contains detailed information on CPI definitions and methods, including analytical and background papers. A brochure that explains the basic concepts and construction of the CPI is available for wide distribution.</p> <p>Assistance to users CBS has one contact point for all users. Infoservice, which is well-publicized on its website and in all publications All publications and services are catalogued on the CBS website.</p>

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

<p>2. Methodological soundness</p> <p>Concepts and definitions The CBS constructs the PPI in basic accord with the concepts and definitions in the international PPI manual and the EU regulations on short-term statistics. Publication is at the four-digit PRODCOM level for commodities and the 2-digit NACE level for industrial sectors.</p> <p>Scope The scope of the PPI is consistent with accepted guidelines. It comprises sales of resident market enterprises for mining, manufacturing, and electricity, gas, steam, and water supply (divisions C, D, and E). Separate index series are published corresponding to exported and imported goods. Indexes for a number of services industries are published or scheduled for publication.</p> <p>Classification/sectorization The classifications for industries and products follow international standards. Goods are classified by the PRODCOM scheme, which maps into the NACE categories. Activity and service industry indexes are classified by the NACE.</p> <p>Basis for recording Producers' market transactions are recorded net of excises and VAT, and specifications include transaction characteristics such as type of purchaser.</p>	<p>3. Accuracy and reliability</p> <p>Source data PPI source data are based on detailed data for the Dutch economy, but the underlying samples of firms and products are based primarily on PRODCOM data for 2000. The program will move to a 2005-based sample in 2009. It also has a plan to implement a continuous re-sampling process but that plan is subject to resource availability.</p> <p>Assessment of source data The CBS maintains rigorous production routines for reviewing and confirming price data.</p> <p>Statistical techniques Internationally accepted techniques are used for index calculation and quality adjustment. Components are weighted using PRODCOM and national accounts information. The weight base period will be updated from 2000 to 2005 in January 2009.</p> <p>Assessment and validation of intermediate data and statistical outputs Results are routinely assessed against other PPI series, export and import price series, and comparable CPI data.</p> <p>Revision studies Weight and sample revisions are carefully monitored and reviewed. Research is ongoing to assess PPI policies on preliminary index publication.</p>	<p>4. Serviceability</p> <p>Periodicity and timeliness The PPI meets the periodicity and timeliness required by the SDDS. The PPI for goods is released on the last working day of the month following the reference month. The services PPIs are issued quarterly.</p> <p>Consistency The PPI series are consistent in aggregation.</p> <p>Revision policy and practice The PPI is preliminary for five months and this is made clear in all releases. Weight revisions are accompanied by announcements and explanations. Users are informed when unscheduled revisions of published data are required. Base period revisions are documented and explained thoroughly.</p>	<p>5. Accessibility</p> <p>Data accessibility Release of the PPI is web-based, comprising numerous clear tables and a brief presentation of key price movements. Data series for adequate historical periods can be downloaded from the website in a variety of formats. A schedule of PPI release dates is presented through June 2008.</p> <p>Metadata accessibility The CBS web site contains much detailed information on PPI definitions and methods, including analytical and background papers.</p> <p>Assistance to users CBS has one contact point for all users, Infoservice, which is well-publicized on its website. All publications and services are catalogued on the CBS website.</p>
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Table 3d. The Netherlands: Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The CBS produces annual and quarterly GFS covering the consolidated general government based on <i>1995 ESA</i> and the <i>1995 ESA Manual on Government Deficit and Debt</i>. The MOF compiles monthly GFS on the same basis, covering the budgetary central government. The GFS disseminated domestically are not presented in an integrated framework useful for fiscal analysis, as described in the <i>GFSM 2001</i>. Plans to disseminate GFS in line with this manual have not been developed.</p> <p>Scope The scope of GFS is broadly consistent with <i>GFSM 2001</i>, but lacks a cash flow statement, a breakdown of other economic flows into holding gains and volume changes, a complete balance sheet that would include liabilities for the unfunded non-autonomous government employee pension scheme.</p> <p>Classification/sectorization Sectorization of GFS is consistent with <i>1995 ESA</i> and <i>GFSM 2001</i>. Classifications of <i>ESA95</i> are broadly consistent with the <i>GFSM 2001</i>, but a detailed classification of tax revenue is lacking in <i>1995 ESA</i>. Classification of swaps in sector accounts does not follow <i>1995 ESA</i> recommendations.</p> <p>Basis for recording Flows and stocks are valued at market prices, and debt is valued at face and market values. Recording is done on an accrual basis, with appropriate grossing/netting procedures.</p>	<p>Source data Source data are broadly adequate for compiling GFS. However, the quality of source data for local governments is often compromised by not always following the required definitions and classifications. Adequate source data for some accounts payable/receivable in the quarterly financial accounts are not available.</p> <p>Assessment of source data Well-established procedures exist to assess the source data routinely against other sources.</p> <p>Statistical techniques Sound statistical techniques are used to estimate missing data and to make quarterly and annual data consistent. Data are corrected when more accurate data become available. Compilation procedures are well-documented. Adjustments to source data, such as from cash to accruals, using the time-adjusted method, are sound.</p> <p>Assessment and validation of intermediate data and statistical outputs Intermediate data are assessed and cross-checked with related data, in particular for the financial accounts. Discrepancies are investigated and resolved, if possible.</p> <p>Revision studies Revision studies are conducted periodically to assess data reliability.</p>	<p>Periodicity and timeliness Monthly, quarterly, and annual GFS are compiled and disseminated with periodicity and timeliness that meet all SDDS requirements. The same applies for quarterly data on government debt statistics.</p> <p>Consistency GFS are consistent within the dataset and with all other macroeconomic statistics.</p> <p>Revision policy and practice Revisions to GFS follow a regular, well-publicized schedule, which is the same every year. Preliminary data and estimates (which are clearly identified in publications) are replaced with final data when they become available. It is the CBS's policy to always explain significant revisions/changes in its publications.</p>	<p>Data accessibility GFS are disseminated in several formats to allow proper interpretation and meaningful comparisons. The CBS website provides a hyperlink to the Dutch GFS on the Eurostat website, which are presented in the <i>GFSM 2001</i> framework. Statistics are released to all users simultaneously following a preannounced schedule on the CBS website and the IMF's DSBB. Users are aware that GFS data not routinely disseminated can be made available upon request.</p> <p>Metadata accessibility Adequate metadata is published on the CBS website, which includes links to Eurostat's website that has additional metadata. SDDS metadata are updated quarterly. Details of metadata are adapted to the needs of users, e.g., providing general explanations of GFS terminology.</p> <p>Assistance to users CBS has one contact point for all users, Infoservice, which is well-publicized on its website and in all publications. All publications and services are catalogued on the CBS website.</p>

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

<p>2. Methodological soundness</p> <p>Concepts and definitions The DNB compiles balance of payments statistics in conformity with the <i>BPM5</i>. As an EU Member State, the Netherlands also follows legal requirements issued by the ECB and Eurostat.</p> <p>Scope In principle, all resident-nonresident transactions are recorded in the balance of payments. However, some negligible deviations exist in practice.</p> <p>Classification/sectorization Classification/sectorization guidelines are broadly in line with <i>BPM5</i>.</p> <p>Basis for recording Basis for recording is generally in line with <i>BPM5</i>.</p>	<p>3. Accuracy and reliability</p> <p>Source data The source data for balance of payments statistics come from comprehensive data collection programs based primarily on direct reporting of banks and nonbank enterprises, and government entities.</p> <p>Assessment of source data Stringent consistency checks are undertaken using several statistical methods, including outlier analysis. Reports on verification results are provided to managers every month.</p> <p>Statistical techniques Data compilation procedures used by the DNB to compile balance of payments statistics are sound and data adjustments robust.</p> <p>Assessment and validation of intermediate data and statistical outputs Intermediate results and outputs are routinely assessed and validated, leading to statistical improvements.</p> <p>Revision studies Revision studies are conducted regularly to identify problems with basic data sources and statistical techniques.</p>	<p>4. Serviceability</p> <p>Periodicity and timeliness Balance of payments statistics either meet or exceed the SDDS periodicity and timeliness requirements.</p> <p>Consistency The cornerstone of consistency within the dataset is the compilation of monthly data, which are used to compile quarterly and annual data. The errors and omissions item has occasionally been large, although it is actively monitored. BOP data are reconcilable with other statistical frameworks. Reconciliation exercises are conducted in the context of ECB/Eurostat task forces and directly with the ECB.</p> <p>Revision policy and practice The DNB's policy for revising balance of payments statistics is not made known to the public. There is no identification of preliminary or revised data in publications. <i>Ad hoc</i> articles are published for large revisions outside the regular cycle.</p>	<p>5. Accessibility</p> <p>Data accessibility Data are disseminated in a format that broadly follows <i>BPM5</i> standards. However, information on services and on reverse investment flows is not presented with the detail recommended in <i>BPM5</i>. The data are disseminated according to an advance release calendar, which is publicized on the DNB website. Data are released simultaneously to all users.</p> <p>Metadata accessibility A detailed set of metadata, which is reviewed on a quarterly basis, is available at the DNB website and in the <i>Statistical Bulletin</i>. Additional information on data sources, methodologies, and statistical techniques is available on the DNB website and in hard copy publications.</p> <p>Assistance to users Assistance to users is provided through knowledgeable and responsive staff mainly by e-mail. Similar questions sent to the dedicated mailbox in the Statistics Department are added to the section of Q&A on the DNB website.</p>
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III. STAFF'S RECOMMENDATIONS

29. Based on the review of the Dutch statistical practices, discussions with the data producing agencies, and responses from data users (see Appendix III of the Detailed Assessments volume), the mission has developed a set of recommendations. They are designed to increase further the Netherlands' adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Dutch statistics. Some additional technical suggestions are included in the Detailed Assessments volume.

Cross-cutting recommendation

- In view of the significant reduction in the staff resources dedicated to the compilation and dissemination of statistics in recent years and the envisaged additional cuts, ensure that available resources continue to be commensurate with maintaining current practices in the compilation of the PPI (e.g., sample size) or taking on new projects (e.g., compiling government finance statistics (GFS) according to the *Government Finance Statistics Manual (GFSM 2001)*, improving the quality of local government source data, improving the data on services, and enhancing CPI methods).

National accounts

- Develop quarterly data sources to measure changes in inventories and capital formation of enterprises.
- Calculate and publish more detailed seasonally adjusted series, and publish quarterly percentage change tables for seasonally adjusted aggregates rather than for original aggregates.

Consumer price index

- Review the deviations from standard COICOP classification for the CPI, particularly the inclusion in the index of taxes based on consumer asset holdings.

Producer price index

- After the January 2009 update, implement continuous sampling processes to ensure that the coverage of companies and products remains representative of the Dutch economy.

Government finance statistics

- Compile and disseminate annual and quarterly general government statistics in line with the analytical framework set out in the *GFSM 2001*.

- Compile and disseminate a Statement of Sources and Uses of Cash (cash flow statement), as well as a complete balance sheet, for the general government and its subsectors. As an interim measure (until recognized by the *1993 SNA* and *1995 ESA*), include government's liabilities for the unfunded nonautonomous employee pension scheme as a memorandum item in the balance sheet.
- Compile and disseminate a detailed classification of tax revenue according to the *GFSM 2001*.
- Continue to explore ways to improve the quality of source data for local governments, as well as the quality of the quarterly source data for accounts payable/receivable in the financial accounts of all subsectors of general government.

Balance of payments statistics

- Include more detailed information on services in the standard presentation of the BOP.
- Publicize information on regular revisions and clearly identify the status of data in the publications.

Appendix I. The Netherlands: Practices Compared with the SDDS Coverage, Periodicity, and Timeliness of Data

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness	
		SDDS	The Netherlands	SDDS	The Netherlands
Real Sector					
National accounts	Yes	Q	Q	Q	6W
Production Index/indices	Yes	M	M	6W <i>(1M encouraged)</i>	6W
Employment	Yes	Q	Q	Q	45D, 90D
Unemployment	Yes	Q	M	Q	NLT 3W
Wages/earnings	Yes	Q	M	Q	NLT 4W
Consumer price index	Yes	M	M	M	10D
Producer price index	Yes	M	M	M	1M
Fiscal Sector					
General govt. operations	Yes	A	Q	2Q	1Q
Central govt. operations	Yes	M	M	M	1M
Central govt. debt	Yes	Q	Q	Q	2W-NLT 1Q
Financial Sector					
Analytical accounts of the banking sector	Yes	M	M	M	1M
Analytical accounts of the central bank	Yes	M <i>(1W recommended)</i>	M	2W <i>(1W encouraged)</i>	2W
Interest rates	Yes	D	D	...	D
Stock market: share price index	Yes	D	The level of the AEX-index is in principle published every 15 seconds.	...	15 minutes (on the website of Euronext Amsterdam: www.euronext.com)

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness	
		SDDS	The Netherlands	SDDS	The Netherlands
External Sector					
Balance of payments	Yes	Q	Q	Q	6-8W
Official reserve assets	Yes	M (W recommended)	M	W	NLT 1W
Reserves template		M	M	M	NLT 11D
Merchandise trade	Yes	M	M	8W <i>(4-6W encouraged)</i>	6W for highly aggregated figures. 8W for detailed figures.
International Investment position	Yes	A (Q recommended)	A	3Q <i>(1Q encouraged)</i>	1Q
External debt	Yes	Q	Q	Q	1Q
Exchange rates	Yes	D	D	1/	D
Addendum: Population	Yes	A	A	...	4-8M for annual data

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

Italics indicate encouraged categories.

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

INTERNATIONAL MONETARY FUND

KINGDOM OF THE NETHERLANDS—NETHERLANDS

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

Response by the Authorities

December 21, 2007

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I. INTRODUCTION

The ROSC mission of the International Monetary Fund (IMF) to the Netherlands to check adherence to international standards and codes for selected official statistics was held in a very constructive and cooperative atmosphere. The members of the IMF-mission, led by Mr. Edgar Ayales, held intensive discussions at management and expert levels with Statistics Netherlands (CBS), the Netherlands Bank (DNB) and the Ministry of Finance (MOF). Moreover, the IMF delegation met major users of official statistics: Rabobank, Robeco and Netherlands Bureau for Economic Policy Analysis (CPB).

The Report on the Observance of Standards and Codes (ROSC) – Data module and the Detailed Assessments using the Data Quality Assessment Framework (DQAF) proved to be most useful to the Netherlands Authorities in the search for due compliance with international recommendations and greater efficiency in compiling macro-economic statistics. The helpful recommendations made by the IMF mission team will assist the statistical experts to further improve the analytical applicability of macro-economic statistics in the Netherlands.

II. RECOMMENDATIONS FOR NATIONAL ACCOUNTS

- **Develop quarterly data sources for changes in inventories.**

Ensuring an improved statistical coverage of changes in inventories as part of the quarterly national accounts has long been a major concern for Statistics Netherlands. Presently, the estimates mainly rely on commodity flow data. In the past, some directly observed data were available for product groups where changes in inventories on a quarterly basis are substantial, and where source data could be obtained from a limited number of enterprises in manufacturing industries and in trade sectors. Notwithstanding the limited extent of this survey, the collection and processing of this data were considered relatively expensive, both in terms of human resources and response burden for the enterprises. Especially in relation to the latter, the societal and political pressure to reduce the response burden is high in the Netherlands. Because of the above recommendation, Statistics Netherlands has decided to look into the matter again. However, it is to be expected that after a quick cost-benefit analysis on a macro-level, Statistics Netherlands will have to come to the same results and conclusions.

- **Calculate and publish more detailed seasonally adjusted series, and publish quarterly percentage change tables for seasonally adjusted aggregates rather than for original aggregates.**

More than twenty years ago, when Statistics Netherlands started to publish the quarterly accounts, the Advisory Board for National Accounts discussed the adequacy of the publication of seasonally adjusted figures as part of official statistics. The advice then was to publish seasonally adjusted figures only for macro-economic aggregates and to publish more detailed original (unadjusted) figures. Doing so, users always would be able to apply their

own seasonal adjustment procedure. This policy is still considered to be relevant in the Dutch situation.

The Advisory Board for Macro-economic Statistics discussed the IMF recommendation to publish more seasonally adjusted series. The Board welcomed the suggestion as being useful for international comparison, but also argued (again) that there is no strong user demand for more detailed seasonally adjusted series in the Netherlands. On the other hand, the Board also asked Statistics Netherlands to seriously take the recommendation into consideration. At this moment (December 2007), Statistics Netherlands is extending the seasonally adjusted series to meet new EU-regulations on the ESA delivery programme. On basis of this new programme, Statistics Netherlands will investigate the usefulness of a further extension of the seasonally adjusted series.

- **When publishing household final consumption expenditure at the one digit COICOP level, allocate expenditure by residents in the rest of the world and expenditure by non-residents in the Netherlands across the COICOP categories, rather than having them only as bottom line adjustments.**

At present, only very rough estimates are available to arrive at a further breakdown by product group for expenditures by non-residents in the Netherlands. For expenditures by residents in the rest of the world, even less source data are available. For that reason, Statistics Netherlands prefers to publish domestic consumption, instead of national consumption, by product group. In the opinion of Statistics Netherlands, it is advisable to continue to do so, unless the quality of the relevant source data improves significantly.

- **Develop a methodology to derive corporate income taxes on an accrual basis.**

The Netherlands compiles and publishes corporate tax data in line with the relevant EU-rules (time adjusted cash). In line with this, publication of corporate tax figures on another registration base in the core system will not be considered.

The problem to derive corporate income taxes on an accrual basis is that fiscal data are delayed very much. In the Dutch corporate income tax system the enterprises have, for example, possibilities to compensate losses in earlier years with profits in later years. This means that a registration on a pure accrual basis is only possible four or five years after the reporting year. As the “final” estimates for national accounts are compiled about 2.5 years after the end of the reporting year, integration of accrual accounting of corporate income taxes in the core system of national accounts is incompatible with the current release and revision policy. Of course, one could consider having a table with the relevant data, in addition to the core system. Until 1994, the National Accounts publication contained such a table. Statistics Netherlands will have a closer look into the possibilities to reactivate the information concerned. The latter will depend on the availability of source information from the Ministry of Finance and the resources needed for the compilation of this table.

- **Develop quarterly data collections from enterprises for gross fixed capital formation and profits.**

Estimates for gross fixed capital formation (GFCF) in the quarterly national accounts are derived from the “supply side”, by applying the commodity flow method. In addition, a lot of ad hoc information is being processed in the compilation process of the GFCF figures. For example, a list of large investment projects is kept up to date. These large projects take sometimes several years and consist of different activities, such as building activities or manufacturing activities (e.g. the building of a new power station).

The development of direct quarterly data sources for GFCF is possible, but expensive, also in terms of response burden for enterprises. The Advisory Board for Macro-economic Statistics discussed the quality of the present GFCF figures. The quality is considered to be satisfactory in comparison to other elements in the quarterly supply and use system. The Advisory Board concluded that a direct measurement of GFCF will improve the quality of the quarterly estimates, but expected that the costs in terms of human resources and response burden for the business community are too high to justify this improvement.

- **Make more use of the Denton method for aligning quarterly series to annual benchmarks for industry and expenditure aggregates derived from the supply and use tables.**

The recommendation to make more use of the Denton method for benchmark purposes is completely in line with future plans. In the current project for redesigning the Dutch system of national accounts, this suggestion will be implemented.

- **Continue to work towards removing any remaining differences between balance of payments and national accounts statistics.**

Statistics Netherlands and the Netherlands Bank fully support the recommendation to continue to work towards removing differences between the balance of payments as compiled by the Netherlands Bank and the system of national accounts as compiled by Statistics Netherlands. Both institutions are working closely together, among others to arrive at a more consistent set of data. This co-operation will be continued.

- **Include chain price indices for national accounts aggregates in the quarterly national accounts publication.**

In the annual publication “National Accounts” of the Netherlands, tables are included containing chain price indices (2000 = 100). On a quarterly basis, there seems to be no user demand up to now, also according to the Advisory Board. The advice is to give this suggestion less priority.

- **Show the derivation of the current price income measure of GDP (including all of its major components) in the quarterly national accounts.**

In the quarterly supply and use table, the breakdown of GDP in major components (wages and salaries and operating surplus/mixed income) is available, both in current and in constant prices. Statistics Netherlands will analyse whether the quality of this breakdown is appropriate for publication.

- **Put more emphasis on seasonally adjusted movements in the latest quarter, rather than the movements from the same quarter of the previous year in original terms.**

In the Advisory Board, reference was made to the second recommendation to produce more seasonally adjusted figures. The Board thinks that Dutch (and European) users of quarterly national accounts may differ somewhat about the preference for quarter-to-quarter changes from users in Anglo-Saxon countries. Of course, the quarter-to-quarter changes are very important for analysing the latest trends in the figures and that is why Statistics Netherlands also publishes seasonally adjusted series for the main aggregates. Up to now, however, users seem to be quite happy with the emphasis on the more traditional year-to-year changes. In future, this may change. Statistics Netherlands will keep track of the future trends in this respect.

- **Release the quarterly national accounts publication on the CBS website at the same time as the press release.**

The present paper publication on quarterly national accounts will be stopped next year. Statistics Netherlands plans to publish a shorter and more dedicated analysis of the latest macro-economic developments on the website. The aim is to publish this kind of analysis together with or very soon after the publication of the press release.

- **List the quarterly national accounts publication on the English version of the CBS website.**

In the near future, Statistics Netherlands plans to have a website page on quarterly national accounts (see also the response to the previous recommendation). Statistics Netherlands will consider including references to other publications and the relevant tables on StatLine.

III. RECOMMENDATIONS FOR CONSUMER PRICE STATISTICS

- **Consider whether information technology resources can be made available to facilitate CPI quality improvement projects such as the expansion of scanner data use (0.2.1).**

To further improve the quality of the Consumer Price Index a project Redesign CPI is currently being carried out. IT-resources are necessary to realise this project. The expectation of Statistics Netherlands is that sufficient resources will become available in 2008.

- **Reconsider the deviations from standard COICOP classification for the CPI, particularly the inclusion in the index of taxes based on consumer asset holdings (2.3.1).**

In addition to the Harmonised Index of Consumer Prices (HICP), Statistics Netherlands compiles the national consumer price index (CPI). The HICP is in line with the standard COICOP classification. For the national CPI, two additional divisions are added to the COICOP classification. COICOP division 13 includes consumption based taxes and government services and COICOP division 14 includes expenditure by Dutch residents abroad. Items in these two artificial COICOP divisions are not within the scope of the twelve standard divisions. Furthermore, the assumption is that taxes which are included in these extra divisions are consumption-related and not asset-based taxes. Statistics Netherlands will examine whether the taxes in the extra divisions are really consumption based and whether there are indeed no items classified in COICOP 13 which should be in one of the twelve standard divisions.

- **Affirm or reconsider the current treatment of insurance on a gross-gross basis (2.4.3).**

The current treatment of insurance on a gross-gross basis by Statistics Netherlands for its national CPI is based on the notion that policy holders and insurance companies contract for an amount of risk coverage. Consumers purchase a product which represents the risk protection they get from insurers, and the premium is the price paid for the protection (plus certain administrative activities). A change in risk cover leading to a change in premiums should be treated as a quality adjustment, not as a price adjustment. Statistics Netherlands acknowledges that for practical reasons this is not done in the current CPI, which may bias the insurance price indices. Statistics Netherlands will re-examine the appropriateness of the basic assumptions of its current treatment of insurance and will take international best practices along in these considerations.

- **Undertake research into the development of a statistically-based outlet sample (3.1.1).**

Statistics Netherlands recognises the importance of a statistically-based outlet sample. Within the scope of the redesign programme, in 2008 a project will be started to develop a statistically-based outlet sample based on the business register.

- **Examine whether and how information on CPI sampling errors could be developed for use in monitoring the accuracy of the index (3.2.1).**

At Statistics Netherlands both the outlet and item samples are not based on full probability sampling. The calculation of overall sampling errors is therefore not possible. Statistics Netherlands, however, recognises the importance of monitoring the accuracy of the index and has in the past carried out studies to determine partial sampling errors. Depending on the availability of sufficient staff resources, this study may be repeated.

- **Analyze differences in the distribution of renters and owners by location, structure type, etc. and whether recognition of those differences could affect the measure of housing inflation (3.3.2).**

One of the most important improvements for the HICP is the inclusion of owner occupied housing in the HICP. This is an important issue in several Eurostat meetings and is supported by the European Central Bank. Statistics Netherlands participates in the pilot on Owner Occupied Housing (OOH) and is a member of its steering group. Statistics Netherlands supports the adoption of the OOH in the HICP and awaits the results of this discussion in Europe before changing the recording of rents in the CPI. In the meantime the differences will be analysed as recommended.

- **Measure the size of consumer discounts on new automobile purchases over a period of time to determine whether ignoring those discounts is acceptable practice (3.3.2).**

From a theoretical point of view Statistics Netherlands fully supports this recommendation. However, the collection of this kind of data will seriously increase the response burden for the relevant companies. At this moment, it is therefore not planned to start price observations of discounts.

- **Reconsider the decision to present only short-term time series for CPI indices (5.1.1).**

Statistics Netherlands recognises the importance of long-term time series for CPI indices and has decided to construct longer time series for CPI indices. These time series (from 1995 until present) will be published in the first half of 2008.

IV. RECOMMENDATIONS FOR PRODUCER PRICE STATISTICS

- **Ensure that resources for the PPI programs for goods and services are kept at a level sufficient to maintain index quality and to implement needed enhancements (0.2.1).**

Statistics Netherlands recognises the importance of a sufficient staff level. Due to the overall tendency in the Netherlands to reduce the number of government employees however, additional cuts will be necessary. To ensure the index quality, Statistics Netherlands started a research project in 2005 aiming to improve the quality of the PPI with less price quotations. Three of the main findings of this project will be implemented in 2008:

1. The sample design will change from a cut-off sample to a PPS sample which has proven to be more efficient.
2. The elementary index calculation will be on a higher level.
3. A more statistical approach will be used for data quality checks

With these three improvements Statistics Netherlands aims to maintain the PPI on at least the same quality level as it is now.

- **After the January 2009 update, implement continuous sampling processes to ensure that the coverage of companies and products remains representative of the Dutch economy (3.1.1).**

Statistics Netherlands has decided to sample on a continuous basis from January 2009 onwards. In 2007 and 2008 all preparations to facilitate this process will be carried out. Also a completely new sample will be drawn. From 2009 onwards, the objective is to renew 20% of the sample annually. In addition for specific PRODCOM groups a new sample will be drawn if deemed necessary.

- **Examine whether and how information on PPI sampling errors could be developed for use in monitoring the accuracy of the index (3.2.1).**

At the moment the calculation of sampling errors is theoretically impossible since Statistics Netherlands uses a cut-off design. However, when the change to a PPS design is implemented in 2009, this will allow the calculation of sampling errors. The mathematical formulas necessary for this calculation are already available for implementation which will take place at the end of 2009 or the beginning of 2010. The information on sampling errors will be used to assess the quality of the indices and to optimise the sample allocation.

- **After the January 2009 update, go forward with plans for continuous updating of product category weights (3.3.2).**

Statistics Netherlands recognises the importance of up-to-date weights and will therefore start, in the end of 2007, the discussion on the (dis)advantages of more frequent updating of the PPI product weights. This discussion will include both theoretical and practical implications of this possible change in methodology.

V. RECOMMENDATIONS FOR GOVERNMENT FINANCE STATISTICS

- **Compile and disseminate annual and quarterly general government statistics in line with the fiscal analytical framework set out in the *GFSM 2001*.**

Statistics Netherlands aims at establishing a more integrated presentation of GFS on its website. Doing so, the Dutch presentation will remain aligned to the current program of Eurostat to present GFS data in a comprehensive fiscal framework based on *ESA95* definitions. Since *ESA95* is the predominant statistical framework in Europe, Statistics Netherlands has no plans to compile data according to *GFSM 2001*. Statistics Netherlands considers to show a link to IMF GFS on the website.

Statistics Netherlands will continue to provide IMF data according to the *GFSM 2001*, as participant to the Eurostat GFS convergence project with the IMF. Further improvements in the data deliveries to IMF will be strived for to meet the IMF demands. However, as stated before, *ESA95* is and will remain the predominant statistical fiscal framework.

- **Compile and disseminate a Statement of Sources and Uses of Cash (cash flow statement), as well as a complete balance sheet, for the general government and its subsectors. As an interim measure (until recognized by the 1993 SNA and 1995 ESA), include government's liabilities for the unfunded non-autonomous employee pension scheme as a memorandum item in the balance sheet.**

Cash flow statements are indeed a useful tool for fiscal analysis. This is also the opinion of public accounts in the IPSAS framework. However, *ESA95* does not impose cash flow statements. Current source data, current accounting rules for local government authorities and financial resources at Statistics Netherlands hamper the compilation of such information.

In the short term, the proposal to include government's liabilities for the unfunded non-autonomous employee pension scheme as a memorandum item in the balance sheet will be considered in the case that Statistics Netherlands publishes an integrated fiscal framework as mentioned above.

- **Compile and disseminate a detailed classification of tax revenue according to the *GFSM 2001*.**

Although tax revenue according to *GFSM 2001* is compiled and provided to IMF, it has indeed not (yet) been published by Statistics Netherlands. Statistics Netherlands only publishes a very detailed list of taxes according to national nomenclature. Presentation of taxes according to an international fiscal framework (*ESA95* and/or IMF *GFSM 2001*) will be aimed at as part of the project on a more integrated presentation of the full GFS.

- **Continue to explore ways to improve the quality of source data for local governments, as well as the quality of the quarterly source data for accounts payable/receivable in the financial accounts of all subsectors of general government.**

Statistics Netherlands also considers the quality of source data for local government as an important issue. Several measures have been taken since, as part of new legislation, new accounting rules for local governments were set up. Statistics Netherlands will continue its efforts in co-operation with the Ministry of the Interior to improve the data.

The accounts payable/receivable in the quarterly financial accounts of all subsectors of general government will be further analyzed. Part of this work will be done in European forums (e.g. the Task Force on Quarterly Financial Accounts for General Government (QFAGG)).

- **Continue to explore ways to value stocks of local government unquoted equity holdings (under financial assets) at their current market values.**

Statistics Netherlands indeed intends to explore ways to improve the valuation of local government unquoted equity holdings. A major problem is that, in line with the relevant accounting rules, local government authorities only report assets at acquisition price.

Adjustment from acquisition price to market value is complicated due to the various corporations in which local governments hold equity. As a consequence, more advanced methodology has to be developed. First estimates for the undervaluation have been made. However, publication of the results as part of the compilation of regular statistical program will not be possible until the next benchmark revision, in order to align to the current release and revision policy for national accounts.

- **Explore the possibility of classifying accrued interest with the underlying instrument rather than in other accounts receivable/payable in the general government's financial balance sheet.**

Due to lack of information, for GFS, accrued interest can only be estimated separately for some government entities. As a consequence, registration under the instruments in question is difficult to realize. Sources on other institutional sectors in national accounts have the same problems. Hence, the current Dutch practice of national accounts is to record accrued interest as part of other accounts receivable/payable. Statistics Netherlands has been examining this issue now for some time. Any results of this research will not be implemented before the next benchmark revision.

- **Include the advance release calendar for central government operations and central government debt on the MOF and CBS websites. Currently, this calendar is only posted on the DNB website.**

Both Statistics Netherlands and the Ministry of Finance will publish this release calendar on their websites soon.

VI. RECOMMENDATIONS FOR BALANCE OF PAYMENTS STATISTICS

- **Classify the free trade zones as part of goods, as recommended in *BPM5*.**

The Netherlands Bank will consider how to follow this recommendation. The guidelines in the *Balance of Payments Manual, fifth edition* prescribe to treat the free trade zones as part of the economic territory, indeed. However, this is not in line with the way trade statistics are compiled in the EU member states. Whereas the Manual follows the 'general trade' concept, European legislation demands from the EU member countries that they apply the 'special trade' concept in compiling trade statistics. Any decision to collect additional information from enterprises needed to compile trade statistics in accordance with the 'general trade' concept must be weighed against the desire to limit the response burden of enterprises. The Netherlands Bank will consider this issue in close cooperation with Statistics Netherlands, which is responsible for compiling trade statistics.

- **Disseminate data on services with the recommended breakdown in *BPM5*.**

The Netherlands Bank intends to resume shortly the publication in its *Statistical Bulletin* (and on its website) of data on services transactions in full conformity with the List of Standard

Components in the *Balance of Payments Manual, fifth edition*. Presently, these statistics - quarterly and annual data in a limited breakdown - can be found on StatLine, Statistics Netherlands' website. The statistical information on the services account will be gradually increased, because Statistics Netherlands and the Netherlands Bank must first align their publication policies. Annual data will be included shortly and Statistics Netherlands and the Netherlands Bank will explore the possibilities of compiling a complete set of quarterly data on services with the required breakdown in close cooperation. Doing so, the need to acquire additional information must be carefully weighed against the desire to limit the response burden of enterprises.

- **With a view to improve vulnerability analysis and in line with *BPM5*, consider recording loans repayments when due.**

The Netherlands Bank agrees with the ROSC mission that the present lack of recording loan repayments when due is in deviation from the *Balance of Payments Manual, fifth edition*. Presently, no source data are available to make such entries. The decision not to collect the information needed was made with a view to the low importance for policy analysis in the Netherlands and the desire to limit the response burden of enterprises. The Netherlands Bank will reconsider the issue of recording loan repayments when due with the implementation of the guidelines in the *Balance of Payments Manual, sixth edition*. At that time, the report forms will be reviewed.

- **Avoid the market valuation of gold positions on a quarterly basis and follow *BPM5* guidelines for the application of market prices at the end of the reporting period.**

The Netherlands Bank intends to adhere fully to the statistical guidelines for the valuation of gold positions. The data on gold in the Data Template on International Reserves and Foreign Currency Liquidity (table 5.12 in the *Statistical Bulletin*) will be adjusted shortly.

- **Pursue plans to provide public information on regular revisions and identify the status of data in publications.**

The Netherlands Bank will implement this recommendation at the first opportunity, which is the publication of its *Statistical Bulletin* in December 2007. The tables on balance of payments statistics and the International Investment Position will include a footnote explaining the revision policy. The rules for revision have been harmonized between EU member states with a view to providing consistent and up-to-date building blocks to Eurostat and the ECB for the compilation of balance of payments statements and the IIP for the euro area and the EU.

- **Provide information on reverse flows in direct investment with the detail recommended in *BPM5***

The Netherlands Bank will implement this recommendation, which results from the assessment of data accessibility, at the first opportunity, which is the publication of its *Statistical Bulletin* in December 2007. Both the table on direct investment transactions and

the one on direct investment positions will be enlarged with a breakdown reflecting the directional principle that, in full conformity with the *Balance of Payments Manual, fifth edition*, is already applied in the Dutch balance of payments.

- **Provide data on the international investment position in a quarterly frequency on the national summary data page for SDDS subscribing countries**

The Netherlands Bank will implement this recommendation, which results from the assessment of SDDS rules on coverage, periodicity and timeliness of data, at the first opportunity (the publication of 2007Q3 data). The data have been published in the *Statistical Bulletin* for some time.

INTERNATIONAL MONETARY FUND

KINGDOM OF THE NETHERLANDS—NETHERLANDS

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Michael C. Deppler

December 21, 2007

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

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ABBREVIATIONS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>1995 ESA</i>	<i>European System of Accounts 1995</i>
AFM	Financial Market Authority
BBV	Minister of Interior (<i>Ministeriële Regeling Besluit Begroten en Verantwoorden provincies en gemeenten</i>)
BEC	Classification of Broad Economic Categories, United Nations, 1989
BIS	Bank for International Settlements
BOPTTEG	Balance of Payments Technical Expert Group
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
CBS	Statistics Netherlands (<i>Centraal Bureau voor de Statistiek</i>)
CCS	Central Commission for Statistics
CFI	Agency of the Ministry of Education
CMFB	Committee on Monetary, Financial and Balance of Payments Statistics
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activity
CPI	Consumer Price Index
DGS	Director-General of Statistics
DNB	Netherlands Bank (<i>De Nederlandsche Bank</i>)
DMK	Methodology and Quality Division (<i>Divisie Methodologie en kwaliteit</i>)
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
ECB	European Central Bank
ESS	European Statistical System
EU	European Union
FDI	Foreign Direct Investment
FISIM	Financial Intermediation Services Indirectly Measured
FTE	Full Time Equivalent
GBR	General Business Register
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HBS	Household Budget Survey
HecS	Project to Redesign the System of Economic Statistics
HICP	Harmonized Index of Consumer Prices
HICES	Household Income and Consumption Expenditure Survey
ILO	International Labor Organization
ITRS	International Transactions Reporting System
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MFO	Financial Institutions and Government Department (MFO) of the Macroeconomic Statistics and Publications Division of the CBS
MOF	Ministry of Finance

MNR	National Accounts Department of the Macroeconomic Statistics and Publications Division of the CBS
MPC	Department for Dissemination of Statistics
MPI	Import Price Index
NACE	Statistical Classification of Economic Activities in the European Communities
NSDB	National Summary Data Page
ODCs	Other Depository Corporations
OECD	Organization for Economic Cooperation and Development
OTC	Over the Counter
PPI	Producer Price Index
PRODCOM	List of Products of the European Communities
RNA	Redesign National Accounts
ROSC	Report on the Observance of Standards and Codes
ROZ	<i>Raad voor Onroerende Zaken</i>
SBI	Standard Industry Classification 1993
SDDS	Special Data Dissemination Standard
SIC	Standard Industry Classification
SFI	Special Financial Institutions
SIS	State Institute of Statistics
<i>SITC</i>	<i>Standard International Trade Classification</i>
SPPI	Services Price Indices
SPO	State Planning Organization
SSB	Social Statistics Database
STS	Short Term Statistics
SUT	Supply and Use Tables
UN	United Nations
VAT	Value Added Tax
XPI	Producer Price Index for Nondomestic Sales

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

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

I. NATIONAL ACCOUNTS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

Statistics Netherlands (CBS) and the Central Commission for Statistics (CCS)¹ were established under the *Statistics Act* of 2003.² The main objectives of the CBS are to promote official statistics that meet the demands of users for purposes of practice, policy, and science, and to promote accuracy and completeness of all statistics published.

Against this background, the responsibility for collecting, processing, and disseminating (at the national and international level) all macroeconomic statistics (excluding balance of payments and monetary statistics) rests with the CBS. This responsibility is clearly defined in the *Statistics Act*, sections 3 and 4, which state that:

- The task of the CBS is to carry out statistical research for the government for practice, policy, and research purposes and to publish the statistics compiled on such research; and
- The CBS is the national authority for the production of (European) Community statistics for the Netherlands.

¹ According to the *Statistics Netherlands Act, 2003 (Statistics Act)*, the CCS is an independent administrative body without corporate rights and has the following duties: (a) to foster the provision of statistical information for the government which meets the needs of practice, policy and science; (b) to foster the accuracy and completeness of the statistics to be published for the government; (c) to assess the multi-annual program and the work program of the CBS; (d) to ensure that the CBS acquires data in such a way as to minimize the ensuing administrative burden for companies and institutions; (e) to ensure that the statistical work carried out by the CBS for third parties does not lead to competition with private suppliers of similar services which would be undesirable from the perspective of the proper operation of market forces; and (f) to oversee the exercise by the Director-General of the power to make available sets of data for the purpose of statistical or scientific research.

² This Act replaced the *Netherlands Statistics Act, 1996* which, in turn, replaced the *Royal Act of 1899*.

The Netherlands' membership in the European Union (EU) implies that European law applies to a large portion of the Dutch statistical programs. European Council Regulation 322/97 stipulates that national authorities shall be responsible for producing European Community statistics at the national level and that Community statistics shall be produced on the basis of uniform standards and, in specific duly justified cases, of harmonized standards.

The production of national accounts statistics is not only subject to EU law but also to verification by the European Commission.³ As part of the European Statistical System (ESS), the CBS compiles and disseminates a significant share of its data according to the legal requirements of this system.

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

The CBS is the only official producer of all macroeconomic statistics, with the exception of balance of payments and monetary statistics. Well-established procedures are in place to ensure adequate data sharing and coordination between the CBS and the Netherlands Bank (DNB), as well as between the CBS and other providers of source data. In order to reduce the data reporting burden of data providers, the CBS uses administrative sources rather than questionnaires, when possible.

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

In line with the *Statistics Act*, articles 37 through 42a, individual reporters' data are kept confidential and used for statistical purposes only. Individual respondents data are only available to CBS staff charged with the compilation of the relevant statistics at the CBS. All employees sign a confidentiality agreement when they enter service at the CBS, ensuring that micro data remain confidential. Encryption is used when data are transmitted electronically. All CBS computers are password protected, and access to the CBS premises can only be obtained with an electronic pass card. Visitors have to report to reception and have to be accompanied by a CBS staff member when entering the CBS premises. Staff who disclose personal information on individual reporters, commit a crime and may be dismissed and/or taken to court at the discretion of the Director-General of Statistics.

Maintaining reporter confidentiality is not usually a major issue for national accounts publications. However, it does limit the level at which industry data may be disseminated.

³ The European Statistical System (ESS) comprises the Statistical Office of the European Communities (EUROSTAT) and the statistical offices, ministries, agencies, and central banks that collect official statistics in the European Union Member States, as well as Iceland, Liechtenstein, and Norway. The ESS functions as a network in which EUROSTAT's role is to lead the way in the harmonization of statistics in close cooperation with the national statistical authorities. The ESS's work concentrates on EU policy areas, but with the extension of EU policies, harmonization has consequently been extended to nearly all statistical fields.

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

Sections 33 through 36 of the *Statistics Act* specify the legal mandate under which the CBS collects data and ensure reporting. Under these provisions, the CBS is authorized to use, for statistical purposes, data from government registers, legal persons, companies, independent professionals, and institutions to fulfill its duties.

Sections 43 through 52 of the *Statistics Act* relate to measures encouraging response. These sections of the *Statistics Act* specify the fines and penalties that the CBS can impose on legal persons, companies, independent professionals, and institutions that fail to provide the data in full or in time. As established in the *Government Gazette* of February 16, 2006, the maximum amount to forfeit is Euro 20,000, but this amount can be raised in very exceptional cases to Euro 500,000.

0.2 Resources

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

The CBS's budgeting process is described in sections 14 through 19 of the *Statistics Act*. At least once every five years, the Director-General of Statistics has to develop a multi-year program outlining the CBS's activities. Every year, the Director General of Statistics has to compile a work program for the following year, taking into account available resources. He must submit both work programs to the CCS for adoption. After adoption, the CCS sends the multi-year program to the Minister of Economic Affairs. Taking into account the view of the cabinet, the Minister notifies the Director-General of Statistics, the CCS, and the House of Representatives of the States General on the financial and organizational conditions to be met to realize the multi-year program. This notification is published in the *Government Gazette*.

In recent years, staff resources at the CBS have been reduced and further cuts are envisaged in the future. Nonetheless, staff, facilities, computing resources, and financing⁴ are commensurate with the CBS's current statistical programs, except for the staff resources dedicated to the compilation of the Producer Price Index (PPI). While staff numbers for the CBS have been reduced by five percent in the period from 2000 to 2005—in line with a general reduction in the size of the civil service—the current number of staff is broadly adequate to perform existing tasks. Staff are highly qualified in their areas of expertise and salary levels in the CBS are competitive with other civil service salaries in the Netherlands. The National Accounts Department is currently involved in a major redevelopment project (Project to Redesign the System of Economic Statistics, HECS)—see discussion in 3.1.2) that it is hoped will yield efficiency gains to enable the Department to cope with the expected staff cuts over the next few years.

⁴ To comply with new statistical requirements on the main macroeconomic indicators with respect to the European Action Plan, additional funds from the Ministry of Economic Affairs were made available. For example, the development and regular production of quarterly sector accounts are financed with these funds.

CBS staff have adequate computing resources available to perform their required tasks. While some software problems arise occasionally, these problems do not affect the overall quality of the statistics produced nor the effectiveness with which staff perform their duties. Computer resources are adequately protected, and the CBS has emergency backup systems in place for retrieval of data in the event of disasters or other unusual events.

Physical facilities of the CBS are adequate to perform required tasks. In 2008, the Voorburg office of the CBS will move into a new building. In light of the multi-year program and transparent planning and budgeting process, funding of the CBS is adequate to perform the required tasks stated in the approved programs.

0.2.2 Measures to ensure efficient use of resources are implemented.

Under current government financial constraints, the efficient use of existing resources is one of the CBS's strategic objectives. The CBS's policy intentions are stated in general terms in the budget of the Ministry of Economic Affairs, and the CBS is accountable through a series of specific performance indicators.

In the current financial environment, the CBS management and CCS have paid special attention to the efficiency of statistical processes and meeting users' needs. This resulted in an extensive internal audit program and a project to revise the national accounts compilation process (as well as its relations to source statistics). A major project (known as the IMPECT project) was commenced in 1999 to standardize the collection of production statistics across a number of industries and to streamline the process by which the survey results were input to the national accounts processing system. Results of this project were used in the benchmark revision of the national accounts for the reference year 2001. The main purpose of the project was to ensure a more efficient use of resources and to improve the transparency of the compilation process.

Each year, each manager in the CBS agrees on a work program with its staff. Staff performance with respect to the agreed work objectives is assessed on an annual basis and outstanding performance is rewarded with extra remuneration (bonus).

Department and group managers frequently evaluate the collaboration and mutual agreements ("service level agreements") on internal data deliveries between the Financial Institutions and Government Department and other departments providing source data, and the National Accounts Department.

0.3 *Relevance*

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

The CBS maintains regular contacts with the main users of official statistics through seven high-level advisory boards.⁵ Each advisory board convenes at least twice a year. In the advisory boards, the main users of statistics comment and advise on the multi-year program and the annual work program of the CBS. The Advisory Board of the Director-General comprises the chairs of the other six advisory boards and the directors of the four planning agencies in the Netherlands. These planning agencies are the Netherlands Institute for Spatial Research, the Netherlands Environmental Assessment Agency, the Social and Cultural Planning Office of the Netherlands and the Netherlands Bureau for Economic Policy Analysis. The members of the other advisory boards are scientists from several universities in the Netherlands, and representatives from enterprises, firms, banks, unions, consumer associations, research institutes, and government ministries.

Often, bilateral meetings are held with “strategic users” (e.g., ministries, DNB, and the Netherlands Bureau for Economic Policy Analysis) at managerial level. Statistics Netherlands has assigned “account managers” (contact persons) to all strategic users to ensure that their data needs are met.

The relevance of CBS statistics is also monitored by means of the following performance indicators: the use of its online database Statline, the coverage of CBS press releases and references to CBS data in parliamentary documents.⁶

As mentioned in section 0.1.1, the national accounts compiled by the CBS are largely prescribed by the EUROSTAT Transmission Program, as prescribed in various European regulations. The “relevance” of the national accounts are, therefore, to a large extent influenced by these EU regulations. Nonetheless, at a high level, the relevance of the national accounts is monitored through the Advisory Board for Macroeconomic Statistics. Its members are representatives from the DNB, the MOF, the Ministry of Economic Affairs, Rabobank (a private bank), the Netherlands Bureau for Economic Policy Analysis, the Netherlands Institute for Spatial Research, and two universities. National accounts data are an important input for the Netherlands Bureau for Economic Policy Analysis in their forecasts in the Central Economic Plan (*Centraal Economisch Plan* (April forecast) and the Macroeconomic Forecast (*Macro-Economische Verkenning*) (September forecast). The historical time series in both reports are provided by the CBS. Adjustments to the data, which are infrequent and usually made only for presentational purposes, are explained in footnotes.

⁵ Advisory Board for Society and Economics; Advisory Board for Economic Statistics; Advisory Board for Social Statistics; Advisory Board for Price Statistics; Advisory Board for Macroeconomic Statistics; Advisory Board for Methodology and Information Technology and the Advisory Board of the Director-General.

⁶ These are some of the performance indicators referred to in dimension 0.2.2.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The CBS has several processes in place to focus on the quality of the statistics it produces. In 2000, the CBS established a separate unit dedicated to quality verification.

Recently, a project to enhance the quality of the CBS's statistical outputs was initiated with the objective of establishing standards for quality of the outputs. All statistical outputs and processes will have to comply with these standards. In 2006, the CBS started conducting risk analysis for those statistics that are the most important for the corporate image of the agency. These analyses provide an insight into the risks associated with different elements of data quality, such as accessibility, accuracy, timeliness, coherence, relevance, and reproducibility of the output.

This process of quality assurance is intended to enhance the transparency and the quality of the compilation procedures and the statistical products. The chain from source data to statistical output often crosses the borders between the organizational units within the CBS. Recently, a new method which takes into consideration both the quality of the statistical output and the processes, including consistency within the production chain, was applied as part of a quality assessment study of economic statistics. The results of this study were very favorable.

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

Three processes are in place to monitor the quality of the CBS's statistical program:

- **Statistical auditing**, to assess the quality of the statistical outputs against EUROSTAT quality benchmarks.
- **Respondent and user survey of the CBS**, to assess the views of existing parties involved in providing and using the CBS's products.
- **Verification by the European Commission according to EU regulation 1287/2003**. Under this regulation all member countries have to produce a GNI Inventory each time they undertake a major revision of their national accounts. The GNI Inventory should provide a detailed explanation of sources and methods used for estimating GNI in a country. It is the basis for the EUROSTAT assessment of the quality and exhaustiveness of GNI data and their compliance with the *European System of Accounts, 1995 (1995 ESA)*. The Inventory is a reference document that needs to be kept up-to-date to reflect the latest methodology in place. The *Gross National Income Inventory 2001* for the Netherlands will be assessed for compliance by a mission from EUROSTAT early in 2008.

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

The Methodology and Quality Division (DMK) is responsible for the expansion of knowledge, the development of a general framework, the coherence and the standardization

of the statistical processes and the implementation of the frameworks for general statistical methods, quality assurance and process development.

The DMK ensures continuous renewal of the statistical processes by (1) providing methodological support to new projects; (2) maintaining the business and information architecture of the CBS; and (3) conducting business analyses.

The Macroeconomic Statistics and Publications Division, which includes the National Accounts Department (MNR), has its own department for research and development (MOO). Capacity for research and development is available without compromising the regular statistical output. For example, the quarterly sector accounts were developed by this department in close cooperation with the departments of Financial Institutions and Government and National Accounts.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The CBS places a high premium on its impartiality, as evidenced in the *Statistics Act*, which established the CBS as an autonomous agency, under the aegis of the Ministry of Economic Affairs, on January 3, 2004.⁷ The Act also affirmed new rules concerning the acquisition, use, and provision of data in the context of the supply of statistical information domestically and internationally. The CBS has two management bodies: a Director-General of Statistics (DGS) and the Central Commission for Statistics (CCS). By law, the DGS cannot be a civil servant subordinated to the Minister of Economic Affairs. Furthermore, the DGS shall not hold any secondary appointments which may interfere with the proper performance of his function of preserving his independence or trust in that independence.

The CBS has adopted a Code of Practice⁸ based on the *European Statistics Code of Practice*,⁹ where the main focus is on promoting trust and confidence in the independence of the CBS. The impartiality of the CBS in producing statistics is safeguarded in the code, which states that:

“The statistical information Statistics Netherlands produces is intended to contribute to the effectiveness of public debate on a wide range of topics. Not only must this information be accessible and available to all parties in society, but everyone must have access to the same information at the same moment in time. Statistics Netherlands remains impartial with regard to the various interested parties in society. Statistics Netherlands also applies the principle of ‘impartiality’ to specially requested tasks: the results of work requested and paid for by third parties are not made

⁷ There is no longer a hierarchical relationship between the Minister of Economic Affairs and the CBS.

⁸ See www.cbs.nl/en-GB/menu/organisatie/corporate-informatie/richtlijnen/code-of-practice.htm

⁹ See CENEX SDC *Handbook on Statistical Disclosure Control*, March 2007.

available exclusively to these third parties. To guarantee its impartiality, Statistics Netherlands publishes release dates for information well in advance.”

Recruitment and promotion of CBS staff is done exclusively based on relevant aptitude and/or expertise. CBS staff regularly and actively participate in seminars, courses, and workshops arranged by regional and international organizations to further their statistical knowledge in their field of expertise.

The CBS has a long-standing culture of professionalism in the workplace. This is evidenced by recognition of authors of research and methodological papers, organization of conferences and lectures, and peer review of statistical work. Staff from statistics offices in both developing and advanced economies often visit the CBS to learn from its practices and procedures. The CBS also participates actively in international working groups and some CBS staff are in key positions in international forums.

The DMK is responsible for research and analysis in the CBS. The work of this Division is also supported by research and development work done by the Development and Support Sector of the Macroeconomic Statistics and Publications Division (i.e., the division responsible for, among others, national accounts, price statistics, and GFS).

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

The CBS’s choices of data sources and statistical techniques and decisions about dissemination are informed solely by statistical considerations. According to Section 18 of the *Statistics Act*, the Director-General of Statistics shall determine the methods by which the studies included in the work program and multi-year program of the CBS will be carried out, and the manner in which the results of these studies will be published. Decisions on data dissemination are guided by international guidelines, such as the IMF’s SDDS and the regulations of the European Union.

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

The CBS has internal guidelines that are available to all staff for appropriate procedures to be followed for acting (or not acting) on the erroneous interpretation and/or misuse of its statistics. The CBS monitors media coverage of its statistics, publications, and activities on a daily basis. Communications policy is handled by the Communication Division of the CBS.

1.2 Transparency

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

All information on the legislation and regulations governing the CBS are available on its website (www.cbs.nl), under “About Us,” and in its library. While *Legislation* is not a specific heading in the site index or on the web page, the *Statistics Act* is easily accessible.

The IMF's Dissemination Standards Bulletin Board (DSBB) includes, under the heading "Integrity" the terms and conditions under which the CBS's statistics are produced, including those relating to confidentiality and individually identifiable information.

All CBS publications identify where more information about the CBS and its products can be found, for example, by referring to the CBS website (www.cbs.nl).

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

With one exception, there is no internal government access to statistics prior to their release. The Dutch version of the CBS's website includes the policy concerning the publication of statistics and makes public the cases in which prior access to the statistics is given to the government. As stated in the *Statistics Act*, some strategic relations of the CBS (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) are able to access (under embargo) relevant statistics prior to the public release. In order to be granted prior access, the following conditions must be met:

- The strategic relationship must have a formal involvement with the subject matter;
- Pre-access is of crucial importance to the relationship, for example to prepare answers to possible questions about statistical results; and
- The interests of other parties are not harmed.

The website also shows a list of eight categories of statistics where prior access (under embargo) is granted. Furthermore, information on the organizations that have prior access to the data and the time of access is disseminated to the public. No one outside the CBS is given access to the national accounts prior to their general release.

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

All CBS press releases and other publications are clearly recognized as products of the CBS by using the CBS logo, and referring to the CBS in the first section and/or in the introduction.

Data from Statistics Netherlands in ministerial reports and in the *Budget Memorandum* are identified as such in footnotes. CBS publications website (under "copyright") note that information may be quoted provided that the source is stated accurately and clearly, and that reproduction of materials for own/internal use is permitted.

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

The CBS publishes information on changes in statistical procedures on its website and in all relevant publications (e.g., *De Nederlandsche Conjunctuur* or "The Dutch Business Cycle" and *De Nederlandse Economie* or "The Dutch Economy"). In addition, methodological changes as well as their consequences are communicated in press releases.

Every February, advance notice of changes in policy that may affect the national accounts is given to the Ministry of Finance and the Netherlands Bureau for Economic Policy Analysis.

In case of significant changes, such as the introduction of a new Health care system in the Netherlands in 2006, an elaborate paper on how it is recorded in the national accounts is distributed to the main users.

When a benchmark revision is done, the CBS invites main users to the CBS to explain the reasons for the benchmark revision as well as the major changes in methodology and sources, and a separate publication on the magnitude of the revisions and methodology is issued.

1.3 Ethical standards

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

Chapter 4 of the *Code of Practice* of the CBS describes the behavior of CBS staff relating to the following six principles: impartiality, reliability, relevance, cost effectiveness, statistical confidentiality, and transparency.

Furthermore, the *Integrity Policy of the Statistics Netherlands* is available for all employees on the CBS's internal website. This handbook contains provisions on integrity and the applicability of this policy within the CBS.

New staff should sign a declaration to observe secrecy when entering duty at the CBS. All new staff should submit a "certificate of incorporation" from the local police vowing never to be involved in criminal activity. A few months after commencement of employment, all staff should take an oath (for example, to be loyal to the Constitution, etc.) before the Director-General of Statistics.

2. Methodological soundness

2.1 Concepts and definitions

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

The national accounts are compiled in accordance with the methodology set out in the *1995 ESA*, which is consistent with the concepts and definitions outlined in the *System of National Accounts, 1993 (1993 SNA)*.

2.2 Scope

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

The national accounts statistics cover all tables and accounts that the Inter-Secretariat Working Group on National Accounts has defined as a minimum requirement for implementation of the *1993 SNA*, as well as those whose compilation the Working Group has recommended.

The minimum set refers to the following:

- Annual value added and GDP at current and constant (or previous year) prices by activity.
- Annual expenditures of gross domestic product (GDP) at current and constant (or previous year) prices.
- Annual value-added components at current prices by activity.
- Sequence of accounts for the total economy (up to financial accounts) with an annual frequency.
- Annual rest-of-world accounts (until net lending).

The recommended set refers to the following:

- Quarterly value added and GDP at current and constant (or previous year) prices by activity.
- Quarterly expenditures of GDP at current and constant (or previous year) prices.

The full sequence of annual accounts including financial accounts and financial balance sheets are compiled and disseminated for the five main institutional sectors of the economy, with the accounts for the financial corporations and general government sectors also being published for several subsectors. Since the first quarter of 2005, quarterly institutional sector accounts have also been compiled at the same level of detail as for the annual sector accounts. However, the quarterly institutional sector accounts have not been officially published as yet.

In addition to the core *1993 SNA* tables and accounts listed above, the following are produced:

- Quarterly supply and use tables.
- Annual input output tables
- Annual social accounting matrices.
- Annual environmental accounts.
- Annual labor accounts.
- Annual regional accounts.
- Tourism satellite accounts

Multifactor productivity estimates are being developed along with a knowledge module encompassing research and development, information technology and innovation.

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

- Research and development on own-account.
- Output of goods for own-account fixed capital formation.
- Mineral exploration.
- Production of entertainment, literary or artistic originals.

- Production of computer software, including when produced on own account.

Although the *1993 SNA* includes own-account production of all goods for own final consumption and the production of all goods for own-account fixed capital formation in productive activities, the Dutch national accounts follow the convention of *1995 ESA* paragraph 3.08 b, which states that the estimates for own-account production of households should be limited to the production, storage, and processing of agricultural products and to the construction of dwellings.

Estimates of illegal output sold to willing buyers are not included. However, estimates of hidden activities such as tips and concealed activities that involve either “turnover fraud” or “cost fraud” are included in GDP. Estimates are also included for agricultural production occurring in allotment gardens. Details of these and other adjustments to achieve “exhaustive” or comprehensive estimates of GDP are provided in the *Gross National Income Inventory 2001* for the Netherlands in respect of the reference year 2001 .

The delimitation of the Netherlands economic territory and the designation of residents conform to the definitions in *1995 ESA*, paragraphs 2.01 to 2.10, inclusive. In particular, the following are included as part of the economy:

- Territorial enclaves, such as Dutch embassies, in the rest of the world.
- Bonded warehouses.
- Workers who work only part of the year in another country.

The Dutch economic territory consists only of the Netherlands itself - that is, the territory of the Kingdom in Europe.

The Kingdom of the Netherlands actually consists of three parts:

- The Netherlands (the Kingdom in Europe)
- The Netherlands Antilles
- Aruba

However, it is only the Kingdom in Europe that is included within the domestic territory of the Netherlands for national accounts purposes.

The asset boundary is defined in accordance with the *1993 SNA*. Consequently, the following items are in scope for determining the assets boundary:

Among tangible assets:

- Defense-related assets that could be used for civilian purposes.
- Valuables and historical monuments.

Among intangible assets:

- Mineral exploration (whether successful or not).
- Systems and standard applications computer software and data bases (purchased or built in-house).
- Entertainment, literary or artistic originals.
- Patented entities.
- Leases and other transferable contracts.

In a minor departure from *1993 SNA* recommendations work-in-progress on growing crops is not included in changes in inventories.

2.3 Classification/sectorization

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

1993 SNA definitions for institutional sectors are followed. Institutional sector accounts are compiled for all *1993 SNA* institutional sectors – nonfinancial corporations, financial corporations, general government, households, and nonprofit institutions serving households.

The CBS classifies all economic activity in accordance with the (national) Standard Industry Classification 1993 (SBI 1993 = SIC). The SBI 1993 aligns with NACE Rev.1 at the four-digit level. The ESA Classification of Products by Activity (CPA) is used to classify products. Imports and exports are classified using the more detailed Harmonized Code.

Household final consumption expenditure is classified according to three classifications—by product from the supply and use tables, by durability and by Classification of Individual Consumption by Purpose (COICOP). Adjustments to household final consumption to add expenditure by residents in the rest of the world and to deduct expenditure by nonresidents in the Netherlands are shown explicitly and are not allocated across the COICOP categories. Estimates of government final consumption expenditure are published at the first level of COFOG on an annual basis. Gross fixed capital formation is classified by asset type, by institutional sector and by industry.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The valuation rules used for recording flows are in accordance with the *1993 SNA*. Market output is valued at both basic and producer prices and output for own-use at equivalent market prices. The valuation of intermediate consumption is at purchasers' values, that is, including sales, excise taxes, and nondeductible value added taxes. The deductible part of the value added taxes is excluded from the valuation of final uses. Transaction values are adjusted in cases where transfer pricing is detected. Transactions in foreign currency are converted using the mid-point exchange rates prevailing in the market at the time that the

transactions take place. Estimates are available for total exports and imports of an f.o.b. basis.

In the use table values are recorded at purchaser's prices, while in the supply table, domestic production is recorded at basic prices and imports at c.i.f. prices. Therefore, three additional columns are included in the supply table in order to fill the valuation gap. These columns relate to trade margins, transport margins, and taxes and subsidies on products.

Taxes and subsidies on products are not fully allocated to individual industries or sectors. Therefore the estimation of GDP at market prices using the income approach starts with total value added at basic prices as the sum of value added at basic prices on the industry/sector level. GDP at market prices is then calculated by adding separate estimates of taxes and deducting subsidies on products.

For imported goods two ways of valuation are of interest, namely the "purchaser's price" and the "c.i.f. price." The difference consists of taxes on products, including import duties, (as plus items) and subsidies on products (as minus items), transport margins on the Dutch territory, trade margins and value added tax (VAT), if applicable, which are included in the former but not in the latter.

2.4.2 Recording is done on an accrual basis

Transactions and flows are recorded on an accrual basis. In some cases the cash based data are converted to an approximate accrual basis. For example, the figures for taxes on products (mainly VAT) are lagged by one month which is considered to best approximate an accrual basis. General government transactions are recorded on an accrual basis for taxes and subsidies on products, expenditures and revenues except for corporate and personal income taxes. Imports and exports of goods are recorded in accordance with the change of ownership principle.

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

In the 2001 Revision of the national accounts grossing/netting procedures were revised, as far as necessary, to align with 1993 SNA and 1995 ESA guidelines. Transactions between establishments within the same enterprise are recorded on a gross basis.

3. Accuracy and reliability

3.1 Source data

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

The General Business Register (GBR) covers all business units in the Netherlands that are relevant for national accounts purposes. All units on the GBR are classified by industry (SIC) and by size categories based on the number of employees. GBR provides the population frame (and is used to obtain samples) for various statistical collections.

Annual data sources

The most important data source for the annual supply and use tables is Production Statistics (PS) collected by Statistics Netherlands. A major project (IMPECT)¹⁰ was undertaken to standardize the PS collections from various industries and to streamline the processing system used in the National Accounts Department to input the PS data. Data from the improved system was first used in respect of the reference year 2001.

As indicated in the table below, PS are a major data source for the goods producing industries and for many of the service industries. Businesses with more than 100 employees are fully enumerated, while those with 1-100 employees are sampled. Firms with no employees are not surveyed but they are included in the PS results by using VAT declarations and imputations based on the ratios of output, intermediate inputs and value added to VAT declared turnover for firms with one employee. Response rates average about 80 percent for large firms and about 60 percent overall. An important feature of the PS from a quality perspective is that detailed data on intermediate inputs by product are collected each year for the manufacturing industry.

Data on manufacturing output by product are obtained from the list of products of the European Communities (PRODCOM) statistics in which output data are classified by products by activity (CPA) categories. For other industries a less detailed specification of outputs and intermediate inputs is collected.

For some industries where PS or other suitable data are not available the General Business Register is used in conjunction with data on numbers of employees and compensation of employees to estimate output and intermediate consumption on the basis of output and input structures for related industries (or data for the same industry from supply and use tables for earlier years).

For health services a specifically designed survey (the Health Cost and Financing Statistics) is conducted to obtain data which are similar to those obtained from the PS for the nonmanufacturing industries.

Both the national accounts and the labor accounts were revised in 2005 for the comprehensive revision of the national accounts in respect of the reporting year 2001. In that revision the Social Statistical Database (SSB) was used as a primary source for the estimation of the number of employed persons, the number of jobs for employed persons, the compensation of employees and the labor input of employees and self-employed persons. The SSB includes information about all persons, jobs and benefits in the Netherlands. The SSB was developed by combining many registers to achieve consistency at a micro level. The labor accounts therefore provide a comprehensive data source for estimates of employment and compensation of employees.

¹⁰ IMPECT stands for "Implementation Economic Transformation Process."

Most components of household final consumption expenditure are estimated using data from the annual household budget survey (HBS) and retail output data from the PS for the retail industry. Data from these sources are adjusted as required for scope differences and compared and confronted in the supply and use tables.

The major data source for estimating gross fixed capital formation for tangible fixed assets is an annual survey of investment and leasing which uses the GBR as the population frame. Various other sources are also used for particular industries. Intangible fixed assets such as mineral exploration and computer software are estimated separately using data from the Ministry of Economic Affairs and estimates of the supply of computer software, respectively.

The main data sources for the annual national accounts are outlined in the table below together with an assessment of the coverage provided by those sources for all three approaches to measuring GDP.

Main Sources for the Annual Accounts

Production Approach		
NACE Rev 1. Section	Main sources	Assessment of Coverage
A. Agriculture, hunting, and forestry	- PS by SN (Production Statistics by Statistics Netherlands) - LEI data (LEI = Agricultural Economics Institute) - Functional data of domestic output per product category - Agricultural prices	Good
B. Fishing	- LEI data	Good
C. Mining and quarrying	- PS by SN	Good
D. Manufacturing	- PS by SN - Survey data on produced volumes by Commodity Boards in the Netherlands - Data from monthly Production Index of SN	Good
E. Electricity, gas and water supply	- PS by SN - Data from "Dutch Energy Balances" (a survey on produced and used volumes in physical terms)	Good
F. Construction	- PS by SN - Building permits - Monthly survey on sales	Good
G. Wholesale and retail trade, repair of vehicles and personal and household goods	- PS by SN - Data from RAI (RAI = statistics on car sales by association)	Good
H. Hotels and Restaurants	- PS by SN	Good (relatively Poor for the category "other accommodation")
I. Transport, storage and communication	- PS by SN - Annual reports of some companies to transfer financial year basis data to calendar year data - Government data on subsidies	Good
J. Financial	- Data from AFM (AFM = Financial Market	Good

Production Approach		
intermediation	Authority) - Data from Central Bank (DNB) - Balance of Payment data (DNB)	
K. Real estate, renting and business activities	- PS by SN - VAT data from Ministry of Finance (MF)	Good (relatively Poor for the renting of buildings (not dwellings))
L. Public administration and defense; compulsory social security	- Data from State record of SN (obtained from accounts and budgets of ministries) - Annual financial reports (provinces, water boards, public corporate organizations, etc., large municipals) - Special computer files to SN (smaller municipals) - Data from POLBIS (system for police)	Good
M. Education	- Data from CFI (CFI = Agency of Ministry of Education) - Data from Labor Accounts of SN - Administrative records on number of driving exams and prices of driving lessons	Satisfactory
N. Health and social work	- Data from Prismant (Prismant = Commercial service provider for Dutch health care organizations) - Data from Labor Accounts - Data from Care Accounts of SN (administrative data not consistent to NA) - POLS Survey data of SN	Satisfactory
O. Other community, social and personal service activities	- PS by SN - Annual reports of the supervision board for gambling - Annual financial reports of water boards - Data of sports organizations (number of members, etc.) - Data from Labor Accounts	Satisfactory
P. Private households with employed persons	- Data on the number of households with double incomes - CPI	Poor

Expenditure Approach		
Expenditure category	Main sources	Assessment of Coverage
Household final consumption expenditure	- Household Budget Survey (HBS) - Data from the PS Retail sales by SN - Data from Tourism Satellite Account of NA - Administrative data on production of housing, water and energy services - Administrative data on mileage information from "private car ownership and use" statistic - VAT data	Good; Satisfactory for the consumption of services
NPISH final consumption expenditure	- Commodity flow data (see NACE O)	Satisfactory
General government final consumption expenditure	- Same sources as NACE L. - Data on own account GFCF, government sector sales and social benefits in kind	Good
Gross Fixed Capital Formation	- Survey data from the LEI - Investment and lease survey (separate surveys in a number of industries) - Annual reports and balance sheets of banks, insurance companies and government - POLBIS - Prismant - RAI data	Good
Changes in inventories	- PS of SN - Commodity flow data (often remainder in the balancing process)	Poor
Acquisitions less disposals of valuables	- Commodity flow data	Poor
Exports and imports of Goods	- Foreign trade statistics of SN	Good
Exports and imports of Services	- Survey data from SN - Data on c.i.f./f.o.b. correction	Satisfactory

Income Approach		
Income category	Main sources	Assessment of Coverage
Compensation of employees	- Labor Accounts - Data on "Dual Actoring" method by NA (these data come from PS, finance statistics of corporations, general business register, etc.)	Good
Gross Operating Surplus	- Data on "Dual Actoring" method by NA	Good

"Dual acting"¹¹ is the expression used by CBS to describe the process by which data from balanced supply and use tables, which are compiled on an establishment basis, are converted

¹¹ Dual acting is applied to the following transactions: production, intermediate consumption, other taxes and other subsidies, wages and salaries, employers' social contributions and (as a balancing item) operating surplus/mixed income.

to estimates by institutional sector. Several sources are used to rearrange the transactions by industry of establishment in the supply and use tables into transactions of institutional sectors, including PS, corporate finance statistics and the General Business Register.

Quarterly data sources

The CBS has good data sources for most industries for compiling the production approach to GDP. However, an independent measure using the expenditure approach is not available because changes in inventories is mainly obtained as a balancing item in the supply and use tables, and gross fixed capital formation is derived using the commodity flow approach. The table below summarizes the data sources used to compile the quarterly national accounts and provides a subjective assessment of the coverage achieved from the available data sources. More detailed information on the sources and methods used to compile the quarterly national accounts is available on the IMF Dissemination Standards Bulletin Board.

Main Sources for the (Regular) Quarterly Accounts

Production Approach		
NACE Rev 1. Section	Main sources	Assessment of Coverage
A. Agriculture, hunting, and forestry	- Data from the Business Information Network of the LEI and the Product boards - Data from Agricultural Survey (CBS/Ministry) - Agricultural prices	Good
B. Fishing	- LEI data, data from ministry - Prices from SN	Good
C. Mining and quarrying	- Data from publications of the Dutch exploration and production Company (NAM) - Producer's prices	Good
D. Manufacturing	- Monthly Production-index (PI) by SN; five types of information are distinguished mainly based upon statistical surveys	Good
E. Electricity, gas and water supply	- PI by SN - Data from "Dutch Energy Balances" (a survey on produced and used volumes in physical terms)	Good
F. Construction	- Turnover-index - Building permits and the progress in construction industry - The number of productive hours (for plausibility checks)	Good
G. Wholesale and retail trade, repair of vehicles and personal and household goods	- Index of consumption (CI) by SN - Foreign trade statistics on goods - Indirect compilation in the Supply and Use Table (SUT)	Satisfactory
H. Hotels and Restaurants	- Data from industry organization - Data from Labor Accounts	Good
I. Transport, storage and communication	- Indicators for railways, air transport and sea transport (transport and traffic data, sales indicators) - Quarterly business reports of companies - Government data on subsidies	Good

Production Approach		
J. Financial intermediation	- Data from Central Bank (DNB); from 2006 onward a quarterly source has developed for QSA - Quarterly business reports of banks - Balance of Payment data (DNB)	Good/Satisfactory
K. Real estate, renting and business activities	- VAT data from Ministry of Finance (MF) - Index of consumption	Satisfactory
L. Public administration and defense; compulsory social security	- Data from State record of SN (obtained from accounts and budgets of ministries) - Data from Labor Accounts	Good
M. Education	- Data from Labor Accounts of SN	Satisfactory
N. Health and social work	- Data from Labor Accounts	Satisfactory
O. Other community, social and personal service activities	- Data from Labor Accounts	Poor
P. Private households with employed persons	- Data on the number of households with double incomes - CPI	Poor

Expenditure Approach		
Expenditure category	Main sources	Assessment of Coverage
Household final consumption expenditure	- Monthly CI by SN based upon: Monthly turnover retail trade and commercial and personal services, Consumer price index (CPI), Consumption of energy (volumes) Turnover of petrol stations, International trade in services and Other internal and external sources - VAT data	Good
NPISH final consumption expenditure	- Commodity flow data (see NACE O)	Poor
General government final consumption expenditure	- Same sources as NACE L. - Data on own account GFCF, government sector sales and social benefits in kind	Good
Gross fixed capital formation	- Indirect measurement according commodity flows of capital goods - RAI data	Satisfactory
Changes in inventories	- Commodity flow data (often remainder in the balancing process)	Poor
Acquisitions less disposals of valuables	- Commodity flow data	Poor
Exports and imports of goods	- Foreign trade statistics of SN	Good
Exports and imports of services	- Survey data from SN - Data on c.i.f./f.o.b. correction	Satisfactory

Income Approach		
Income category	Main sources	Assessment of Coverage
Compensation of employees	- Labor Accounts	Good

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

The statisticians in the National Accounts Department have an important influence on the design of the source statistics produced within the CBS, thereby ensuring that these source data are as close as possible to the basis required for national accounting purposes. There is recognition within the CBS of the integrating role played by the national accounts in the whole macro economic statistics process. The National Accounts Department is currently heavily involved in a major redesign of the entire System of Economic Statistics (referred to as the HEcS project). In this project the System of Economic Statistics is seen as a chain process in which national accounts is the final link in the chain. An element of the HEcS project is also being undertaken within the National Accounts Department, entitled Redesign National Accounts (RNA). Important elements of the RNA project include a rationalization of the national accounts compilation process, separation of the error detection and balancing processes, and the introduction of automatic balancing techniques where possible.

Non-CBS information is also used in compiling the national accounts. For such sources it is generally more difficult to ensure that the source data are in line with the requirements of the *1993 SNA* and *1995 ESA*. The close cooperation that exists between the Netherlands Bank (DNB) and the CBS concerning data sharing for the balance of payments and financial sector data has ensured that national accounts requirements are given a high priority.

Overall the source data used in compiling the national accounts are reasonably consistent with the definitions, scope, classifications, valuation and time of recording required for national accounts purposes. Nevertheless numerous adjustments are made to correct errors, misclassifications, and to apply special national accounts treatments, such as Financial Intermediation Services Indirectly Measures (FISIM).

The data collection program provides a high level of coverage of economic activity (in terms of value added) both in total and for *International Standard Industrial Classification of all Economic Activities (ISIC)* industries at the one-digit level.

3.1.3 Source data are timely

In most cases the source data are timely for use in compiling the national accounts. Of course, for the flash estimates less data are available than for the regular quarterly estimates.¹² However, by and large, the source data meet the requirements of the national

¹² For example, for the flash estimates, sometimes data for only two months of the quarter are available.

accounts. For the flash estimates the release date is 45 days after the end of the quarter under report, while for the regular quarterly estimates it is 90 days. The first annual national accounts estimates (which are based mainly on the sources used for the quarterly accounts) are released about seven months after the end of the reference year. The improved annual estimates are released one year later and the definitive national accounts estimates are published the following year (i.e., about two years and seven months after the end of the reference year).

3.2 Assessment of source data

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

Information on various aspects of survey data, such as coverage, sampling error, response error and non-sampling error, are routinely assessed. This process is facilitated by survey areas providing reports to the National Accounts Department, which deal with the various statistical issues associated with their collections. Regular meetings are held with the survey areas each cycle to discuss the survey results. Service Level Agreements are established with survey areas that specify the minimum statistical requirements that the survey data must satisfy for national accounts purposes.

Source data are also assessed in the context of the national accounts compilation process through the balancing procedures in the supply and use tables. This applies both to survey data and to data from administrative sources, such as government finance statistics and merchandise trade statistics, and also to volume and price statistics. The results of these assessments are fed back to the source areas.

Furthermore, the source statistics are periodically audited by the Quality Assurance Unit as part of the ongoing series of internal statistical audits.

It is standard practice at CBS for the editing procedures of collection areas to identify outliers and to confirm extreme values with respondents. Input edits are used to validate individual survey returns.

In the process of compiling the national accounts, source data are routinely analyzed to correct for misreporting, misclassification and underreporting and to check for temporal consistency and consistency with other related source data. The effects of changes in questionnaires on survey estimates are closely monitored by the National Accounts Department.

3.3 *Statistical techniques*

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

In the Netherlands the main macroeconomic totals in the system of the annual national accounts are derived from the supply and use tables (SUT). These tables are compiled both in current prices and in constant prices (i.e., the prices of the previous year). Besides the SUT—which serves as a framework for the integration of statistical data on goods and services—two other integration frameworks are compiled. These are the sector accounts and the labor accounts. In the Dutch system of annual national accounts these three frameworks are directly connected to each other and are mutually consistent.¹³

The SUT for the definitive annual national accounts is compiled at a very detailed level—about 800 categories of goods and services are distinguished and about 250 industries. For the preliminary annual accounts (as well as for the quarterly supply and use tables) about 200 categories of goods and services and 120 industries are distinguished.

For the SA the degree of detail is similar for both the annual and the quarterly compilations. In the SA 26 sectors or subsectors are distinguished, as well as 66 categories of nonfinancial transactions and 33 categories of financial transactions. Balance sheets for financial assets and other assets are also compiled (except for nonproduced capital goods). The quarterly SA have been developed in recent years, but the full implementation of this quarterly framework in the national accounts has not yet been completed.

The industry dissection used in the labor accounts matches that in the SUT. The labor accounts contain the variables sex (male/female), work agreement (part time/full time) and the labor relationship (fixed/flexible). For self-employed workers the data are somewhat less detailed (branch of industry and sex). In the labor accounts a lot of source data are obtained from surveys (like the Labor Force Survey), as well as from registers. The latter data are brought together in the Social Statistical Database (SSD) of Statistics Netherlands.

Statistics Netherlands has had many years experience in using supply and use tables to compile quarterly national accounts estimates. A brief outline of the approach to compiling quarterly national accounts is given below:¹⁴

¹³ On a quarterly basis, the sector accounts have only recently been developed and have been incorporated into the regular production process. However the quarterly SA are not yet fully consistent with the main aggregates in the quarterly SUT. There are still some differences between the two systems, including timing differences. Development work is continuing to remove these differences. The quarterly SA have not yet been officially published by the CBS.

¹⁴ For a more detailed description of the QNA methodology see: Janssen, R.J.A. and Algera, S.B., 1988, *The methodology of the Dutch system of Quarterly Accounts* (National Accounts Occasional Papers, number 25); and S.B. Algera and R.J.A. Janssen, 1991, *The development of short-term macro-economic statistics*, in CBS Select 7, statistical essays on statistical integration.

To extrapolate the structure of the economy to the latest period, a production function with fixed coefficients is assumed. The volume change in gross production is used to calculate the volume change in intermediate consumption by commodity for each industry. The next step is to add data on household and government consumption, capital formation, exports and imports and, if available, estimates for the change in stocks and work in progress. The result is an estimation of total demand (= total use). This is confronted with the estimation of gross production plus imports (= total supply). Subsequently, the various output and expenditure indicators at current and constant prices are used to calculate a price index for intermediate use. The result is a column of statistical discrepancies at current and constant prices. Differences between the estimates of the supply and the use of a product group are eliminated by adjusting elements in either the use table or the supply table. Which estimates are adjusted depends on the quality of the basic underlying data sources. If gross production is changed because demand is found to be higher than production, then the whole column (input) of this industry must be recalculated. This of course leads to new statistical discrepancies. This process is therefore iterative. If a figure in current prices is adjusted, the consequences for the corresponding figures in prices of the previous year, the volume index and the price index are examined. If a figure in constant prices is adjusted, a similar procedure takes place. The results, especially big adjustments, are then examined and discussed with the national accounts industry analysts and the final demand analysts.

Preliminary data are subject to further plausibility checks. For example, changes in labor productivity can be analyzed by comparing quarter-on-quarter changes of total output with changes in labor input; or the output/input ratio of an industry can be verified if source data of the output as well as input are used.

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

Various adjustments are made to ensure that the measure of GDP is comprehensive or exhaustive. These include allowances for tips in relevant industries; concealed activities that may be reflected as either “turnover fraud” or “cost fraud,” and an accrual estimate for VAT based on what should be collected rather than actual collections. However, in line with the treatment in most countries, no adjustments are made for illegal activities.

Production approach procedures

Estimates of output and intermediate consumption are compiled at a very detailed level—about 120 industries and 200 products for preliminary annual and quarterly estimates and 250 industries and 800 products for final annual estimates. The annual collections of production statistics obtain very detailed information on intermediate inputs by commodity according to the CPA classification for the manufacturing industry.

The use of fixed ratios that are more than five years old to estimate value added applies to only a very small percentage of total value added for the Netherlands. Evidence for this can be found in the *Gross National Income Inventory 2001* for the Netherlands which includes “process tables” that provide detailed analyses of the relationship between the original source

data and the various adjustments that are made for national accounts purposes. The process tables also indicate the contributions of various types of source data to value added.

Appropriate techniques are generally used to address specific issues of GDP compilation. The output of owner-occupied dwellings is estimated using market based rents for dwellings of a comparable quality. Work in progress is recorded for:

- Standing timber.
- Stocks of fish.
- Livestock reared for meat.
- Large construction projects.
- Output of large equipment such as ships and aircraft.

However, work in progress is not recorded for growing crops.

No inventory valuation adjustment is made to data for the manufacturing industry. The perpetual inventory method is used to estimate consumption of fixed capital. General government data for taxes, subsidies, revenue and expenditure is generally on an accrual basis, except for corporate and personal income taxes.

Appropriate procedures are followed for compiling volume measures of GDP. In particular, the double deflation method is used at a very detailed level of economic activity. Volume measures of taxes and subsidies are estimated by applying base year tax rates to the volume of transactions subject to a specific tax or subsidy. GDP volume change is measured using annual chain volume indices. The chain volume measures are also expressed in terms of average prices of 2000. The CBS has an ongoing program to improve the measurement of price and volume measures, particularly in construction and service industries.¹⁵

Expenditure approach procedures

The initial estimates of household final consumption expenditure, gross fixed capital formation, and changes in inventories are compiled from various sources before balancing adjustments are made in the annual supply and use tables. However, in the quarterly national accounts changes in inventories is derived largely as a balancing item. Quarterly estimates of gross fixed capital formation are compiled using the commodity flow method rather than from direct surveys of enterprises.

Household final consumption is compiled at a detailed commodity level and various dissections are published, including at the one digit COICOP level. Government final consumption expenditure is published at the one digit COFOG level on an annual basis.

¹⁵ In 2001 EUROSTAT issued a Handbook on Price and Volume Measurement in National Accounts. EU regulations require member countries to replace methods of deflation that are regarded as unacceptable. The proportion of GDP deflated using so called “unacceptable methods” was reduced from 22 percent to 14 percent over the reference years 1999 to 2004.

Gross fixed capital formation and changes in inventories are both classified by industry and type.

The *Gross National Income Inventory 2001* “process tables” indicate that fixed ratios are used to a very limited extent in order to estimate each of the main expenditure components of GDP.

Appropriate techniques are used to address specific issues of GDP compilation. In particular, government final consumption is calculated after deducting incidental sales of goods and services. Expenses of residents abroad are included in household final consumption expenditure and in imports, while expenses of nonresidents in the economy are excluded from household final consumption expenditure and included in exports. Expenditure on items that are considered as stores of wealth, such as gold, jewelry and works of art, are included in the estimates of valuables.

The volume measures of GDP and its components are compiled using appropriate techniques, including the use of annual chain indices. Dedicated price indices are used to deflate GDP components at a detailed level. The implicit deflator for household final consumption expenditure is consistent with the CPI.

Specific quarterly compilation techniques

The Denton technique is used to combine annual estimates with the corresponding quarterly indicators for compilation of the quarterly accounts. However, the Denton technique is not used to align the quarterly supply and use tables with the annual benchmarks.

Quarterly national accounts are compiled from seasonally unadjusted source data to generate unadjusted quarterly national accounts estimates. REGARIMA X-12 of the United States Bureau of the Census is then used for seasonal adjustment. Seasonal factors are recalculated each quarter and the seasonally adjusted series revised as far back as necessary.

Quarterly chain volume measures are compiled using the “Annual Overlap” procedure¹⁶ and are expressed in the average prices of 2000.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Preliminary estimates of economic growth are compared with forecasts made by the Netherlands Bureau of Economic Policy Analysis, private banks and international organizations, such as the OECD.

¹⁶ This improvement was only recently introduced for the release of the first quarter accounts for 2007. Formerly, Statistics Netherlands applied the so called “Over the Year” technique.

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

In the production process of the supply and use tables, as well as in the other integration frameworks of the sector accounts and the labor accounts, the intermediate results are constantly reviewed. Special attention is paid to the coherence between price and volume changes, the coherence with VAT estimates and other tax information, and the plausibility of the estimates in a time series sense. In addition, estimates of productivity derived from the labor accounts provide a check on estimates of output by industry

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

The supply and use tables are used to identify discrepancies, which can then be investigated and resolved. The supply and use tables are simultaneously balanced at both current prices and in the prices of the previous year. Consequently, the equality of the estimates of GDP for both the production approach and the expenditure approach is ensured.

3.5 *Revision studies*

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

Since 2003 Statistics Netherlands has established a database to record annual and quarterly series from each publication cycle in order to facilitate revisions analyses. This database is available on the CBS website so that users can undertake their own analyses of revisions. Revisions analyses are now conducted each year and the results are disseminated in the quarterly national accounts publication *De Nederlandse Conjunctuur* (The Netherlands' Business Cycle)¹⁷ and on the CBS website. The main objectives of the revisions analyses are to identify biases in the data sources or national accounts estimation techniques, and thereby to improve national accounts estimates in future periods, and to inform users of the likely extent of revisions to the national accounts estimates.

¹⁷ The most recent publication at the time of writing this DQAF (September 2007) is edition three of volume 2007.

The article "Bijstellingen schattingen economische groei 2004" (Updates estimations on economic growth 2004) can be found on pages 26–29. Unfortunately this article is in Dutch language only.

<http://www.cbs.nl/NR/rdonlyres/2503F7A1-01F4-43BE-86F0-F5989FFA6454/0/200703P104pub.pdf>

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity (quarterly) of the national accounts meets the SDDS requirements.

4.1.2 Timeliness follows dissemination standards

The timeliness of the quarterly national accounts (45 days after the end of the reference quarter for the flash estimates and 90 days after the end of the quarter for the regular estimates) also meets the requirements of the SDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The national accounts are internally consistent. Quarterly estimates always add to the previously published annual estimates. The supply and use tables are used to ensure that all three measures of GDP—production, expenditure and income—are identical. The estimates at current prices are consistent with the corresponding series at previous year prices and the deflators.

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

Consistent estimates for annual GDP are normally maintained from 1969. However, when an historical revision is undertaken the back years are updated on a progressive basis. The most recent historical revision was in respect of the reference year 2001. Annual and quarterly estimates for GDP are always consistent in the sense that the sum of the four quarters is exactly equal to the annual total. Official quarterly data for national accounts variables are prepared from the first quarter of 1977 onwards. At present, the quarterly series have been adjusted to the revised annual accounts (and disseminated to the IMF) from the beginning of 1987 onwards. The annual series will be revised back to 1969 and the quarterly series will be revised back to the first quarter of 1977 by the end of 2007.

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

The national accounts rely on three integrated frameworks, the supply and use tables, the sector accounts and the labor accounts. These three frameworks are by design mutually consistent. The national accounts are generally consistent with the balance of payments. In the recent past cooperation between the DNB and the CBS has led to a harmonization of concepts between the national accounts and the balance of payments. In practice, however, differences in data still occur (minor differences with respect to goods, but larger discrepancies for services) due to deficiencies in practical procedures for harmonization.

More importantly, differences result due to differences in the publication cycle and in the update and revision strategies of CBS and the DNB. As both statistics adhere to European rules and regulations, it is only at the European level where these differences can be resolved. These issues are currently on the agenda of the CMFB.

4.3 *Revision policy and practice*

4.3.1 Revisions follow a regular and transparent schedule

The revisions cycle for both annual and quarterly national accounts is clearly indicated in CBS publications and follows a very regular pattern each year.

There are two national accounts releases each quarter—the flash estimate is released 45 days after the end of the quarter, while the regular estimate is released after 90 days. The quarterly data are provisional when first released. The data become final when they are adjusted to the final annual accounts. This varies from 32 months after the first release for a fourth quarter to 41 months after the first release for a first quarter. The final quarterly data are published in *De Nederlandse Conjunctuur* (in English: The Netherlands' Business Cycle). The revision policy is explained in the annual national accounts publication and a brief explanation provided in each press release.

Three versions of the annual national accounts are published for each reference year. The first annual estimates that are published about seven months after the end of the year are referred to as the Provisional Annual estimates. These estimates are mainly based on the quarterly estimates, together with some annual data that have not yet been incorporated in the quarterly accounts. Second, the Revised Provisional Annual Accounts are produced about 12 months after the first annual estimates. Finally, the Definitive Annual Accounts are released about two years and seven months after the reference year.

4.3.2 Preliminary and/or revised data are clearly identified

The provisional status of the data is indicated in the press releases and in the annual and quarterly national accounts publications. Different symbols are used to identify preliminary quarterly estimates, quarterly estimates that have been reconciled to the provisional annual estimate and quarterly estimates that have been reconciled to the revised provisional annual estimate. The absence of any symbol indicates that the estimates are final (they are still, of course, subject to revision in the next historical revision).

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

Annual articles are published in the quarterly national accounts publication to provide users with the latest analysis of revisions to the national accounts aggregates. In addition, special publications are released after each major revision of the national accounts (e.g., *National*

Accounts of the Netherlands, Revision 2001.¹⁸ Furthermore, for each major revision of the national accounts a new GNI inventory is written and made available on the CBS website.

5. Accessibility

5.1 Data accessibility

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

The annual national accounts publication which is usually released in August does not contain much commentary on the estimates because in September the CBS releases another publication entitled *De Nederlandse Economie* (The Dutch Economy), which contains detailed economic analysis of the economy based on the annual national accounts. *De Nederlandse Conjunctuur* (Quarterly National Accounts) does include detailed analytical commentary on the quarterly national accounts estimates.

Some users have commented about the delay between when the annual estimates are released in a press release around 20 July each year and when the annual publication becomes available on the website around mid August. There is a further delay until the hard copy publication is released in early September.

The data in the quarterly national accounts are disseminated in both unadjusted and seasonally adjusted formats. However, the seasonally adjusted data are only available at a very highly aggregated level. For the expenditure measure of GDP the following aggregates are adjusted: household final consumption expenditure, government final consumption expenditure, gross fixed capital formation (separately for enterprises and general government), changes in inventories, and exports and imports of goods and services. For the production approach, ten industry groups are adjusted, while for the income approach only six industry groups for compensation of employees are adjusted.

It is recommended that seasonally adjusted series should be compiled for the main dissections of each of the expenditure aggregates and for more detailed industries. Interpretation of the quarterly national accounts estimates would be assisted if percentage change tables in the quarterly national accounts were published using seasonally adjusted data at this more detailed level, rather than using original data.

The national accounts data on the CBS website appears to have some current issues from a user perspective. First, the English version does not list the quarterly national accounts *De Nederlandse Conjunctuur* among the available publications. Second, for the Dutch version the latest available issue of *De Nederlandse Conjunctuur* that is shown appears to be for

¹⁸ The link to this publication is the following:

<http://www.cbs.nl/NR/rdonlyres/7A7C8E0A-708F-456C-9F3B-D754BF5A2426/0/2001p22pub.pdf>

March quarter 2007, rather than for June quarter 2007. Third, Statline could be made more user friendly.

5.1.2 Dissemination media and format are adequate

National accounts are available as hard copy publications or as PDF files on the CBS website. Users may also receive email copies of the quarterly national accounts press releases on request.

5.1.3 Statistics are released on a pre-announced schedule

A release calendar is published annually.¹⁹ In addition, a weekly calendar is available on the CBS website.²⁰

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

National accounts data are released simultaneously to all interested parties by way of a press release at 9:30 a.m. CET. At the same time the data are also sent to subscribers by e-mail and the press release is posted on the CBS website (<http://www.cbs.nl>).

5.1.5 Statistics not routinely disseminated are made available upon request

Unpublished nonconfidential data that are generated in the process of compiling the national accounts are made available on request. Unpublished data are provided free of charge or for a small fee, depending on the amount of work involved in extracting and organizing the data. This policy is stated on the CBS website, as well as in its publications. A list of available unpublished data is included as an appendix in the annual national accounts publication.

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, sources and methods are available in printed publications that may also be downloaded from the CBS website free of charge. Two major publications were produced following the comprehensive revision of the national accounts in respect of the reference year 2001. First, *National Accounts of the Netherlands, Revision 2001* provides a detailed account of improvements that were introduced in this major revision and the effect the changes had on the national accounts estimates for 2001. Second, details of the sources

¹⁹ For an example (2007) of the press schedule by date see: <http://www.cbs.nl/NR/rdonlyres/FB6B6392-54BF-4651-87BD-84A7180EDEB0/0/200651jpde.pdf>, and for an example (2007) of the press schedule by theme see: <http://www.cbs.nl/NR/rdonlyres/0816E997-950D-468F-9EF2-8342555ACF52/0/200651jpte.pdf>

²⁰ See <http://www.cbs.nl/en-GB/menu/publicaties/agenda/2007-331-pb.htm>

and methods used to compile the national accounts estimates were presented in *Gross National Income Inventory, 2001, The Netherlands*. A similar inventory of sources and methods for the quarterly national accounts is due to be published in 2008.

The hard copy publication *National Accounts of the Netherlands* contains summary metadata on concepts, scope, classifications, and basis of recording in English and in Dutch.

Occasional papers on various national accounting issues that have been prepared by staff of the National Accounts Department are available on the CBS website.²¹ A list of these papers is also shown in the annual national accounts publication.

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

The CBS appropriately adapts the level of detail in national accounts publications to suit the needs of the intended audience. The regular annual and quarterly publications include summary information about concepts and definitions, whereas detailed information on concepts, sources and methods are available in separate publications. Summary information on national accounts aimed at the more general reader is also included in the *Netherlands Statistical Year Book*.

About ten years ago a special video and booklet concerning basic national accounting concepts were produced by the National Accounts Department for use as an educational tool in schools.

5.3 *Assistance to users*

5.3.1 *Contact points for each subject field are publicized*

The CBS has one, central contact point for all inquiries, called “Infoservice.” This contact point is well-publicized in all its hard copy and electronic publications, as well as on its website, by providing a physical address, telephone and facsimile numbers, and an email address.

General inquiries are handled by staff in Infoservice, while technical inquiries are directed by Infoservice to CBS specialists in each area. CBS policy, as stated on the website, is that inquiries are answered within two working days.

The CBS also has a spokesperson for macroeconomic statistics, who deals with the press. As mentioned in dimension 0.3.1, Statistics Netherlands has “account managers” (contact persons) for all strategic users to ensure regular contact with respect to their needs.

²¹ The intranet link to this series is:

<http://intranet/msp/MNR%20Nationale%20Rekeningen/methoden/occasional%20papers.asp>

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

The Department for Dissemination of Statistics (MPC) is responsible for catalogs, leaflets and so on about statistical products. MPC is also responsible for setting the prices for hard copy publications. However, nearly all information on the products of the CBS, as well as the publications themselves in PDF-format, is available at the CBS website www.cbs.nl, free of charge.

Recommendations for National Accounts

- Develop quarterly data sources for changes in inventories.
- Calculate and publish more detailed seasonally adjusted series, and publish quarterly percentage change tables for seasonally adjusted aggregates rather than for original aggregates.
- When publishing household final consumption expenditure at the one digit COICOP level, allocate expenditure by residents in the rest of the world and expenditure by nonresidents in the Netherlands across the COICOP categories, rather than having them only as bottom line adjustments.
- Develop a methodology to derive corporate income taxes on an accrual basis.
- Develop quarterly data collections from enterprises for gross fixed capital formation and profits.
- Make more use of the Denton method for aligning quarterly series to annual benchmarks for industry and expenditure aggregates derived from the supply and use tables.
- Continue to work towards removing any remaining differences between balance of payments and national accounts statistics.
- Include chain price indices for national accounts aggregates in the quarterly national accounts publication.
- Show the derivation of the current price income measure of GDP (including all of its major components) in the quarterly national accounts.
- Put more emphasis on seasonally adjusted movements in the latest quarter, rather than the movements from the same quarter of the previous year in original terms.
- Release the quarterly national accounts publication on the CBS website at the same time as the press release.
- List the quarterly national accounts publication on the English version of the CBS website.

Table 1. The Netherlands: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts
(*Compiling Agency: Statistics Netherlands*)

Element		NA	Assessment				Comments
			O	LO	LNO	NO	
0. Prerequisites of quality							
0.1	Legal and institutional environment		X				
0.2	Resources		X				
0.3	Relevance		X				
0.4	Other quality management						
1. Assurances of integrity							
1.1	Professionalism		X				
1.2	Transparency		X				
1.3	Ethical standards						
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		No quarterly data for changes in inventories	
3.2	Assessment of source data		X				
3.3	Statistical techniques		X				
3.4	Assessment and validation of source data		X				
3.5	Assessment and validation of intermediate data and statistical outputs		X				
3.6	Revision studies		X				
4. Serviceability							
4.1	Periodicity and timeliness		X				
4.2	Consistency		X				
4.3	Revision policy and practice		X				
5. Accessibility							
5.1	Data accessibility			X		More seasonally adjusted estimates should be disseminated to facilitate more detailed analyses and percentage change tables published in seasonally adjusted terms.	
5.2	Metadata accessibility		X				
5.3	Assistance to users		X				

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

Statistics Netherlands (CBS) and the Central Commission for Statistics (CCS)²² were established under the *Statistics Act* of 2003.²³ The main objectives of the CBS are to promote official statistics that meet the demands of users for purposes of practice, policy, and science, and to promote accuracy and completeness of all statistics published.

Against this background, the responsibility for collecting, processing, and disseminating (at the national and international level) all macroeconomic statistics (excluding balance of payments and monetary statistics) rests with the CBS. This responsibility is clearly defined in the *Statistics Act*, sections 3 and 4, which state that:

- The task of the CBS is to carry out statistical research for the government for practice, policy, and research purposes and to publish the statistics compiled on such research; and
- The CBS is the national authority for the production of (European) Community statistics for the Netherlands.

The Netherlands' membership in the European Union (EU) implies that European law applies to a large portion of the Dutch statistical programs. European Council Regulation 322/97 stipulates that national authorities shall be responsible for producing European Community statistics at the national level and that Community statistics shall be produced on the basis of uniform standards and, in specific duly justified cases, of harmonized standards. In the case of the Consumer Price Index (CPI), the CBS is responsible for producing the Dutch series of the Harmonized Index of Consumer Prices (HICP), which for the most part is constructed using the same source data as the Netherlands CPI.

²² According to the *Statistics Netherlands Act, 2003 (Statistics Act)*, the CCS is an independent administrative body without corporate rights and has the following duties: (a) to foster the provision of statistical information for the government which meets the needs of practice, policy and science; (b) to foster the accuracy and completeness of the statistics to be published for the government; (c) to assess the multi-annual program and the work program of the CBS; (d) to ensure that the CBS acquires data in such a way as to minimize the ensuing administrative burden for companies and institutions; (e) to ensure that the statistical work carried out by the CBS for third parties does not lead to competition with private suppliers of similar services which would be undesirable from the perspective of the proper operation of market forces; and (f) to oversee the exercise by the Director-General of the power to make available sets of data for the purpose of statistical or scientific research.

²³ This Act replaced the *Netherlands Statistics Act, 1996* which, in turn, replaced the *Royal Act of 1899*.

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

The CBS is the only official producer of all macroeconomic statistics, with the exception of balance of payments and monetary statistics. Well-established procedures are in place to ensure adequate data sharing and coordination between the CBS and the Netherlands Bank (DNB), as well as between the CBS and other providers of source data. In order to reduce the data reporting burden of data providers, the CBS uses administrative sources rather than questionnaires, when possible.

The CPI program relies on both CBS national accounts and household budget survey data for expenditure weighting. In addition, the CBS maintains extensive contacts with other government agencies, such as tax and social insurance authorities, and signs formal contracts for information to be collected. The *Statistics Act* has facilitated these contacts by clearly establishing the CBS access to administrative records, as noted below.

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

In line with the *Statistics Act*, articles 37 through 42a, individuals reporters' data are kept confidential and used for statistical purposes only. Individual respondents data are only available to CBS staff charged with the compilation of the relevant statistics at the CBS. All employees sign a confidentiality agreement when they enter service at the CBS, ensuring that micro data remain confidential. Encryption is used when data are transmitted electronically. All CBS computers are password protected, and access to the CBS premises can only be obtained with an electronic pass card. Visitors have to report to reception and have to be accompanied by a CBS staff member when entering the CBS premises. Staff who disclose personal information on individual reporters commit a crime and may be dismissed and/or taken to court at the discretion of the Director-General of Statistics.

The nature of the CPI sample design in the Netherlands, as in most other countries, is that maintaining reporter confidentiality is not usually a significant issue in statistical publications. The CBS does, however, complete written agreements with major energy companies whose pricing information—usually publicly available in any case—may be discernable in CPI statistics.

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

Sections 33 through 36 of the *Statistics Act* specify the legal mandate under which the CBS collects data and ensure reporting. Under these provisions, the CBS is authorized to use, for statistical purposes, data from government registers, legal persons, companies, independent professionals, and institutions to fulfill its duties.

Section 43 through 52 of the *Statistics Act* relate to measures encouraging response. These sections of the *Statistics Act* specify the fines and penalties that the CBS can impose on legal persons, companies, independent professionals, and institutions that fail to provide the data in full or in time. As established in the *Government Gazette* of February 16, 2006, the

maximum amount to forfeit is Euro 20,000, but this amount can be raised in very exceptional cases to Euro 500,000.

0.2 Resources

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

The CBS's budgeting process is described in sections 14 through 19 of the *Statistics Act*. At least once every five years, the Director-General of Statistics has to develop a multi-year program outlining the CBS's activities. Every year, the Director-General of Statistics has to compile a work program for the following year, taking into account available resources. He must submit both work programs to the CCS for adoption. After adoption, the CCS sends the multi-year program to the Minister of Economic Affairs. Taking into account the view of the cabinet, the Minister notifies the Director-General of Statistics, the CCS, and the House of Representatives of the States General on the financial and organizational conditions to be met to realize the multi-year program. This notification is published in the *Government Gazette*.

In recent years, staff resources at the CBS have been reduced and further cuts are envisaged in the future. Nonetheless, staff, facilities, computing resources, and financing²⁴ are commensurate with the CBS's current statistical programs, except for the staff resources dedicated to the compilation of the PPI. While staff numbers have been reduced by five percent in the period from 2000 to 2005—in line with a general reduction in the size of the civil service—the current number of staff is broadly adequate to perform existing tasks. Staff are highly qualified in their areas of expertise and salary levels in the CBS are competitive with other civil service salaries in the Netherlands.

CBS staff have adequate computing (IT) resources available to perform their required tasks. While some software problems arise occasionally, these problems do not affect the overall quality of the statistics produced nor the effectiveness in which staff perform their duties. Computer resources are adequately protected, and the CBS has emergency backup systems in place for retrieval of data in the event of disasters or other unusual events.

Physical facilities of the CBS are adequate to perform required tasks. In 2008, the Voorburg office of the CBS will move into a new building. In light of the multi-year program and transparent planning and budgeting process, funding of the CBS is adequate to perform the required tasks stated in the approved programs.

Within the CBS the Consumer Prices task group of the Index Numbers, Prices, and Business Cycle Department (MIC) is responsible for organizing and overseeing monthly CPI production. Field collection staff are managed through the CBS unit in Heerlen. In aggregate, this comprises approximately 40 full-time equivalent (FTE) staff. Much of the responsibility

²⁴ To comply with new statistical requirements on the main macroeconomic indicators with respect to the European Action Plan, additional funds from the Ministry of Economic Affairs were made available. For example, the development and regular production of quarterly sector accounts are financed with these funds.

for index review and analysis is assigned to the Price Analysis and Process Support task group within MIC; these resources are shared with other programs. In addition, the Development and Support Department (MOO) currently provides approximately five FTE in long-term research support to the CPI program, and the Infoservice task group in the Publications and Communications Department (MPC) is the primary public contact for CPI information requests.

These resources are viewed as sufficient to perform the tasks required to produce and maintain the CPI. There is concern, however, about the ability to carry out valuable improvement projects. For example, the CPI program has plans to enhance quality by expanding the collection and use of retail scanner data, and also by modifying field data collection processes in order to incorporate new goods and services more rapidly. A recent risk analysis of CPI IT support indicated that current resource levels were sufficient to guarantee the reliability of regular production, but were insufficient to make software modifications associated with methodological changes. Unless steps are taken to reverse scheduled IT staff reductions, or to redirect existing IT resources to CPI projects, there is a strong likelihood that the index quality enhancements cannot take place as planned.

0.2.2 Measures to ensure efficient use of resources are implemented.

Under current government financial constraints, the efficient use of existing resources is one of the CBS's strategic objectives. The CBS's policy intentions are stated in general terms in the budget of the Ministry of Economic Affairs, and the CBS is accountable through a series of specific performance indicators.

In the current financial environment, the CBS management and CCS have paid special attention to the efficiency of statistical processes and meeting users needs. In the CPI, one notable source of efficiency gains is the use of supermarket scanner data to provide large sample sizes while substituting for monthly price recording by field staff.

Each year, each manager in the CBS agrees on a work program with its staff. Staff performance with respect to the agreed work objectives is assessed on an annual basis and outstanding performance is rewarded with extra remuneration (bonus).

0.3 Relevance

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

The CBS maintains regular contacts with the main users of official statistics through seven high-level advisory boards.²⁵ The Advisory Board of the Director-General comprises the chairs of the other six advisory boards and the directors of the four planning agencies in the

²⁵ Advisory Board for Society and Economics; Advisory Board for Economic Statistics; Advisory Board for Social Statistics; Advisory Board for Price Statistics; Advisory Board for Macroeconomic Statistics; Advisory Board for Methodology and Information Technology and the Advisory Board of the Director-general.

Netherlands. These planning agencies are the Netherlands Institute for Spatial Research, the Netherlands Environmental Assessment Agency, the Social and Cultural Planning Office of the Netherlands and the Netherlands Bureau for Economic Policy Analysis. The members of the other advisory boards are scientists from several universities in the Netherlands, and representatives from enterprises, firms, banks, unions, consumer associations, research institutes, and government ministries.

The Advisory Board for Price Statistics convenes twice a year. In one of these meetings, the main users of statistics comment and advise on the multi-year program and the annual work program of the CPI and the other price statistics. The other meeting is devoted to special topics.

Often, bilateral meetings are held between CBS and “strategic users” (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) at managerial level. Statistics Netherlands has assigned “account managers” (contact persons) to all strategic users to ensure that their data needs are met.

The relevance of CBS statistics is also monitored by means of the following performance indicators: the use of its online database (Statline), the coverage of CBS press releases, and references to CBS data in parliamentary documents.²⁶

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The CBS has several processes in place to focus on the quality of the statistics it produces. In 2000, the CBS established a separate unit dedicated to quality verification.

Recently, a project to enhance the quality of the CBS’s statistical outputs was initiated with the objective of establishing standards for quality of the outputs. All statistical outputs and processes will have to comply with these standards. In 2006, the CBS started conducting risk analysis for those statistics that are the most important for the corporate image of the agency. These analyses provide an insight into the risks associated to different element of data quality, such as accessibility, accuracy, timeliness, coherence, relevance, and reproducibility of the output.

This process of quality assurance is intended to enhance the transparency and the quality of the compilation procedures and the statistical products. The chain from source data to statistical output often crosses the borders between the organizational units within the CBS. Recently, a new method which takes into considerations both the quality of the statistical output and the processes, including consistency within the production chain, was applied as part of a quality assessment study of economic statistics. The results of this study were very favorable.

²⁶ Some of these are performance indicators referred to in dimension 0.2.2.

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

Three processes are in place to monitor the quality of the CBS's statistical program:

- **Statistical auditing**, to assess the quality of the statistical outputs against EUROSTAT quality benchmarks.
- **Respondent and user survey of the CBS**, to assess the views of existing parties involved in providing and using the CBS's products.
- **Verification by the European Commission according to EU regulation 3605/93.** According to Article 8 of this regulation, bi-annual reports on government deficit and debt are assessed by EUROSTAT before publication. Member states also have to submit an "inventory of sources and methods" relating to the Excessive Deficit Procedure to EUROSTAT. Also, EUROSTAT conducts official, regular dialogue visits to member states to evaluate and discuss data transmission and EDP inventory. EUROSTAT may also, in some cases, conduct visits to member states to discuss methodological issues.

In 2006, an audit was carried out relating to a change in the timing of CPI field data collection, in which data collection was spread throughout three collection weeks instead of just one specific day within the month. The audit evaluated the new procedures and how successfully the CPI work of the associated units was coordinated.

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

The DMK is responsible for expansion of knowledge, the development of a general framework, the coherence and the standardization of the statistical processes, and the implementation of the frameworks for general statistical methods, quality assurance, and process development.

The DMK ensures continuous renewal of the statistical processes by (1) providing methodological support to new projects; (2) maintaining the business and information architecture of the CBS; and (3) conducting business analyses.

The Macroeconomic Statistics and Publications Division, which includes CPI production, has its own department for research and development (MOO). Capacity for research and development is available without compromising the regular statistical output. As noted above, some MOO resources are currently assigned to CPI research.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The CBS places a high premium on its impartiality, as evidenced in the *Statistics Act*, which established the CBS as an autonomous agency, under the aegis of the Ministry of Economic Affairs, on January 3, 2004.²⁷ The Act also affirmed new rules concerning the acquisition, use, and provision of data in the context of the supply of statistical information domestically and internationally. The CBS has two management bodies: a Director-General of Statistics (DGS) and the Central Commission for Statistics (CCS). By law, the DGS cannot be a civil servant subordinated to the Minister of Economic Affairs. Furthermore, the DGS shall not hold any secondary appointments which may interfere with the proper performance of his function of preserving his independence or trust in that independence.

The CBS has adopted a Code of Practice²⁸ based on the *European Statistics Code of Practice*,²⁹ where the main focus is on promoting trust and confidence in the independence of the CBS. The impartiality of the CBS in producing statistics is safeguarded in the code, which states that:

“The statistical information Statistics Netherlands produces is intended to contribute to the effectiveness of public debate on a wide range of topics. Not only must this information be accessible and available to all parties in society, but everyone must have access to the same information at the same moment in time. Statistics Netherlands remains impartial with regard to the various interested parties in society. Statistics Netherlands also applies the principle of ‘impartiality’ to specially requested tasks: the results of work requested and paid for by third parties are not made available exclusively to these third parties. To guarantee its impartiality, Statistics Netherlands publishes release dates for information well in advance.”

Recruitment and promotion of CBS staff is done exclusively based on relevant aptitude and/or expertise. CBS staff regularly and actively participate in seminars, courses, and workshops arranged by regional and international organizations to further their statistical knowledge in their field of expertise.

The CBS has a long-standing culture of professionalism in the workplace. This is evidenced by recognition of authors of research and methodological papers, organization of conferences and lectures, and peer review of statistical work. Staff from statistics offices in both developing and advanced economies often visit the CBS to learn from its practices and

²⁷ There is no longer a hierarchical relationship between the Minister of Economic Affairs and the CBS.

²⁸ See www.cbs.nl/en-GB/menu/organisatie/corporate-informatie/richtlijnen/code-of-practice.htm

²⁹ See CENEX SDC *Handbook on Statistical Disclosure Control*, March 2007.

procedures. The CBS staff also participate actively in international working groups and some CBS staff are in key positions in international forums.

The DMK is responsible for research and analysis in the CBS. The work of this Division is also supported by research and development work done by the Development and Support Sector of the Macroeconomic Statistics and Publications Division (i.e., the division responsible for, among others, national accounts, price statistics, and GFS).

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

The CBS's choices of data sources and statistical techniques and decisions about dissemination are informed solely by statistical considerations. According to Section 18 of the *Statistics Act*, the Director-General of Statistics shall determine the methods by which the studies included in the work program and multi-year program of the CBS will be carried out, and the manner in which the results of these studies will be published. Decisions on data dissemination are guided by international guidelines, such as the IMF's SDDS and the regulations of the European Union.

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

The CBS has internal guidelines that are available to all staff for appropriate procedures to be followed for acting (or not acting) on the erroneous interpretation and/or misuse of its statistics. The CBS monitors media coverage of its statistics, publications, and activities on a daily basis. Communications policy is handled by the Communication Division of the CBS.

In the context of the CPI, a recent CBS paper³⁰ addressed the causes of the frequent divergence between the public perception of consumer price inflation and the price change estimates published by statistical agencies.

1.2 Transparency

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

All information on the legislation and regulations governing the CBS are available on its website (www.cbs.nl), under "About Us," and in its library. While *Legislation* is not a specific heading in the site index or on the web page, the *Statistics Act* is easily accessible.

³⁰ See Roel Canisius, "Gevoelsinflatie: Het verschil tussen waargenomen inflatie en perceptie," available on the CBS website at <http://www.cbs.nl/NR/rdonlyres/AB3F1E9D-EFED-4FD9-9393-E59F762D5C9B/0/2007gevoelsinflatieart.pdf>.

The IMF's Dissemination Standards Bulletin Board (DSBB) includes, under the heading "Integrity" the terms and conditions under which the CBS's statistics are produced, including those relating to confidentiality and individually identifiable information.

All CBS publications identify where more information about the CBS and its products can be found, for example, by referring to the CBS website (www.cbs.nl).

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

With one exception, there is no internal government access to statistics prior to their release. The Dutch version of the CBS's website includes the policy concerning the publication of statistics and makes public the cases in which prior access to the statistics is given to the government. As stated in the *Statistics Act*, some strategic relations of the CBS (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) are able to access (under embargo) relevant statistics prior to the public release. In order to be granted prior access, the following conditions must be met:

- The strategic relationship must have a formal involvement with the subject matter;
- Pre-access is of crucial importance to the relationship, for example to prepare answers to possible questions about statistical results; and
- The interests of other parties are not harmed.

The website also shows a list of eight categories of statistics where prior access (under embargo) is granted. Furthermore, information on the organizations that have prior access to the data and the time of access is disseminated to the public. No one outside the CBS is given access to the CPI prior to its general release.

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

All CBS press releases and other publications are clearly recognized as products of the CBS by using the CBS logo, and referring to the CBS in the first section and/or in the introduction.

Data from Statistics Netherlands in ministerial reports and in the *Budget Memorandum* are identified as such in footnotes. CBS publications and website (under "copyright") noted that information may be quoted, provided that the source is stated accurately and clearly.

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

The CBS publishes information on changes in statistical procedures on its website and in all relevant publications (e.g., *De Nederlandsche Conjunctuur* or "The Dutch Business Cycle" and *De Nederlandse Economie* or "The Dutch Economy"). In addition, methodological changes as well as their consequences are communicated in press releases.

In the case of the CPI, methodological changes, reclassifications, and periodic weight updating are routinely announced in advance.

1.3 Ethical standards

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

Chapter 4 of the *Code of Practice* of the CBS describes the behavior of CBS staff relating to the following six principles: impartiality, reliability, relevance, cost effectiveness, statistical confidentiality, and transparency.

Furthermore, the *Integrity Policy of the Statistics Netherlands* is available for all employees on the CBS's internal website. This handbook contains provisions on integrity and the applicability of this policy within the CBS.

New staff should sign a declaration to observe secrecy when entering duty at the CBS. All new staff should submit a "certificate of incorporation" from the local police vowing never to be involved in criminal activity. A few months after commencement of employment, all staff should take an oath (for example, to be loyal to the Constitution, etc.) before the Director-General of Statistics.

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 CPI generally follows internationally accepted concepts and definitions as specified in the international *CPI Manual* and for the *1993 SNA* and HICP. Among the minor and/or internationally common exceptions to the *1993 SNA* are the exclusion of illegal goods and services, the way expenditure weights for insurances are dealt with, the exclusion of expenditure by institutional households, and the exclusion of expenditure weights for gambling and prostitution.

CBS publishes the national CPI as the key measure of inflation in the Netherlands and compiles the Harmonized Index of Consumer Prices (HICP) following the HICP regulation. The two indices are derived from the same source data but have some differences in terms of concept, scope, definition, and classification.

The CPI is widely used by the public not only as a measure of economic activity but for indexation of rents and other individual contracts. Component CPI series are sometimes employed by the Ministry of Finance for tax legislation. CBS also publishes a constant tax rate index (the CPI minus changes in taxes plus subsidies), which is often used in wage negotiations. No regional CPI indices are published. In all the discussion that follows the CPI described is the national CPI.

Concepts that do not follow international standards are kept under review. For example, as of January 2007, gross rather than net expenditures and prices for child care are used in the CPI.

The CBS chooses to account for government and employers' child care contribution in Netherlands income statistics and not in the CPI because they contain elements of income transfers.³¹

Expenditure weights are broken down at the Division (14), Group (42), Class (95), and Sub-class (114) of the COICOP classification, using household budget survey data for disaggregation within higher-level national accounts values.

Weights are also broken down by branch of trade. Currently, some 68 different branches (outlet types) are distinguished. The intersection of these classifications yields a weighting scheme of all relevant COICOP/outlet type combinations.

2.2 *Scope*

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

The overall CPI scope is defined in broad accord with approved practice and recommendations found in the *CPI Manual* and other authoritative sources. Among the items within the scope of national accounts household consumption, the CPI does not cover games of chance, life insurance, pension premiums, and Financial Intermediation Services Indirectly Measured.

The CPI covers expenditures on the Dutch territory and abroad from the net disposable income of all Dutch resident, noninstitutional households. By contrast, in the HICP expenditure weights of institutional households consumption are included, along with expenditure of nonresidents on Dutch territory. Expenditure of residents abroad is excluded from the HICP.

CPI includes urban and rural households, households whose primary activity is farming or fishing, and households of all sizes and income levels. Households whose major activity involves an unincorporated business activity and who can separate records on business and private consumption purchases are also included in national accounts consumption and therefore in the CPI.

The transactions within the scope of the CPI correspond to monetary final consumption of market goods by households. The CPI excludes the sales of illegal market goods and services for consumption. Own-account production of market goods for own final consumption is in scope, using national accounts estimates. Savings are excluded. Payments which have a large savings component, like premiums for life insurance and pension plans, are also excluded. Included in the CPI are premiums for private health care insurance and direct health care payments that are not covered by insurance. Health care under social insurance is excluded.

³¹ This change was announced in the January 2007 CPI press release, "January's inflation at 1.4 percent", on the CBS website at www.cbs.nl/NR/rdonlyres/E6F5F2C3-D966-42FB-A9C7-4580EA83E7C1/0/pb07e012.pdf

As noted in the next section, the CPI includes a category for consumption-based taxes, some of which are not usually included in consumer price indices.

The Netherlands CPI corresponds conceptually to a consumption CPI by employing imputed rental value as the measure of shelter cost for owner-occupants. Fixed capital formation of residential structures is not in scope.

2.3 Classification/sectorization

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

In general, the Netherlands CPI classification is on a COICOP basis, but several notable deviations are made that are not in accord with international standards. Most significantly, two artificial divisions are added. In CPI tables, COICOP division 13 includes consumption based taxes and government services and COICOP division 14 includes expenditure by Dutch residents abroad. Together, using the current 2006 relative importance values, these two artificial divisions comprise about eight percent of the overall CPI.

Certain components of division 13 are spending categories that are ordinarily located in other COICOP groups; an example is sewerage charges paid to governmental units. Among these consumption-based taxes are some taxes that appear to be based on the ownership, as opposed to the purchase, of consumption goods; examples are pollution taxes, motor vehicle taxes, and dog taxes. Taxes assessed as a percentage on consumer durable asset values, for example, apparently would be within the scope of division 13. This would be a deviation both from the COICOP classification scheme and from recognized best practice for defining consumption spending. The CBS, however, views the CPI treatment of consumption based taxes as being in line with a consumption index. They note, for example, that sewerage charges can be divided into fixed and variable parts, and only the variable part is included in the CPI. Also, dog taxes, although charged on the basis of ownership, in practice are paid for usage of public areas.

Another reassignment of spending across the usual COICOP classification applies to tuition fees. These are classified in division 10 for the HICP but in division 13 for the CPI because of a significant component of state payments.

Finally, some deviations from the standard COICOP assignments result from the CPI's non-standard treatment of insurance, which is discussed in a later section. In the CPI, for example, both gross premiums for private health care insurance and direct health care payments not covered by insurance are in COICOP division 12. In the HICP, net premiums are in Division 12, but health care spending financed by private insurance is allocated to Division 6.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

The basis for recording generally follows procedures consistent with international standards. Consumption expenditure is valued at purchasers' prices, which include trade and transportation margins and applicable taxes less subsidies on products. List prices and scanner data are collected from some outlets and centralized sources, representing transaction prices. Discounted prices are recorded only when the discounts are not discriminatory and can be obtained without difficulty. The CPI does not exclude second-hand goods. Thus, used car prices are included in the CPI.

Product specifications include price determining characteristics related to the terms of transactions. For example, product specifications prescribe whether or not delivery costs, services costs or guarantees are reflected in the price.

2.4.2 Recording is done on an accrual basis.

The CPI is a monthly index that reflects the situation for the month as a whole. To further this objective, collection of most products is spread over the first three weeks of the month. An exception is the collection of prices in December, which is limited to the first two weeks to avoid the Christmas rush. Petrol prices, obtained by CBS from a secondary source, are registered every day of the month. In the case of supermarket scanner data, the first two complete weeks (beginning on Monday) of the month are used.

Rental data are collected once a year because these are usually updated annually in July in the Netherlands. Taxes on consumption and a small number of other prices also are not collected monthly.

Prices correspond to the time of purchase. For example, some collected airline fare prices apply to the current ticket price for travel two weeks later.

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

Insurance items in CPI are defined on the so-called gross-gross basis and thus deviate from international guidelines, although this treatment is not unique to the Netherlands. The weights for insurance are based on gross premiums paid by consumers, and these spending categories are priced by collecting information on gross premiums charged for policies with specified contract terms. While CPI weights are based on national accounts data, the amount for insurance are corrected for benefit payments.

Under this approach to insurance, changes in the consumer environment that lead to an overall increase in the level of claims, such as more traffic accidents or higher disease incidence, will lead to an increase in the CPI, because premium charges will rise even absent increases in the prices for covered services. In the CBS view, it would be appropriate to make quality adjustments for such changes in risk, but in practice this would be difficult.

The weight for used cars in CPI is based on national accounts data using a net acquisitions basis. That is, the value for used cars represents acquisitions less disposals.

3. Accuracy and reliability

3.1 Source data

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

The CBS maintains a detailed and innovative program for the collection of CPI expenditure and price data.

Expenditure weights

The principal source for the CPI expenditure weights to the four-digit COICOP level is the household consumption data from the national accounts produced by the CBS. For the compilation of these household consumption data, important sources are the annual surveys of business statistics (specifically statistics of retail trade) and foreign trade statistics.

Prior to 2007, the CPI weights were updated every five years, but the expenditure weights are now subject to annual updating. Based on simulation studies by the CBS, the CPI expenditure weights for year $y-1$ (y being the year of publication) are based on NA household consumption data of year $y-2$. For example, the base and reference year are now 2006. The 2006 weights were estimated by using the preliminary data for 2005, the latest available year, with no price updating. The CBS analysis found this to be superior to using final national accounts data for a year prior to 2005. Weights and index series are not revised when final data on expenditures for year $y-1$ become available. Expenditure data from year 2005 are taken to represent the structure of consumption expenditure without price-updating in 2006, because keeping the consumption shares constant was demonstrated to be more accurate than keeping the implicit quantity structure constant.

The household budget survey is compiled annually. Survey data for 2004 are currently being used to allocate lowest-level CPI expenditure shares. The decision to use budget survey data only for detailed disaggregations appears prudent, given that there are concerns about the representativeness of the household sample and results. There was no budget survey in 2001-2002, and the process and methodology of the survey have recently undergone major revisions. From 2005 forward, the sample of households in the household budget survey has been divided into two groups. Households within the first group keep a budget diary for expenses exceeding 20 Euro, plus holiday expenses and expenses on gas, electricity and water. The realized sample size for this group is approximately 6,000 households per year in total. Households in the second group keep a budget diary for all expenses, including periodic payments. The sample of households for this group is relatively small, approximately 1,500 households. As sampling frame a register of postal addresses combined with a municipalities register of all households and individual persons is used. The budget survey has an appropriate coverage and design, but the small sample size leads to some

concern about future volatility of estimates over time and CPI staff are considering methods to deal with that problem.

Plausibility of the expenditure weight results is examined against various kinds of external source data. In addition, when appropriate, a special targeted update can be carried out, using complementary sources. An example results from the new health care insurance system that was introduced in the Netherlands in 2006. Since social insurance is not covered by the CPI this change in the system resulted in a significant shift in the health care covered by CPI.³² Therefore, the national accounts figures for medical health care from 2005 were viewed as unrepresentative for the use in 2006 CPI expenditure weights.

Sampling and price collection

The design of the CPI price survey ensures broad coverage of a vast majority of goods and services. Approximately 81 percent (scanner data excluded) of all prices are collected locally by interviewers visiting retail outlets throughout the Netherlands.

Sampling is carried out at various stages. In terms of geographic coverage, all cities with more than 100,000 inhabitants are included in the index with certainty. A sample is drawn from the cities with between 10,000 and 100,000 inhabitants, and municipalities with less than 10,000 inhabitants are excluded. A total of 101 municipalities are included in the sample. This method is believed to ensure adequate representation throughout the Netherlands. It should be noted that field staff collection for the CPI is only carried out in the larger municipalities. Other types of CPI collection do cover the smaller municipalities, however.

No regional indices are compiled. That decision is justified by CBS on the basis of the geographical compactness of the country.

About 9,000 outlets are chosen for the survey. These are classified according to the 68 outlet types mentioned above. The outlet selection has a clustered design; the sample is determined centrally and has developed over time based on gradual expansion rather than scientific sampling, although the CBS is studying the potential use of a business register for future probability sampling. Price collectors can suggest new outlets if necessary. Mail order outlets, Internet shopping, and market stalls are included.

The sample of products representing consumption is also specified centrally, based on information from producers, commodity boards, scanner data and market research. The aim is to represent the full range of products currently on the market. About 1,300 different products are included in the CPI for pricing. In most cases, product specifications for these products are tight, and the CBS believes that for each product group there are enough products to ensure good representation of the product group as a whole. In some cases, notably durables, the price collector can decide at the outlet between a small number of

³² See the December 2006 announcement “Base shift Consumer price index in 2007” available on the CBS website at www.cbs.nl/NR/rdonlyres/D7F5BD8D-AA59-4A77-B15B-F389D720B87D/0/PB06e813.pdf

predefined items which the CBS considers to be equivalent. In subsequent visits, however, the price collector has to observe the price of the item chosen initially. For clothing, on the other hand, very loose specifications are used and the price collector is instructed to choose the most frequently sold items. For most products different outlet categories are distinguished. This results in around 2,000 product/outlet type combinations and price indices. Product/outlet price indices are only used for computations and are not published.

Price measurement of second-hand goods is limited to used cars. Net acquisitions of other second-hand goods are included in the weighting scheme but these purchases are not covered by a price survey.

On average about 63,000 prices are collected monthly in the process described above. In addition, prices from one supermarket chain are collected using scanner data pertaining to all transactions in the shops concerned. These scanner data include data on sales volumes and quantities per item, specified by European Article Number (EAN). Also included may be a text field to identify the type of item and a store-level aggregation code. These scanner data are used in the CPI to represent about 30 percent of all supermarket purchases. The CPI program is currently developing plans, subject to resource availability, to expand scanner data use.

As noted above, approximately 81 percent (unweighted and not counting scanner data) of CPI prices are collected locally. CBS price collectors, who do not work full-time on the CPI, visit the outlets and record prices on paper. They then typically transmit the data at the end of the day using laptop computers to the Heerlen office, from which it is sent to the central CPI office at the end of the week. Central price collection is done by telephone, paper questionnaire, searching prices on the internet or other appropriate means.

For housing services, the CPI tracks developments in the rents of approximately 12,000 dwellings each year. The sampling frame for housing services covers all houses and apartment units with a separate postal address. Apartments are not included if they have shared facilities such as kitchens or bathrooms. The selection of housing units is made by random selection. The units are distributed by stratum according to house owner, period of construction, type of building, number of rooms and region.

The CPI follows the HICP procedure for newly significant goods: truly new products (for example, DVD players) are introduced in the index when they become significant in their market segment. This has usually—but not always—taken place in connection with a base revision. A new product model, for example a car, is introduced as a new representative item in the course of the year if it replaces an old outgoing model. For genuinely new products there is usually a testing period in which prices for a product are collected. The resulting product index is not included in the CPI until price collection has proven to be successful. Among the process improvements being considered by the CBS are new methods to encourage more rapid incorporation of new products in the CPI sample.

CPI specialists frequently contact enterprises, trade organizations and groups representing users. The aim is to monitor changes in the markets that are appearing or are expected to appear in the near future. These contacts may also be used to find out about price changes

that appear in the data, particularly if they were not foreseen. The CBS also participates in the HICP working group, the aim of which is to harmonize the price collection and calculation methods which are used in EU countries to improve data quality and comparability.

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

Prices of most products are collected monthly. All price collection takes place within the publication month. In a small number of cases, when prices are known to change only once or a few times per year, price collection is less frequent; examples are quarterly pricing for magazines, motorcycles, and some repairs. The average prices for package tours are measured twice a year: in the summer season and in the winter season. Housing rents are collected only in July, as noted above.

The CPI index for used cars is derived from an index created and maintained using hedonic methods and provided by an outside company; data are reported to the company by garages.

3.1.3 Source data are timely.

As noted above, most CPI data are collected over the first three weeks of the reference month, with notable exceptions for scanner and fuel data. Interviewers and central CBS staff have follow-up procedures to ensure timely receipt of source data. Timeliness of the price collection survey is adequate for disseminating the CPI according to schedule.

3.2 Assessment of source data

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

CPI price data are routinely assessed using clear rules. First, when interviewers enter price data into their computers, the figures are checked for validity of the results. If there is a large divergence from the previous price, the interviewer is asked to confirm the new price. After the prices have been sent to the central office they are automatically checked. Prices that increase by more than 850 percent or decrease by more than 85 percent are rejected automatically. Every month approximately 200 prices are rejected. Other exceptional price changes are verified against price collection sheets or by calling the price collector or the outlet. Centrally collected prices are checked in a similar manner. Twice-yearly meetings are held with field staff managers to discuss how data collection quality can best be maintained.

Periodic assessments have been made of secondary price data sources, including those for used cars and motor fuel. National accounts data are investigated and assessed before using them to compile CPI weights. The same applies to the household budget survey.

No information is available, however, on the sampling errors of component or aggregate CPI series, and there are no recent CBS studies of this issue. Neither are there standard error estimates associated with the CPI expenditure weights, because these are taken from the national accounts.

3.3 *Statistical techniques*

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

In general, the CBS employs appropriate statistical techniques in index calculation, imputation of missing values, and quality adjustments.

As noted above, all price data entered into the CPI computer system are checked for extreme changes. If the difference is large, the interviewer is asked to confirm.

If a price is rejected or if a price cannot be observed (i.e., nonresponse) a price is imputed in the system. Normally, prices are imputed using the average monthly change of prices for the same product collected in the same outlet type. Only if reliable information is available indicating that prices have moved in a certain direction will this imputation be adjusted. In any case, as soon as new price information becomes available the index computation assures that the long-run index change is in accordance with the new price level as compared to the last collected price.

Sampled items are normally replaced if prices are missing for two or three in-season months. A product-offer is missing if no observation meeting the specification is made in an outlet (even if the product is likely to return and there is a price label indicating a price). In this case missing prices are imputed and the outlet is replaced by another outlet.

CBS staff are able to monitor the sample size for a sampled product. If the sample size for the product declines sufficiently, it will be replaced in the sample by an equivalent product.

Seasonal products are treated by giving them seasonal weights. Prices are carried forward but product weights are zero in out-of-season periods. When a product comes into season again, the new prices are compared to the prices last observed for the previous season to compute the product index. Aggregate weights are constant through the year for all 5-digit COICOP groups. This approach should avoid the defects of the seasonal carry-forward practice.

Quality differences between new and replaced products are handled by the CPI central office analysts using a variety of methods, including direct comparison (i.e., no adjustment to the price), proportional quantity adjustment for small changes in package size, option prices (frequently used for new cars and computers), and imputations using other observed price changes. It is noteworthy that the matching and comparison of new and old items is a particularly ambitious and resource-intensive in the Netherlands CPI because of the large number of scanner data prices being processed each month.

No hedonic methods are used in the CPI, although there is a pilot project to examine the possible use of the hedonic model for computers.

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

Except in special cases, such as the externally-supplied used car series, an unbiased formula, the Dutot ratio of average prices, is used for CPI index calculation at the elementary (product/outlet) level where the sample should be acceptably homogeneous. The method to aggregate elementary indices to higher levels uses an internationally accepted Laspeyres formula.

For the supermarket scanner data, the elementary indices are at the level of the EAN-code. These indices are based on unit values for outlets in the same chain. The EAN code index are weighted together according to the Laspeyres formula with weights from the previous year. Expenditure shares are held constant from the weight reference period (yielding a Young-type index).

Aggregate indices are calculated using the Laspeyres formula with the previous year as index and weight reference year. The weight reference period was updated in 2006 and henceforth will be updated yearly. When new weights are introduced the new index is linked to the old index using an internationally accepted technique. From January 2007 forward the index reference period for the long term time series will be set at 2006=100.

For owner-occupied housing, consumption is valued as the estimated rentals that tenants would pay for similar accommodation. As noted above, this is obtained by means of a national stratified survey of rental companies. The CBS, however, makes no effort to distinguish shelter inflation for renters and owner-occupants. The two CPI indices are identical. The Dutch housing market is carefully regulated and rent changes are limited except when there is a change of tenant or when the quality of the unit changes. This year, the maximum allowable increase was only 1.1 percent. Nevertheless, it would be potentially quite useful to examine whether rent inflation varies with respect to geographic location, housing unit type, or other factors that might be expected to vary between renters and owners.

For new automobiles, the CPI records the list (“sticker” or “catalog”) price with no recognition of discounts negotiated between customer and dealer. The CBS believes that these discounts, although present, are roughly stable over time; moreover, the CPI is a measure of price change and not price level. Examination of this assumption could be a fruitful area of study, however, given the volatility and importance of automobile discounts in some other countries.

3.4 Assessment and validation of intermediate data and statistical outputs

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

Index results are reviewed and assessed against available information by a separate analysis unit not involved in monthly production. Month-to-month changes and results of product

indices are compared to earlier years and checked. In case of doubt, feedback is given to responsible staff in the production process.

Movements in the CPI can be compared to the HICP as well as to the PPI and other CBS price series.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

Unusual or unexpected movements in the index arising from large movements in particular sectors or from particular reporters are investigated thoroughly before publication. In the case of unexpected prices, the respondents may be asked to re-evaluate the reported price data. In the case of lack of observations the imputed prices are investigated.

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

Assessment of inconsistently imputed prices is part of the regular checking procedures. If discrepancies are discovered appropriate measures are taken to remove them. In case of unexpected outcomes the reasons are investigated. The CBS does not calculate indices for different geographical areas so inter-area differences cannot be assessed.

3.5 Revision studies

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

The CPI is final after one month and seldom revised. In the past, expenditure weight updates have been analyzed for evidence of substitution bias. Now that annual updating is in place, no similar studies are planned, but COICOP weight changes will be thoroughly reviewed. The results of the studies are used to inform the statistical process.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

The CPI is produced on a monthly basis, in accord with SDDS standards.

4.1.2 Timeliness follows dissemination standards.

The CPI is released in a timely manner, usually on the first or second Thursday following the end of the reference month.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

Within any expenditure base period the CPI is fully consistent in aggregation: higher-level indices can be calculated from their constituent series using the basic Laspeyres-type formula. With annual updating of weights, however, longer-run consistency is necessarily lost.

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

The CBS policy for the CPI is that when changes in the index are introduced, in particular when the base period is updated, no historical series are reconstructed. This is justified in part by the possibility that COICOP aggregates can be added or removed and methodology can be changed. This was the case at the last base year revision. A new series was published starting in January 2006 with index reference period 2006=100. Series running from January 2000 to December 2006 with index reference period 2000=100, and running from January 1996 to December 2002 with reference period 1995=100, are also published. With knowledge of component relative importance at a link month, it is feasible, although not trivial, to account for the weight changes in constructing aggregates from components. This issue applies to any index with revised weights.

Past base period revisions have been documented and analyzed in various articles.

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

The use of national accounts weights in the CPI, and of lower-level CPI series in the national accounts, ensures that CPI indices can be reconciled at higher levels with corresponding national accounts series as well as with the HICP, which uses similar source data.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

CPI series are preliminary for one month and this is clearly noted on the website and in press releases. Weight updates now will take place every year on a regular schedule. Past updates have been explained to the public by press releases, and the CBS intends to continue this practice with publications on the internet site.³³

³³ See the announcement “Base shift Consumer price index in 2007” cited in the previous footnote.

In 2003, an error in processing scanner data was discovered that necessitated republishing more than a year of CPI data. This problem and the extent of the associated data revisions were announced to the public at the time of the correction.³⁴

4.3.2 *Preliminary and/or revised data are clearly identified.*

The preliminary data for the first month of release are identified in CBS tables and publications.

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

As mentioned above, CPI data can be revised after one month but this is very infrequent. As a consequence, no formal analyses of these revisions have been conducted.

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 CBS website makes detailed data available with the CPI release. Data series can be downloaded from the website in a variety of formats.

Detailed CPI statistics are accompanied by monthly press releases on the website in Dutch and in English.³⁵ The press releases start with a short analysis of current outcomes and developments. The Dutch version contains tables with time series for the overall CPI series, outcomes on a disaggregated level and international HICP figures. The releases also contain data on the contributions of disaggregated levels to the overall CPI. Apart from the press release the results are also published in the statistical bulletin, a weekly CBS publication.

A second way of dissemination is by the publication database (StatLine). In StatLine, the CPI figures are presented on a 5-digit level and annotated by metadata. Extended time series for inflation figures—although not index levels—are included. StatLine offers the possibility to make tables and graphs based on the CPI or HICP series to facilitate analysis.

CPI figures are only presented in a non seasonally adjusted form. This may reflect a reasonable allocation of staff resources, although the extent of seasonality in the CPI has not been studied in recent years.

³⁴ See “Statistics Netherlands reduces the consumer price index”, August 5, 2003, on the CBS website at www.cbs.nl/NR/rdonlyres/4E6FD3F4-17BE-47C9-B053-6DC4C705E558/0/pb03e810.pdf

³⁵ Examples of the English and Dutch CPI press releases are, respectively, available at www.cbs.nl/NR/rdonlyres/8F249158-217C-4336-B56A-775F909C2CE3/0/pb07e068.pdf and www.cbs.nl/NR/rdonlyres/982AC286-2E63-4163-B9B0-7DDB93753BEF/0/pb07n068.pdf

As noted in section 4.2.2, CPI series ending in the current month are only made available to users in a convenient fashion from January 2006 forward. Series below the total-CPI level going back more than two years have to be linked together using indices with earlier reference bases. Historical index series extended prior to the mid-1990s are only available by request. Although this approach is defended on the basis that the indices are not consistent in aggregation across weight updates, it appears to impose an unnecessary burden on any user who wishes to make longer than annual price level comparisons.

5.1.2 Dissemination media and format are adequate.

The CPI press releases are published on the CBS website and disseminated by e-mail to press agencies and other subscribed parties without charge. Also, a flash version containing the main figures is sent to press agencies. The goal of the press release, which covers seven or eight pages, is to explain the figures and underlying developments in a user and media friendly way. CPI press releases are usually well covered in the media.

5.1.3 Statistics are released on a preannounced schedule.

The CBS provides a schedule of CPI release dates well in advance, as of this writing through June 2008. In addition a weekly agenda, announcing press releases, is placed on the CBS website every Friday. In August 2003, when the above-noted errors in scanner data computations were discovered, it was announced a few days in advance that the publication date would not be met. Apart from that event, releases have always been punctually issued.

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

CPI figures can not be viewed before publication date. The figures are made available to all public at the same preannounced time, 9:30 a.m. on Thursday, by press release and publication database. The press, ministries and central bank are not briefed in advance. Questions by public are answered centrally by CBS Infoservice if possible.

5.1.5 Statistics not routinely disseminated are made available upon request.

Unpublished CPI data are not made available to the public, except for some special-purpose aggregates that are based on official figures for use by, for example, central banks, ministries, planning agencies. These series are available to everyone in principle 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.

A great deal of specific information on CPI definitions and methods is available on the CBS web site, including analytical and background papers.³⁶ Many of these are in Dutch only but some are also in English. Press releases and StatLine tables contain helpful metadata on sources and definitions.

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

A brochure is available for wide distribution that explains the basic concepts and construction of the CPI.³⁷ At a more technical level, an internal tool is available that makes it possible for CPI staff to address questions about the effect on the CPI of excluding individual price series. Technical and analytical articles concerning the CPI are found on the website.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized.

First line support regarding nontechnical CPI issues is handled not by the CPI staff but by the CBS Infoservice unit. Releases and publications on the CBS website clearly identify Infoservice contacts for CPI information. Second line support and technical questions are handled by CPI specialists, either by email or by phone. Answers are provided within one working day if possible. The Infoservice maintains a database including CPI questions from users and the associated answers. The timeliness and quality of assistance to users is routinely monitored by the CBS.

The CBS has designated a spokesman to have primary responsibility for CPI questions. Web articles are accompanied by the names of the authors. Questions on these articles are answered by the spokesman if possible, otherwise by the authors.

³⁶ See, for example, Heymerik van der Grient, “Scanner Data on Durable Goods: Market Dynamics and Hedonic Time Dummy Price Indexes”, Discussion paper 04011, August 2004, on the CBS website at www.cbs.nl/NR/rdonlyres/1A1F8D6B-B246-4092-92DD-52516E1F06B7/0/discussionpaper04011.pdf

³⁷ See the CBS website at <http://www.cbs.nl/NR/rdonlyres/A4EB37F7-FAE1-439A-B3DF-2EB663D7784C/0/2007prijsindexengelsart.pdf>

Detailed information from the CPI database is available by using StatLine. CBS is working on a new version of StatLine to improve its user-friendliness.

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

All publications and press releases are catalogued on the website. These are available without charge.

Recommendations for the Consumer Price Index

- Consider whether information technology resources can be made available to facilitate CPI quality improvement projects such as the expansion of scanner data use (0.2.1).
- Reconsider the deviations from standard COICOP classification for the CPI, particularly the inclusion in the index of taxes based on consumer asset holdings (2.3.1).
- Affirm or reconsider the current treatment of insurance on a gross-gross basis (2.4.3).
- Undertake research into the development of a statistically-based outlet sample (3.1.1).
- Examine whether and how information on CPI sampling errors could be developed for use in monitoring the accuracy of the index (3.2.1).
- Analyze differences in the distribution of renters and owners by location, structure type, etc. and whether recognition of those differences could affect the measure of housing inflation (3.3.2).
- Measure the size of consumer discounts on new automobile purchases over a period of time to determine whether ignoring those discounts is acceptable practice (3.3.2).
- Reconsider the decision to present only short-term time series for CPI indices (5.1.1).

Table 2. The Netherlands: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Consumer Price Index)

(Compiling Agency: Statistics Netherlands)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X	X			
2.3 Classification/sectorization				X		Deviations from COICOP classification. Inclusion of consumption based taxes and spending abroad in separate COICOP groups.
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of source data		X				
3.5 Assessment and validation of intermediate data and statistical outputs		X				
3.6 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

III. PRICE STATISTICS (PRODUCER PRICE INDEX)

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

Statistics Netherlands (CBS) and the Central Commission for Statistics (CCS)³⁸ were established under the *Statistics Act* of 2003.³⁹ The main objectives of the CBS are to promote official statistics that meet the demands of users for purposes of practice, policy, and science, and to promote accuracy and completeness of all statistics published.

Against this background, the responsibility for collecting, processing, and disseminating (at the national and international level) all macroeconomic statistics (excluding balance of payments and monetary statistics) rests with the CBS. This responsibility is clearly defined in the *Statistics Act*, sections 3 and 4, which state that:

- The task of the CBS is to carry out statistical research for the government for practice, policy, and research purposes and to publish the statistics compiled on such research; and
- The CBS is the national authority for the production of (European) Community statistics for the Netherlands.

The Netherlands' membership in the European Union (EU) implies that European law applies to a large portion of the Dutch statistical programs. European Council Regulation 322/97 stipulates that national authorities shall be responsible for producing European Community statistics at the national level and that Community statistics shall be produced on the basis of uniform standards and, in specific duly justified cases, of harmonized standards. In the case of the Producer Price Index (PPI), the CBS is subject to the EU regulation on Short-Term Statistics (STS).

³⁸ According to the *Statistics Netherlands Act, 2003 (Statistics Act)*, the CCS is an independent administrative body without corporate rights and has the following duties: (a) to foster the provision of statistical information for the government which meets the needs of practice, policy and science; (b) to foster the accuracy and completeness of the statistics to be published for the government; (c) to assess the multi-annual program and the work program of the CBS; (d) to ensure that the CBS acquires data in such a way as to minimize the ensuing administrative burden for companies and institutions; (e) to ensure that the statistical work carried out by the CBS for third parties does not lead to competition with private suppliers of similar services which would be undesirable from the perspective of the proper operation of market forces; and (f) to oversee the exercise by the director general of the power to make available sets of data for the purpose of statistical or scientific research.

³⁹ This Act replaced the *Netherlands Statistics Act, 1996* which, in turn, replaced the *Royal Act of 1899*.

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

The CBS is the only official producer of all macroeconomic statistics, with the exception of balance of payments and monetary statistics. Well-established procedures are in place to ensure adequate data sharing and coordination between the CBS and the Netherlands Bank (DNB), as well as between the CBS and other providers of source data. In order to reduce the data reporting burden of data providers, the CBS uses administrative sources rather than questionnaires, when possible.

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

In line with the *Statistics Act*, articles 37 through 42a, individuals reporters' data are kept confidential and used for statistical purposes only. Individual respondents data are only available to CBS staff charged with the compilation of the relevant statistics at the CBS. All employees sign a confidentiality agreement when they enter service at the CBS, ensuring that micro data remain confidential. Encryption is used when data are transmitted electronically. All CBS computers are password protected, and access to the CBS premises can only be obtained with an electronic pass card. Visitors have to report to reception and have to be accompanied by a CBS staff member when entering the CBS premises. Staff who disclose personal information on individual reporters commit a crime and may be dismissed and/or taken to court at the discretion of the Director-General of Statistics.

Within the PPI, confidentiality of reported information is also maintained by setting publication criteria so as to limit disclosure. The general PPI rule is to publish only if reports are received from at least three companies. In addition, publication may be suppressed if the coverage is less than 50 percent of the total sample of reporters.

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

Sections 33 through 36 of the *Statistics Act* specify the legal mandate under which the CBS collects data and ensure reporting. Under these provisions, the CBS is authorized to use, for statistical purposes, data from government registers, legal persons, companies, independent professionals, and institutions to fulfill its duties. As far as banking statistics are concerned, the CBS acquires the statistics only after consultation with the DNB.

Section 43 through 52 of the *Statistics Act* relate to measures encouraging response. These sections of the *Statistics Act* specify the fines and penalties that the CBS can impose on legal persons, companies, independent professionals, and institutions that fail to provide the data in full or in time. As established in the *Government Gazette* of February 16, 2006, the maximum amount to forfeit is Euro 20,000, but this amount can be raised in very exceptional cases to Euro 500,000.

0.2 Resources

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

The CBS's budgeting process is described in sections 14 through 19 of the *Statistics Act*. At least once every five years, the Director-General of Statistics has to develop a multi-year program outlining the CBS's activities. Every year, the Director-General of Statistics has to compile a work program for the following year, taking into account available resources. He must submit both work programs to the CCS for adoption. After adoption, the CCS sends the multi-year program to the Minister of Economic Affairs. Taking into account the view of the cabinet, the Minister notifies the Director-General of Statistics, the CCS, and the House of Representatives of the States General on the financial and organizational conditions to be met to realize the multi-year program. This notification is published in the *Government Gazette*.

In recent years, staff resources at the CBS have been reduced and further cuts are envisaged in the future. Nonetheless, staff, facilities, computing resources, and financing⁴⁰ are commensurate with the CBS's current statistical programs, except for the staff resources dedicated to the compilation of the PPI. While staff numbers have been reduced by five percent in the period from 2000 to 2005—in line with a general reduction in the size of the civil service—the current number of staff is broadly adequate to perform existing tasks. Staff are highly qualified in their areas of expertise and salary levels in the CBS are competitive with other civil service salaries in the Netherlands.

CBS staff have adequate computing resources available to perform their required tasks. While some software problems arise occasionally, these problems do not affect the overall quality of the statistics produced nor the effectiveness in which staff perform their duties. Computer resources are adequately protected, and the CBS has emergency backup systems in place for retrieval of data in the event of disasters or other unusual events.

Physical facilities of the CBS are adequate to perform required tasks. In 2008, the Voorburg office of the CBS will move into a new building. In light of the multi-year program and transparent planning and budgeting process, funding of the CBS is adequate to perform the required tasks stated in the approved programs.

Within the CBS approximately 12 full-time equivalent (FTE) staff in the Producer Prices task group of the Index Numbers, Prices, and Business Cycle Department (MIC) are responsible for organizing and overseeing the monthly PPI (including export and import price indexes) production for goods. In addition, during the current index developmental period there are about 11 FTE in a Services Prices task group in MIC. Field collection staff totaling about five FTE are managed through the CBS unit in Heerlen. Part of the responsibility for index

⁴⁰ To comply with new statistical requirements on the main macroeconomic indicators with respect to the European Action Plan, additional funds from the Ministry of Economic Affairs were made available. For example, the development and regular production of quarterly sector accounts are financed with these funds.

review and analysis is assigned to the Price Analysis and Process Support task group within MIC; these resources are shared with other programs. A general spokesman located within MIC but outside the PPI staff, and the Infoservice task group in the Publications and Communications Department (MPC), are the primary public contacts for PPI information requests.

The aggregate PPI staff level has decreased by about 5 FTE in recent years. Part of this decrease has been offset by the introduction of an electronic data collection program for the PPI and a centralized call centre for contacting firms in case of nonresponse. Nevertheless, the staff reduction, combined with the overall CBS initiative to reduce the administrative burden, have already led to cuts in publication detail and will lead to cuts in PPI sample size. In 2006, the number of detailed PPI publication cells was cut by approximately 60 percent.⁴¹ In January 2009, the aggregate PPI (again including export and import price index) pricing sample will fall from about 25,000 to about 17,500, a decrease of 30 percent. Coming at a time when there is a strong international desire for PPI programs to continue expanding services industry coverage (service coverage expansion is part of the CBS multi-year plan, and additional series may be mandated by the EU in the future) and to enhance the quality of their indices, further resource cuts are a matter of concern.

0.2.2 Measures to ensure efficient use of resources are implemented.

Under current government financial constraints, the efficient use of existing resources is one of the CBS's strategic objectives. The CBS's policy intentions are stated in general terms in the budget of the Ministry of Economic Affairs, and the CBS is accountable through a series of specific performance indicators.

In the current financial environment, the CBS management and CCS have paid special attention to the efficiency of statistical processes and meeting users needs. As will be discussed later in this report, the PPI has taken several steps to improve efficiency as a means of accommodating resource reductions. These steps include scheduled changes in the process for index calculation and the introduction of a probability proportional to size (PPS) based product sample.

Each year, each manager in the CBS agrees on a work program with its staff. Staff performance with respect to the agreed work objectives is assessed on an annual basis and outstanding performance is rewarded with extra remuneration (bonus).

⁴¹ Announcement of this reduction is available on the CBS website in "Change in publication scheme of the producer price statistics," October 14, 2006, at www.cbs.nl/NR/rdonlyres/68DF083D-975A-4D95-8D49-1272771FF457/0/NieuwChangepublicationproducerpricesprodcom.pdf. The change is also discussed, in Dutch, in "Publicatiestrategie statistiek Producentenprijzen Industrie," July 5, 2004, at www.cbs.nl/NR/rdonlyres/6365FBD7-C9A2-4FB7-939B-4715A7C689D2/0/publicatiestrategieproducentenprijzenindustrie.pdf

0.3 *Relevance*

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

The CBS maintains regular contacts with the main users of official statistics through seven high-level advisory boards.⁴² Each advisory board convenes at least twice a year. In the advisory boards, the main users of statistics comment and advise on the multi-year program and the annual work program of the CBS. The Advisory Board of the Director-General comprises the chairs of the other six advisory boards and the directors of the four planning agencies in the Netherlands. These planning agencies are the Netherlands Institute for Spatial Research, the Netherlands Environmental Assessment Agency, the Social and Cultural Planning Office of the Netherlands and the Netherlands Bureau for Economic Policy Analysis. The members of the other advisory boards are scientists from several universities in the Netherlands, and representatives from enterprises, firms, banks, unions, consumer associations, research institutes, and government ministries.

The Advisory Board for Price Statistics convenes twice a year. In one of these meetings, the main users of statistics comment and advise on the multi-year program and the annual work program of the PPI and the other price statistics. The other meeting is devoted to special topics.

Often, bilateral meetings are held with “strategic users” (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) at managerial level. Statistics Netherlands has assigned “account managers” (contact persons) to all strategic users to ensure that their data needs are met.

The relevance of CBS statistics is also monitored by means of the following performance indicators: the use of its online database (Statline), the coverage of CBS press releases, and references to CBS data in parliamentary documents.⁴³

0.4 *Other quality management*

0.4.1 Processes are in place to focus on quality.

The CBS has several processes in place to focus on the quality of the statistics it produces. In 2000, the CBS established a separate unit dedicated to quality verification.

Recently, a project to enhance the quality of the CBS's statistical outputs was initiated with the objective of establishing standards for quality of the outputs. All statistical outputs and

⁴² Advisory Board for Society and Economics; Advisory Board for Economic Statistics; Advisory Board for Social Statistics; Advisory Board for Price Statistics; Advisory Board for Macroeconomic Statistics; Advisory Board for Methodology and Information Technology and the Advisory Board of the Director-General.

⁴³ Some of these are performance indicators referred to in dimension 0.2.2.

processes will have to comply with these standards. In 2006, the CBS started conducting risk analysis for those statistics that are the most important for the corporate image of the agency. These analyses provide an insight into the risks associated to different element of data quality, such as accessibility, accuracy, timeliness, coherence, relevance, and reproducibility of the output.

This process of quality assurance is intended to enhance the transparency and the quality of the compilation procedures and the statistical products. The chain from source data to statistical output often crosses the borders between the organizational units within the CBS. Recently, a new method which takes into considerations both the quality of the statistical output and the processes, including consistency within the production chain, was applied as part of a quality assessment study of economic statistics. The results of this study were very favorable.

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

Three processes are in place to monitor the quality of the CBS's statistical program:

- **Statistical auditing**, to assess the quality of the statistical outputs against EUROSTAT quality benchmarks.
- **Respondent and user survey of the CBS**, to assess the views of existing parties involved in providing and using the CBS's products.
- **Verification by the European Commission according to EU regulation 3605/93.** According to Article 8 of this regulation, bi-annual reports on government deficit and debt are assessed by EUROSTAT before publication. Member states also have to submit an "inventory of sources and methods" relating to the Excessive Deficit Procedure to EUROSTAT. Also, EUROSTAT conducts official, regular, dialogue visits to member states to evaluate and discuss data transmission and EDP inventory. EUROSTAT may also, in some cases, conduct visits to member states to discuss methodological issues.

In 2005, a series of visits with PPI users was conducted. The primary purpose was to assess the users' ability and willingness to deal with the reduction in PPI publication detail mentioned above.

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

The DMK is responsible for expansion of knowledge, the development of a general framework, the coherence and the standardization of the statistical processes, and the implementation of the frameworks for general statistical methods, quality assurance, and process development.

The DMK ensures continuous renewal of the statistical processes by (1) providing methodological support to new projects; (2) maintaining the business and information architecture of the CBS; and (3) conducting business analyses.

The Macroeconomic Statistics and Publications Division, which includes PPI production, has its own department for research and development (MOO). Capacity for research and development is available without compromising the regular statistical output.

1. Assurances of integrity

1.1 Professionalism

1.1.1 *Statistics are produced on an impartial basis.*

The CBS places a high premium on its impartiality, as evidenced in the *Statistics Act*, which established the CBS as an autonomous agency, under the aegis of the Ministry of Economic Affairs, on January 3, 2004.⁴⁴ The Act also affirmed new rules concerning the acquisition, use, and provision of data in the context of the supply of statistical information domestically and internationally. The CBS has two management bodies: a Director-General of Statistics (DGS) and the Central Commission for Statistics (CCS). By law, the DGS cannot be a civil servant subordinated to the Minister of Economic Affairs. Furthermore, the DGS shall not hold any secondary appointments which may interfere with the proper performance of his function of preserving his independence or trust in that independence. The CBS has adopted a Code of Practice⁴⁵ based on the *European Statistics Code of Practice*⁴⁶, where the main focus is on promoting trust and confidence in the independence of the CBS. The impartiality of the CBS in producing statistics is safeguarded in the code, which states that:

“The statistical information Statistics Netherlands produces is intended to contribute to the effectiveness of public debate on a wide range of topics. Not only must this information be accessible and available to all parties in society, but everyone must have access to the same information at the same moment in time. Statistics Netherlands remains impartial with regard to the various interested parties in society. Statistics Netherlands also applies the principle of ‘impartiality’ to specially requested tasks: the results of work requested and paid for by third parties are not made available exclusively to these third parties. To guarantee its impartiality, Statistics Netherlands publishes release dates for information well in advance.”

Recruitment and promotion of CBS staff is done exclusively based on relevant aptitude and/or expertise. CBS staff regularly and actively participate in seminars, courses, and

⁴⁴ There is no longer a hierarchical relationship between the Minister of Economic Affairs and the CBS.

⁴⁵ See www.cbs.nl/en-GB/menu/organisatie/corporate-informatie/richtlijnen/code-of-practice.htm

⁴⁶ See CENEX SDC *Handbook on Statistical Disclosure Control*, March 2007.

workshops arranged by regional and international organizations to further their statistical knowledge in their field of expertise.

The CBS has a long-standing culture of professionalism in the workplace. This is evidenced by recognition of authors of research and methodological papers, organization of conferences and lectures, and peer review of statistical work. Staff from statistics offices in both developing and advanced economies often visit the CBS to learn from its practices and procedures. The CBS staff also participate actively in international working groups and some CBS staff are in key positions in international forums.

The DMK is responsible for research and analysis in the CBS. The work of this Division is also supported by research and development work done by the Development and Support Sector of the Macroeconomic Statistics and Publications Division (i.e., the division responsible for, among others, national accounts, price statistics, and GFS).

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

The CBS's choices of data sources and statistical techniques and decisions about dissemination are informed solely by statistical considerations. According to Section 18 of the *Statistics Act*, the Director-General of Statistics shall determine the methods by which the studies included in the work program and multi-year program of the CBS will be carried out, and the manner in which the results of these studies will be published. Decisions on data dissemination are guided by international guidelines, such as the IMF's SDDS and the regulations of the European Union.

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

The CBS has internal guidelines that are available to all staff for appropriate procedures to be followed for acting (or not acting) on the erroneous interpretation and/or misuse of its statistics. The CBS monitors media coverage of its statistics, publications, and activities on a daily basis. Communications policy is handled by the Communication Division of the CBS.

1.2 Transparency

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

All information on the legislation and regulations governing the CBS are available on its website (www.cbs.nl), under "About Us," and in its library. While *Legislation* is not a specific heading in the site index or on the web page, the *Statistics Act* is easily accessible.

The IMF's Dissemination Standards Bulletin Board (DSBB) includes, under the heading "Integrity" the terms and conditions under which the CBS's statistics are produced, including those relating to confidentiality and individually identifiable information.

All CBS publications identify where more information about the CBS and its products can be found, for example, by referring to the CBS website (www.cbs.nl).

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

With one exception, there is no internal government access to statistics prior to their release. The Dutch version of the CBS's website includes the policy concerning the publication of statistics and makes public the cases in which prior access to the statistics is given to the government. As stated in the *Statistics Act*, some strategic relations of the CBS (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) are able to access (under embargo) relevant statistics prior to the public release. In order to be granted prior access, the following conditions must be met:

- The strategic relationship must have a formal involvement with the subject matter;
- Pre-access is of crucial importance to the relationship, for example to prepare answers to possible questions about statistical results; and
- The interests of other parties are not harmed.

The website also shows a list of eight categories of statistics where prior access (under embargo) is granted. Furthermore, information on the organizations that have prior access to the data and the time of access is disseminated to the public. The PPI is not among this list of eight categories, so no one has prior access to the PPI results.

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

All CBS press releases and other publications are clearly recognized as products of the CBS by using the CBS logo, and referring to the CBS in the first section and/or in the introduction.

Data from Statistics Netherlands in ministerial reports and in the *Budget Memorandum* are identified as such in footnotes. CBS publications and website (under "copyright"), noted that information may be quoted, provided that the source is stated accurately and clearly.

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

The CBS publishes information on changes in statistical procedures on its website and in all relevant publications (e.g., *De Nederlandsche Conjunctuur* or "The Dutch Business Cycle" and *De Nederlandse Economie* or "The Dutch Economy"). In addition, methodological changes as well as their consequences are communicated in press releases.

In the case of the PPI, methodological changes, reclassifications, and periodic weight updating are routinely announced in advance.

1.3 Ethical standards

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

Chapter 4 of the *Code of Practice* of the CBS describes the behavior of CBS staff relating to the following six principles: impartiality, reliability, relevance, cost effectiveness, statistical confidentiality, and transparency.

Furthermore, the *Integrity Policy of the Statistics Netherlands* is available for all employees on the CBS's internal website. This handbook contains provisions on integrity and the applicability of this policy within the CBS.

New staff should sign a declaration to observe secrecy when entering duty at the CBS. All new staff should submit a "certificate of incorporation" from the local police vowing never to be involved in criminal activity. A few months after commencement of employment, all staff should take an oath (for example, to be loyal to the Constitution, etc.) before the Director-General of Statistics.

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 CBS assesses the methodology of the PPI against the guidelines outlined in the *System of National Accounts 1993 (1993 SNA)*, the *Producer Price Index Manual (PPI Manual)*, the draft *Import/Export Prices Manual* available on the *IMF PPI Manual* website, and the *OECD/EUROSTAT Guide for Developing Producer Price Indices for Services*. The concepts and definitions from the *1993 SNA* are used as guidelines with regard to coverage and valuation, and the methods and procedures from the *PPI Manual* are used as guidelines for compiling the PPI.

The PPI series published by CBS are divisible into two major groups: those for goods and those for services. In most cases, references to the PPI in this report will apply to the traditional goods program, and the services indices now in development will be referred to as the SPPI.

Within the goods PPI, prices are collected for imports as well as for domestic production. This leads to three broad categories of index aggregates: the PPI for domestic sales (sometimes called the "regular" PPI), the PPI for nondomestic sales (XPI) and the import PPI (MPI). In addition to these series, a number of derivatives are published, such as total use (a weighted combination of PPI and MPI) and total sales (a weighted combination of PPI and XPI).

It is important to note that the “headline” PPI featured in CBS release articles and media reports is the total sales PPI, consistent with the usual international practice. The focus of this report is also on the total sales PPI. Import price indices are not reviewed here, and export prices are only of interest as they affect the nature of the total sales PPI.

Data collection and index calculation in the Dutch PPI are focused on products and only indirectly on activities and industries. The published activity-level indices are based on indices for goods, reweighed for each industry using input-output tables from the national accounts. At the activity level, separate series on intermediate, capital and consumer goods are also published, along with certain special aggregates according to the STS regulation.

PPI publication by commodity is on a detailed level, mostly 4-digit PRODCOM classes for a total of 902 publication cells (PPI: 286, XPI: 270 and MPI: 346). The publication for industrial sectors is on a 2-digit NACE level and consists of 49 publication cells. (These counts of publication cells include aggregates.) Both commodity and industry series are published monthly.

The PPIs for services are published quarterly for commercial sectors, with no uniform level of detail; some sectors comprise only a small part of a 4-digit NACE while others are much more comprehensive. No aggregate SPPI series are published at this time.

The CBS believes that the main PPI departures from international guidelines are:

- The exclusion of small companies from the sample population for the PPIs for goods
- The reweighing of product based indices to activity indices, instead of aggregating these directly according to the known activity of the reporting companies
- The inevitable inclusion of some mixed (i.e., average) and intercompany prices

2.2 Scope

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

The scope of the PPI is consistent with accepted guidelines. The PPI for goods includes indices on products from mining and quarrying, manufactured goods and electricity, gas and water (the aggregate PRODCOM categories C,D and E). The activity-level indices cover NACE sectors C to E. To allow the calculation of the activity-based indices, there is also some collection of prices of products from agriculture and fishing. These indices are not published.

In line with the STS regulation, the following activities are not included in the PPI: uranium mining (absent in the Netherlands), publishing, manufacturing and processing of nuclear material, manufacturing of arms and ammunition, ship building, and airplane and spacecraft construction. Maintenance and repair, illegal sales and the sales of second hand products are excluded from the PPI. Also, at this time sales from bonded warehouses to the export market are out of scope along with imports to bonded warehouses.

The SPPI is still under development. As of August 2007 indices for 13 sectors are compiled, of which 11 are published, within NACE divisions I (transport, storage, and communication) and K (commercial services):

- Accountancy
- Legal services
- Car lease
- Road transport
- Engineers
- Software consultancy
- Couriers
- Postal services
- Cleaning services
- Telecommunication
- Storage
- Aviation
- Postal services

By December 2008, this number will be expanded to 24, with the following 11 sectors added:

- Investigation and security services
- Remaining information services
- Cargo handling services
- Market research and public opinion polling
- Management-consultancy
- Advertising services
- Labor recruitment and provision of personnel
- Coastal and transoceanic water transport services
- Architectural services
- Real estate agents and surveyors
- Data processing

Publication of most of these series is required by STS regulation.

All resident market enterprises can be considered in scope for the PPI, although as discussed below sampling is confined to firms with 20 or more employees. For the SPPI all companies are eligible for sampling.

2.3 Classification/sectorization

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

The classifications for industries and products follow international standards. Goods are classified using the 8-digit PRODCOM list. PRODCOM level indices are re-weighted to the NACE-activity level using input-output tables from the national accounts. Using the PRODCOM classification it is possible to aggregate to the Classification of Products by Activity (CPA), because PRODCOM differs from CPA only in going to a more detailed level. In addition, prescribed in the STS regulation, there is an aggregation structure to compile index figures for capital, intermediate and consumer goods.

Definitions of the services for the SPPI are taken from the CPA.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

The data used for PPI goods weighting are based on the annual company-level PRODCOM turnover and quantity statistics collected by the CBS unit in Heerlen.

For PPI price collection, companies are asked to report market prices. Prices are collected separately for domestic and nondomestic sales as well as for imports. Export prices are measured ex-factory and import prices c.i.f., at the national border. Foreign currency import and export prices are converted to euros at the average exchange rate of the foreign currency in the reference month. Prices are asked without excises and excluding VAT. According to the STS regulation index numbers including excises have to be delivered; these are calculated by CBS using excise tariffs tables as published by the government.

If market prices are not available and cannot be estimated by the company, CBS will accept intercompany transfer prices. These account for about ten percent of prices received. Also, when necessary to achieve response the PPI will accept mixed prices. In some cases companies can only report average prices for a range of qualities, typically because there is only one transaction price in their sales accounts system (i.e., a unit value). In other cases the prices charged to different customers are averaged in the reported data.

The PPI for services asks for two types of prices, depending on the sector: average rates, which are comparable with the mixed prices sometimes used in the PPI for goods, and model prices, which are comparable to ordinary PPI market prices.

2.4.2 Recording is done on an accrual basis.

The PPI weighting data are constructed according to the standard PRODCOM procedures.

PPI prices are collected on a transaction basis, regardless of the date of production. They are recorded at the time of order as required by the EU STS. Prices refer to the average of the reference month; there is no reference date. The prices for the SPPI refer to the middle of the quarterly reference period (for example, for the 1st quarter of 2007 the price of February 15 is collected).

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

Transactions between companies within the same enterprise or sector are recorded on a gross basis. Netting procedures are not part of the Dutch PPI methodology. The weights used in building the activity-level PPIs from PRODCOM indices are on a gross basis so they may include some within-activity flows; they are not net output weights for the activities.

3. Accuracy and reliability

3.1 Source data

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

PPI data collection follows systematic processes based on detailed information reflective of the Dutch economy, but the samples are currently based on data for the year 2000 and are only systematically updated at five-year intervals. At the fundamental level, the PPI for goods (including imports and exports) is organized and constructed from the product level, with the activity-level indices being re-weighted aggregates of the product indices. The SPPI indices are constructed using data and procedures designed specifically for industry-level services price measurement.

Sampling and weights

The CBS uses the annual PRODCOM statistics for sampling of enterprises and products and for weighting in the lowest-level goods index calculations. The PRODCOM data provide information on production by product group at the lowest (8-digit) level for both domestic or nondomestic destination.

Only companies with 20 or more employees are represented in the PRODCOM statistics. The CBS has no reliable data source available to complement the data with the production of smaller companies. A CBS study to be released in the near future examined the relationship between price and company size within the PRODCOM file and found no basis in those results to assume that the exclusion of the smallest companies would lead to a structural bias in the PPI.

A cut-off sampling approach within each 8-digit PRODCOM group is used to select samples of the largest companies with a cumulative turnover of at least 80 per cent of the total. Short term turnover statistics and information already available within the PPI are then used to separate the total sales into domestic and nondomestic flows. Following this procedure, samples for domestic and nondomestic sales are created. The usual objective is to achieve a sample of three companies with at least two prices each within a PRODCOM group.

A new sample is drawn every five years, with the most recent being based on 2000 PRODCOM data. To compensate for loss of companies through attrition, more companies are selected in this procedure than are initially used. When companies drop out, they are replaced from the pools of over sampled companies on a continuous basis.

The PPI will introduce a new PRODCOM-based sample in January 2009, using 2005 data. Although this can be expected to sharply improve the timeliness of the PPI sample, it will still have been drawn using weights that are three to four years old at the time the sample is introduced. Under normal PPI procedures, this sample will remain in place for five years except for replacements due to attrition.

The PPI program will implement probability-based sampling with the 2009 update, replacing the cut-off approach. This should improve sample efficiency and offset the loss of sample size. Despite this enhancement, the PPI has developed plans to move to a continuous process of sample selection and updating after 2009, and it should be encouraged to implement that plan in order to ensure that the PPI samples are sufficiently representative of the economy.

For the SPPI, the sample is taken using a random stratified sample from the CBS general company register. This register's classification is derived from the NACE. The strata classification is based on the number of employees. Usually, the smallest firms are excluded in order to limit respondent burden. The objective is to draw a sample of about 100 firms for each services index.

Weights enter PPI goods calculation at two levels, as described in more detail in section 3.3.1 below. First, company weights within a lowest-level PRODCOM group are used in averaging the price changes in that group. Second, the PRODCOM indices are aggregated with national accounts weights reflecting their importance relative to total national production. The national accounts weights have been adjusted for the PRODCOM undercoverage of small firms.

The input-output tables from the national accounts also provide weighting information to produce indices on the NACE activity classification. The PPI activity-level indices are aggregates of the goods indices and do not employ the micro-level information on the company distribution within PRODCOM groups.

Company weights for the PPI for services are taken from the CBS Structural Business Statistics (SBS) surveys or from the results of the SPPI surveys.

Price collection

Once sampled, a company reporting for the first time is visited by an officer of the CBS. During this initiation visit, the purpose of the price statistics and the questionnaire are introduced, the data collecting procedures are explained, and by mutual agreement a representative list of price quotations is defined for subsequent data collection. The collection of prices is on an 8-digit PRODCOM level for the PPIs for goods and at the lowest possible service level for the SPPIs. As noted above, the involved companies have a legal obligation to report information for these surveys.

For the PPIs for goods, prices are collected monthly, quarterly, biannually, or annually, depending on the price policy of the company and/or the specific product. Prices are defined by a detailed description including, if relevant and/or possible, the involved customer and delivery conditions. For the MPI and XPI the countries or region of origin/destination are added. As indicated above, the CBS has the policy to collect a minimum of six prices for each product. The sample sizes for companies and prices are as follows:

Sample Sizes for Companies and Prices		
	No. companies	No. prices
PPI	2750	9550
XPI	1850	6000
MPI	2400	9500
Total	7000	25050

In the table, a company is separately counted for the PPI, XPI, and MPI, however; the total number of unique reporting companies is about 4,300.

Approximately half of the prices are collected electronically, using a well-designed survey form distributed by e-mail. Mail accounts for most of the remainder of the sample, along with a small amount of telephone collection and use of price lists and auction results published in newspapers or on the internet. The PPI does not make use of any data collected or provided by third parties, except for preliminary indices as mentioned below. Firms have the option of reporting that a product is no longer available or that the product description has changed, in which case they can enter the new information or possible substitute another product. In these cases the CBS will telephone the firm to agree on a new product specification and on any associated quality adjustments.

For the SPPI all prices are collected quarterly. At the present time 790 companies report a total of 4,700 prices. Samples are regularly updated.

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

The source data generally follow requirements. As discussed in section 2.4.1, some mixed and intercompany prices are accepted when unavoidable.

3.1.3 Source data are timely.

Although the PPI is a monthly index, the CBS collects the PPI price data on a variety of frequencies. This addresses the CBS goal of reducing aggregate administrative burden and also because the companies have communicated that they change prices less frequently than on a monthly basis. Overall, about 18 percent of prices are collected monthly; 59 percent quarterly; 18 percent biannually; and five percent annually.⁴⁷ The price changes are sometimes reported in advance, sometimes subsequent to the price change. In index calculation, prices are carried forward between reporting months. Since the PPI publishes five preliminary months, data reported within six months can be taken into account for the final results. Data received after the publication is final are not used.

Data received before the 25th of the month can be processed before the first preliminary publication month. In case of nonresponse a company receives reminders by telephone, fax, conventional mail or e-mail. A company can be prompted several times. Additional efforts

⁴⁷ This distribution includes MPI prices as well as prices of domestic production.

are made to achieve timely response from to the 500 largest companies and other crucial reporters. In general more than 95 percent of all price quotations are collected before the publication obtains its final status.

All data for the SPPI are collected on a quarterly basis, with procedures for minimizing non-responsive similar to those in the goods PPI.

Company weights from the PRODCOM statistics are available after six months. Product weights are available after about 2 ½ years; for example, final national accounts data for 2005 will be available in mid-2008. Data on submarket and submarket strata weights for the PPI for services are available after 1 ½ years. Company weights are updated regularly using data from the SBS surveys.

3.2 Assessment of source data

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

The CBS maintains rigorous production routines for reviewing and confirming price data. When prices collected for the PPI differ more than five percent from the previous period the company is contacted to provide an explanation. If the price change cannot be verified it is not used in the index. All these telephonic contacts are recorded in a log in the production database. The SPPI uses a similar method, but the margins are dependent on the type of price: for average rates the margin is set to 10 per cent and for model prices five percent is used. The total number of PPI telephone contacts with respondents is approximately 1,500 per month.

Reporting companies are visited on a regular basis (once every three years on average) by an official of the CBS, for a total of about 1,500 company visits per year. During this visit, all price quotations are checked and efforts are made to make sure the observed prices are according to the PPI definitions and representative for the product category. In cases of complex products or persistent nonresponse a company is interviewed by telephone or visited. These contacts include a reminder that there is a legal obligation to report information for all PPI surveys.

Daily reports on response and on the number of detected implausible prices are made available to all involved analysts. The coverage, defined as the weighted response at publication level, is reported three times each month.

Information on sampling errors for the PPIs for goods is not available because of the cut-off design used in sampling from PRODCOM. The planned implementation of PPS sampling for January 2009, however, will facilitate development of some standard-error information in the future. Information on non-sampling errors is partly available in the form of nonresponse and results of telephone interviews with companies.

Sampling and non-sampling errors for the SPPI are also not yet estimated. Additional information should become available in the next few years.

3.3 *Statistical techniques*

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

Internationally accepted techniques are used for index calculation and quality adjustment. Missing observations can occur at three levels: goods, enterprises and commodity groups.

- When an enterprise has to report the prices of more than one product for a given PRODCOM group, and one of the prices is missing, then the price change of the commodity group for that enterprise is determined on the basis of the available prices. The missing price is imputed by multiplying the price relative for the enterprise/commodity group by the price of the previous month.
- If an enterprise does not respond at all, but there is information available from other enterprises in that commodity group, the price relative of the group will be calculated on the basis of the responding enterprises and this will be used to impute all price items of the missing enterprise.
- If all information is missing from a PRODCOM group the month-to-month price changes from a higher group are used for imputation of the missing group. For this purpose the weighted arithmetic mean price is determined for the underlying known groups for months m and $m-1$ and the index change is calculated.

In the case of missing values for seasonal products in clothing and agricultural product groups, a carry-forward price is used until the moment new seasonal prices become available. The PPI program experimented with other imputation methods for seasonally-missing items but decided that the carry-forward approach resulted in better indices.

For some product groups, estimates taken from bulletins or world market price information are used to calculate preliminary indices. PPI analysis has shown that this information, for example in the case of petrochemical products, is preferred to available imputation techniques for preventing or minimizing future revisions of preliminary data.

New items are introduced if a reporting company clearly indicates their importance. Company weights are in general not adjusted except when the company indicates there is a considerable deviation with the one known and used in the calculations.

Several alternative methodologies are used to adjust for differences between new and replaced items. The methods include quantity adjustments, option prices, production cost adjustments, expert judgment, and linking. The general approach is to ask the reporting firm what the replaced product would sell for in the current period, or what the new product would have sold for in the prior period. No hedonic models are employed.

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

While compiling the PPI, no specific statistical procedures are used for inventory valuation adjustment, work in progress, and conversions from cash to accrual.

Index calculation in the PPI goods indices takes place in three steps, from the prices of individual products to the highest levels of aggregation.

First, the elementary indices, for a PRODCOM group within an enterprise, are calculated as unweighted geometric averages of the month-to-month price changes for the individual items. Second, the lowest-level PRODCOM indexes are calculated as averages of the elementary enterprise-by-PRODCOM indexes. The standard Laspeyres formula is used in this step but rewritten as a monthly chained index. Enterprise weights for the previous month within the lowest PRODCOM level are calculated by price-updating the 2000 weights. In the third step, from the lowest PRODCOM level onwards, the PPI is a standard fixed base Laspeyres index, with 2000 as the current base year. Weights for the PRODCOM groups are based on national accounts data.

In a similar manner to the third step above, activity-level indices are constructed from the PRODCOM indices with base-period weights developed using the input-output tables of the national accounts. The approach does not use the industry classifications of the individual reporting PPI firms.

Beginning in 2009, the PPI plans to broaden the level at which the first step, geometric mean, aggregation is employed in order to improve the efficiency of estimation.

In January 2009, the PPI also will introduce updated 2005 base year weights, along with the new company samples. Additionally, there are plans being developed to move to annual updating of weights for PRODCOM groups as well as companies. The goal is to resample 25 percent of the PRODCOM groups annually. The PRODCOM weights from the national accounts would be updated annually. If this plan can be implemented, it is reasonable to expect that it would contribute significantly to PPI quality.

Index calculation for the SPPI is in general equivalent to the calculation of the PPIs for goods. The CBS observes either prices or turnover values and units corresponding to individual services. Calculation of the price relative for a respondent's price development is based on the quarterly price relatives of the individual priced services using an unweighted geometric mean formula. Respondents in a submarket are stratified according to number of employees. Calculation of stratum, submarket, and industry price indices are based on weighted arithmetic averages of the chained respondent price indices, with the turnover values used as weights at each level.

PPI and SPPI indices are published only on a not-seasonally-adjusted basis, with the one exception of Accountancy. This decision is based in part on past CBS research into seasonal patterns in PPI series.

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

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

Index results are reviewed and assessed against available information by a separate analysis unit not involved in monthly production. Month-to-month changes and results of product indices are compared to earlier years and checked. In case of doubt, feedback is given to responsible staff in the production process. The PPI, XPI and MPI series by product are compared to each other as well as to world market prices or price information published by other institutions, and to the CPI where applicable. The SPPI is compared to information from branch organizations and publications from other institutions.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

Each analyst in the production unit writes a report each month summarizing developments in his or her respective area. These reports are discussed with all involved statisticians and an independent statistical researcher not involved in the PPI production process. As part of this process respondents may be called for further information on sources of price change.

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

Assessment of inconsistently imputed prices is part of the regular checking procedures. If discrepancies are discovered appropriate measures are taken to remove them. In case of unexpected outcomes the reasons are investigated.

3.5 *Revision studies*

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

Studies on the difference between preliminary data and final index values are carried out periodically. Currently, the PPI program is evaluating whether it would be appropriate to declare published indices final more quickly than after five months.

The effects of product weight updates every five years are analyzed thoroughly and the results are used to inform the statistical process.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

Dissemination policies for the months PPIs for goods are fully in line with the SDDS and with the EU code of practice. The SPPI is disseminated quarterly, in accordance with the EU STS requirements for the Dutch PPI.

4.1.2 Timeliness follows dissemination standards.

The monthly indices are disseminated on the last working day of the month following the reference month. The quarterly indices on services prices are not yet published according to a fixed schedule. The objective is to publish the SPPI indices within three months after the reference period.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

PPI series for both products and activities are consistent in aggregation within any given base period. They are also consistent with each other given the methodology used.

The SPPI is only published by sector, so aggregation consistency is not currently an issue. There are plans to introduce an overall SPPI at some point in the future.

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

For the PPIs for goods, fully consistent time series data are generally available for a minimum of four years. For example, for the last update to 2000=100, the new time series beginning in January 2000 were introduced in early 2004 and will be continued to December 2008 when a 2005 weighting and reference base period will be introduced.

The statistics for the SPPI for services are consistent over time, but have been available for only one to five years depending on the specific sector, with the exception of road transport which is available from 1993 forward.

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

The use of national accounts weights in the PPI, and of lower-level PPI series in the national accounts, ensures that PPI series can be reconciled at higher levels with corresponding national accounts series.

4.3 *Revision policy and practice*

4.3.1 *Revisions follow a regular and transparent schedule.*

The PPI has four types of revisions. Revisions of preliminary indices follow a regular five-month cycle. The annual revisions of company weights are part of regular PPI methodology for index calculation, as described in an article on the CBS website,⁴⁸ and are not announced each year. The updating of product group weights follows a regular five-year cycle and is announced and explained.⁴⁹

The fourth type of revision is when a correction in final data is required due to errors. This occurs rarely and is very clearly mentioned, both in the statistical database and on the website of the CBS.

4.3.2 *Preliminary and/or revised data are clearly identified.*

Preliminary data are identified by annotations for all relevant data cells, and in many cases by the use of color on the website.

In 2007, a weighting error was discovered that necessitated publishing revised values for a number of PPI series for 2004-2006. This was announced on the website.

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

With every rebase a detailed analysis is made for the overlap in years. To the extent possible explanations are given for the observed differences. These analyses, with explanations, are published on the website of the CBS.

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 published using the statistical database of the CBS (Statline), which can be consulted through the website www.cbs.nl. In this database it is possible to create charts and tables to facilitate the analysis.

⁴⁸ “New index formulas for the statistic producer prices manufacturing,” Ria Okkerse and Wim Vosselman, June 9, 2005, on the CBS website at www.cbs.nl/NR/rdonlyres/A507CE76-DD1E-429A-9F1B-E0A13A2538B5/0/ppimethodology.pdf.

⁴⁹ See, for example, “Description of the base year revision (2000=100) of the producer price index for manufacturing,” Corien Ooms-Brouwer and Wim Vosselman, June 9, 2005, on the CBS website at www.cbs.nl/NR/rdonlyres/2FEC896A-EB1F-4F71-B279-5B88817E1773/0/rebasingppimanufacturing.pdf.

Apart from the regular PPI time series beginning in 2000, series with 1995 and 1990 base periods are available on the Dutch portion of the CBS website. Historical time series on a 2-digit NACE activity level are compiled. Annual data are available from 1935. Price information for a limited number of product groups is available in hardcopy from 1901.

More thorough analysis and publication may be found on occasion in a “web magazine” article. The regular monthly publication is always accompanied by a short article on the Internet highlighting the most relevant price change. PPI data also are published in some other CBS periodicals, such as the *Statistical Yearbook*.⁵⁰

5.1.2 Dissemination media and format are adequate.

All statistical data are accessible to users through the website. Downloads are possible in different formats (in Excel, SPSS, CSV, HTML). This allows users to re-disseminate the data themselves. Web magazine articles are also published on the website. PPI dissemination is now almost exclusively through the CBS website, with no regular paper publications.

5.1.3 Statistics are released on a preannounced schedule.

The CBS provides a schedule of PPI release dates well in advance, as of this writing through June 2008. In addition a weekly agenda, announcing press releases, is placed on the CBS website every Friday. SPPI releases are not yet announced in advance.

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

PPI figures cannot be viewed before the publication date. The data for the PPI are always published on the last working day of the month at 9:30 AM. At the same time the Electronic Bulletin on the Dutch Business Cycle is available. The figures are made available to all public at the same preannounced time by press release and publication database. The press, ministries and central bank are not briefed in advance. Questions by the public are answered centrally by CBS Infoservice if possible. More difficult questions are passed on to the PPI group.

5.1.5 Statistics not routinely disseminated are made available upon request.

On request, the CBS also disseminates data which are not in the regular publication program. This is usually done without charge and, when the information is regarded as newsworthy, the results are published on the web. In some occasions, when this extra dissemination is very time-consuming, a fee is asked.

⁵⁰ *Statistical Yearbook of the Netherlands 2007*, at www.cbs.nl/NR/rdonlyres/3BF6E44E-CA75-46F4-AB16-405A3512CAD5/0/2007a3pub.pdf.

5.2 *Metadata accessibility*

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

A general methodology document describing the PPI is now being updated and none is on the CBS website at present. A great deal of specific information on PPI definitions and methods is available on the website, however, including analytical and background papers as noted above. Many of these are in Dutch only, but some are also in English. Press releases and StatLine tables contain helpful metadata on sources and definitions.

Most PPI data are produced according to the STS regulation and the descriptions of departures from other accepted standards are not included. Information on response rates and sampling errors also are not published. The SDDS/GDDS metadata, SDDS summary methodologies, and other related descriptions are reviewed and updated regularly.

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

PPI data and analyses are presented on the CBS website at various levels of technical detail. There is also a specific brochure available to the public to assist in indexation of contracts.

5.3 *Assistance to users*

5.3.1 Contact points for each subject field are publicized.

First line support regarding nontechnical PPI issues is handled not by the PPI staff but by the CBS Infoservice unit and the general spokesman. Releases and publications on the CBS website clearly identify Infoservice contacts for PPI information. Second line support and technical questions are handled by PPI specialists, either by email or by phone. Answers are provided within one working day if possible. The CBS maintains a database including PPI questions from users and the associated answers. The timeliness and quality of assistance to users is routinely monitored by the CBS.

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

All publications and press releases are catalogued on the website. These are available without charge. As noted, the PPI has no regular hardcopy publications.

Recommendations for the Producer Price Index

- Ensure that resources for the PPI programs for goods and services are kept at a level sufficient to maintain index quality and to implement needed enhancements (0.2.1).
- After the January 2009 update, implement continuous sampling processes to ensure that the coverage of companies and products remains representative of the Dutch economy (3.1.1).
- Examine whether and how information on PPI sampling errors could be developed for use in monitoring the accuracy of the index (3.2.1).
- After the January 2009 update, go forward with plans for continuous updating of product category weights (3.3.2).

Table 3. The Netherlands: Data Quality Assessment Framework (July 2003): Summary of Results for Price Statistics (Producer Price Index)

(Compiling Agency: Statistics Netherlands)

Element		NA	Assessment				Comments
			O	LO	LNO	NO	
0. Prerequisites of quality							
0.1	Legal and institutional environment		X	X			Staff resources for PPI are broadly adequate, but tightening. Fewer staff and limitations on respondent burden have forced reductions in publication detail and sample size.
0.2	Resources						
0.3	Relevance		X				
0.4	Other quality management		X				
1. Assurances of integrity							
1.1	Professionalism		X				
1.2	Transparency		X				
1.3	Ethical standards		X				
2. Methodological soundness							
2.1	Concepts and definitions		X				
2.2	Scope		X				
2.3	Classification/sectorization		X				
2.4	Basis for recording		X				
3. Accuracy and reliability							
3.1	Source data			X			PRODCOM data used for sampling and lower-level weighting are still for 2000. (Updating will take place in 2009 and PPI has plans for more frequent updating thereafter.)
3.2	Assessment of source data		X				
3.3	Statistical techniques		X				
3.4	Assessment and validation of source data		X				
3.5	Assessment and validation of intermediate data and statistical outputs		X				
3.6	Revision studies		X				
4. Serviceability							
4.1	Periodicity and timeliness		X				
4.2	Consistency		X				
4.3	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

The “comprehensive statistical framework” for government finance statistics (GFS) in the Netherlands is the consolidated general government sector data that are compiled and disseminated by Statistics Netherlands (CBS) in the context of the national accounts statistics. These data are produced according to the *European System of Accounts, 1995 (1995 ESA)* under EU Council Regulation 2223/96, and the *1995 ESA Manual on Government Deficit and Debt* under EU Council Regulation 3605/93 and later amendments (which refer to the *Protocol on the Excessive Deficit Procedure of the Maastricht Treaty* or *EDP Protocol*). These GFS are disseminated on the IMF’s Dissemination Standards Bulletin Board (DSBB) for the Netherlands to meet the requirements of the IMF’s Special Data Dissemination Standard (SDDS) and will be assessed in all dimensions of the data quality assessment. In addition, to meet the SDDS requirements for the “tracking indicators” on central government operations and debt, the Ministry of Finance compiles and disseminates monthly data on central government operations and debt. These monthly central government data are assessed, as relevant, in dimensions 2 through 5 in the GFS data quality assessment that follows.

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

Statistics Netherlands (CBS) and the Central Commission for Statistics (CCS)⁵¹ were established under the Statistics Act of 2003.⁵² The main objectives of the CBS are to promote official statistics that meet the demands of users for purposes of practice, policy, and science, and to promote accuracy and completeness of all statistics published.

⁵¹ According to the *Statistics Netherlands Act, 2003 (Statistics Act)*, the CCS is an independent administrative body without corporate rights and has the following duties: (a) to foster the provision of statistical information for the government to meet the needs of practice, policy and science; (b) to foster the accuracy and completeness of the statistics to be published for the government; (c) to assess the multi-annual program and the work program of the CBS; (d) to ensure that the CBS acquires data in such a way as to minimize the ensuing administrative burden for companies and institutions; (e) to ensure that the statistical work carried out by the CBS for third parties does not lead to competition with private suppliers of similar services, which would be undesirable from the perspective of the proper operation of market forces; and (f) to oversee the exercise by the Director General of the power to make available sets of data for the purpose of statistical or scientific research.

⁵² This Act replaced the *Netherlands Statistics Act, 1996* which, in turn, replaced the *Royal Act of 1899*.

Against this background, the responsibility for collecting, processing, and disseminating (at the national and international level) all macroeconomic statistics (excluding balance of payments and monetary statistics) rests with the CBS. This responsibility is clearly defined in the *Statistics Act*, sections 3 and 4, which state that:

- The task of the CBS is to carry out statistical research for the government for practice, policy, and research purposes and to publish the statistics compiled on such research; and
- The CBS is the national authority for the production of (European) Community statistics for the Netherlands.

The Netherlands' membership in the European Union (EU) implies that European law applies to a large portion of the Dutch statistical programs. European Council Regulation 322/97 stipulates that national authorities shall be responsible for producing European Community statistics at the national level and that Community statistics shall be produced on the basis of uniform standards and, in specific duly justified cases, of harmonized standards.

The production of national accounts statistics, including GFS, is not only subject to EU law but also to verification by the European Commission.⁵³ As part of the European Statistical System (ESS), the CBS compiles and disseminates a significant share of its data according to the legal requirements of this system.

The Financial Institutions and Government Department (MFO) of the Macroeconomic Statistics and Publications Division of the CBS is responsible for collecting and compiling most⁵⁴ fiscal data for each subsector of general government for administrative use in the Netherlands. The main users of these statistics are government ministries. The definitions and classifications are according to each subsector or institution's laws and accounting standards, not according to international statistical standards.

The National Accounts Department (MNR) of the Macroeconomic Statistics and Publications Division of the CBS compiles and disseminates GFS covering the general government sector in the context of national accounts statistics. Using the source data collected and/or compiled by the MFO, the MNR produces GFS according to the *European System of Accounts, 1995 (1995 ESA)* (EU Council Regulation 2223/96) and the *Manual on Government Deficit and Debt* (EU Council Regulation 3605/93 and later amendments, which refer to the *Protocol on the Excessive Deficit Procedure of the Maastricht Treaty*). The Netherlands does not compile and disseminate domestically GFS according to the *Government Finance Statistics Manual*

⁵³ The European Statistical System (ESS) comprises the Statistical Office of the European Communities (EUROSTAT) and the statistical offices, ministries, agencies, and central banks that collect official statistics in the European Union Member States, as well as Iceland, Liechtenstein, and Norway. The ESS functions as a network in which EUROSTAT's role is to lead the way in the harmonization of statistics in close cooperation with the national statistical authorities. The ESS's work concentrates on EU policy areas, but with the extension of EU policies, harmonization has consequently been extended to nearly all statistical fields.

⁵⁴ The National Accounts Department (MNR) is responsible for collecting and compiling fiscal data on all nonprofit institutions (NPIs) and "public corporate organizations."

2001 (*GFSM 2001*).⁵⁵ The statistics are reported to EUROSTAT in accordance with the 1995 *ESA* Transmission Program.

According to a 2005 Protocol⁵⁶ between the CBS and the Ministry of Finance (MOF), the CBS is responsible for compiling data on the government deficit and debt for past years according to the *EDP Protocol*, while the MOF is responsible for the estimates of the current year based on budget figures. Among other things, this Protocol confirms the independence of the CBS in estimating the deficit and debt statistics.

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

The CBS is the only official producer of all macroeconomic statistics, with the exception of balance of payments and monetary statistics. Well-established procedures are in place to ensure adequate data sharing and coordination between the CBS and the Netherlands Bank (DNB), as well as between the CBS and other providers of source data. In order to reduce the data reporting burden of data providers, the CBS uses administrative sources rather than questionnaires, when possible.

For GFS, specific protocols are in place between the CBS and the various providers of source data, such as the Ministry of Finance, other ministries, and local authorities. In addition, well-established procedures exist between the CBS and the DNB for the exchange of data related to the operations of the general government, which contributes to the consistency of the data between monetary and fiscal statistics. The CBS uses the DNB statistics to supplement their estimates of the financial account of the general government and its subsectors.

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

In line with the *Statistics Act*, sections 37 through 42a, individuals reporters' data are kept confidential and used for statistical purposes only. Individual respondents data are only available to CBS staff charged with the compilation of the relevant statistics at the CBS. All employees sign a confidentiality agreement when they enter service at the CBS, ensuring that micro data remain confidential. Encryption is used when data are transmitted electronically. All CBS computers are password protected, and access to the CBS premises can only be obtained with an electronic pass card. Visitors have to report to reception and have to be accompanied by a CBS staff member when entering the CBS premises. Staff who disclose

⁵⁵ Until 2004, general government data compiled in the context of the national accounts have been used as the basis, together with additional fiscal data, for compiling and reporting GFS according to the *GFSM 2001* for publication in the IMF's *Government Finance Statistics Yearbook (GFSY)*. This practice was ceased in 2005, when the authorities agreed that the IMF uses the fiscal data reported to EUROSTAT for publication in the *GFSY* (bridged from 1995 *ESA* formats to the *GFSM 2001* framework).

⁵⁶ *Protocol ministerie van Financiën-CBS aangaande de Nederlandse EDP-rapportages (EMU-saldo en-schuld)*, March 24, 2005.

personal information on individual reporters commits a crime and may be dismissed and/or taken to court at the discretion of the Director-General of Statistics.

For GFS, individual respondents' data⁵⁷ are only disseminated after explicit written consent has been given by the respondent. This applies to publishing data on a “functional”⁵⁸ breakdown of expenditure and revenues and data on assets and liabilities of local governments.

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

Sections 33 through 36 of the *Statistics Act* specify the legal mandate under which the CBS collects data and ensures reporting. Under these provisions, the CBS is authorized to use, for statistical purposes, data from government registers, legal persons, companies, independent professionals, and institutions to fulfill its duties.

Sections 43 through 52 of the *Statistics Act* relate to measures encouraging response. These sections of the *Statistics Act* specify the fines and penalties that the CBS can impose on legal persons, companies, independent professionals, and institutions that fail to provide the data in full or in time. As established in the *Government Gazette* of February 16, 2006, the maximum amount to forfeit is Euro 20,000, but this amount can be raised in very exceptional cases to Euro 500,000.

Special measures are needed to encourage timely reporting of high-quality data by local governments. Data reporting arrangements for local government units/entities (known as Iv3 reports or “information for third parties”) are specified in a special regulation issued by the Minister of Interior in 2004 (*Ministeriële Regeling Besluit Begroten en Verantwoorden provincies en gemeenten*—BBV). Because local governments have to report a large volume of information, mainly according to 1995 ESA classifications, the CBS established a help desk for local authorities in 2003. The help desk communicates regularly with local governments by telephone, through a dedicated website, individual visits by experts, and larger meetings with groups of respondents.

The BBV regulation provides for penalties in those cases in which the information is not delivered or when the submitted information does not meet the required standards. Local governments will first receive a written warning from the “legal supervisor” of the local government unit (e.g., for a municipality, the legal supervisor would be the province in which the municipality is located) and, if the non-observance persists, local governments have to hire an expert, at their own expense, to assist them in producing the required source data for the CBS. In practice, these measures have only been applied successfully in about 90 percent

⁵⁷ These data are compiled according to the Dutch accounting rules and classifications, not according to international statistical standards.

⁵⁸ This does not refer to the Classification of the Functions of Government (COFOG), but to the administrative functions of local governments.

of the cases. As a result, the Ministry of Interior is planning to change the BBV regulation and introduce a financial penalty to ensure timely reporting of high-quality data by local governments.

0.2 Resources

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

The CBS's budgeting process is described in sections 14 through 19 of the *Statistics Act*. At least every five years, the Director General of Statistics has to develop a multi-year program outlining the activities of the CBS. Every year, the Director-General of Statistics has to compile a work program for the following year, taking into account available resources. He must submit both work programs to the CCS for endorsement. After the work programs have been endorsed, the CCS sends the multi-year program to the Minister of Economic Affairs. Taking into account the view of the cabinet, the Minister notifies the Director-General of Statistics, the CCS, and the House of Representatives of the States General on the financial and organizational conditions to be met to realize the multi-year program. This notification is published in the *Government Gazette*.

In recent years, staff resources at the CBS have been reduced and further cuts are envisaged in the future. Nonetheless, staff, facilities, computing resources, and financing⁵⁹ are commensurate with the CBS's current statistical programs, except for the staff resources dedicated to the compilation of the PPI. While staff numbers have been reduced by five percent in the period from 2000 to 2005—in line with a general reduction in the size of the civil service, the current number of staff is broadly adequate to perform existing tasks. Staff are highly qualified in their areas of expertise and salary levels in the CBS are competitive with other civil service salaries in the Netherlands.

CBS staff have adequate computing resources available to perform their required tasks. Computer resources are adequately protected, and the CBS has emergency backup systems in place for retrieval of data in the event of disasters or other unusual events.

Physical facilities of the CBS are adequate to perform current tasks. In 2008, the Voorburg office of the CBS will move into a new building. In light of the multi-year program and transparent planning and budgeting process, funding of the CBS is adequate to perform the required tasks stated in the approved programs.

Two Departments are involved in the compilation of GFS in the CBS: the Financial Institutions and Government Department (MFO) and the GFS group in the National Accounts Department (MNR). The MFO is responsible for collecting and compiling fiscal

⁵⁹ To comply with new statistical requirements on the main macroeconomic indicators with respect to the European Action Plan, additional funds from the Ministry of Economic Affairs were made available. For example, the development and regular production of quarterly sector accounts are financed with these funds.

data for the general government (except for NPIs and “public corporate organizations”), following the country’s own classifications and formats, as well as to provide data to the GFS group in MNR for the compilation of national accounts statistics. The MFO has 49 staff members: 34 (28 full-time equivalent) staff members are responsible for local government statistics (DOH group) and the other 15 are responsible for the statistics of the rest of the general government sector (COI group). The GFS group in the MNR has 11 staff members (10 full-time equivalent). This group is responsible for compiling the general government statistics in the context of the *1995 ESA* and *EDP Protocol*. Fulfilling the requirements under the *1995 ESA* Transmission Program is taking up a large portion of staff resources in the GFS group of the MNR.

While these staff numbers for GFS appear to be commensurate with their existing tasks, they may not be adequate to compile GFS according to a more integrated presentation of data for fiscal analysis (the *GFSM 2001*, see section 2.1 and 5.1) or to implement additional measures to improve the quality of source data for local government statistics (see section 3.1).

0.2.2 Measures to ensure efficient use of resources are implemented.

Under current government financial constraints, the efficient use of existing resources is one of the CBS’s strategic objectives. The CBS’s policy intentions are stated in general terms in the budget of the Ministry of Economic Affairs, and the CBS is accountable through a series of specific performance indicators.

In the current financial environment, the CBS management and CCS have paid special attention to the efficiency of statistical processes and meeting users needs. This resulted in an extensive internal audit program and a project to revise the process for compiling national accounts, including the data sources. A major project (known as the IMPECT project) to standardize the collection of production statistics across a number of industries and to streamline the process to use the survey results in the estimation of the national accounts was initiated in 1999. Results of this project were used in the benchmark revision of the national accounts with 2001 as reference year. The main purpose of the project was to ensure a more efficient use of resources and to improve the transparency of the compilation process.

Each year, the managers in the CBS agree on a work program with each staff member. Staff performance with respect to the agreed work objectives is assessed on an annual basis and outstanding performance is rewarded with extra remuneration (bonus).

Department and group managers frequently evaluate the collaboration and mutual agreements (“service level agreements”) on internal data deliveries between the Financial Institutions and Government Department and the National Accounts Department.

0.3 *Relevance*

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

The CBS maintains regular contacts with the main users of official statistics through seven high-level advisory boards.⁶⁰ Each advisory board convenes at least twice a year. Members of the boards, which include the main users of official statistics, comment and advise on the multi-year program and the annual work program of the CBS. The Advisory Board of the Director-General comprises the chairs of the other six advisory boards and the directors of the four planning agencies in the Netherlands. These planning agencies are the Netherlands Institute for Spatial Research, the Netherlands Environmental Assessment Agency, the Social and Cultural Planning Office of the Netherlands, and the Netherlands Bureau for Economic Policy Analysis. The members of the other advisory boards are scientists from several universities in the Netherlands and representatives from enterprises, firms, banks, unions, consumer associations, research institutes, and government ministries.

Often, bilateral meetings are held with strategic users (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) at managerial level. Statistics Netherlands has assigned “account managers” (contact persons) to all strategic users to ensure that their needs are met.

CBS monitors the relevance of its statistical products through several performance indicators, including the use of its online database (StatLine), the coverage of CBS press releases, and references in parliamentary documents.⁶¹

As mentioned in dimension 0.1.1, GFS compiled by the CBS are largely prescribed by the 1995 ESA Transmission Program, as stated in various European regulations. Therefore, the relevance of the GFS is largely influenced by these EU regulations. Nonetheless, at a high level, the relevance of GFS is monitored through the Advisory Board for Macroeconomic Statistics. Its members are representatives from the DNB, the MOF, the Ministry of Economic Affairs, Rabobank (a private bank), the Netherlands Bureau for Economic Policy Analysis, the Netherlands Institute for Spatial Research, and two universities. GFS are an important input for the Netherlands Bureau for Economic Policy Analysis in their forecasts in the Central Economic Plan (“*Centraal Economisch Plan*” (April forecast) and the Macroeconomic Outlook (“*Macro-Economische Verkenning*”) (September forecast). The historical time series of GFS in both reports are provided by the CBS. Adjustments to the data, which are infrequent and usually made only for presentational purposes, are explained in footnotes.

⁶⁰ Advisory Board for Society and Economics; Advisory Board for Economic Statistics; Advisory Board for Social Statistics; Advisory Board for Price Statistics; Advisory Board for Macroeconomic Statistics; Advisory Board for Methodology and Information Technology and the Advisory Board of the Director-General.

⁶¹ Some of these are performance indicators referred to in dimension 0.2.2.

The data on government deficit (balance) and debt according to the *EDP Protocol* are of particular importance to the MOF as main indicators of their budget policy. In all reports from the MOF to the Parliament and the press (e.g., the Budget Memorandum "*Miljoenennota*"), CBS data are generally used without reservation.

The MOF provides regular feedback to the CBS on the quality of GFS. At technical level, GFS compilers in the CBS have regular, informal contacts with staff in the MOF and the Netherlands Bureau for Economic Policy Analysis.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The CBS has several processes in place to focus on the quality of the statistics it produces. In 2000, the CBS established a separate unit dedicated to quality verification.

Recently, a project to enhance the quality of the CBS's statistical outputs was initiated with the objective of establishing standards for quality of the outputs. All statistical outputs and processes will have to comply with these standards. In 2006, the CBS started conducting risk analysis for those statistics that are the most important for the corporate image of the agency. These analyses cover the different element of data quality, such as accessibility, accuracy, timeliness, coherence, relevance, and reproducibility of the output.

This process of quality assurance is intended to enhance the transparency and the quality of the compilation procedures and the statistical products. The chain from source data to statistical output often crosses the borders between the organizational units within the CBS. Recently, a new method which takes into considerations both the quality of the statistical output and the processes, including consistency within the production chain, was applied as part of a quality assessment study of economic statistics. The results of this study were very favorable.

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

Three processes are in place to monitor the quality of the CBS's statistical program:

- **Statistical auditing**, to assess the quality of the statistical outputs against EUROSTAT quality benchmarks.
- **Respondent and user survey of the CBS**, to assess the views of existing parties involved in providing and using the CBS's products.
- **Verification by the European Commission according to EU regulation 3605/93.** According to Article 8 of this regulation, bi-annual reports on government deficit and debt are assessed by EUROSTAT before publication. Member states also have to submit an "inventory of sources and methods" relating to the Excessive Deficit Procedure to EUROSTAT. Also, EUROSTAT conducts visits to member states to evaluate and discuss data transmission and EDP inventory. EUROSTAT conducts regular, official dialogue visits to member states to discuss methodological issues.

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

The DMK is responsible for expansion of knowledge, the development of a general framework, and ensuring the coherence and the standardization of the statistical processes. The DMK is also responsible for the implementation of the frameworks for general statistical methods and quality verification.

The DMK ensures continuous renewal of the statistical processes by (1) providing methodological support to new projects; (2) maintaining the business and information architecture of the CBS; and (3) conducting business analyses.

The Macroeconomic Statistics and Publications Division, which includes the National Accounts department (MNR), has its own department for research and development (MOO). Capacity for research and development is available without compromising the regular statistical output. For example, the quarterly sector accounts were developed by this department in close cooperation with the departments of Financial Institutions and Government and National accounts.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

The CBS places a high premium on its impartiality, as evidenced in the *Statistics Act*, which established the CBS as an autonomous agency, under the aegis of the Ministry of Economic Affairs, on January 3, 2004.⁶² The Act also affirmed new rules concerning the acquisition, use, and provision of data in the context of the supply of statistical information domestically and internationally. The CBS has two management bodies: a Director-General of Statistics and the Central Commission for Statistics (CCS). By law, the Director-General cannot be a civil servant subordinated to the Minister of Economic Affairs. Furthermore, the Director-General shall not hold any secondary appointments which may interfere with the proper performance of his function of preserving his independence or trust in that independence.

The CBS adopted a Code of Practice⁶³ based on the *European Statistics Code of Practice*,⁶⁴ where the main focus is on promoting trust and confidence in the independence of the CBS. The impartiality of the CBS in producing statistics is safeguarded in the code, which states that:

⁶² There is no longer a hierarchical relationship between the Minister of Economic Affairs and the CBS.

⁶³ See www.cbs.nl/en-GB/menu/organisatie/corporate-informatie/richtlijnen/code-of-practice.htm

⁶⁴ See CENEX SDC *Handbook on Statistical Disclosure Control*, March 2007.

“The statistical information Statistics Netherlands produces is intended to contribute to the effectiveness of public debate on a wide range of topics. Not only must this information be accessible and available to all parties in society, but everyone must have access to the same information at the same moment in time. Statistics Netherlands remains impartial with regard to the various interested parties in society. Statistics Netherlands also applies the principle of ‘impartiality’ to specially requested tasks: the results of work requested and paid for by third parties are not made available exclusively to these third parties. To guarantee its impartiality, Statistics Netherlands publishes release dates for information well in advance.”

Recruitment and promotion of CBS staff are done exclusively based on relevant aptitude and expertise. CBS staff regularly and actively participate in seminars, courses, and workshops arranged by regional and international organizations to further their knowledge of statistical practices in their field of expertise.

The CBS has a long-standing a culture of professionalism in the workplace. This is evidenced by recognition of authors of research and methodological papers, organization of conferences and lectures, and peer review of statistical work. Staff from statistics offices in both developing and advanced economies often visit the CBS to learn from its practices and procedures. The CBS also participates actively in international working groups and some CBS staff are in key positions in international forums.

The DMK is responsible for research and analysis in the CBS. The work of this Division is also supported by research and development work conducted by the Development and Support Sector of the Macroeconomic Statistics and Publications Division (i.e., the division responsible for, among others, national accounts, price statistics, and GFS).

For GFS, impartiality of the CBS is further strengthened by the 2005 Protocol (see dimension 0.1.1) signed between the CBS and the Ministry of Finance with respect to compilation of the government deficit and debt statistics under the EDP Protocol. This protocol protects the CBS from any MOF interference in the compilation of statistics on government deficit and debt.

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

The CBS’s choices of data sources and statistical techniques and decisions about dissemination are informed solely by statistical considerations. According to Section 18 of the *Statistics Act*, the Director-General of Statistics shall determine the methods by which the studies included in the work program and multi-year program of the CBS will be carried out, and the manner in which the results of these studies will be published. Decisions on data dissemination are guided by international guidelines, such as the IMF’s SDDS and the regulations of the European Union.

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

The CBS has internal guidelines that are available to all staff for appropriate procedures to be followed for acting (or not acting) on the erroneous interpretation and/or misuse of its statistics. The CBS monitors media coverage of its statistics, publications, and activities on a daily basis. Communications policy is handled by the Communication Division of the CBS.

1.2 Transparency

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

All information on the legislation and regulations governing the CBS are available on its website (www.cbs.nl), under “About Us,” and in its library. While *Legislation* is not a specific heading in the site index or on the web page, the *Statistics Act* is easily accessible.

The IMF’s Dissemination Standards Bulletin Board (DSBB) includes, under the heading “Integrity” the terms and conditions under which the CBS’s statistics are produced, including those relating to confidentiality and individually identifiable information.

All CBS publications identify where more information about the CBS and its products can be found, for example, by referring to the CBS website (www.cbs.nl).

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

With one exception, there is no internal government access to statistics prior to their release. The Dutch version of the CBS’s website includes the policy concerning the publication of statistics and makes public the cases in which prior access to the statistics is given to the government. As stated in the *Statistics Act*, some strategic relations of the CBS (e.g., ministries and the Netherlands Bureau for Economic Policy Analysis) are able to access (under embargo) relevant statistics prior to the public release. In order to be granted prior access, the following conditions must be met:

- The strategic relationship must have a formal involvement with the subject matter;
- Pre-access is of crucial importance to the relationship, for example to prepare answers to possible questions about statistical results; and
- The interests of other parties are not harmed.

The website also shows a list of eight categories of statistics where prior access (under embargo) is granted. Furthermore, information on the organizations that have prior access to the data and the time of access is disseminated to the public.

For GFS, prior access relates to the first estimate of the government deficit and debt statistics in March of every year, and is covered in the formal 2005 Protocol between the CBS and the Ministry of Finance. Under this agreement, the CBS sends these estimates to the Ministry of

Finance one week in advance of publication. During this week, the Ministry of Finance verifies the data for the “state” (central government) and social security funds, and compare them with their own data. The CBS and the Ministry of Finance will discuss any discrepancies between the data, but the CBS can only make adjustment to their estimates if there is, beyond any doubt, evidence that the CBS has made an error in their calculations of the deficit and debt statistics.

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

All CBS press releases and other publications are clearly recognized as products of the CBS by using the CBS logo and referring to the CBS in the first section and/or in the introduction.

Data from Statistics Netherlands in ministerial reports and in the *Budget Memorandum* are identified as such in footnotes. CBS publications and website (under “copyright”) note that information may be quoted provided that the source is stated accurately and clearly, and that reproduction of materials for own/internal use is permitted.

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

The CBS publishes information on changes in statistical procedures on their website and in all relevant publications (e.g., *De Nederlandse Conjunctuur* or “The Dutch Business Cycle” and *De Nederlandse Economie* or “The Dutch Economy”). In addition, methodological changes as well as their consequences are communicated in press releases.

Every February, advance notice of changes in policy that may affect the national accounts is given to the Ministry of Finance and the Netherlands Bureau for Economic Policy Analysis. In case of significant changes, such as the introduction of a new health care system in the Netherlands in 2006, a detailed study on the impact on the national accounts is distributed to the main users.

When a benchmark revision is done, the CBS invites main users to the CBS to explain the reasons for the benchmark revision as well as the major changes in methodology and sources, and a separate publication on the magnitude of the revisions and methodology is issued.

Since GFS are compiled in the context of the national accounts statistics, any major changes would be included with those relating to the national accounts.

1.3 Ethical standards

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

Chapter 4 of the Code of Practice of the CBS describes the behavior of CBS staff relating to the following six principles: impartiality, reliability, relevance, cost effectiveness, statistical confidentiality, and transparency.

Furthermore, the *Integrity Policy of the Statistics Netherlands* is available for all employees on the CBS's internal website. This handbook contains provisions on integrity and the applicability of this policy within the CBS.

New staff should sign a declaration to observe secrecy when entering duty at the CBS. All new staff should submit a "certificate of incorporation" from the local police vowing never to be involved in criminal activity. A few months after commencement of employment, all staff should take an oath (for example, to be loyal to the Constitution, etc.) before the Director-General of Statistics.

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 CBS compiles and disseminates annual and quarterly general government, central government, and local government statistics, on an accrual basis, in the context of the national accounts. These data are compiled according to the *European System of Accounts 1995 (1995 ESA)* under EU Council Regulation 2223/96, and the *1995 ESA Manual on Government Deficit and Debt* following the *Protocol on the Excessive Deficit Procedure of the Maastricht Treaty (EDP Protocol)*, EU Council Regulation 3605/93.⁶⁵ In addition, the Ministry of Finance compiles and disseminates monthly data on central government operations and central government debt according to the *EDP Protocol*.

Therefore, the overall structure in terms of concepts and definitions of the Dutch GFS closely follows the internationally accepted standards and guidelines defined in the *1995 ESA* and the *EDP Protocol*. These definitions and concepts are broadly similar to those of the IMF's *Government Finance Statistics Manual, 2001 (GFSM 2001)*. However, while the *GFSM 2001* is explicit on the need for an integrated fiscal analytical framework useful for fiscal analysis, in the *1995 ESA* such a framework is only implicit. The *GFSM 2001* integrated framework would provide additional analytical tools and details to support fiscal analysis, but it is not used for GFS in the Netherlands, and the authorities have no plans to migrate to the *GFSM 2001*. The revenue, expenditure, and financial data in the *1995 ESA* framework and under the *EDP Protocol* can be bridged—albeit with shortcomings—to the *GFSM 2001* framework. The same applies to the financial stock and transactions data classified by financial instrument. However, CBS staff indicated that, since there are no legal obligations to adopt the *GFSM 2001* (unlike the requirements under European law), and in light of

⁶⁵ The CBS uses the *System of National Accounts, 1993 (1993 SNA)* in cases where neither the *1995 ESA* nor the *1995 ESA Manual on Government Deficit and Debt* provide clear guidance.

further cuts (of about 30 percent) to the already tight staff resources, its adoption will have low priority.⁶⁶

2.2 *Scope*

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

The scope of GFS compiled and disseminated by the CBS and Ministry of Finance is broadly consistent with internationally accepted standards and guidelines, with some exceptions outlined below.

GFS cover all general government units in the Netherlands, with separate statistics available for the central government, local government, and social security subsectors. The GFS compiled and disseminated by the CBS complies with the *1995 ESA* Transmission Program:

- Table 02, General Government Revenue and Expenditure (annual);
- Table 06, Financial Transactions and Other Volume Changes, including GFS (annual);
- Table 07, Financial Balances, including GFS (annual);
- Table 08, Nonfinancial Sector Accounts, including GFS (quarterly and annual);
- Table 09, Taxes and Social Contributions (annual);
- Table 11, Government Expenditure according to the Classification of Functions of Government (COFOG) (annual);
- Table 25, Quarterly Nonfinancial Sector Accounts for General Government (quarterly);
- Table 27, Quarterly Financial Sector Accounts for General Government (quarterly); and
- Table 28, Quarterly General Government Debt according to the *EDP Protocol* (quarterly).

The above statistics are disseminated only by EUROSTAT, but there is a link to the EUROSTAT statistics on the CBS's website. Domestically, GFS are disseminated in the context of national accounts (i.e., the general government sector accounts of the national accounts), along with some additional details, such as a more detailed breakdown of taxes and other major revenue and expenditure items (all according to national nomenclatures).

The GFS, as compiled and disseminated in the context of the national accounts in accordance with EU Council Regulations 2223/96 and 3605/93, cover all transactions of units within its

⁶⁶ EUROSTAT recognized that data prepared in the context of *1995 ESA* have some shortcomings for purposes of fiscal analysis. Ongoing collaboration between EUROSTAT and the IMF is in place to bridge the EUROSTAT GFS to the *GFSM 2001* framework. This collaboration serves to help improve the analytical usefulness of the *1995 ESA* data on the general government account, thereby better meeting the Commission's—and the IMF member states'—analytical requirements.

scope, as presented in the **Statement of Government Operations** (Table 4.1 in the *GFSM 2001*). However, because GFS are compiled in the context of the national accounts, the following important aspects of fiscal analysis, as outlined in the *GFSM 2001*, are lacking in terms of the scope of the GFS compiled and disseminated by the CBS and the MOF:

- A **Statement on Sources and Uses of Cash** (i.e., a cash flow statement) integrated with the rest of the GFS (Table 4.2 in the *GFSM 2001*);
- A breakdown between holding gains/losses and other changes in the volume of assets and liabilities to compile a complete **Statement of Other Economic Flows** (Table 4.3 in the *GFSM 2001*);
- A complete, consolidated **Balance Sheet**, i.e., holdings of nonfinancial assets, financial assets, and liabilities (Tables 7.1, 7.2, 7.3 and 7.4 in the *GFSM 2001*). Only stocks of financial assets and liabilities are compiled and disseminated. While statistics on stocks of nonfinancial assets are compiled by the CBS for purposes of calculating consumption of fixed capital, they are currently not disseminated because it is not required under the EU regulations. The Ministry of Finance compiles and disseminates a complete balance sheet in the “*State’s Annual Report*”, in accordance with the *1995 ESA*,⁶⁷ for the “State” (equivalent to the budgetary central government),⁶⁸ and
- Recognition of government’s liabilities for unfunded, non-autonomous government employee pension schemes. In the Netherlands, most of military pensions fall under this category. The Ministry of Finance recognizes this liability in the annual balance sheet it compiles for the “State.”

The Ministry of Finance compiles and disseminates domestically monthly GFS as well as monthly debt statistics. These data are compiled in accordance with the *EDP Protocol* and cover the budgetary central government (the “State”).⁶⁹ The same monthly central government operations data and *quarterly* debt data are disseminated on the IMF’s Dissemination Standards Bulletin Board (DSBB).

⁶⁷ One balance sheet is compiled at “nominal” (face) values and another at market values.

⁶⁸ This is done in terms of the *Government Accounting Act* of 2002.

⁶⁹ For the EMU-balance and debt, these monthly statistics cover the central government, but for revenue, expenditure and financial transactions, the coverage is the budgetary central government. The operations of the “non-state” central government units/entities (public “corporate organizations”, public universities, and non-market nonprofit institutions—see dimension 2.3.1) are assumed to be balanced (i.e., net lending/borrowing is zero). It is also assumed that they have no change in their debt. For annual data, the full operations and debt of these units and entities are included in the statistics.

2.3 *Classification/sectorization*

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

The general government sector and its subsectors are defined in accordance with the *1995 ESA* guidelines (paragraphs 2.69, 3.27 and 3.28) and the *1995 ESA Manual on Government Deficit and Debt* (chapter 1), which are also consistent with the *1993 SNA* and *GFSM 2001*. The general government in the Netherlands consists of a central government, local government, and social security funds, and the CBS compiles and disseminates GFS for each subsector as well as for the consolidated (and unconsolidated) general government sector. The Ministry of Finance's monthly statistics on central government operations and debt cover all of the budgetary central government (the "State"), while the same annual statistics cover all of central government.

The central government subsector comprises:

- The budgetary central government (the "State"), i.e., ministries, some budget funds (e.g. the Municipal Budget Fund and the Infrastructure Fund) and state agencies (e.g., the prison system, state building system, central police services). Two state agencies and a part of a third state agency are considered to be engaged in market production and, therefore, are excluded from the government sector;
- Public corporate organizations, i.e., organizations established by government and funded through obliged payments by corporations. They carry out general economic policy for a specific branch of trade;
- Universities (public); and
- Nonprofit institutions (NPIs), which are controlled and financed by government units and have a national function (e.g., Prorail, which is responsible for the railway infrastructure in the Netherlands).

The local government subsector comprises:

- Municipalities, excluding their "quasi-corporations" such as public transport, energy supply;
- Provinces;
- Communal arrangements, which largely refer to cooperation between municipalities for the joint provision of public services);
- Public Water Boards;
- Special Education (i.e., schools that are financed directly by the Ministry of Education, contrary to a large part of the schools that are financed and controlled by municipalities and therefore incorporated in the accounts of municipalities);
- Nonprofit institutions (NPIs), which are controlled and financed by government units and have a local function (e.g., museums, public libraries, employment agencies, and police districts).

The social security funds subsector consists of two main parts:

- Executive bodies: Health Care Insurance Board (CVZ), Executive body Employment Insurance (UWV), Social Insurance Bank (SVB), and Central Administration Office Special Medical Cost (CAK);
- Social security funds: Disablement Insurance Fund (AOK), Disablement Insurance Act (WIA/Aof), Fund for unemployment (WW), Executive Fund of the Government (UFO), Medical Health Fund Act (ZVW), General Old Age Pensions Act (AOW), Surviving Relatives Act (ANW), and Exceptional Medical Health Act (AWBZ).

Quasi-corporations are not classified in the general government sector (in accordance with *1995 ESA* paragraph 2.13f and *1993 SNA* paragraphs 4.49-4.53). In the Netherlands, the only significant quasi-corporations are owned and controlled by municipalities (e.g., public transport, sea harbors). On the central government level, quasi-corporations' activities are negligible.

The classification of expenditure according to the *1995 ESA* is similar to the *GFSM 2001* classification of expense and acquisition of nonfinancial assets. The classification of revenue according to the *1995 ESA* is similar to the classification used by the *GFSM 2001* for revenue and disposal of nonfinancial assets. However, the *1995 ESA* classification of revenue does not require the detailed breakdown of tax revenue recommended in the *GFSM 2001*.⁷⁰

For the following items, more detailed information is compiled and disseminated domestically: taxes, subsidies, social contributions, social benefits, income and capital transfers, as well as a revenue and expenditure breakdown of social security schemes. In these cases, the high-level classifications are according to the *1995 ESA*, which are then further distinguished into national (budgetary) categories.

In line with the *1995 ESA* (paragraph 5.130), accrued interest is classified in the category "other accounts payable/receivable excluding trade credits and advances" (AF.79) in GFS compiled in the context of the national accounts.⁷¹

Swaps are classified differently in the quarterly (*1995 ESA* Transmission Tables) and annual GFS statistics in the context of the national accounts. In the quarterly tables, swaps are classified (net) as financial derivatives under financial assets (in line with the *GFSM 2001*), and in the annual accounts they are classified (net) as other accounts receivable.

⁷⁰ Table 09 of the *1995 ESA* Transmission Program requires a detailed classification of revenues, but this is not in line with the *GFSM 2001* detailed classification of revenue.

⁷¹ The CBS is investigating this issue in order to comply with the best practice, i.e., to classify accrued interest with the underlying instrument. For EU member states, these practices are described in the *1995 ESA Manual on Government Deficit and Debt* (page 133) as well as in the *Manual on Sources and Methods for the compilation of 1995 ESA Financial Accounts* (First edition, page 63). This practice has also been endorsed by the ECB and the Working Group on Monetary Union Financial Accounts.

2.4 *Basis for recording*

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

All flows and stocks of financial assets and liabilities⁷² for the general government and its subsectors are valued at market prices, with the exception noted below.

Transactions expressed in monetary values are usually at current market prices, and values of other flows and stocks are estimated using the closest market information available.

Transactions in foreign currency are converted into euros at the mean rate between the buying and selling rates on the day of the transaction. Similarly, foreign currency stocks are valued at the mean exchange rate in force at the end of the period. Quoted shares, bonds, and mutual funds shares are mainly valued at market prices, while money market instruments are valued at purchase prices. Unquoted shares and other equity holdings of central government are valued at own funds at book value, in compliance with the requirements of EUROSTAT, but unquoted shares and other equity of local governments are valued at acquisition (historical) values, contrary to international standards.⁷³

Monthly debt statistics are compiled and disseminated by the Ministry of Finance at face value⁷⁴ (which is the amount that government is obliged to pay when the debt matures), in accordance with the *EDP Protocol*, as well as at market values. Accrued interest is not capitalized to the debt instrument in the general government balance sheet in the context of the national accounts (see dimension 2.3.1 above).⁷⁵

2.4.2 *Recording is done on an accrual basis.*

Stocks and flows in the general government account are recorded on accrual basis in line with *1995 ESA* (paragraph 1.57) and the *1995 ESA Manual on Government Deficit and Debt*. The same applies for the monthly central government operations, which are compiled according to the *EDP Protocol*.

⁷² As stated in 2.2.1 above, the general government statistics disseminated by the CBS do not include stocks of nonfinancial assets but only stock figures on financial assets and liabilities. In the balance sheet for the “State” (compiled and disseminated by the Ministry of Finance) nonfinancial assets, financial assets, and liabilities are valued at current market prices, but unquoted shares and other equity are valued at market prices of the previous year.

⁷³ For 2006, it is estimated that total financial assets of the general government is underestimated by about 15 percent due to the valuation policy of unquoted share holdings of local governments.

⁷⁴ While the valuation of EMU-debt is normally referred to be at “nominal value”, the valuation is, in fact, at face value. The nominal value is the amount that the debtor owes to the creditor at any moment. It reflects the value of the instrument at creation and subsequent economic flows, such as transactions, valuation changes (excluding market price changes), and other changes, such as debt forgiveness. Conceptually, the nominal value is equal to the required future payments of principal and interest discounted at the existing contractual interest rate. Nominal value is not necessarily face value, which is the undiscounted amount of principal to be repaid.

⁷⁵ According to *1995 ESA*, this is allowed as a second-best option.

Most of the central government's source data are on a cash basis,⁷⁶ and the rest of the general government's source data are on an accrual basis. The cash-based source data are adjusted to an accruals basis using the time-adjusted method. Generally, central government taxes and charges are estimated on an accrual basis by using techniques that time-adjust the cash data by one month.⁷⁷ Consumption of fixed capital is estimated using a perpetual inventory method, based on the market values estimates of nonfinancial assets.

The Dutch government has no specific plans to implement an accrual basis of recording to central government accounting or budgeting.⁷⁸

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

The CBS and the Ministry of Finance applies grossing/netting procedures consistently with 1995 ESA guidelines. Corrective transactions, such as tax refunds, are netted against the original transactions. Transactions in assets and liabilities are shown on a net basis (i.e., acquisitions minus disposals). No financial assets are offset against liabilities.

While there is a practice of netting “own nontax revenues” of ministries against their expenditures in setting “expenditure ceilings” during the budgetary planning process, the source data are correctly recorded on a gross basis.

3. Accuracy and reliability

3.1 Source data

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

It is the policy of the Dutch Government to reduce the administrative burden of all government units and entities, including the CBS. In the area of source data collection, this policy implies that the CBS should explore all options to obtain the most reliable data sources and, only if these options have been exhausted, collect source data directly from the

⁷⁶ Except for interest on government securities other than shares (i.e., bonds and bills), which are on an accrual basis in the source data.

⁷⁷ For individual and corporate income tax, as well as the dividend tax and inheritance tax, the one-month time adjustment of cash receipts do not provide a better approximation of the accrual receipts. The monthly cash receipts for these taxes are a diverse mixture of tax liabilities and in some cases the liabilities incurred many years ago. Thus, given the current cash accounting system, it is impossible to make a realistic accrual adjustment for these taxes. These taxes represent about 20 per cent of total taxes.

⁷⁸ In 2007, one pilot project was launched in accrual accounting for the annual report (not the budget) of the Ministry of Agriculture on the basis of the *International Public Sector Accounting Standards (IPSAS)* rules. This project will be evaluated in 2008.

source (by way of a survey or questionnaire). Since this program has only been implemented recently, there are still some general “teething problems” in obtaining some data from alternative sources. Nonetheless, the overall quality of the statistics have not been significantly affected by this program.

The same comprehensive list of public sector units in the Netherlands is used across the CBS.⁷⁹ This list is reviewed regularly and, if needed, updated. Against this background, the CBS employs comprehensive data collection programs to compile GFS for the central government, local government, and social security funds. However, the local governments often report source data (using the required Iv3 reports) of substandard quality (see dimension 3.1.2 below).

Where possible, direct data sources are used. However, sometimes the CBS has to employ indirect sources of inferior quality, either because direct data sources are not available or because of the program to reduce the administrative burden of reporting agencies. For example, for all subsectors of general government, data from the Labor Force Survey (i.e., wages and salaries), banking statistics from the DNB (for financial accounts), and annual reports of public companies (e.g., to estimate dividends) are used. The CBS is using bridge and derivation tables to compile GFS from the various data sources in the context of the national accounts and the *EDP Protocol*. In general, the quality of quarterly GFS covering the quarterly financial accounts are inferior to those of the nonfinancial accounts, resulting in a discrepancy between these accounts within each subsector of general government.⁸⁰ For the most part, this inconsistency can be ascribed to lack of adequate source data for some accounts payable/receivable in the quarterly financial accounts.

The next paragraphs discuss the data sources for the three subsectors of general government in the Netherlands.

Central government

Different types of (cash-based) source data are available on a monthly, quarterly, and annual basis for the budgetary central government (the “State”): (1) monthly reports on taxes from the Tax Authority; (2) monthly revenue and expenditure, data broken down into aggregated “budget articles”, from the Ministry of Finance; (3) electronic reports, with revenue and expenditure broken down into aggregated “budget articles,” the main transactions by economic type, and explanatory notes, from all ministries and budget funds; (4) the balance of the state (“*Staatsbalans*”) from the Ministry of Finance; (5) Treasury/exchequer

⁷⁹ The CBS is responsible for the sector classification of all institutional units in the Dutch economy. In 2002, the CBS assisted the Ministry of Finance in compiling and publishing a “reference list” of all public and private NPIs with a “public task” i.e., “legal entities with a legal task” (Respersonen met een wettelijke taak (RWTs)) and “independent management bodies” (Zelfstandige bestuursorganen (ZBOs)). This publication forms the basis of the sectorization of all NPIs in the national accounts.

⁸⁰ For example, net lending/borrowing calculated as the difference between revenue and expenditure is not the same as net lending/borrowing calculated as the difference between transactions in financial assets and liabilities.

statements (*“Rijksschatkistoverzichten”*), which provide details of short-term financing of budgetary central government operations; and (6) various budget documents, such as the Budget Memorandum (*“Miljoenennota”*), Spring Memorandum (*“Voorjaarsnota”*), Fall Memorandum (*“Najaarsnota”*), Provisional Annual Account (*“Voorlopige jaarrekening”*), and the Final Account (*“Slotwet”*). For state agencies (e.g., prisons, the Immigration and Naturalization Office, weather bureau, and some agencies in defense), which employ accrual accounting principles, the CBS collects source data using quarterly questionnaires on the main revenue and expenditure items, and their annual reports.

For the other central government units/entities, quarterly and annual source data are derived from their annual, accrual-based reports. No quarterly source data are available for these units/entities, except for the Investment Bank for Developing Countries. The following annual data sources are used: (1) financial information on public universities from the Ministry of Education; (2) annual financial reports on the operations of “public corporate organizations,” prepared by the supervising body, the Social and Economic Council; and (3) a summary of financial and nonfinancial transactions of other central government nonprofit institutions (NPIs), based on their published annual reports. The relative size of all these central government entities is small in terms of the total consolidated general government. According to the CBS, the quarterly estimates from the annual sources proved to be broadly sufficient and, therefore, do not justify additional resources to collect quarterly source data. However, part of the inconsistencies between the nonfinancial data (above-the-line) and financial data (below-the-line) within the GFS datasets can most likely be ascribed to the estimates (based on annual source data) made for accounts payable/receivable for these entities.

For the monthly estimates on central government operations, the Ministry of Finance is primarily using administrative data for the budgetary central government (the “state”). Data on outstanding government debt are based on source data from the Dutch State Treasury Agency (an agency of the Ministry of Finance).

Local government

Local governments use accrual accounting standards, but do not employ standardized charts of accounts and/or nomenclatures. Since 2004, the BBV regulation (the *“Besluit Begroting en Verantwoording provincies en gemeenten”*) requires local governments to report quarterly and annual source data to the CBS using the “Iv3” reports (i.e., a standardized, detailed questionnaire). Quarterly and annual data on the operations of public water boards (quarterly and annual data) are reported according to a mutual agreement between these institutions and the CBS.

The following data sources are used for local governments: (1) for municipalities and provinces, Iv3 reports based on their budgets, which contain information on revenue and current expenditure, showing “functions” (local government nomenclature, not COFOG), including budgeted data for taxes and some market output activities; (2) for public water

boards, Iv3 reports containing information on their budgeted tax revenues; (3) quarterly and annual Iv3 reports (actual data) on the operations⁸¹ (nonfinancial and financial) of municipalities, provinces, communal arrangements, and public water boards; (4) annual information on the operations of schools from the Ministry of Education, except primary schools (see below); and (5) a summary of financial and nonfinancial transactions of other local government nonprofit NPIs, based on their published annual reports.

Through 2006, no source data for primary schools were available and had to be estimated by the CBS (see also dimension 3.3 below). Starting in 2007, some data on primary schools (for 2006) will be obtained, for the first time, from the Ministry of Education.

Social security funds

The social security “executive bodies” (see dimension 2.3.1 above) provide the CBS with monthly, quarterly, and annual source data on the operations of social security funds. These reports are supplemented with information from the Tax Authority (social security contributions) and the central bank (financial statements from insurance companies to estimate revenue and expenditure of the new Health Care Insurance Act). As mentioned earlier, some teething problems occur when switching data sources. In the case of social security funds, data on social contributions have previously been provided by the executive bodies. Now such data are provided by the Tax Authority and there appears to be an underreporting of social contributions. The CBS is making appropriate adjustments to compensate for this,⁸² and is giving high priority to the solution of this problem.

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

For central government and social security funds, the various data sources described in dimension 3.1.1 reasonably approximate the definitions, scope, classifications, valuation, and time of recording required to compile GFS in the context of the national accounts (*1995 ESA*) and the *EDP Protocol*.

Generally, enough details are provided to reclassify the source data of all subsectors of general government from the national nomenclatures to the *1995 ESA* definitions and classifications, as well as to classify financial information on stocks and flows according to the *1995 ESA* Transmission Program and the IMF’s SDDS requirements. However, some deficiencies do exist in the source data:

⁸¹ These reports include complete balance sheets on an annual basis, and financial balance sheets on a quarterly basis.

⁸² In the interim, the CBS is still getting data on social contributions from the executive bodies as well, so they can compare the data from the two sources.

- For quarterly budgetary central government (the “State”) data, some information on “other accounts payable/receivable” are missing,⁸³ and these categories have to be estimated by the CBS. This may, in part, be contributing to the discrepancy between the quarterly financial accounts and the quarterly nonfinancial accounts data.
- In some cases, source data do not provide details on the nature of the recipients or counterparties (e.g., transfers, interest, and some other financial transactions), and the CBS has to obtain such information from the counterparts or has to estimate the data.

Where data are not available on an accrual basis, the CBS uses either time-adjusted method to adjust the cash data or additional information from ministries, as relevant. This is done for some taxes, military expenditures, income transfers to the EU, social assistance benefits, property income, and the cash-based social contributions information received from the Tax Authority.

For all levels of government, sufficient information is provided to eliminate inter- and intra-governmental flows and stocks in consolidation.

Often, local government source data—as reflected in the quarterly Iv3 report—do not meet the definitions and classifications required to compile GFS. The quarterly Iv3 reports completed by local governments often include many misclassifications and incorrect entries, despite the internal checks in the questionnaire and assistance from the CBS.⁸⁴ The completion of the questionnaire is complicated for local government staff because they are unfamiliar with the 1995 ESA classifications. Moreover, there are no standard charts of accounts for local governments in the Netherlands, which makes virtually impossible to create a standard bridge between the local government nomenclatures and the 1995 ESA definitions and classifications in the Iv3 reports.

3.1.3 Source data are timely.

In general, all source data are provided with sufficient timeliness and periodicity for the CBS and the Ministry of Finance to meet timely dissemination of GFS covering the general government and its subsectors:

- Monthly source data for the compilation of monthly central government statistics are available less than one month after the end of the reference period;
- Quarterly source data are, on average, available about 30 to 45 days after the end of the reference quarter to compile GFS in the context of the national accounts and *EDP Protocol*; and

⁸³ The missing information relate to other accounts payable/receivable that are not related to the cash-to-accrual adjustments.

⁸⁴ The CBS has found that only direct visits to local governments, with hands-on assistance in completing the questionnaires, deliver lasting improvements in the quality of the questionnaires. However, tightening resources does not allow direct visits to all local governments.

- Annual source data are available with adequate periodicity and timeliness, varying in status from preliminary to “semi-final” to final data, to compile annual GFS in the context of the national accounts and the *EDP Protocol*.

The Financial Institutions and Government Department (MFO) within the Macroeconomic Accounts and Publications Division monitors the reporting of local government units and announces the reporting deadlines to municipalities, provinces, communal arrangements, and public water boards well in advance.

Nonetheless, some local governments have difficulties to submit their Iv3 report forms (covering the fourth quarter of the fiscal year (September to December)) to the CBS before February 1 of the following year, as required by the BBV regulations. In such cases, the CBS is forced to delay the reporting deadline by two weeks and, if at the end of this period no data have been submitted, the CBS estimates the missing data.⁸⁵

Reporting deadlines of other general government units (e.g., with the Ministry of Education, public water boards, and executive bodies of social security funds) are established by official agreements.

3.2 Assessment of source data

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

Well-established, adequate procedures exist to assess the source data on a regular basis. In the CBS, these assessments are performed primarily by the Financial Institutions and Government Department (MFO) within the Macroeconomic Accounts and Publications Division. Source data for NPIs and “public corporate organizations” are assessed by the GFS group in the MNR Department, which also performs some secondary assessments of the data provided by the MFO.

Most of the MOF’s resources are devoted to the assessment and processing of source data of local governments, given the quality problems being experienced with local governments’ Iv3 reports. Within this department, the Input Bureau is responsible for entering and processing the source data of local governments. Special software is used to monitor data reporting form local governments. The Input Bureau also checks (partly automatically) that files submitted by local governments are technically correct for processing. Five built-in quality checks (i.e., automatic tests) are incorporated in the Iv3 report form for local

⁸⁵ As mentioned above, the CBS established a help desk for local government units to assist them in completing the Iv3 report forms on a quarterly and annual basis. The help desk communicates regularly with local government units by telephone, through a dedicated website, individual visits by experts, and larger meetings with groups of respondents.

governments, focusing on internal consistency of the data. As mentioned in dimension 0.1.4, the authorities are considering changing the BBV regulations to incorporate additional measures to improve the quality of local government data reporting (including additional quality checks in the report forms). These type of checks cannot be introduced without changing the law.

Source data for other units/entities in the general government sector are collected by the units in the MFO responsible for data processing and dissemination. After the initial processing, all the data are assessed by the respective specialists in the MFO. During these assessments, preliminary data are assessed against the final data and large changes are noted and investigated.

The data compiled by the MFO serve as input to the GFS compiled in the context of the national accounts and according to the EDP Protocol. The GFS Group in the MNR Department performs additional assessments of the source data, such as consistency among the subsectors of general government and comparisons with data from the Labor Force Survey and banking statistics, before they are used to compile GFS. When in doubt, source data are also compared with counterpart information or supplementary information. Data on transactions in financial assets and liabilities are also compared with the changes in the stocks of financial assets and liabilities.

In all cases where direct source data are used, compilers address questions regarding source data through direct contacts in the reporting agencies.

3.3 *Statistical techniques*

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

The CBS employs sound statistical techniques in dealing with the data sources. For example:

- Estimates of missing data are based on annual historical data or budget reports of the sources.
- For quarterly data, a sample survey of state agencies and communal arrangements are used. The sample is fixed and is based on the size of the entities. Of the 40 agencies, the data of 30 are estimated using their budget reports or annual reports.
- If some of the local government Iv3 reports prove to be unusable due to quality issues, the data are grossed-up to the full population using simplified stratified ratio estimators.⁸⁶

All data are corrected when more accurate data become available, if there are material differences. Any discrepancies between the sum of the quarterly data and annual data is removed by using the Denton technique or proportional smoothing. No discrepancies can

⁸⁶ The DMK is currently working on a more advanced imputation model to deal with the Iv3 missing data problems.

exist between stocks and their corresponding flows, because they have to be reconciled in tables that form part of the *1995 ESA* Transmission Program.

No statistical techniques are applied by the Ministry of Finance in the compilation of data for the budgetary central government (the “state”).

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

Whenever possible, the CBS uses bridge tables to automatically transform the source data into the *1995 ESA* and relating classifications. In some cases, when automatic bridging is not possible, it is done manually. Other statistical procedures, such as valuation adjustments of financial assets and liabilities to market prices, are also sound. Consumption of fixed capital is calculated using the Perpetual Inventory Method, based on the market valuations of stocks of nonfinancial assets in the various subsectors of general government.⁸⁷

The procedures for adjusting cash data to accrual basis are also sound. They are (1) a one-month the time-adjusted method for some taxes and social contributions, or (2) additional information from ministries (some military expenditures, income transfers to the EU, social assistance benefits, and property income).

3.4 Assessment and validation of intermediate data and statistical outputs

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

In addition to the assessments performed by the MFO (as described earlier), the GFS Group in the MNR Department cross-checks all results with other sources, if available.

For revenue and expenditure (“nonfinancial accounts”), attention is paid to consistency over time and the application of specific *1995 ESA* concepts, such as payments of “super” dividends and cross-border leases. Other data sources for national accounts, such as the Labor Force Survey and the Supply and Use Tables are also used at this stage to validate intermediate results of GFS.

After the above verifications, “pre-balancing” verifications are done for the revenue and expenditure data of the various government units. For example, grants paid by the budgetary central government (the “State”) to municipalities, as recorded in the budgetary central government accounts are compared with grants received by municipalities, as recorded in the Iv3 reports. The data from the source that is considered most reliable is then used. Finally, this process produces a consistent dataset for the general government.

⁸⁷ Available from unpublished general government nonfinancial balance sheets in the CBS.

A similar process is applied to the “financial accounts”. First, the consistency between the above- and below-the-line data is verified. Then, the financial data are compared with monetary (banking) statistics.

The next step is to balance “uses” and “resources” for all nonfinancial transactions, as well as all financial assets and liabilities, in the Sector Accounts of the national accounts, which includes GFS. This is facilitated by software (iSR) in the computer system of the CBS.

As a final step, two types of actions are performed: (1) the overall picture is considered and judged, and (2) statistical discrepancies are investigated. If discrepancies can be resolved, adjustments are made (usually to the financial accounts); if not, the discrepancies are noted in the disseminated data.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

All statistical discrepancies in the intermediate data are assessed and investigated in the MFO Department, before they publish the data or provide data to the GFS Group in the MNR Department for further processing. For example:

- While a computer program is applying the Denton technique to make quarterly data consistent with the corresponding annual data, the results are always assessed by CBS staff in the areas of expertise.
- Aggregates of data edited on an individual basis and then grossed up are assessed to identify outliers or problems, which are investigated by senior specialists.

Once the MFO is satisfied, the data are provided to the MNR Department with accompanying explanatory notes on outliers, comparisons, coverage, etc.

As mentioned in dimension 3.4.2, all discrepancies in the Sector Accounts are also investigated and resolved, if possible.

As part of the *1995 ESA* Transmission Program, flow data are reconciled with the corresponding stock data for financial assets and liabilities. This is not done for flows and stocks of nonfinancial assets, because the CBS does not publish a nonfinancial balance sheet for general government or its subsectors.

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

Since GFS are compiled in the context of the national accounts, automatic, built-in consistency checks can be used to identify discrepancies or other data problems in the output.

The CBS has several formal and informal cooperation arrangements between itself and main data sources, such as the DNB and the Ministry of Finance. Every effort is made to resolve statistical discrepancies, although they are not necessarily resolved. For example, the

discrepancy between the quarterly net lending/borrowing calculated from the nonfinancial accounts (B.9) and its financial counterpart (B.9F) remains to be resolved.

3.5 *Revision studies*

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

The main revisions of GFS are the benchmark revision in the context of the national accounts. Such revisions are thoroughly studied and explained. On a more regular basis, revisions to GFS are only done for consumption and production. The results are published. The CBS also drafts “internal notes” about revisions, to keep record and inform other departments within the CBS. For GFS, many studies are also done in EU/EUROSTAT Task Forces. In all cases, findings from these studies are used to improve the compilation of GFS.

4. **Serviceability**

4.1 *Periodicity and timeliness*

4.1.1 *Periodicity follows dissemination standards.*

For GFS, the Netherlands meets the periodicity standards of the SDDS:

- **Central government operations** data are published monthly (by the Ministry of Finance).
- **Central government debt** data are published quarterly by the Ministry of Finance. The data are broken down by type of debt instrument and by maturity.⁸⁸

General government operations data are published quarterly and annually by the CBS.

4.1.2 *Timeliness follows dissemination standards.*

For GFS, the Netherlands meets (or exceeds) the timeliness standards of the SDDS as follows:

- Monthly **central government operations** data are published within one month after the end of the reference month.
- Quarterly **central government debt data** are published within one quarter after the end of the reference quarter.

⁸⁸ All debt are issued in Euro.

- The first estimate of annual data on **general government operations**⁸⁹ are published within one quarter of the end of the reference year, thereby exceeding the timeliness requirement for SDDS and meeting the encouraged timeliness for this category. The second estimate is published six months after the end of the reference year, in line with the SDDS requirement.

In addition, the Netherlands also meets the timeliness of the *1995 ESA* Transmission program (i.e., submitting data within one quarter).⁹⁰

4.2 Consistency

4.2.1 Statistics are consistent within the dataset.

GFS are consistent within the dataset, with one exception, which is due to the quality of the source data for quarterly transactions in financial assets and liabilities. For quarterly GFS, a statistical discrepancy (sometimes large) exists between net lending/borrowing (*1995 ESA* category B9) in the nonfinancial accounts and its counterpart (B.9F) in the financial accounts. Because the first estimate of annual GFS is based on the quarterly statistics, the same discrepancy exists in the first estimate of annual GFS for the most recent year. For years t-2, t-3, etc. the statistical discrepancies in the four quarters of a year add to zero, because the quarterly data have been made consistent with the annual data, using the Denton technique.

In Table 03 of the EDP report, which relates to stock-flow adjustments, negligible discrepancies exist in the reconciliation between the stock of government debt and the government deficit and other economic flows.

There are no inconsistencies within the monthly GFS compiled and disseminated by the Ministry of Finance.

Except for identified differences between the GFS produced according to the *1995 ESA* under EU Council Regulation 2223/96, and the *1995 ESA Manual on Government Deficit and Debt* under EU Council Regulation 3605/93 and later amendments, the same concepts and definitions are used in annual and sub annual GFS.

⁸⁹ These data are the first estimate of annual GFS according to the *EDP Protocol* and Table 02 of the EUROSTAT Transmission Program. The complete, annual GFS statistics in the context of the national accounts are disseminated in July after the end of the reference year. The GFS estimates are then based on annual data sources, not quarterly data.

⁹⁰ The exception was in 2006, when there was a delay of a few weeks in submitting Table 11, the COFOG classification of expenditure.

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

Continuity (i.e., comparability over time) of the time series has priority in the national accounts and, therefore, GFS. As a result of this policy, GFS data are consistent over time and all changes are incorporated in the scheduled national accounts benchmark revisions (every five years). Benchmark revisions are always thoroughly explained.

For the “nonfinancial accounts,” consistent series of GFS for the general government and its subsectors exist from 1969 onwards. For the “financial accounts,” consistent series (with the same coverage as the nonfinancial accounts) exist from 1990 onwards. Consistent series for COFOG classifications of expenditure exist from 1995 onwards.

Large breaks, or changes, in time series are always accompanied with explanatory notes in the publication. In GFS, breaks in time series occur exclusively due to changes in the Dutch government’s policies.

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

GFS, compiled in the context of the national accounts, are by definition consistent with the national accounts statistics. GFS is generally consistent with balance of payments and monetary and financial statistics and differences, if any, can be reconciled.⁹¹

4.3 **Revision policy and practice**

4.3.1 *Revisions follow a regular and transparent schedule.*

Revisions to GFS follow a regular, well-publicized schedule, which is the same every year:

- Annual GFS for year t are disseminated at the end of March year t+1, based on quarterly information. Subsequently, annual data are revised three times: in the national accounts in July of year t+1, where new estimates for year t (2nd estimate), year t-1 (3rd estimate), and year t-2 (4th and final estimate) are published. For GFS specifically, there is an additional revision of the government deficit and debt of year t-2 in April of year t, resulting from new information on local governments.
- Quarterly GFS for year t are revised first when the fourth quarter’s estimates are made. The revised quarterly GFS for year t are published at end-March of year t+1, along with the fourth quarter estimates for year t. Other quarterly revision are done with the same frequency as the annual data (see previous bullet).⁹²

⁹¹ Because national accounts data (and thus GFS) are only revised at benchmark revisions, and BOP is compiled (and revised) on a monthly, there may be occasions where the datasets are not fully consistent.

⁹² Revisions to quarterly GFS for EUROSTAT are submitted in September and published in October each year.

A benchmark revision is done about every five years, and announced in advance. The revision policy for all statistics is explained on the CBS's website and in the relevant hard copy publications.

4.3.2 *Preliminary and/or revised data are clearly identified.*

Preliminary data are clearly identified in all publications, using a symbol. Users know when preliminary data are replaced with final data (i.e., a revision) by observing the absence of a symbol indicating the preliminary nature of the data.

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

It is the policy of the CBS to explain significant revisions to the statistics. For a benchmark revision of the national accounts (including GFS), extensive explanations are provided for all changes/revisions. The same applies to changes in the GFS as a result of a (significant) change in government policy. Regular revisions resulting from the replacement of preliminary data with final data are not specifically explained in publications (unless significant), but final data are clearly distinguished from preliminary data (which are indicated with an asterisk (*)).

5. Accessibility

5.1 *Data accessibility*

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

GFS are disseminated in several formats to allow proper interpretation and meaningful comparisons. The CBS recognizes that the *1995 ESA* presentations do not explicitly present GFS in a complete, integrated framework useful for fiscal analysis, as is most comprehensively outlined in the *GFSM 2001*. Therefore, the CBS provides a hyperlink to the Netherlands' GFS on the EUROSTAT website, which are presented in the *GFSM 2001* framework. The CBS is exploring ways to disseminate these data domestically, using the EUROSTAT statistics in the *GFSM 2001* framework.

The most flexible facility to obtain CBS statistics is its electronic database, "Statline,"⁹³ which can be accessed via its website (www.cbs.nl). Users can select variables, periods, and the preferred layout. Statline also allows the compilation of simple charts and includes a substantial amount of metadata. Data from Statline can be downloaded in MS Excel, plain text, html or SPSS formats. First time users of Statline find it somewhat user-unfriendly.

The hard copy publication *National Accounts* (available in English and Dutch) contains a substantial amount of GFS in the context of the national accounts, as well as additional tables

⁹³ See <http://www.cbs.nl/en-GB/menu/cijfers/statline/default.htm>.

with more details (following the 1995 ESA classifications at a high level, with national nomenclature at lower levels of classification).

More GFS tables and analyses are disseminated in other CBS publications, such *De Nederlandse Conjunctuur* (“The Dutch Business Cycle”) and *De Nederlandse Economie* (“The Dutch Economy”).

With the exception of government consumption, no seasonally adjusted GFS data are compiled and disseminated.

5.1.2 Dissemination media and format are adequate.

Dissemination media and format of GFS are adequate. GFS are disseminated electronically on the CBS’s website, press releases, as well as in hard copy publications such as *National Accounts*, *De Nederlandse Conjunctuur*, and *De Nederlandse Economie*. The latter two publications include analyses of fiscal developments and more integrated presentations of GFS—albeit not according to the *GFSM 2001* framework. As mentioned, the CBS website also includes a hyperlink to the Netherlands’ GFS on the EUROSTAT website, which are presented in the *GFSM 2001* framework.

The Ministry of Finance publishes the monthly GFS on its website, as well as on the IMF’s DSBB.

5.1.3 Statistics are released on a preannounced schedule.

Every year, the CBS publishes an advance release calendar. This is supplemented by a weekly advance release calendar, which is also available on the CBS website.

A quarter-ahead advance release calendar giving the precise release dates is posted on the IMF's DSBB. A notice informing the public that an advance release calendar is disseminated on the IMF's DSBB is published in the *Statistical Bulletin of De Nederlandsche Bank*. It would be useful for users if this advance release calendar for monthly central government operations and debt is also disseminated on the Ministry of Finance and CBS’s websites.

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

All data are made available to all users at the same time, with the exception of the first estimate of the government deficit and debt according to the *EDP Protocol*. As described in dimension 1.2.2, the Ministry of Finance has prior access to assist the CBS in the verification process, before the statistics are released.

5.1.5 Statistics not routinely disseminated are made available upon request.

All nonconfidential statistics relating to GFS are made available to users upon request. Depending on the effort involved to obtain such statistics, they are provided free or for a small fee. This policy is stated on the CBS website, as well as in its 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.*

Documentation on GFS sources and methods are adequate and readily accessible. Since GFS is compiled and disseminated according to the *1995 ESA* and the *1995 ESA Manual on Government Deficit and Debt*, these two publications are the primary documents on GFS methodology used in the Netherlands. These publications have been translated in Dutch, and are available on the CBS website.

The CBS's electronic database, Statline, includes definitions of each variable, as well as brief explanations of each table. It also contains links to relevant tables and articles, definitions and explanations of symbols, and descriptions of surveys, where relevant.

The hard copy publication *National Accounts* contains summary metadata on concepts, scope, classifications, and basis of recording in English and in Dutch.

For some GFS, manuals and "inventories" are produced by EUROSTAT and EU member states. So far, only the *Manual on Quarterly Nonfinancial Accounts for General Government* (including the Dutch practice) has been published on EUROSTAT website in December 2006. The CBS has a hyperlink on its website to the EUROSTAT website home page, as well as to the EUROSTAT GFS presentations. However, it is rather difficult for users to find these references to the EUROSTAT GFS presentations and metadata on the CBS website.

Currently, drafts are being prepared on the Dutch *Quarterly Financial Accounts for General Government* and *Government Expenditure according to COFOG*. In addition, EUROSTAT will soon publish, for each member state, an inventory of sources and methods on the compilation of the government deficit and debt according to the *EDP Protocol*.

Sources and methods on the Dutch national accounts, of which the GFS forms part, is published on the CBS website in the "GNI Inventory."

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

The CBS appropriately adapts the levels of detail of metadata to the needs of the intended audience. Some publications, such as the *National Accounts*, contains detailed statistics and technical explanations and descriptions. On the other hand, publications such as *De Nederlandse Economie* (the Dutch Economy) is aimed at the general public, with fewer details and more general analyses.

5.3 *Assistance to users*

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

The CBS has one, central contact point for all inquiries, called Infoservice. This contact point is well-publicized on the CBS website and in its publications, by providing a physical address, telephone and facsimile numbers, and an e-mail address.

General inquiries are handled by staff in Infoservice, while technical inquiries are directed by Infoservice to CBS specialists in each area.

The CBS also has a spokesperson for macroeconomic statistics, who deals with the press. As mentioned in dimension 0.3.1, Statistics Netherlands has “account managers” (contact persons) for all strategic users to ensure that their needs are met.

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

All the CBS publications, press releases, contact information, and services are catalogued on its website. Specific information on GFS is available on the webpage “Macroeconomy.”⁹⁴ Hard copy publications of the CBS also contain information on other available publications, prices of publications, references to the Infoservice, and a link to Statline.

All publications and press releases are catalogued on the website. These are available without charge.

⁹⁴ See <http://www.cbs.nl/nl-NL/menu/themas/macro-economie/nieuws/default.htm>

Recommendations for Government Finance Statistics

- Compile and disseminate annual and quarterly general government statistics in line with the fiscal analytical framework set out in the *GFSM 2001*.
- Compile and disseminate a Statement of Sources and Uses of Cash (cash flow statement), as well as a complete balance sheet, for the general government and its subsectors. As an interim measure (until recognized by the *1993 SNA* and *1995 ESA*), include government's liabilities for the unfunded non-autonomous employee pension scheme as a memorandum item in the balance sheet.
- Compile and disseminate a detailed classification of tax revenue according to the *GFSM 2001*.
- Continue to explore ways to improve the quality of source data for local governments, as well as the quality of the quarterly source data for accounts payable/receivable in the financial accounts of all subsectors of general government.
- Continue to explore ways to value stocks of local government unquoted equity holdings (under financial assets) at their current market values.
- Explore the possibility of classifying accrued interest with the underlying instrument rather than in other accounts receivable/payable in the general government's financial balance sheet.
- Include the advance release calendar for central government operations and central government debt on the MOF and CBS websites. Currently, this calendar is only posted on the DNB website.

Table 4. The Netherlands: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics
(*Compiling Agency: Statistics Netherlands*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions			X			GFS according to <i>1995 ESA</i> and the <i>EDP Protocol</i> are broadly consistent with <i>GFSM 2001</i> , but important deviations in concepts and definitions, scope, and classifications do exist.
2.2 Scope			X			
2.3 Classification/sectorization			X			
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data			X			The quality of source data for local governments has room for improvement. The same applies to quarterly source data for other accounts receivable/payable.
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of source data		X				
3.5 Assessment and validation of intermediate data and statistical outputs		X				
3.6 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

V. BALANCE OF PAYMENTS STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

De Nederlandsche Bank (DNB) is responsible for compiling balance of payments statistics in the Netherlands, as established in Section 7 of the *External Financial Relations Act 1994* (*Wfbb – Wet financiële betrekkingen buitenland 1994*). The legislation requires from residents to report to the DNB information and data needed for the compilation of the balance of payments in conformity with the rules established by the DNB. Section 4 of the *Bank Act 1998* mandates the production of the statistics. Although the DNB's responsibility for the compilation of the balance of payments has been formulated rather implicitly, it is clear under Dutch law that the primary responsibility for this task rests with the DNB. The legal mandates do not prescribe data dissemination responsibilities but the DNB has a long-standing tradition of dissemination balance of payments statistics as a public service.

The DNB compiles the balance of payments in close cooperation with Statistics Netherlands (CBS). Most of the data for the current and capital accounts of the balance of payments are collected by the CBS under the terms and conditions established in the *Statistics Act* of November 2003. This division of tasks corresponds with the core business of each institution, that is real sector statistics are compiled primarily in the CBS and financial sector statistics compiled in the DNB. The compilation of balance of payments statistics at the DNB dates back to 1946.

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

The cooperation between the CBS and the DNB, which also extends to other statistical areas (in particular Financial Accounts), was formally ratified in January 2006, when directors of both institutions signed a Partnership Agreement. This agreement established responsibilities and mutual obligations that are clearly specified. The agreement has been worked out in more detail in several Further Partnership Agreements, to ensure methodological consistency and statistical output.

The Partnership Agreement CBS-DNB enhanced the decades-long cooperation between the two institutions in the exchange of data and harmonization of statistics. New elements in this agreement are the recognition of mutual obligations regarding the delivery of high quality data on a timely basis and the transparency of consultation processes.⁹⁵

⁹⁵ See Barteld Braaksma and Pim Claassen, IFC Working Paper (forthcoming), *Statistical Cooperation between Statistics Netherlands and De Nederlandsche Bank*.

The actual exchange of data between the DNB and CBS takes place by means of a secure web portal and secure e-mail. A limited number of employees at both institutions have access to this portal. Existing legislation (*Wfbb 1994* and *CBS law 2003*) allows the exchange of confidential data (including individual reports) between the institutions. Each October, a mailing calendar for data exchange in the next calendar year is agreed upon between the DNB and CBS.

Forums where statistical issues on balance of payments are discussed with CBS include regular meetings (thrice a year) at high management level devoted to all common statistical issues, technical working groups chaired by management, and meetings on a shop-floor level devoted to the joint analysis of data as well as the coordination of the Rest-of-the-World account with the balance of payments. The working groups are devoted to all aspects of quality, including harmonization of methodology and the timely transmission of data. Consideration is always given to efforts aimed at minimizing the reporting burden and avoiding duplication of activities.

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

The confidentiality of individual reporters' data is protected by law. Section 8 of the *External Financial Relations Act 1998* stipulates that any data or information collected under this law must be dealt with confidentially. However, the law allows the sharing of data and information with the CBS, ECB, and other EU central banks for statistical purposes only, if confidentiality has been sufficiently safeguarded. Section 37 of the CBS Law describes the use and confidentiality of data obtained under its legal mandate.

The Partnership Agreement states that information on individual reporters can be exchanged without restrictions, but may only be used for statistical purposes and should never be supplied to third parties. The Annex to the Further Partnership Agreements deals with actual data that may be exchanged under this rule.

Central banks that are members of the ESCB must comply with the *ECB Guideline on Confidentiality*. They must submit an annual report to the ECB on their compliance with confidentiality rules. This report is scrutinized by the ECB, which closely watches the implementation of the recommendations resulting from its review.

Respondents are informed of their rights and obligations in the explanatory notes to the report forms. In the notes, a reference is also made to the text of the *External Financial Relations Act 1994*. Several procedures exist that safeguard the confidentiality of individual reporters' data: (a) new employees at DNB have to sign an agreement never to disclose confidential data; (b) access to individual data is restricted to staff who require the information in the performance of their statistical duties; (c) staff manually execute checks on possible confidentiality issues when disseminating data (regular or ad hoc), for example to prevent residual disclosure or indirect disclosure of individual data; (d) general policy is that

external recipients of data (mainly ECB and EUROSTAT) are not allowed to publish data with a more detailed geographical breakdown than in the DNB publications; (e) micro-data are only made available to CBS, ESCB-institutions, or EUROSTAT. They are not made available for research purposes outside the DNB. (This may be reconsidered when confidentiality issues have been solved satisfactorily.); (f) confidentiality of data is guarded during storage by making use of a digital environment with limited access; (g) the DNB-premises are appropriately secured by electronic gates that prevent access to people not working at DNB, and; (h) visitors must be accompanied by DNB staff when they are inside the building.

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

Section 7 of the *External Financial Relations Act* assigns to the DNB the authority to collect data for statistical purposes. Actual collection activities are consistent with the legal authority. In some cases, the DNB and the CBS make use of each other's legislation in order to be able to limit the reporting burden and to warrant an efficient data collection process. In order to enforce reporting, the DNB applies a system of monthly formal reminders, which are followed up in the event of noncompliance. In this case, the negligent reporter must pay a daily fine ('cease and desist order') multiplied by the number of days passed after the reporting deadline. The law does not impose a maximum fine. However, the fines should be "...in reasonable proportion to the importance of the statistics..." In addition, the DNB has the power to impose an administrative fine (with a maximum of € 900.000 per individual case) when a respondent repeatedly does not comply with the reporting instructions (for example with respect to the reporting deadline). This system is actively applied and has contributed to a high level of compliance. The CBS disposes of similar instruments to enforce reporting by respondents.

Reducing the reporting burden is an important objective of the DNB, thus the reporting population is reviewed regularly. In the current report forms, business terminology is used as much as possible to avoid statistics jargon. The DNB regularly schedules meetings with different sectors of the economy to request feedback on how to improve reporting procedures, to inform them of reporting changes, and to report back statistics. Discussions with business organizations also provide the DNB with quality check on the data. In compiling the balance of payments, the DNB makes use of account managers who are well-informed of reporters' specific circumstances and are available to assist respondents in completing and submitting forms. They also deal with their questions and complaints. Examples of other mechanisms to promote adequate reporting are: (1) report forms and reporting guidelines can easily be accessed on the internet, and are available both in Dutch and English; (2) report forms can be submitted by E-line, an internet tool specially designed for easy reporting to the DNB; (3) E-line can be used from 07:00 am to 07:00 pm on working days (also, a helpdesk is available); and (4) respondents are allowed to submit reports based on their financial year.

0.2 Resources

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

The number of staff in the Statistics Department devoted to the compilation of balance of payments statistics amounts to about 30 full-time personnel. Staff members are spread out over several divisions, because they are all involved in collecting source data for four divisions: Balance of Payments and Statistical Publications, Monetary and Banking Statistics, Insurance Companies and Pension Funds statistics, and Other Financial Intermediaries Statistics. The Balance of Payments and Statistical Publications Division is responsible for the actual compilation of the balance of payments, its dissemination, and contacts with international organizations.

The DNB hires well-educated staff (university and other higher education level) by offering an adequate salary and an attractive work environment. Staff members are active participants in international meetings, and involved in teaching at seminars. Staff are encouraged to contribute articles to the DNB's *Statistical Bulletin*. Balance of payments seminars presented by DNB staff are regularly held in both Amsterdam and Ljubljana, Slovenia, in cooperation with the "Center for Excellence in Finance." These seminars are aimed at participants from countries that form part of the Dutch IMF constituency and from transition economies. Occasionally, regional seminars are held in other places (Manila in 2007, Aruba in 2008). In 2006, the DNB was ranked second in an influential best-employer national study because of its relatively high starting salaries and training budget. As regards balance of payments contents, most training is done on the job, but occasionally new staff participate in a balance of payments course offered by international organizations such as the IMF and the ECB. In recent years, staff turnover has been relatively low, contributing to the existence of a core staff with extensive experience.

Modern desktop computers with installed statistical programs for collecting, analyzing, and compiling the balance of payment data are available to all staff members. The programs are custom made and adequately maintained, with frequent new releases to keep up with new developments. The software that supports the compilation of the balance of payments, known as "AVB," was one of the largest IT projects ever implemented at the DNB. Since the completion of "AVB," regular updates take place, but for these the Statistics Department must compete with the needs of other departments within the institution. Almost all statistical reports are transmitted electronically and all data are stored and processed electronically. Special software is used to analyze the output, using an efficient macro-micro approach.⁹⁶ A back-up process takes place on a continuous basis through the general DNB back-up facilities, which are established outside the main building.

⁹⁶ See Gerrit van den Dool, Dirk van der Wal and Marc de Vor, IFC Working Paper (forthcoming), *A Macro-Micro Approach to Compiling Statistics*.

The DNB budget distinguishes between so called “ZBO-tasks” under which all supervisory tasks are included, and ESCB-tasks, under which balance of payments statistics are compiled. The funding of the ESCB tasks does not require the approval of the Minister of Finance. The DNB aims to be a strong institution within the Euro system, also in the field of balance of payments statistics. In order to be a credible member within the ESCB and internationally, the DNB is committed to adhere to best statistical practices. This has also resulted in major investments to reform the balance of payments system and to continuously train and upgrade staff. The current budget framework allows for a timely anticipation of needed changes. Overall funding is adequate.

0.2.2 Measures to ensure efficient use of resources are implemented.

The Statistics Department’s organization in the DNB is aimed at an efficient use of resources. The department was recently reorganized in such a way that its divisions deal with different groups of reporting institutions and data are shared amongst them. The Statistics Department has an organization that encourages effective delegation of responsibility. Individual progress meetings with staff are held regularly. Its management conducts annual reviews of staff performance, in which actual achievements are assessed against previously formulated objectives. The outcomes are used as an input to determine the remuneration.

Reviews of work processes are carried out periodically. In 1999, a strategic decision was made to introduce a new direct reporting system that would replace the ITRS in 2003. As a result, the reporting burden for banks and enterprises was reduced considerably. Also, the number of staff could be reduced considerably. Recently, the Statistics Department initiated a study on the feasibility of a single inquiry of nonfinancial institutions for all statistical purposes by both the DNB and CBS. A permanent exchange of best practices is carried out between the countries of the European Union (for example, in the ECB’s Working Group on External Statistics and EUROSTAT’s Balance of Payments Working Group). In addition, the CBS and DNB have well established mechanisms to discuss best practices.

Management information is sufficient to make appropriate decisions. For major projects, individual business cases have to be approved by the Project Board of the Statistics Department, which consists of all managers of the Statistics Department. This Project Board also approves the annual automation plan and regularly meets to review the progress of all projects, which are run by professional project managers. Within the limits of its overall budget, the Board also has some flexibility to (re)allocate resources. When needed, the Project Board can ask for additional budget from the Executive Board of the DNB. The Strategy, Planning and Control Division provides for a quarterly financial report on the actual utilization of the department’s budget. There is also a quarterly “traffic light” report signaling the extent to which the agreed upon targets in the field of statistics have been reached.

0.3 Relevance

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

The Balance of Payments and Statistical Publications Division holds regular meetings on statistical issues with internal users. During those meetings, users have the opportunity to express their demands. Also, regular meetings with business organizations are undertaken between three and four times every year, as well as several *ad hoc* meetings with ministries and other important data users. When relevant changes occur to its statistics (e.g., methodological changes, adjustments to reporting procedures, availability of new data, revisions), the Statistics Department informs users by means of articles in the *Statistical Bulletin* or notes to the tables.

DNB participates in a variety of statistical meetings and seminars organized by international organizations (ECB, EUROSTAT, OECD, etc.). In these meetings, new and emerging data requirements are identified and discussed. The DNB is receptive to remarks and requests from the users of its statistics. This has, for instance, resulted in the publication of data on Special Financial Institutions (SFI). Following recommendations from qualified users, the DNB plans to introduce a new table containing a reconciliation of stocks (from the IIP) and flows (from the balance of payments statement) in the December 2007 issue of its *Statistical Bulletin*.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality.

The importance of good quality statistics is at the core of the Statistics Department's mission. This filters through into the objectives of its management and the annual performance reviews. The structure of the organization is designed to ensure quality and a culture of carefulness prevails. Efficiency goals are always taken into consideration simultaneously, which, for example, has resulted in the macro-micro approach in the process of analysis of data.

During the monthly compilation process and the revision cycle, cooperation between account managers, economists, and statisticians ensures high quality output. In several meetings prior to the publication of balance of payments statistics, the quality of the figures is monitored. Respondents deal with account managers, who regularly visit reporting institutions.

Economies of scale and interrelations between datasets are well recognized. The reports of banks for monetary and banking statistics allow data to be used for monetary statistics and banking transactions in the balance of payments. The quality of the data is enhanced by performing regular economic analysis. This results in articles published in the *Statistical Bulletin* and in quarterly notes to the Board of Directors. The regular data consultations with the CBS are another important element in the quality control of the data.

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

Managers in the Statistics Department are informed each month on quality indicators focusing on response rates and timeliness among other indicators. Whenever necessary, steps are undertaken to maintain quality. In addition, the DNB compiles every quarter an internal quality report assessing some of the same quality indicators on balance of payments statistics used by the ECB and EUROSTAT.

Each year, the DNB completes and returns a partially pre-filled quality report to EUROSTAT. Until now, EUROSTAT has only produced pilot versions of its comprehensive quality report named *Quality of BoP Statistics in the EU*. Starting with the new production cycle, EUROSTAT will publish the *Quality Report* and present its conclusions to the European Parliament.

The ECB has also set up a quality monitoring system, addressing the quality of the balance of payments of the euro area and the contributions of the individual euro area countries. The ECB produces its quality report *Quality assessment of the country contributions to the euro area balance of payments and international investment position* on an annual basis.

The DNB has been advocating more extensive comparisons between EU-countries' balance of payments quality and compiling processes in the ECB's and EUROSTAT's quality reports. DNB aims at fulfilling all requirements imposed by ECB and EUROSTAT.

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

The annual work program takes quality issues explicitly into account. These issues emanate, among others, from findings in the quality reports and from feedback from users.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis.

Section 108 of the *Treaty establishing the European Union* (EU) and Section 7 of the *ESCB-Statutes* regulate the independence of central banks. Section 2 of the *External Financial Relations Act* states that the Minister of Finance may give general directions to the DNB, which shall observe these directions only to the extent that these do not conflict with the EU Treaty. In addition, Section 8 of the *Statistics Act* describes the independence of the Director-General of the CBS. Next to these formal provisions, DNB's Statistics Department has a strong and long-standing tradition of independence and professionalism. The same holds true for the CBS.

The DNB is fully committed to both the IMF's Special Data Dissemination Standard (SDDS) and the "Public commitment with respect to the ESCB's statistical function." Within the DNB, the Statistics Department has an independent position. For instance, its decisions on reporting guidelines and report forms do not have to be submitted to the Board of Directors. On the other hand, recruitment for all functions is based on competence. For functions with statistical content, only people with sufficient statistical knowledge are hired.

Training in methodology and compilation methods take place on the job. The DNB takes an active stance in nominating staff for balance of payments seminars, workshops or courses organized by international organizations (for example, the Balance of Payments Methodology course that is offered by the IMF Institute). DNB staff have been actively involved in the ongoing process of revising the *Balance of Payments Manual* as members of the working groups BOPTEG and DITEG. DNB staff also actively participate in the design of the Coordinated Portfolio Investment Survey and the Coordinated Direct Investment Survey organized by the IMF. The DNB organizes seminars on balance of payments methodology and practical compilation issues, in which its staff members are active as teachers.

A culture of professionalism prevails at the DNB, by encouraging research and analysis, the writing of articles, the organization of international conferences (for example a conference on data collection by central banks in 2006), and the sharing of experience with international organizations or other institutions within the ESCB. Currently, the DNB is running a project in which its data collection system via internet "e-Line DNB" is offered for a fee to other European institutions.

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

The choices of data sources are determined by the data requirements as prescribed by international organizations, available sources, and reporting burden considerations. Decisions to disseminate data and the timing of dissemination are based solely on statistical considerations. The publication of data and their timeliness is largely determined by the demands of international organizations. The format of the balance of payments tables in the *Statistical Bulletin* is, to a large extent, based on the *BPM5*. Besides this, wishes of users are taken into consideration when deciding on specific aspects of dissemination.

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

The DNB's Statistics Department aims to promote a correct interpretation and use of its data through the frequent publication of articles in its quarterly *Statistical Bulletin*, also available on the Internet. These articles cover both methodological issues and recent developments. The publication of a new table is usually accompanied by an article. In addition, the tables in the *Statistical Bulletin* are accompanied by extensive explanatory notes. The DNB's statistics website www.statistics.dnb.nl contains a list of "most frequently asked questions." Moreover,

the public can ask questions to the Statistics Department by clicking on the e-mail address that is on the website (usually, the response is within 48 hours). Journalists are always in close contact with DNB's Communication Department. Due to this proactive stance, the DNB has no experience with serious misinterpretations of its statistics in the media. The DNB closely follows media coverage of its statistics. If need arises, the DNB would be able to react quickly, most likely through its the Communication Department.

1.2 Transparency

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

The *External Financial Relations Act 1994* is published in Dutch in the Official Government Newspaper *De Staatscourant*. A non-authoritative translation into English is also available. The public can obtain copies from the DNB. Moreover, the text has been published on DNB website. DNB's publications contain references to places where more information can be found (for example, a list of articles in the *Statistical Bulletin*).

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

There is no access to the data before they are released to the public by the Statistics Department.

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

The DNB's statistical products display name and logo of the DNB. The DNB allows redissemination of its statistics for educational and noncommercial purposes if the source is mentioned.

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

Changes in methodology are usually described in articles in the *Statistical Bulletin* upon their implementation. In 2003, after the introduction of the new balance of payments framework, a special edition of the *Statistical Bulletin* was published. Major methodological changes are generally implemented after extensive discussions in relevant ECB and EUROSTAT fora and in close collaboration with the CBS.

Direct reporters were informed in advance of the changes implemented in 2003. In addition, they were extensively consulted about the structure and design of the new report forms. Consultations with the representative organizations of the banks started some years before the introduction of the new reporting system, even before the introduction date was known.

The banks benefited the most from the transition from ITRS to a direct reporting system. They were very cooperative in the design of the new reporting system for securities transactions and stocks based on security-by-security reporting, in which custodians (mainly owned by banks) played a key role. The banks themselves informed their customers that the obligation to complete report forms on outgoing and incoming payments would be abolished by May 1, 2003.

Enterprises that would be direct reporters in the new survey system were invited to informative meetings at the premises of the DNB. In addition, large enterprises or enterprises representative of their economic sector were visited by DNB staff for consultation about the new reporting system. The actual implementation of the new reporting system was accompanied by extensive support to the enterprises, such as on-the-spot installation of the new software E-line used for reporting data to the DNB.

1.3 Ethical standards

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

The DNB's *Code of Conduct* contains a general set of guidelines outlining correct behavior. Integrity is at the core of the Code of Conduct. DNB staff must behave in accordance with the standards of integrity, carefulness and discretion, and avoid indecent behavior, treat others respectfully and collectively maintain high standards. Guidelines exist with respect to unwanted behavior as well. A separate guideline deals with the position of whistle-blowers.

The DNB considers integrity of paramount importance. As the DNB also carries out supervisory tasks and strives for internal standards at least as high as those it demands from other financial institutions. Integrity is also one of the core competencies of DNB staff and one of the criteria in their annual performance review.

The DNB compliance regulation deals with private investment transactions by DNB staff. The goal of the compliance regulation is to avoid that staff members deal with insider knowledge and to avoid even the appearance thereof. As a general rule, DNB staff are not allowed to invest in bonds, shares, or other financial instruments issued by institutions under its supervision. All staff members must submit an overview of their investments on an annual basis. The compliance regulation is guarded by the compliance officer, who reports directly to the Board of Directors.

The Code of Conduct and the compliance regulation have been widely publicized when they were first issued. Their contents can easily be consulted on the DNB website. In addition, aspects of integrity are discussed in bank-wide meetings. DNB staff are reminded of the compliance regulation on an annual basis when they have to submit their investments report form. Staff members are screened upon commencement of their employment with the DNB, as well as when they change jobs between different departments.

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 Dutch balance of payments closely follows internationally accepted standards and guidelines. *BPM5* was taken as point of departure when the new direct reporting system was designed. The DNB is always closely communicating with international organizations (IMF, ECB, EUROSTAT, and OECD) to discuss the implementation of *BPM5* rules. In particular:

- Current, capital, and financial accounts of the balance of payments statement are defined according to the guidelines of the *BPM5*, and the current account balance is equal (with sign reversed) to the net capital and financial account balance.
- In constructing the balance of payments statement, a double-entry system is applied as a basic principle, and the net residual is embedded in the errors and omissions item.
- A clear distinction is made between the income component and the goods and services components.
- The financial account provides for a separate recording of transactions in assets and transactions in liabilities.
- The directional principle is applied in recording foreign direct investment.

The data are split up in twelve categories under five main headings:

- Current account: goods, services, income and current transfers;
- Capital account: capital transfers and acquisition/disposal of nonproduced nonfinancial assets;
- Financial account (excluding official reserves): direct investment, portfolio investment, financial derivatives and other capital;
- Reserve assets;
- Errors & omissions.

Just like the conceptual framework, concepts and definitions used to compile the balance of payments statement for the Netherlands are in conformity with *BPM5* guidelines.

This means that resident institutional units are defined as units that have a center of economic interest in the Netherlands. For construction enterprises that operate as unincorporated establishments outside the Netherlands, the one-year guideline is applied flexibly together with other considerations (e.g., maintain a complete set of accounts, pay income taxes to the host country, etc.). The same applies to construction in the Netherlands. The residence of enterprises operating in free trade zones is not recorded following the residency criteria of *BPM5*. Special Financial Institutions (SFIs) are considered residents of the Netherlands.

These entities play a significant role in the Dutch balance of payments. However, the size of their transactions also leads to distortions of individual balance of payments items. For this reason, DNB publishes both a balance of payments statement including and one excluding SFIs.

International organizations and supranational authorities are not considered residents of the Netherlands or any other national economy and are distinguished separately (i.e., they receive their own “country” code). Units of general government established abroad, e.g., Dutch embassies, military bases are considered to be resident of the Netherlands, and vice versa. In general, the one-year principle is applied to people that for balance of payments purposes are no longer considered to be a Dutch resident, such as when they intend to work in a foreign country for more than one year.

The Dutch balance of payments records the economic transactions between resident economic entities with nonresidents during a particular period. Conceptually, the time of recording a transaction corresponds to a change in ownership. In practice, a transaction in goods is recorded at the clearing by customs, in which trade statistics are used as a source. Services are recorded at the moment they are invoiced. For portfolio investment and financial derivatives, preference is given to record a transaction on the trade date. The 10 percent rule for distinguishing direct investment from portfolio investment is not applied mechanically. In the Netherlands, a direct investment relationship is determined on the basis of effective control, a treatment also allowed by *BPM5*. In practice, however, this does not lead to significant deviations.

2.2 *Scope*

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

In principle, all resident-nonresident transactions as specified in the *BPM5* are covered in the balance of payments statistics. However, there are some exceptions:

- Debt forgiveness of sectors other than the government, as a part of capital transfers, is not covered.
- No data are collected on reinvested income from investments in collective investment institutions as well as on transactions of private household accounts held abroad.
- Illegal activities are not recorded in goods.
- No distinction is made between trade in non-monetary gold held as a store of value or for other purposes.
- Loan repayments for all sectors are not entered when due, but when they are actually made.

2.3 Classification/sectorization

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

Institutional units are classified and attributed to the relevant sector according to *BPM5*. Government guaranteed external debt transactions are attributed to the institutional sector of the borrower; public enterprise claims and liabilities are attributed to ‘other sectors.’

With regard to transactions, short-term loans of the banking sector and currency and deposits transactions of this sector are not separately identified. Money and Banking Statistics are used as a source; in these only a distinction is asked between short-term and long-term liabilities. Borrowing and lending between direct investors and direct investment enterprises are classified under Foreign Direct Investment (FDI), except when those transactions are between affiliated monetary financial institutions. Also, long-term construction projects are classified under foreign direct investment. Transactions in goods and services by government entities abroad are classified under the standard component ‘government services not-included-elsewhere.’ The short-term and long-term attribution of transactions in the other investment component is made according to the original maturity of the financial instrument.

Deviations with respect to classification and sectorization from internationally accepted guidelines are object of discussion in international working groups and kept under close review.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks.

In general, all transactions are valued at market prices. Imports and exports are converted into f.o.b. prices. Monetary gold is valued at market prices, although on a quarterly basis and not at the end of the reporting period. Financial instruments traded on markets are mostly valued by directly using the prices from the DNB’s securities database (DEBBI), of which market data are provided by a commercial data provider. Non-tradable financial instruments are valued at nominal value. Direct investment transactions and stocks must be reported at market value. However, the guidelines to the report form offer respondents some freedom to fall back on nominal value or historic costs if no information on market value is available in the financial administration. In banking statistics, transaction estimates are derived from stock data. The value of the transactions excludes valuation and other changes.

If no actual market prices are available for the valuation of transactions, substitute measures are taken. For example, the value of goods in barter trade is determined by customs. However, no corrections are made for the valuation of transactions between affiliated enterprises.

Respondents must submit their reports in thousands of Euros. The reporters should convert foreign currency transactions themselves using the actual exchange rate or the reference rate on the transaction day. When net changes in foreign currency deposits/accounts are reported, the average exchange rate during the reporting period can be used. For this purpose, respondents can use the exchange rates that are published on the DNB website, which are updated daily.

Banking transactions in the financial account are derived from information on the banks' balance sheet. First, the end-of-month position data are valued in the currency in which they were originally denominated. The changes of position are calculated in the original currency. Consequently, these changes are converted into euro using the average exchange rates for the period concerned.

2.4.2 Recording is done on an accrual basis.

The principle governing transactions and their time of recording is change of ownership. With respect to goods and services transactions, approximations are used in accordance with *BPM5*. Transactions in goods are recorded at the time the goods pass the border, in harmony with trade statistics that are used as a source. Transactions in services are recorded when invoiced. Interest on financial instruments is recorded on an accrual basis. Dividends are recorded on the dates declared payable and reinvested earnings on direct investment are attributed to the periods when earned. Loans are entered in the accounts at the moment of actual disbursement and payments. Loan repayments are not entered when due, but when they are actually made. For Special Financial Institutions (SFIs), all income is recorded on a cash basis.

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

Current and capital account transactions are recorded on a gross basis. To ensure proper reporting, the DNB collects information on financial account transactions mainly on a gross basis, but the actual recording in the financial account is done on a net basis, separately for assets and liabilities. The directional principle in direct investment is applied; net flows are automatically calculated by the compilation system.

3. Accuracy and reliability

3.1 Source data

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

Although the DNB is responsible for compiling the balance of payments statement of the Netherlands, as from April 2003 a strategic decision was taken regarding the allocation of tasks between the DNB and the CBS. Currently, the CBS collects the greater part of the data

for the current and capital account (excluding investment income) and the DNB for the financial account.

The data provided by the CBS for the goods account comprise intra- and extra-EU trade. This information is adjusted for the c.i.f./f.o.b margin. After the adoption of the Intra-Community Trade Statistical System (Intrastat), the quality of trade statistics is generally considered to be of lower quality. Consequently, the CBS' National Accounts Department makes corrections to trade data. These corrections are also adopted by the DNB.

As of the second quarter of 2003, the CBS has been providing quarterly data on international trade in services with limited breakdown in comparison with the *BPM5* recommendation. However, the more detailed breakdown that *BPM5* requires is compiled on an annual basis only. To that end, it adopted a new quarterly survey. Starting in 2006, the reporting population comprises 300 large enterprises and a sample of 5000 enterprises from the group of small and medium-sized enterprises. The latter provide reports with less detail. The results are grossed up to a national level. The CBS collects data on travel using a hybrid system: travel debits come from the continuous holiday survey and travel credits come from the lodging and accommodation survey.

Furthermore, the CBS compiles quarterly data on the compensation of employees and on some items of current and capital transfers, both partly based on estimates. Some of these estimates are still subject of discussion between the DNB and the CBS, which are making a joint effort to improve the quality of the balance of payments.

The DNB collects fully reconciled data on financial transactions and positions, and additionally related income, on a monthly basis by means of its direct reporting system. This system was explicitly set up in 2003 to collect data for the compilation of balance of payments statistics. Recently, the coverage of this reporting system was extended to also

collect information on domestic transactions of some sectors (e.g., for the compilation of financial accounts).⁹⁷ The DNB survey system provides a full coverage of financial account transactions and the IIP. Data collected by the CBS and the DNB together provide generally a full coverage of the current and capital account. The DNB survey system is defined by the following features:

- Firstly, the cross-border transactions and positions are mostly obtained directly from the residents involved, i.e., through direct reporting. At the same time, it includes

⁹⁷ For a concise description of the survey system used by DNB, see: Pim Claassen, *The Road to a modern survey system: strategic choices and first experiences*, which can be accessed by the following link [http://www.czso.cz/sif/conference2004.nsf/bce41ad0daa3aad1c1256c6e00499152/6d16d67b0806ca50c1256edd0045ecbd/\\$FILE/pim%20claassen.pdf](http://www.czso.cz/sif/conference2004.nsf/bce41ad0daa3aad1c1256c6e00499152/6d16d67b0806ca50c1256edd0045ecbd/$FILE/pim%20claassen.pdf)

- some intermediary reporting by banks and custodians, especially in the field of derivatives and portfolio investment, to enhance the efficiency of data collection.
- Secondly, the collected information does not consist of individual settlements, but of aggregated transactions (and positions), as recorded in the reporting agents' business administration.
 - Thirdly, the reporting population is largely confined to representative samples.

The reporting requirements of the DNB survey are included in 16 reporting profiles for each specific group of reporting agents. The reporting profiles comprise the main data for the IIP and external debt (i.e. stocks, including accrued interest), as well as for the financial and investment income accounts of the balance of payments. They include breakdowns by country, sector and type of financial instrument.

Most reporting requirements include a full reconciliation between flows and stocks including a reconciliation of accrued interest. The "reconciliation model" implies that all changes between the opening and closing positions of the reporting period need to be explained. The changes are generally broken down into gross transactions, changes in market prices, exchange rate changes and other changes (e.g., write-offs). Portfolio investments are almost completely reported on a security-by-security basis whereby the ISIN code system is used as security identifier. Only a very limited number of reporting agents prefer to return aggregated portfolio reports. The methodology for recording portfolio investment in the Dutch balance of payments is considered as best practice by the ECB.

Most reports, both for stocks and flows, must be transmitted at a monthly frequency. However, some data which are generally not available at a monthly frequency, need to be reported on an annual basis only. This mainly concerns the stocks of equity participations and real estate, as well as related profits and losses and reinvested earnings.

Direct investment and other financial transactions of MFIs have been integrated in the reports for money and banking statistics. To that end, the reporting requirements for these statistics have been extended to allow for the derivation of flows. Moreover, investment income related to these financial instruments has been included in the reports. Data on reserve assets are provided by the accounting and securities departments of the DNB, which also use the direct reporting system to transmit this information. The most important government institutions report on a monthly basis to the DNB; estimates of the external transactions of the rest of the government are taken from the CBS.

The reporting requirements of the 16 profiles are imposed on sample populations of specific groups of reporting agents. Overall, these samples comprise around 2,100 reporting agents that were drawn in such manner to cover around 95 percent of total transactions and positions of the complete population. The DNB maintains its own business register, which provides the basis for the sample surveys. For nonfinancial institutions and other financial institutions this is, however, not a complete business register. This means that there is no possibility of cross checking the sample population with the total population. A scouting procedure has been set up to be able to detect new important players (for example in the media) and to include them

in the survey as soon as possible. Reporters are exempted from reporting when their positions fall below a threshold. A project has been started to investigate harmonizing the DNB's register, which only contains the sample of respondents, with the (complete) business register of the CBS (for benchmark purposes), as well as integrating the surveys for nonfinancial institutions.

The registers for insurance companies, pension funds, banks, and investment funds are complete and the sample populations are regularly reviewed. Every two years, a benchmark study is done to determine the sample of Special Financial Institutions (SFIs), involving all those known by the DNB at that moment. The data for the entities that are not included in the sample are estimated through a grossing-up procedure. This applies notably to investment income in the balance of payments and stocks in the IIP. For nonfinancial institutions, the DNB does not yet apply a grossing-up procedure with regard to financial account transactions in the balance of payments. For the positions of nonfinancial institutions, the grossing-up factors are based on historical data (from the system that was in place before 2003, which was based on an ITRS). For insurance companies and pension funds, a yearly grossing-up procedure in terms of percentage is used, after benchmarking with supervisory data. For MFIs, a similar system is used. However, for this sector, monetary information reported by all banks is used to determine the sample population and grossing-up factors. For missing SFIs, new fixed grossing-up figures are determined after the benchmark study. When designing the survey questionnaires used by reporters, the forms have been pre-tested extensively by reporters. Also, other central banks that had set up a survey system have been consulted and their experience has been used.

Data on goods transactions are supplied by the CBS, which uses trade statistics as a source. As regards exports and imports of goods, a distinction must be made between extra-trade (with countries outside the EU), which is fully covered, and intra-trade (with other EU countries), which is based on a sample covering about 98 percent of transactions.

With respect to the services data compiled by the CBS, all services with the exception of travel, government, insurance, and financial services are based on a direct reporting method (for the large enterprises) and a survey for the small and medium sized enterprises. The large enterprises are required to provide full information on all required detail and also more geographical detail than the smaller enterprises. Sampling methods for smaller enterprises are based on settlements data from the previous reporting system and readily available international payments data from banks. Travel, government, and insurance services are covered by already existing sources. Data on financial services are obtained through an estimation method based on direct reporting from the MFIs.'

The DNB receives from the Land Registry monthly administrative data regarding the purchases and sales of Dutch real estate by nonresidents with full geographical detail. The CBS uses data from several administrative sources (customs, VAT register, and foreign visitors) as input for various estimates regarding current account items. Migration statistics are used as a source for the estimation of migrants' transfers.

The financial press is monitored closely for information on international transactions that need to be recorded in the balance of payments. This holds in particular for direct investment transactions. For this purpose, a special file is created, called the “MeDIa file,” in which all information on mergers and acquisitions is organized by month, resident entity involved and the account manager who puts the item into the archive after finalizing it. The Statistics Department holds periodic meetings with business organizations to identify new developments or wishes that need to be taken into account in the compilation system.

Changes in international standards, guidelines, and practices are monitored and discussed in international working groups (among these the ECB Working Group on External Statistics and EUROSTAT’s Balance of Payments Working Group), in which DNB representatives participate actively. Sometimes, the DNB takes a leading role in this process, for instance in formulating the new OECD benchmark definitions for direct investment.

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

Goods: External trade statistics are compiled by the CBS on the basis of customs declarations and Intrastat for extra- and intra-EU trade, respectively. These data are available within six weeks. Both intra-EU and extra-EU trade statistics are compiled according to the country-of-consignment principle. The c.i.f./f.o.b. margin is calculated by CBS through a particular f.o.b. delivery terms method. To the extent customs declarations include f.o.b. delivery terms, these are applied as a proxy to calculate the margins for country groups. The same method is used to calculate the margins for intra-EU trade, based on the customs declarations from non-EU European countries which are adjusted for the average distances from the Netherlands.

Services: Data on international trade in services are collected by the CBS on a quarterly basis. Large entities report full detail and geography. In addition, a larger number of small and medium sized enterprises reports with less detail. The results are grossed up to a national level. Monthly data on trade in services, broken down by transport, travel and other, are extrapolated from historical data by means of an ARIMA model. After the quarterly data have been obtained, a similar method is used to distribute the data over the separate months.

Income: Investment income is collected through the DNB’s direct reporting system, as an integrated part of the reconciliation model. Dividends are recorded as of the date they are declared. All interest income is recorded on an accrual basis. Profits on foreign direct investment (FDI) equity participations are collected annually. Consequently, reinvested earnings (which are included both in the income and the financial account) are calculated for the current year as the difference between the average of profits over the previous three years and the reported declared dividends, at the level of individual reporting agents. The estimates are revised once the actual data on profits have been collected through the annual reports, which reporting agents need to submit within four months after the end of their financial year. Income on direct investment debt, like on all other interest-bearing debt, is reported on an accrual basis. Income on real estate liabilities is estimated by applying a gross yield on the reported stocks. This yield is published by ROZ (*Raad voor Onroerende Zaken*), an Institute

which collects information on transactions and rate of return on real estate in the Netherlands. In the system, no difference in treatment is made between normal shares and shares in collective investment institutions. Distributed income from shares in collective investment institutions is therefore treated as dividend income and is recorded when paid. Finally, quarterly data on compensation of employees are estimated by CBS from several labor statistics.

Current transfers: Data on current transfers from the government are collected by the DNB through monthly reports from a limited number of government agencies. Quarterly data on current transfers, in particular social security and other current transfers are supplied by the CBS, using various sources. Monthly data for the current and previous months are estimated in the same manner as for trade in services.

Capital account: Data on capital transfers from the government, including non-produced, nonfinancial assets of the government, are collected through monthly direct reports from a limited number of government agencies, supplemented by a quarterly EU-report on capital transfers coming from the EU. Data on migrants' transfers, related to portfolio investment, are collected through monthly direct reports of the custodian banks. Quarterly estimates are made by the CBS for inheritances (based on inheritance tax) and for change of residency of bank accounts (based on number of emigrants and immigrants). Private sector nonproduced, nonfinancial assets are collected by the CBS as part of their quarterly survey on international trade in services. Monthly data for the current and previous months are estimated in the same manner as for trade in services.

Direct investment: The data on direct investment are collected through the general direct reporting system, i.e., the reconciliation model. Information is collected on equity investments, equity-related investments and various types of inter-company assets and liabilities. For each of these direct investment instruments a distinction is made between long-term and short-term loans, financial leases, repurchase agreements, long-term trade credits, inter-company current accounts, and other assets and liabilities. Direct investment comprises not only the initial transaction establishing the relationship between the investor and the enterprise, but also all subsequent transactions between them and among affiliated enterprises. Reporting agents included in the sample population have to submit annual reports on the stocks of equity participations within four months after the end of their financial year. Data on stocks of loans and other forms of investment capital are collected through monthly reports. Geographical breakdowns are based on the residency of the direct cross-border debtor or creditor (first-shot principle). Financial derivatives contracted between affiliates, excluding the MFI sector, are not identified separately and are included in financial derivatives. Direct equity investment and other investments of MFIs are integrated in monthly money and banking statistics. Additionally, banks have to report direct investment equity stocks at market values, revaluations and profits paid and retained as an integral part of their annual reports on foreign affiliates, collected for prudential purposes. Only for EUROSTAT and ECB an additional breakdown of equity stocks by valuation in market and book value, is made manually. Because almost all reporters report on the basis of net asset

value (book value), a book/market ratio is applied to estimate a market value. Data on real estate within the Netherlands are based on information from the Dutch Land Registry.

Portfolio investment: The data on portfolio investment **assets** are collected through the general direct reporting system, except for holdings of households which are collected from: custodians. Data on portfolio-investment **liabilities**, on the other hand, are collected from : (a) custodians, (b) the local central securities depository, (c) resident issuers and (d) resident holders. This method is referred to as the “mixed approach for portfolio liabilities” in Chapter IV of the *Task Force on Portfolio Investment Collection Systems’ Final Report of June 2002*. Data collected from the reporting agents relate to economic ownership, except for the reports of custodians and the central securities depository, which relates to legal ownership. Both portfolio **assets and liabilities** are compiled on the basis of economic ownership. Information on cross border security lending is not collected because an investigation proved that its size is negligible. Reporting by ISIN code is not compulsory, although practically all of the data are reported in this way. When investments are reported without the ISIN code, reporting agents have to submit a full reconciliation of stocks, flows, and revaluation, including interest accrued for debt, on a monthly basis. Reporters have to submit all data classified by country and sector of the issuer and by type of instrument (shares, bonds and notes and money market instruments). When reporters use security-by-security reporting, stocks are reported as number of shares for equity or nominal value for debt. The market value of stocks, price and exchange rate changes, and interest accrued is calculated by the compilation system. The system also classifies the data by country and sector of the issuer. The transformation of the data reported by ISIN code is based on data from a securities database. The database, which is updated daily using information from a commercial data provider, contains information on ISIN code and other security identification codes, type of security , that is, by 1995 ESA instrument classification, outstanding capital (number and value of shares/debt), issue date and price, monthly price information including its source, interest (fixed/floating, current coupon rate), and the issuer (name, sector, country of residence). As from April 2006 portfolio investment assets are broken down by issuer sector.

Financial derivatives: The data on financial derivatives are collected through the general direct reporting system, i.e., the reconciliation model. For pragmatic reasons, part of the data is collected through intermediary reports from clearing organizations. Data on contracts traded directly on foreign exchanges and on OTC contracts are collected directly from the reporting agents. Contracts traded on foreign exchanges but executed through domestic banks and clearing members, on the other hand, are collected from the banks and clearing members concerned. Information regarding contracts executed by nonresidents on the domestic derivative exchange is also collected from resident banks and clearing members. Reporting agents must submit a full reconciliation of stocks, flows, and revaluation on a monthly basis. Revaluations do not need to be broken down further into price and exchange rate changes. The data are reported by instrument: options (including warrants), futures (variation margins), forward rate agreements, interest rate swaps (only swaps where no principals are exchanged), cross-currency interest rate swaps (including other swaps), outright forwards and foreign exchange swaps (forward legs only), and all other over the counter (OTC) contracts.

For exchange-traded derivatives, the geographical allocation is made according to the country where the exchange is based or, in the case of a contract traded on a Dutch exchange, the country of residency of the client. OTC contracts are allocated to the country of the actual counterpart. Transactions for assets and liabilities are collected separately, except for interest rate swaps. For these types of contracts receipts are recorded as transactions in assets and payments as transactions in liabilities.

Other investment: The data on other investments of other sectors and the DNB are collected through the general direct reporting system, i.e., the reconciliation model. The items of the other investment account are broken down by long- and short-term loans, financial leases, repurchase agreements, long-term trade credits, current accounts and other assets and liabilities. Information on the sector of the foreign counterparts is requested on the report forms for both assets and liabilities. Other (and direct) investments of MFIs are integrated in monthly money and banking statistics. Flow data on other investment are derived from monthly stock data on the balance sheet information. No data on short-term trade credits are collected in the survey system. All data for this item are estimated. The estimates are made through an econometric model which relates the supply of short-term trade credit (on the assets side) to exports and the demand for short-term trade credit (on the liabilities side) to imports. The model's results effectively mimic an inventory process, whereby trade credits supplied and demanded in a given month are compiled from trade credits from the same month plus a certain percentage of the trade credits from previous months. The percentages thus decline for months further back, so as to take redemptions into account.

Reserve assets: The data on securities and financial derivatives are collected through the general direct reporting system. Data on monetary gold, receivables from the IMF, and currency and deposits are derived from information from the DNB's monthly balance sheet, broken down by currency, country, and sector. Valuation of gold at market prices is done on a quarterly basis.

The reconciliation of international merchandise trade data with balance of payments data on goods requires extensive coordination with the compilers of trade statistics and of the rest-of-the-world account. The necessary adjustments to the data are documented. Some persistent inconsistencies between the balance of payments and the rest-of-the-world account are still under investigation.

Because external debt data are also compiled by the DNB and are derived from the same reconciliation model as the balance of payments, they are fully consistent with the international investment position and in line with the recommendations of *BPM5*.

3.1.3 Source data are timely.

The timeliness is mainly determined by international requirements of the ECB and EUROSTAT. A calendar is developed annually by the DNB, which contains all transmission and production deadlines to meet these requirements. The deadlines agreed on for collecting source data:

- Monthly information on External Trade Statistics is delivered by the CBS within six weeks.
- Quarterly information on International Trade in Services is delivered by the CBS within 12 weeks.
- Quarterly information on compensation of employees and transfers is delivered by the CBS within 12 weeks.
- Monthly information on domestic real estate is delivered by the Land Registry within 15 working days.
- Monthly information on financial transactions and related income of the MFI sector is delivered by the DNB's Monetary and banking statistics department within one month.

Respondents must transmit the report forms with monthly information on stocks, financial transactions, and related income within 15 working days. When the monthly balance of payments statement is compiled after 25 working days, about 95 percent of the monthly reports has been received and processed.

Monthly information on financial transactions and related income on the DNB's balance sheet is delivered by the Accounting department within one month.

3.2 Assessment of source data

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

The reporting technique developed by the DNB (e-Line) enforces clean input from the reporter. Primarily all source data are only assessed from a macro level, using a self-developed application called “Sirius” to easily identify outliers. In case of outliers, the underlying micro details are examined. Extreme values are confirmed with respondents, and records maintained on the confirmation. Also, the reports of the most important respondents are checked on a monthly basis.⁹⁸ Reported returns on financial assets and liabilities are compared with the reported related income.

When possible, balance of payments data are verified with external administrative sources. An important benchmark for the outcome of the balance of payments is the harmonization with the Rest-of-the-World (RoW) account within the framework of national accounts through regular consultations between the DNB and the CBS. Also bilateral banking data compiled by the Bank of International Settlements are used to verify DNB data. In case of material changes of available up-to-date data, these are all incorporated in a well defined and

⁹⁸ For a more extensive description, see: Gerrit van den Dool, Dirk van der Wal and Marc de Vor, IFC Working Paper (forthcoming), *A Macro-Micro Approach to Compiling Statistics*.

recorded revision cycle, which are scheduled according to the ECB and EUROSTAT guidelines. The size of these revisions is also assessed systematically as part of the regular process.

The DNB assesses the robustness of data on foreign acquisition of Dutch real estate obtained from the Land Registry manually, but also automatically on a macro level by means of the outlier analysis. In case of remarkable transactions, outliers or atypical developments, the Land Registry is requested to supply more detailed information.

3.3 *Statistical techniques.*

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

Data on both stocks and flows, as well as revaluations are collected simultaneously through the monthly direct reports. This allows for the checking of consistency between flows, stocks, price changes, and exchange rate changes. Processing errors are rare. Respondents deliver clean inputs and all reports are automatically processed. In case of system changes, extensive testing activities are performed to prevent possible problems. Discrepancies between monthly, quarterly, and annual data are impossible, as the system design is such that monthly data always are the basis for longer periods, i.e., quarterly and annual data are always based on and consistent with the underlying months.

Adjustments to unit records are made only when reported data clearly are inaccurate and (for analysis purposes) systems have stopped reading new reports for the current data delivery. But even then, reporters are always asked to transmit a revised report, which overwrites the manual adjustment at the time of a revision. Manual adjustments are always documented. They are always clearly identifiable because they receive a specific code (depending on the type and source of the adjustment). In addition, adjustments are made at a macro level, among others to ensure consistency with the RoW accounts published by the CBS. These adjustments are also documented. The compilation system allows an analysis of both the originally reported data, the data after revisions, as well as the revisions separately.

Adjustments are made to improve coverage/classification/timing/valuation of:

In general: Nonresponse for transactions is set off by imputations. When a report is missing, micro estimates are imputed based on the average data previously reported by the respondent.

Goods: Transit trade is excluded from merchandise trade data. All data, both imports and exports, are valued f.o.b.

Services: Until the quarterly statistics on international trade in services are received from CBS (within about ten weeks after the end of the quarter), estimations for monthly data are made with an ARIMA-model.

Income: Income on debt securities is calculated on an accrual basis when portfolio investments are reported security-by-security, using data from a securities database. As data on profits from direct investment are only collected through an annual report, the DNB makes preliminary estimates on retained profits using historical data on profits and reported declared dividends.

Current transfers: Until the quarterly statistics on current transfers of the other sectors are received from the CBS (within two months after the end of the quarter), estimations are made with an ARIMA-model. Workers remittances are estimated by the DNB as a fixed percentage (18,8 percent) of total other transfers. The CBS and the DNB are currently working to improve these estimates, for instance by using mirror statistics from important partner countries and collecting data from money transfer institutions.

Capital account: Until information from EUROSTAT on European Commission accounts has become available in order to make the breakdown between current and capital transfers, the capital transfers are estimated by the DNB with an ARIMA-model.

Direct investment: As data on earnings are only collected through an annual report, preliminary estimates of retained profits are made by the DNB based on a moving average of previously recorded profits and currently reported dividends.

Portfolio investment: Data for the MFI sector are compared with Money and Banking statistics and, if possible, harmonized.

Other investment: Deposits of Dutch citizens held at foreign banks are verified by using data collected by the BIS and, if possible, adjusted.

Reserve assets: None.

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

CBS estimates the c.i.f./f.o.b., factor for valuing imports each year on the basis of a sample survey of transportation enterprises. At this moment, no partner-country data are used to adjust trade data, but in international working groups, the so-called single-flow reporting model is currently being discussed. Data on securities transactions in secondary markets are not converted to a gross basis by adjusting for fees and commissions of securities dealers. Illegal activities are not recorded as such. The DNB makes no seasonal adjustment of the balance of payments because this is not required by international organizations and users have not shown any interest.

3.4 Assessment and validation of intermediate results and statistical outputs.

3.4.1 Intermediate results are validated against other information where applicable.

For all components of the balance of payments, the consistency with national accounts data is an important element to assess the quality of the data. For different components of investment income, monthly rates of return are derived on the basis of stock data to check for irregularities. Regarding the capital account, corrections are made each quarter for the breakdown of transfers to the European Union institutions into current and capital transfers. In the financial account in general, data on both stocks and flows, as well as revaluations and other changes are collected simultaneously through the monthly direct reports. This allows for checking the full reconciliation between flows, stocks, price changes and exchange rate changes.

On an annual basis, fully reconciled direct reports on direct investment equity are used for cross-checking the monthly capital flows. Data are compared with freely available external data. In addition, the DNB has started to investigate bilateral asymmetries in direct investment flows with some partner countries (U.K., Luxembourg). These asymmetry studies are supported and facilitated by EUROSTAT. In portfolio investment, comparisons with statistics on emissions of securities, which are also compiled by the Statistics Department, are carried out to check robustness. Moreover, the results from the IMF CPIS survey are regularly used to verify portfolio liabilities. The DNB performs appropriate checks on issues of government securities with data provided by the Dutch State Treasury Agency. Regarding other investment, BIS-data are used to verify completeness. Finally, for reserve assets, monthly reports on securities are cross-checked with data from administrative sources (accounting department).

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

As a consequence of the allocation of tasks between both institutions, the CBS is primarily responsible for the quality of the data regarding a considerable part of the current account. By means of several consultative structures, the quality of the intermediate data is assessed. In principle, the supplier is responsible for the assessment of the source data. The CBS, for example, regularly assesses data on freight earnings in relation to the value and volume of the trade flows. The DNB checks data collected for statistical purposes with data collected for supervisory purposes.

Reported financial flows are reconciled with changes in the stock data collected for external debt and the international investment position. This is an essential feature of the Dutch direct reporting system. Data on investment income are assessed in relation to corresponding stock data in the final stage of the monthly compilation cycle, and also after the revision of quarterly data, when staff performs an economic analysis, on which the quarterly report to the Board of Directors and articles in the *Statistical Bulletin* are based.

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

On a monthly basis, an overview is made of errors and omissions over a longer period, in total and by sector, in order to monitor developments. Findings may induce broader studies to identify the causes of these developments. Information on errors and omissions also is a part of the information set with quality indicators that management receives each quarter.

The occurrence of bilateral discrepancies may induce the creation of task forces by the ECB or EUROSTAT with a special mission in order to detect and solve gaps within the statistical framework. Also, the DNB has started bilateral comparisons with statistical agencies from the United Kingdom and Luxembourg to identify and investigate differences in direct investment data. The BIS Locational Banking Statistics are used for comparison of reported data.

3.5 Revision studies

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

Due to strict timetables for the delivery of monthly balance of payments statistics, revisions cannot be avoided. On one hand, some reporters will exceed deadlines or have to send again the report, on the other hand the methodology compels compilers to make initial estimates, for instance for reinvested earnings. Monitoring of revisions is considered to be a normal part of the current compilation process. Studies of the magnitude and direction of revisions over a given period of time are part of the set of quality indicators that the DNB management receives, as well as ECB's and EUROSTAT's quality reports, which have recently been developed. Since the introduction of the new reporting system in 2003, longer time series have become available and possibilities for further refinement are being considered. The DNB has acknowledged the need for a revision analysis. However, the new direct reporting system (*Directe Rapportage, or DRA*) is still so recent that sufficiently long time series are not yet available.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards.

Balance of payments statistics are disseminated with a quarterly frequency, in accordance with SDDS.

4.1.2 *Timeliness follows dissemination standards.*

The timeliness of balance of payments data meet SDDS requirements. The data are published according to the ECB timetable, usually within 32 working days after the end of the reference quarter for all prescribed components.

4.2 *Consistency*

4.2.1 *Statistics are consistent within the dataset.*

The main components of the balance of payments are classified, as far as possible, according to *BPM5*. Concepts, definitions, and classifications for producing monthly, quarterly and annual balance of payments statistics are the same. The sum of the quarterly data and the annual data are consistent. Quarterly and annual balance of payments statistics are derived from the monthly data.

Financial transactions data are reconciled with changes in the international investment position and information on the reconciliation is included on a regular basis in articles published in the *Statistical Bulletin*. A new table will be included in the quarterly Statistical Bulletin, containing a full reconciliation of the main items of the financial account, beginning with the December 2007 issue of the *Bulletin*.

The net errors and omissions item has occasionally been large, and tends to be negative. This is a continuous reason for research and further analysis.

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

Time series in the tables of the *Statistical Bulletin* cover annual data for the last five years and quarterly data for the last five quarters. The *Statistical Bulletin* makes reference to the website, <http://www.statistics.dnb.nl>, where consistent annual and quarterly time series back to 1982 are available. When changes in source data or methodology occur, historical series are reconstructed according to arrangements within the ESCB.

Methodological notes in the explanatory notes and in articles in the *Statistical Bulletin* identify and explain the main breaks and discontinuities in the balance of payments component time series, their causes, as well as adjustments made to maintain consistency over time. When the new balance of payments system was taken into use in 2003, a special edition of the *Statistical Bulletin* was issued, explaining the reasons to change over and describing the new system in detail.⁹⁹ In addition, changes in economic trends are explained

⁹⁹ See *Balance of Payments in the Netherlands: The Route to a Modern Survey System*, special issue of the *Statistical Bulletin*, May 2003, by Mark van Wersch (http://www.dnb.nl/dnb/home/file/se2003m05_tcm47-147374.pdf).

in the *Statistical Bulletin*, under “Some recent developments” or more extensively in the articles section.

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

The aim is to obtain consistent balance of payments and national accounts statistics. Temporary inconsistencies can occur due to different revision cycles. Consequently, published data are not fully harmonized. The CBS and the DNB make continuous efforts aimed at reducing methodological differences, in which progress is being made.

The balance of payments data on trade in goods is reconciled with international merchandise trade data by means of the “EUROSTAT reconciliation table.” The banking sector transactions in the balance of payments statistics are regularly checked on consistency with money and banking statistics. Even though money and banking statistics are a source for the balance of payments, sometimes adjustments are made, causing small inconsistencies. One reason for this is the different treatment of financial derivatives.

The balance of payments components comprising external debt data are consistent with the corresponding debt stocks, as the system is based on a full reconciliation of stocks and flows.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule.

Balance of payments data are preliminary when first released and are subject to revision according to the ECB timetable. However, there is no information to the public on regular revisions. This revision cycle is predetermined and stable from year to year. Even though revised quarterly and annual data are published in the *Statistical Bulletin* and on the DNB website, only the date of first publication is made known to the public by means of a release calendar. There is no documentation of regular revisions in the publications or in the database. In case there is a large revision outside the regular cycle, the public will be informed. The common practice is to prepare an article or a box in the *Statistical Bulletin*.

4.3.2 Preliminary and/or revised data are clearly identified.

Revised data are not identified in DNB’s statistical publications. However, the preliminary status of quarterly IIP data, which are partly based on estimates pending the reporting of annual data, is indicated in the explanation to the statistical tables.

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

The ECB and EUROSTAT are informed about major revisions through regular procedures, including the exchange of e-mails. In addition, the general public is informed about major revisions through articles in the *Statistical Bulletin*, which assess and explain these revisions.

A detailed analysis of differences between revised and preliminary data is only performed for internal use, as part of the management information.

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 DNB publishes in its *Statistical Bulletin* a full set of detailed time series of the balance of payments, external debt, and international investment position.¹⁰⁰ Data are disseminated in millions of euros and cover the Dutch economy excluding Special Financial Institutions (SFIs). Data on the BOP and IIP are also available including the SFIs.

The breakdowns follow the standard components classification of the *BPM5*. Data are disseminated for the following:

- Goods: exports and imports of goods;
- Services: exports and imports of services;
- Income: payments and receipts of labor and of capital income, both available on a gross basis;
- Current transfers: payments and receipts of current transfers to and from the government and other sectors;
- Direct investments (equity capital, reinvested earnings, other capital; with geographical breakdown);
- Portfolio investment: transactions in foreign and Dutch securities with nonresidents (geographical breakdown), transactions in non-EMU securities (breakdown by sector of the holder);
- Financial derivatives and other investment: trade credits; government, bank and other loans; currency and deposits.

The statistics are disseminated in a clear manner in the *Statistical Bulletin*. Analysis of and commentaries on recent developments (including charts) accompany the tables.

The Dutch balance of payments follows the functional classification of transactions in the *BPM5* list of Standard Components. However, there is no dissemination of detailed breakdown for some services since 2003.

¹⁰⁰ See <http://www.statistics.dnb.nl/index.cgi?lang=uk&todo=Balans>

5.1.2 Dissemination media and formats are adequate.

Long time series covering quarterly and annual data are disseminated in an easily downloadable MS Excel format on the website. The *Statistical Bulletin* in Dutch is available free of charge by subscription. An electronic copy of the *Statistical Bulletin* can be obtained at the DNB website.¹⁰¹ A press release containing some headlines is published with the presentation of the *Statistical Bulletin*. The press receives a pre-publication of the *Statistical Bulletin* under embargo. It is foreseen to issue press notices more frequently in the near future as soon as important new statistical information becomes available, containing a brief analysis as well.

5.1.3 Statistics are released on the preannounced schedule.

A quarter-ahead advance release calendar giving the precise release dates of its statistics, among which the balance of payments, is disseminated on the DNB website (<http://www.statistics.dnb.nl/index.cgi?lang=uk&todo=PubKal>). The *Statistical Bulletin* contains a note to bring attention to the advance release calendar. The statistics are released punctually.

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

Only the ECB and the CBS receive monthly balance of payments data. These data are not disseminated to the public at large. The sum of the three months in a quarter is made available simultaneously to all interested parties by posting the data on the DNB website, one day after data on the last month of that quarter are transmitted to the ECB. The same data are published in the *Statistical Bulletin*.

The press is briefed in advance of the content of the *Statistical Bulletin*, but embargoes are imposed to prevent early public disclosure.

5.1.5 Statistics not routinely disseminated are made available upon request.

Data on the financial account and investment income are disseminated on request. Before dissemination it is checked whether the confidentiality of the data is secured. Customized tabulations can be provided, free of charge, to meet specific requests. These requests can be made known by completing a form on the statistics part of the DNB website. Questions about the statistics can be asked in the same way. Questions about the current account or capital account, concerning statistics compiled by the CBS, are generally forwarded to the CBS.

¹⁰¹ <http://www.dnb.nl/dnb/home?lang=en&id=tcm:47-151587-64> (In English, although the Dutch version is standard).

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.*

Explanatory notes on methodology are included in the *Statistical Bulletin* and in the tables on the website. The head page of the statistics website (<http://www.statistics.dnb.nl>) makes a reference to the IMF Dissemination Standards Bulletin Board, on which comprehensive information on the sources and methods can be found in the form of the SDDS metadata. These metadata are reviewed and updated quarterly. An up-to-date document with metadata on the Dutch and European Union Balance of Payments is also available on the ECB-website: http://www.ecb.int/pub/pdf/other/bop_052007en.pdf.

Detailed information on sources and characteristics of the survey system is also available in the special edition of the *Statistical Bulletin* of May 2003 *Balance of payments in the Netherlands - The road to a modern survey system*.

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

On the statistics website there is some easy understandable information on balance of payments statistics available, for instance by means of a Frequently Asked Questions section.

More specialized information can be found in articles in the *Statistical Bulletin*, in the May 2003 special edition of the *Statistical Bulletin* and on the SDDS website (see 5.2.1).

5.3 *Assistance to users*

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

The DNB website (www.statistics.dnb.nl) provides detailed contact information for balance of payments data. The contact person is responsible for answering the question within two days. Assistance to users is monitored and reviewed regularly. When questions appear to be asked more often, they will be added to the FAQ.

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

The last pages of every *Statistical Bulletin* contain a list with all published articles and special editions since 1999. These can also be downloaded from the website. All statistical products and services are provided free of charge.

Recommendations for balance of payments

- Classify the free trade zones as part of goods, as recommended in *BPM5*.
- Disseminate data on services with the recommended breakdown in *BPM5*.
- With a view to improve vulnerability analysis and in line with *BPM5*, consider recording loans repayments when due.
- Avoid the market valuation of gold positions on a quarterly basis and follow *BPM5* guidelines for the application of market prices at the end of the reporting period.
- Pursue plans to provide public information on regular revisions and identify the status of data in publications.

Table 5. The Netherlands: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments Statistics
(*Compiling Agency: De Nederlandsche Bank*)

Element	NA	Assessment				Comments
		O	LO	LNO	NO	
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources		X				
0.3 Relevance		X				
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording		X				
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				
3.4 Assessment and validation of source data		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency		X				
4.3 Revision policy and practice			X			No information to the public on regular revisions. Lack of identification of revised data in publications.
5. Accessibility						
5.1 Data accessibility			X			No dissemination of details in services and the reverse investment for equity and other capital in direct investment flows as recommended by <i>BPM5</i> .
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

Appendix I. Summary of the Special Data Dissemination Standard (SDDS)

The SDDS prescribes the following practices under each of the identified dimensions:

Data dimension (coverage, periodicity, and timeliness)

- the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars providing at least a one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- the dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to:

- post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and
- maintain an Internet website, referred to as the National Summary Data Page (NSDP), which contains the actual data described in the metadata and to which the DSBB is electronically linked.

The IMF staff is monitoring observance of the standard through NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: <http://dsbb.imf.org>.

**Appendix II. Data Quality Assessment Framework—Generic Framework
(July 2003 Framework)**

Quality Dimensions	Elements	Indicators
<p>0. Prerequisites of quality</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics.</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>0.4 Other quality management—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</p> <p>0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.</p> <p>0.4.1 Processes are in place to focus on quality.</p> <p>0.4.2 Processes are in place to monitor the quality of the statistical program.</p> <p>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</p>
<p>1. Assurances of integrity <i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are produced on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness <i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions—<i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization—<i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.</p> <p>2.4.1 Market prices are used to value flows and stocks.</p> <p>2.4.2 Recording is done on an accrual basis.</p> <p>2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.</p>
<p>3. Accuracy and reliability <i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.</i></p>	<p>3.1 Source data—<i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Assessment of source data—<i>Source data are regularly assessed.</i></p> <p>3.3 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.</p> <p>3.3.1 Data compilation employs sound statistical techniques to deal with data sources.</p> <p>3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>3.4.1 Intermediate results are validated against other information, where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).</p>

Quality Dimensions	Elements	Indicators
<p>4. Serviceability <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p>	<p>4.1 Periodicity and timeliness—<i>Periodicity and timeliness follow internationally accepted dissemination standards.</i></p> <p>4.2 Consistency—<i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.3 Revision policy and practice—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.</p> <p>4.2.1 Statistics are consistent within the dataset. 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>4.3.1 Revisions follow a regular and transparent schedule. 4.3.2 Preliminary and/or revised data are clearly identified. 4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).</p>
<p>5. Accessibility <i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility—<i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility—<i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users—<i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 5.1.2 Dissemination media and format are adequate. 5.1.3 Statistics are released on a preannounced schedule. 5.1.4 Statistics are made available to all users at the same time. 5.1.5 Statistics not routinely disseminated are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated. 5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact points for each subject field are publicized. 5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</p>

Appendix III. Users' Survey

An informal survey of users of macroeconomic statistics was conducted with the assistance of Statistics Netherlands (*Centraal Bureau voor de Statistiek*, or CBS) to complement the IMF's assessment of the quality of macroeconomic statistics of The Netherlands. Questionnaires were sent to a wide range of users, including international agencies, government authorities, research institutes, associations, media, enterprises, and banks. Surveys were sent to 129 targeted users and 50 responses were received, which represents a 39 percent response rate. Users were asked to evaluate the coverage, periodicity, timeliness, dissemination practices, accessibility and overall quality of the official statistics produced by the CBS, the Ministry of Finance (MOF) and the Netherlands Bank (*De Nederlandsche Bank*, or DNB).

On a five point scale (1 = poor and 5 = excellent), the average rating for the overall quality of the official statistics for all sectors was 4.0. There was very little variation among the averages for each of the main datasets, with a 0.5 difference between the sector that scored the highest (balance of payments) and the one that scored the lowest (national accounts). The overwhelming majority of respondents felt that the official statistics of The Netherlands are better (23 percent) or at least as good as (74 percent) those of other countries in the region.

The respondents indicated that the official statistics they use the most were prices and national accounts. The majority of respondents obtain official statistics from official websites and statistical publications and refer to official descriptions of the sources and methods. Respondents use official statistics mainly for analysis of trends for longer-term policy formulation and for analysis of current development for short-term decision making.

In terms of the different elements of data quality, respondents expressed the most satisfaction with the coverage and level of detail of price and national accounts statistics. They felt that there is room for improving the coverage and detail of government finance and balance of payments statistics.

Most respondents were also satisfied with the methodological soundness of the official statistics, particularly for national accounts and price statistics. The lowest level of satisfaction was expressed for balance of payments (54 percent) and government finance statistics (52 percent). Along the same lines, most respondents considered price and national account statistics to be the most unbiased and accurate of the official statistics.

A large majority of respondents (86 percent) were satisfied with the periodicity and timeliness of price statistics and, to a lesser extent, national accounts. However, there was dissatisfaction with the timeliness of balance of payments statistics.

Most respondents were satisfied with the accessibility of official statistics and the metadata available on the official websites and in the publications. However, two-thirds of the respondents were unaware of the existence of advance release calendars, which have been available on the websites of the statistical agencies and the IMF's Data Dissemination Bulletin Board for many years.

Many respondents took advantage of the survey and provided additional comments and suggestions regarding the Netherlands' statistics. Among several of these, users expressed interest in more disaggregated data on prices, production, foreign direct investment, trade in services, and government finance statistics. They also felt that the lag between the estimated and final national accounts is too long and that the timeliness of the hard copy publications should improve. Several users mentioned that the official websites were quite adequate, but they could be made more user-friendly. Users expressed interest in the availability, among other things, of data on small and medium enterprises, wages, education, imports by sector, the number of importing and exporting firms, and on the prices of financial services. Finally, several users felt that there is room for improving the revisions policy and practices of the official statistical agencies. The comments are shown below, grouped into four categories: (1) methodological soundness; (2) serviceability; (3) accessibility; and (4) general comments.

Table 6. Questionnaire Results Analyzed by Type of User

Type of Respondent	Total Sent	Total Received	In % Received
International	4	4	100
Government	25	8	32
Research Institutes	25	7	28
Associations	19	8	42
Media	10	2	20
Enterprises and Banks	46	21	46
Total	129	50	39

Table 7. Results of Users' Survey
(In percentage of total responses)
October 2007

General Information about Uses of Official Macroeconomic Statistics of

1. Which official statistics do you use regularly?		
1.1	National accounts (NA)	56%
1.2	Prices	76%
1.3	Government finance statistics (GFS)	34%
1.4	Balance of payments (BOP)	26%
1.5	Other:	
	• Monetary and financial statistics	32%
	• Production indices	34%
	• Labor market	56%
	• Merchandise trade	28%
	• International reserves and foreign currency liquidity	14%
	• External debt	10%
	• International investment position	24%
	• Other	28%
2. Where do you obtain the official statistics?		
2.1	Official press releases and publications on macroeconomic statistics	74%
2.2	Private sector summaries and analyses	34%
2.3	Official policy papers	32%
2.4	Publications from international organizations about the country	26%
2.5	Other sources	28%
3. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?		
	• Yes	66%
	• No	30%
4. For what purposes do you use the official statistics?		
4.1	Analysis of current developments for short-term decision making	48%
4.2	Analysis of trends for longer-term policy formulation?	52%
4.3	Econometric model building and forecasting	28%
4.4	Economic research	46%
4.5	Comparison with economic developments in other countries	40%
4.6	General economic background	42%
4.7	Other	26%

Table 7.

	NA	Prices	GFS	BOP	Other	Average
5. Coverage and detail						
5.1 In general, are you satisfied with the coverage of official statistics?						
• Yes	62%	80%	48%	42%	38%	58%
• No	38%	20%	52%	58%	62%	42%
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?						
• Yes	60%	72%	44%	38%	32%	54%
• No	40%	28%	56%	62%	68%	47%
6. Periodicity and timeliness						
6.1 Are you satisfied with the frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly, annual)?						
• Yes	66%	86%	44%	42%	34%	60%
• No	34%	14%	56%	58%	66%	40%
6.2. In general, do you consider that the official statistics are disseminated with the appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)?						
• Yes	50%	78%	42%	36%	24%	52%
• No	50%	22%	58%	64%	76%	48%
7. Other dissemination practices						
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dates on which the various official statistics will be disseminated?						
• Yes	48%	62%	24%	30%	20%	41%
• No	52%	38%	76%	70%	80%	59%
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?						
• Yes	40%	54%	22%	28%	16%	36%
• No	60%	46%	78%	72%	84%	64%
7.3 Is there enough information about revisions to official statistics?						
• Yes	48%	58%	40%	34%	32%	45%
• No	52%	42%	60%	66%	68%	55%

Table 7.

8. Accessibility

8.1 Can you easily access the official statistics?

• Yes	62%	76%	42%	44%	24%	56%
• No	38%	24%	58%	56%	76%	44%

8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, methodological descriptions, reference concerning concepts, classification, statistical practice)?

• Yes	58%	70%	42%	42%	30%	53%
• No	42%	30%	58%	58%	70%	46%

8.3 Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you?

• Yes	68%
• No	0%
• No Opinion	32%

8.4 How do you get access to official statistics?

• Official releases	32%
• Hard copy publications	54%
• Data specifically requested	34%
Electronic form	
• Official website	90%
• Other	14%
• E-mail requests	40%

NA Prices GFS BOP Other

9. Overall assessment

9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?

• Yes	62%	74%	48%	46%	28%	58%
• No	38%	26%	52%	54%	72%	42%

9.2 In general, do you consider the official statistics to be unbiased and accurate?

• Yes	50%	70%	48%	46%	36%	54%
• No	50%	30%	52%	54%	64%	46%

9.3 How would you compare the quality of official statistics of the country with those of other countries in the region?

• Better	26%	20%	24%	24%	31%	23%
• Same	67%	77%	76%	76%	69%	74%
• Worse	7%	3%	0%	0%	0%	3%

9.4 How do you assess the overall quality of the official statistics?

(1 rated as poor and 5 as excellent)	3.8	4.1	3.9	4.3	3.8	4.0
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Appendix IV. The Netherlands: Comments by Users of Macroeconomic Statistics

1. Methodological soundness

- It would be important to provide nonfinancial balance sheets for the general government and the households sector.
- Data on Dutch natural gas revenue are missing. These data should be separated in three categories: corporations tax, dividend, and revenue from land and mineral reserves.
- Good price/quantity data is still missing in services.
- Insufficient disaggregation in national accounts, price, and production statistics with regard to the construction industry.
- Activity breakdown for foreign direct investment and geographical breakdown for trade in services data would be useful.
- Changes from one consumer basket to the next raises some doubts, and uncertainty about the soundness of the methodology of the labor market statistics.
- The grossing-up methods for balance of payments may be further explained in the documentation, particularly for special purpose entities.

2. Serviceability

- BOP publications should explain the differences between BOP and IIP statistics.
- National accounts estimates are quick enough, but it takes too much time to have definitive data.
- Statistics on emissions and transport/traffic data have a very long time lag, sometimes almost 1.5 until two years later.
- In case of revisions, back data that still have to be revised are often hard to access.
- Recent revisions have proven to be large, suggesting initial estimates may not have been accurate.
- In national accounts, construction statistics regularly show big differences between preliminary results and final statistics occur.

3. Accessibility

- A consistent national accounts time series before 1970 exist only in the most aggregate level. As a consequence, data users have to construct their own time series.
- Statistical publications are sometimes too late, which leads to conclusions that are not correct anymore.
- Price statistics are on the internet in total numbers only. More detailed statistics are needed.
- The statistics covering the government could be more detailed.
- More detailed information may be useful concerning hours worked, capital stock, housing wealth, asset holdings split into domestic and foreign holding or sectoral level.

- The availability of an advance release calendar needs to be communicated to the public.
- Statline should be made more user-friendly.
- A good set of comprehensive and long time-series is still not yet available for several statistics.

4. General comments

- Data on small and medium enterprises, as well as wages would be very useful.
- Better statistics on education should be developed in cooperation with the Ministry of Education.
- It would be useful to disseminate information on imports by sector and on the number of importing and exporting firms.
- Improvements can be made if there is a difference between national and European/international definitions, e.g. the unemployment definition. Both statistics should be presented with an explanatory note.
- Quality of data should be given a high priority.
- There should be better and more transparent information on the prices of financial services.