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

This Report on the Observance of Standards and Codes on Data Module for Malta 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 August 3, 2006. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Malta or the Executive Board of the IMF.

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

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MALTA

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

Prepared by the Statistics Department

Approved by Robert W. Edwards and Michael Deppler

August 3, 2006

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

The datasets covered in this report are national accounts, consumer price indices, government finance, and balance of payments statistics. The agencies that compile the datasets assessed in this report are the National Statistics Office and the Central Bank of Malta.

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

The National Statistics Office website (http://www.nso.gov.mt)
The Central Bank of Malta website (http://www.centralbankmalta.com)

This report is based on information provided prior to and during a staff mission from June 22–July 5, 2005 and publicly available information. The mission team included Mr. Keith Dublin (mission chief), Messrs. Louis Venter and René Fiévet (Senior Economists), Ms. Silvia Matei and Ms. Shelley Winston (Economists), and Ms. Norma Marotta (STA—Research Officer).

Malta is a member of the European Statistical System, which comprises the Statistical Office of the European Communities (Eurostat) and the statistical offices, ministries, and central banks that collect statistics in the countries of the European Economic Area. These countries presently comprise the European Union member states, Iceland, Liechtenstein, and Norway.

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ACRONYMS

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

ARC Advance Release Calendar

BPM5 Balance of Payments Statistics Manual, fifth edition

CBM Central Bank of Malta

CIBAs International Trading Companies

CPIs Consumer Price Indices
CPIU Consumer Price Index Unit

COICOP Classification of Individual Consumption by Purpose DQAF July 2003 Data Quality Assessment Framework, July 2003 version

DG Director General

DSBB Dissemination Standards Bulletin Board

EBU Extrabudgetary Unit
ECB European Central Bank
EEA European Economic Area

EU European Union

GDDS General Data Dissemination System

GDP Gross Domestic Product GFS Government Finance Statistics

GFSM 1986 A Manual on Government Finance Statistics, 1986 GFSM 2001 Government Finance Statistics Manual 2001

HBS Household Budget Survey

HICP Harmonized Index of Consumer Prices
IIP International Investment Position
IMF International Monetary Fund

ISWGNA Inter-Secretariat Working Group on National Accounts

MOF Ministry of Finance
MSA Malta Statistics Authority
NSO National Statistics Office

ROSC Report on the Observance of Standards and Codes

RPI Retail Price Index

SDDS Special Data Dissemination Standard

STA IMF Statistics Department SUT Supply and Use Tables

I. OVERALL ASSESSMENT

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A. SDDS Assessment

- 1. In early February 2005, the Maltese authorities expressed interest in subscribing to the Special Data Dissemination Standard (SDDS). During this Report on the Observance of Standards and Codes (ROSC)—Data Module mission of June 22–July 5, 2005, the Governor of the Central Bank of Malta (CBM) and the Director General (DG) of the National Statistics Office (NSO) voiced their strong commitment to SDDS subscription in the coming months.
- 2. The authorities post data for most of the prescribed SDDS data categories on the websites of the NSO and the CBM. The NSO plans to post time series for producer price indices and government finance data on its website in the near term. The CBM indicated that it would disseminate data on the international reserves and foreign currency liquidity template and the external debt template on its website.² A preliminary review of Malta's observance of the SDDS prescriptions (see Table 4) indicates that Malta meets the specifications for coverage, periodicity, and timeliness for those SDDS data categories that are currently disseminated (see Table 4).
- 3. The review of the observance of the SDDS also covered the availability of Advance Release Calendars (ARCs). ARCs are available for most of the data categories except for the production and producer price indices, government finance statistics (GFS), gross official reserves, international reserves and foreign currency liquidity template, external debt, and the international investment position (IIP). However, both the NSO and the CBM have indicated that ARCs for all SDDS data categories will be available shortly.

B. ROSC Data Module

- 4. The quality of the macroeconomic statistics for Malta has improved significantly in recent years, particularly as a result of the legal and institutional restructuring of the NSO. These changes were made in an effort to respond more effectively to the needs of users and to comply with new data-reporting requirements of the European Union (EU). These improvements have brought Malta's statistical practices in line with internationally accepted standards and practices in a number of statistical areas.
- 5. The ROSC data module contains in this first section the following main observations. Malta has an effective legal and institutional framework that supports the conduct of a range of statistical functions. Collaboration among statistical agencies in sharing data is effective.

¹ Malta has participated in the General Data Dissemination System (GDDS) since September 2000, and its metadata are posted on the Fund's Dissemination Standards Bulletin Board (DSBB). These metadata were last updated in June 2003.

² The reserves template has been compiled monthly since June 2004, and the annual external debt data have been compiled on a trial basis since 2003.

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These agencies manage their resources flexibly to meet evolving statistical needs, but constraints are emerging, as resources are increasingly stretched to respond to the demands from regional and international statistical institutions. All statistical agencies maintain high professional and ethical standards in carrying out their functions, which have increased public confidence in the statistics. However, improvements can be made to the methodological soundness of the data, particularly regarding scope, to enhance certain data sources and statistical techniques in light of ongoing structural changes in the economy, and improve accessibility of certain data categories. Section II provides a summary assessment by agency and dataset based on a four-part scale. This is followed by staff recommendations in Section III. Practices compared to the SDDS are summarized in Appendix I. The authorities' response to this report and a volume of detailed assessments are presented in separate documents.

- 6. In applying the IMF's Data Quality Assessment Framework (DQAF July 2003), the remainder of this section presents the mission's main conclusions. The presentation is done at the level of the DQAF's quality dimensions, by agency for the first two dimensions, and across datasets for the remaining four.
- 7. **Prerequisites of quality and assurances of integrity.** The agencies that compile official statistics in Malta are the NSO—for national accounts, consumer price indices (CPIs), and GFS—and both the NSO and the CBM for balance of payments.
 - The Malta Statistics Authority Act XXIV of 2000 (MSA Act) mandates that the Malta Statistics Authority (MSA) regulate and supervise the production of official statistics in accordance with international requirements and standards. It assigns the obligation and authority for collecting, compiling, and disseminating official statistics to the **NSO**, the executive agency of the MSA. Collaborative data sharing arrangements have been developed with other providers of source data since the establishment of the NSO. Pragmatic management at the NSO has promoted the efficient use of financial and staff resources for discharging existing statistical responsibilities. However, efforts to expand the range of statistics to comply with regional and international standards, and to respond to new data reporting requirements are placing increasing strains on these resources. Consultations with users have resulted in the improvement and diversification of statistical products. Extensive processes are in place to monitor the quality of the statistics that are compiled and disseminated. The NSO operates in an environment that is free of political interference, and current work procedures emphasize professionalism and ethical standards. Transparency in the data dissemination process is supported by the simultaneous release of data to all users.

³ Consumer price indices include the retail price index (RPI) and the Harmonized Index of Consumer Prices (HICP).

- The **CBM** derives its legal authority to collect statistics from the *Central Bank of Malta Act of 2002* (CBM Act). Following a cooperation agreement signed in 2003, it compiles the balance of payments and IIP statistics in collaboration with the NSO. Resources are adequate for current statistical activities but are now placed under increasing pressure by new reporting requirements of the European Central Bank (ECB), following Malta's entry into the European Exchange Rate Mechanism. The CBM enjoys statutory independence in the performance of its statistical functions and cultivates an environment of transparency and adherence to ethical standards. Its recruitment and promotion policies are based on professional competence.
- 8. **Methodological soundness.** The methodological basis for compiling statistics broadly conforms to international standards for balance of payments and the CPIs. However, the analytical usefulness of national accounts and GFS is limited by shortcomings in the scope of the data. In particular, volume estimates of the gross domestic product (GDP) by type of economic activity and income accounts are not available, and the accounts of the general government do not cover stock positions of non-financial assets and financial assets and liabilities. Other limitations include noncoverage of imputed rentals in the CPIs, nonrecording of transactions of special purpose entities in the balance of payments, and the practice of adjusting cash transactions to the accrual basis only at a very aggregate level in the GFS.
- 9. **Accuracy and reliability.** The accuracy and reliability of datasets are generally adequate. However, some shortcomings are identified across all datasets. For national accounts, source data generally support compilation of nominal GDP estimates, except for coverage of service activities, but inadequate timeliness of major source data adversely affects the accuracy of quarterly estimates, resulting in significant revisions, in particular of the first estimates. Moreover, these estimates are not benchmarked to the annual estimates. The absence of a producer price index impedes compilation of volume estimates of GDP by activity. The retail price index (RPI) is affected by weights that are not price updated. With respect to the balance of payments, the magnitude of the errors and omissions item raises questions about the adequacy of coverage of source data. Revision studies are not routinely conducted for balance of payments and national accounts, and little evidence exists that the findings of any studies are used to improve the effectiveness of the statistical processes.
- 10. **Serviceability.** Serviceability of macroeconomic statistics is generally good, with periodicity and timeliness of all disseminated data meeting or exceeding the SDDS requirements. Moreover, statistics are broadly consistent over a reasonable time period within individual datasets and are generally consistent across datasets. However, revised data are not clearly identified in most datasets, and greater clarity and adherence to the revisions policies for both quarterly and annual national accounts are needed.
- 11. **Accessibility**. Accessibility to macroeconomic statistics is uneven across datasets. Balance of payments statistics and related metadata are readily available and can be downloaded from the official website. National accounts and the price indices are also easily accessible, although the availability of supporting metadata could be enhanced. With regard to the GFS, accessibility to data and metadata is very limited. Only central government data

are disseminated in an analytical framework, and there is inadequate documentation that explains concepts and definitions. However, good assistance is provided to users, notably through official websites.

II. ASSESSMENT BY AGENCY AND DATASET

- 12. Assessment of the quality of four macroeconomic datasets—national accounts, consumer price indices, government finance, and balance of payments statistics—was 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). For the NSO and CBM, 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–d.
- 13. To complement the Fund staff's assessment of the quality of statistics produced by Malta, the mission conducted an informal survey of the key users of macroeconomic statistics, with the assistance of the authorities. Questionnaires were sent to 55 users, asking them to evaluate the coverage, periodicity, timeliness, dissemination practices, accessibility, and overall quality of the official statistics. Fifteen responses were received, representing a response rate of 27 percent.
- 14. The results of the survey and the follow-up discussion indicate that, in general, most users consider the official statistics to be unbiased and accurate and comparable in terms of quality to statistics in other countries of the region. In particular, users were satisfied with the coverage, periodicity, timeliness, and underlying methodology of the official statistics, although several users noted that they would appreciate more timely and more detailed national accounts and government finance statistics.
- 15. A more detailed analysis of the User's Survey and the tabulated results are presented in Appendix III of the accompanying document presenting the detailed assessment.

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

Key to symbols: O = Practice Observed; LO = Practice Applicable	Largely Observed; LNO) =Practice Largely Not	'ed; LO = Practice Largely Observed; LNO =Practice Largely Not Observed; NO = Practice Not Observed; NA = Not	Not Observed; NA = Not
Datasets	National Accounts	Consumer Price Index	Government Finance Statistics	Balance of Payments Statistics
Dimensions/Elements				
0. Prerequisites of quality				
	0	0	0	0
0.2 Resources	ΓO	Γ 0	ГО	0
0.3 Relevance	0	0	0	0
0.4 Other quality management	0	0	0	О
1. Assurances of integrity				
1.1 Professionalism	0	0	0	0
1.2 Transparency	0	0	0	0
1.3 Ethical standards	0	0	0	0
2. Methodological soundness				
2.1 Concepts and definitions	0	0	0	0
2.2 Scope	LNO	ГО	ГО	ГО
2.3 Classification/sectorization	0	0	0	0
2.4 Basis for recording	ГО	0	ГО	0
3. Accuracy and reliability				
	ΓO	0	0	ОТ
3.2 Assessment of source data	0	0	0	0
3.3 Statistical techniques	ΓO	Γ 0	0	0
3.4 Assessment and validation of intermediate data	ΓO	T0	ГО	0
and statistical outputs				
3.5 Revision studies	LO	0	0	LNO
4. Serviceability				
4.1 Periodicity and timeliness	0	0	0	0
4.2 Consistency	Γ0	0	0	0
4.3 Revision policy and practice	LNO	0	ГО	ГО
5. Accessibility				
5.1 Data accessibility	T0	T0	LNO	0
	Γ 0	$\Gamma 0$	CNO	0
5.3 Assistance to users	0	0	0	0

Practice observed: current practices generally in observance 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. Malta: Assessment of Data Quality—Dimensions 0 and 1— National Statistical Office

0. Prerequisites of quality

Legal and institutional environment

The NSO, Malta's official national statistical agency, was established by virtue of the specifies obligations for compiling and reporting statistics. Coordination and working production are generally adequate. Concerning the confidentiality of data, the NSO is compilation, storage, presentation and publication of the data. Malta, as a member of arrangements between the NSO and other agencies with regard to data collection and scope and purpose of statistics, and on the methods and procedures for the collection, the European Economic Area (EEA), also has to comply with the European law that discharging its functions, the NSO is accountable to the MSA, the supervisory body compiling a wide range of official statistics. It states that the DG shall decide on the for the production of official statistics. The MSA Act stipulates the functions and MSA Act. The NSO is headed by a DG and operates as an independent body. In responsibilities of the NSO and provides the NSO with the responsibility for bound by the provisions of the Data Protection Act of 2000.

resources combined with a possible reassignment of current staff. Mechanisms, such Staff, facilities, computing resources, and financing are deemed commensurate with the current statistical programs. However, due to increasing demands on the NSO to as an annual staff performance appraisal, could be more effectively used to ensure meet regional requirements and standards (compilation of a producer price index, government finance statistics), there is a recognition of the need for more staff further improvement of the annual and quarterly national accounts, as well as greater efficiency in implementing statistical processes.

Relevance

products and to gather information on emerging statistical needs. Feedback from users Perception Survey. In order to further enhance the practical utility of existing statistics on the quality standards of the NSO statistics was solicited in 2002/3 through a Users The NSO staff has frequent consultations with main users to explain their statistical in meeting user needs, the NSO is examining the desirability of establishing more broadly based user committees and consultation groups.

Other quality management

quality standards, and monitoring of outputs in many statistical fields. Methodology, The MSA Act stipulates the functions and responsibilities necessary to ensure quality Agreement. Article 76 of this Agreement gives the basis for common methodology, quality standards, and outputs are monitored through regular reporting considerations in the statistical program. Malta is also a member of the EEA requirements

1. Assurances of integrity

The MSA Act provides the legal basis for the NSO's institutional autonomy and professional independence in carrying out its statistical functions. Professionalism is actively promoted misuse of statistics. This policy does not encourage debates that may be political in nature. professionalism. There is a policy in place for dealing with erroneous interpretations or within the institution. Recruitment and promotion practices in the NSO support

The NSO's publications and website include information on its organization and availability of its products. Hard copies of the MSA Act are also available from the NSO's library. All **Transparency**Transparency is fostered by the widespread public availability of the MSA Act in English. products of the NSO are clearly identified. Except in one instance, for the RPI, there is no internal government access to the NSO's statistics prior to their release. The RPI is premaking authority. Advance notice is provided for major changes in methodology, source procedure. This RPI Board operates only as a consultative body without any decision released to the Retail Price Index Advisory Board, and the public is notified of this data, and statistical techniques for all disseminated datasets.

Ethical standards

renegotiation of NSO's Collective Agreement, staff are reminded of the code of conduct and The code of conduct and practice of the NSO's employees reinforces the provision of the MSA Act. Each employee is provided with a copy of the Collective Agreement and must sign the "Form of Oath" upon accepting employment with the NSO. Through the oractice.

Table 2b. Malta: Assessment of Data Quality—Dimensions 0 and 1— Central Bank of Malta

0. Prerequisites of quality

Legal and institutional environment

The compilation and dissemination of the balance of payments of Malta is a joint responsibility of the NSO and the CBM. This cooperation has been formalized by an agreement in July 2003 between the two institutions. Under this agreement, the NSO is responsible for collecting data from reporting agents in the nonfinancial sectors of the economy as specified in the European System of Accounts 1995 (1995 ESA), while the CBM is responsible for the collection of data from reporting agents in the financial sector. The CBM is authorized to collect data from banks, other financial institutions, and persons under the CBM Act. In practice, there is a complete sharing of information with respect to the collection of balance of payments data between the two institutions. In addition, the CBM has set up a Technical Committee for Financial Statistics, which brings together key representatives of the financial sector (Malta Financial Services Authority, Malta Stock Exchange, Bankers' Association).

Resources

Staff resources are generally considered adequate to meet existing objectives, although the new statistical requirements imposed by Eurostat and the ECB, as well as the introduction of a new direct reporting system, have significantly increased the workload of the two units (one in the NSO and another in the CBM) in recent years.

Relevance

In practice, statistical needs are essentially driven by the requirements of economic and monetary policies, and also by regional and international requirements and standards, in particular those of the ECB. In this connection, the CBM participates regularly in the relevant working groups set up at the European level.

Other quality management

The CBM's main aim is to comply with international methodological standards, and to produce timely balance of payments with comprehensive coverage. Quality management processes include validation checks at the level of the processing of primary information sent by respondents, consistency checks at the macro level, and the monitoring of the response rate to questionnaires.

1. Assurances of integrity

Professionalism

The statutory provisions under which the CBM compiles balance of payments statistics are adequate to support its impartiality. The choice of data sources and statistical methods is determined solely by the need to produce analytically meaningful data. Staff recruitment and promotion are made on the basis of required qualifications and experience.

Transparency

Transparency is primarily ensured by the requirements of the CBM Act. In addition, the balance of payments annual publication forms state the terms and conditions under which the statistics are collected. There is no internal government access to balance of payments data prior to their release. Communication of an advance copy of the CBM's Quarterly Review to the Ministry of Finance is mentioned in the GDDS metadata. The NSO's official website is linked to the GDDS metadata.

Ethical standards

CBM employees are governed by a Code of Ethics, which gives guidance in matters of professional ethics and serves as a reference with regard to the standard of conduct within the CBM. On joining the CBM, employees sign a "Declaration of Secrecy" as required by the By-Laws of the CBM. All CBM employees are bound to respect the confidential nature of information acquired in the course of their employment. This obligation continues to apply notwithstanding that an individual is no longer in employment of the CBM.

Table 3a. Malta: Assessment of Data Quality—Dimensions 2 to 5—National Accounts

2. Methodological soundness	5. Accuracy and remaninty	4. Serviceability	5. Accessibility
Concepts and definitions	Source data	Periodicity and timeliness	Data accessibility
National accounts follow the conceptual	Adoption of the 1995 ESA, since 1999, was	The periodicity and timeliness of	National accounts are
framework of the 1995 ESA.	accompanied by improvements in source data, namely	the quarterly accounts meet the	published in a clear manner,
	the introduction of new annual and quarterly surveys	SDDS requirements.	but information is
Scope	covering the majority of economic activities, update		fragmented across hard copy
National accounts do not cover all the	of the business registry, and improvement of	Consistency	publications. Data are
accounts and tables recommended by the	administrative sources to conform to new	The estimates at current prices	released to all users at the
Inter-Secretariat Working Group on	methodological requirements. However, data are	are internally consistent and are	same time, based on a
National Accounts (ISWGNA) as	generally available at the enterprise level instead of	reconcilable with the other major	preannounced schedule that
necessary for implementing the System of	the establishment one. The range of price indices is	datasets (e.g., GFS, balance of	is available on the NSO's
National Accounts 1993 (1993 SNA)/1995	too limited to support compilation of reliable volume	payments). However,	website. Additional details
ESA. In particular, (i) volume estimates of	estimates. In particular, the absence of a producer	consistency of the volume	are available upon request.
GDP are only compiled for the	price index impedes compilation of volume measures	estimates of GDP cannot be	
expenditure categories; (ii) income	for GDP by production. Source data are not timely to	checked in the absence of a	Metadata accessibility
accounts, the capital account, and the rest	allow compilation of supply and use tables (SUT)	second measure. The magnitude	The metadata are limited.
of the world accounts are not compiled.	within a reasonable timeframe.	of the statistical discrepancy	The updated publication on
However, nominal GDP estimates are		between the various approaches	sources and methods,
compiled from production, expenditure,	Assessment of source data	to compile GDP estimates	following the 1995 ESA
and income approaches. The production	Administrative and survey data are regularly assessed	fluctuates over time.	concepts and methods, is
and assets boundaries are broadly in line	to identify outliers and inconsistencies, and source		prepared but not yet
with the framework.	data providers are contacted as needed. A special	Revision policy and practice	published. Metadata on
	research unit is monitoring surveys.	There is no revision policy in	quarterly national accounts
Classification/sectorization		place for the annual accounts.	are limited to brief notes on
Internationally accepted classifications	Statistical techniques	They are generally considered	the seasonal adjustment.
derived from appropriate EU standards are	Statistical techniques are broadly adequate for the	final when the SUT are released.	
implemented to classify activities,	current price estimates. The estimates for the non-	On the other hand, quarterly	Assistance to users
products, government functions, and	observed economy are adequate but their coverage	accounts are continuously	The hardcopy publications
individual consumption. Work is	could be further improved, in particular for illegal	revised as more source data	and the website provide
underway to complete identification of	activities. The volume estimates of certain	become available without close	comprehensive information
institutional sector accounts.	expenditure categories are weak. Quarterly estimates	coordination with the annual	on how users may contact
;	are not benchmarked to the annual estimates.	accounts.	the NSO. A catalog of
Basis for recording		The publications do not	publications is available.
Market prices are used to value flows and	Assessment and validation of intermediate data	document revisions, but users are	
stocks. Adjustment to accrual basis for	and statistical outputs	informed about the major	
government's transactions is less precise	SUT were used to balance the estimates for 2000 and	methodological aspects	
since it is done at a very aggregated level.	2001, but for the subsequent years, the discrepancy	underlying production of the	
No adjustments are made for holding	was incorporated into the expenditure estimates	newly published data.	
gains/losses. Transactions between	(changes in inventories) and not investigated.		
establishments in the same enterprise are			
recorded on a net instead of a gross basis.	Revision studies		
	The results of regular revisions are observed and used		
	to inform ongoing work, but no explicit studies are		
	undertaken to identify trends of systematic plases.		

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions	Source data	Periodicity and timeliness	Data accessibility
The RPI and the harmonized index of	The Household Budget Survey (HBS)	The RPI and HICP are disseminated	The NSO publishes well designed charts and
consumer prices (HICP) broadly follow the	and the business registry provide an	monthly, two to three weeks after the	tables to facilitate analysis. Data for the RPI
concepts and definitions set out in the CPI	adequate basis to compile the RPI and	reference period, and, as a result,	and HICP are generally accessible, but the
Manual and 1995 ESA.	HICP. The data generally approximate	dissemination is within the one-month	series are not published with adequate levels
7	the definitions, scope, classifications,	SDDS timeliness requirements.	of disaggregation. An ARC is available on
Scope	valuation, and time of recording.	•	the NSO's website. With the exception of
The RPI and HICP weights cover the	•	Consistency	the RPI Advisory Board, data are
expenditures of all resident households.	Assessment of source data	There are no consistency issues for the	simultaneously released to all users. The
The Maltese HICP, while covering all the	There are monthly assessments of	RPI and the HICP since all-items	public is informed in detail of the NSO's
subindices laid down in Council	source data. Sampling, response, and	aggregate is invariant to geographical	data dissemination practices through the
Regulation (EC), No. 1687/98, includes	non-sampling errors for each survey are	classification. Long-term time series	NSO website.
the home such as home cleaning meals	complied and monitored.	for the HICP (hase year 1996) which	Metadata accessibility
and transport for the disabled. All in-scope	Statistical techniques	are published with link factors to	News Release Publications of metadata are
urban and rural households are covered, as	Data compiled employ good quality	previous base years.	available on the NSO's website, where
are households of all income levels and	statistical techniques, though the RPI	•	limited and outdated RPI and HICP
occupations. Malta's RPI and HICP do not	weights are not price updated.	Revision policy and practice	methodology descriptions are provided. An
cover imputed rentals of owner occupants.		Revision policy is known as a result of	updated document on sources and methods
	Assessment and validation of	well designed marketing techniques and	is available internally, but not published.
Classification/sectorization	intermediate data and statistical	promotions, which are designed to	There is, however, published information
The RPI and HICP cover	outputs	educate data users. RPI data are not	on the survey sources in official statistical
noninstitutionalized Maltese households	Although statistical discrepancies in	revised once published other than in	publications, that include the response rates,
that are consistent with the 1995 ESA	intermediate RPI data are assessed and	exceptional cases to correct the impact	survey monitoring, nonsampling errors,
definition of household sector. The item	investigated, the RPI and HICP data are	on weights of extraordinary price rises	sample frame, sample design, estimation,
weights for the HICP are classified using	not validated against other price	for some items. On the other hand, the	and imputation techniques.
the Classification of Individual	ındıces.	HICP is revised regularly, since the	
Consumption by Purpose	:	weights are updated annually. Studies	Assistance to users
(COICOP), while the KPI employs a	Revision studies	of the annual weight updating of the	The NSO's library is the point of contact for
modified COICOP that better represents	For the HICP, revision studies are	HICP are conducted and disseminated.	data users; it provides INSO is e-mail and
the Maltese economy. The weights of both	routinely conducted, especially on		Internet addresses in its statistics
classifications are consistent with	weight updating. The RPI is not		publications. If the contact person in the
International guidelines. The Statistical	irequently revised, but new weights are		notary is unable to answer an inquiry, the
Day 1 is used for election of activities	to being incomposited in the index		user is reterred to the Consumer rine much
Rev. 1, 1s used for classification of retail	to being incorporated in the index.		Unit. The NSO publishes a comprehensive
outices in the ousmess region y.			catalog of its publications, which are
Basis for recording			other electronic formats. General use
Market prices are used to value flows and			information about the RPI and HICP in
stocks, and the basis for recording follows			hardcopy format is not available.
international best practices.			

Table 3c. Malta: Assessment of Data Quality—Dimensions 2 to 5—Government Finance Statistics

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
Concepts and definitions	Source data	Periodicity and timeliness	Data accessibility
General government statistics are compiled	The NSO uses accounting data obtained from the	Malta meets the periodicity and	Data on central government
by the NSO in the context of the national	Treasury, Extrabudgetary Units (EBUs), and local	timeliness requirements of the	operations and debt are
accounts based on the 1995 ESA. Therefore,	authorities. The NSO and CBM obtain source data	SDDS for central government	disseminated according to the
the overall structure of the concepts and	for the budgetary central government directly from	data. Monthly central	budgetary framework.
definitions closely follow international	the accounting records. NSO obtains accounting	government debt data are	However, GFS for general
standards and guidelines. The CBM compiles	data from the EBUs by means of quarterly surveys.	disseminated within one month,	government following a
annual GFS for the central government	Local councils submit their financial accounts to	which exceeds the SDDS	comprehensive framework is
according to the concepts and definitions	the NSO. All source data are timely and	requirement. Data on general	not disseminated in Malta.
prescribed in A Manual on Government	comprehensive and provide enough detail for	government operations,	The NSO is currently not
Finance Statistics, 1986.	reclassification. Government debt data are collected	although compiled and reported	disseminating any GFS time-
	from the MOF, the CBM, and the Malta Stock	to regional statistical	series data. However, the ARC
Scope	Exchange.	institutions consistent with the	for national accounts, which
General government statistics have full		periodicity and timeliness	includes general government
coverage of all government institutions.	Assessment of source data	requirements of the SDDS, are	data, is available on the NSO's
However, GFS compiled by the NSO do not	The final source data are based on audited accounts	not disseminated in Malta.	website. General government
cover the full set of general government	of all the general government institutions.		accounts are released to all
accounts. No data on the stocks of non-		Consistency	users at the same time.
financial assets and financial assets and	Statistical techniques	Government finance data are	Statistics not routinely
liabilities are compiled.	Source data are detailed and comprehensive and do	internally consistent for the	disseminated are available
	not require complex statistical techniques.	general government account as	from the NSO on request.
Classification/sectorization		well as the accounts of the	
The economic and functional classification of	Assessment and validation of intermediate data	other levels of government.	Metadata accessibility
the data, as well as the institutional sector	and statistical outputs	General government data are	For government data, NSO
classification of the general government, is	In the compilation of the final general government	also consistent with the	provides some notes on the
consistent with the 1995 ESA.	accounts, audited data based on full institutional	national accounts, balance of	methodology in its News
	coverage are used. All tables are checked for	payment, and monetary	Release publications.
Basis for recording	internal consistency before being released.	statistics.	However, the NSO does not
Most flows are valued at market prices;	However, as the NSO has not yet compiled the		provide any detailed metadata
however, not all stocks are valued on the	financial account, comparisons cannot be made	Revision policy and practice	on its website or in any
same basis. The recording of central	between data derived from the non-financial	The revision schedule is	publication.
government transactions is based on cash	accounts and changes in net financial	predetermined and known to	
accounting principles, and is adjusted to an	assets/liabilities.	the public. Preliminary data are	Assistance to users
accrual basis. Yet, these adjustments are not		clearly indicated in the	The hard copy publications
accurate as they are based on an annual	Revision studies	publications; however, no	and the website provide
survey among the major revenue receiving	The reasons for revisions are taken into account	distinction is made between	comprehensive information on
and spending departments. An exception is	and analyzed. These revisions are minimal due to	previously published and	how users can contact the
the value added tax data where accrual data	the extensive use of accounting data.	revised data.	NSO for assistance. A catalog
are made available to the NSO on a monthly			of publications is available.
basis.			

Table 3d. Malta: Assessment of Data Quality—Dimensions 2 to 5—Balance of Payments Statistics

2 Mathodological coundrace	3 Acouracy and reliability	1 Common bility	5 Accessibility
2. Intelliguological soundiness	a	4. Sel viceability	3. Accessibility
Concepts and definitions	Source data	Periodicity and timeliness	Data accessibility
Concepts and definitions generally conform to	The data collection system used to compile	As from the first quarter of 2005,	Users have access to balance of payments
the definitions and guidelines set out in the	balance of payments statistics is based	balance of payments statistics are	data through regular publications issued by
Balance of Payments Manual, fifth edition	essentially on direct reporting from both the	disseminated quarterly, within 70 days	the NSO and the CBM. These include the
(BPM5).	nonfinancial and financial sectors,	of the end of the reference period,	NSO's News Release, the NSO's annual
	complemented by cash settlements reports	which exceeds the SDDS requirements.	Balance of Payments publication, and the
Scope	provided by banks and other data sources.	•	CBM's Quarterly Review and Annual Report.
All transactions between residents and	However, given the size of errors and	Consistency	Data are also available on the NSO's website:
nonresidents are, in principle, covered in the	omissions, the coverage and accuracy of	Statistical series are sufficiently	http://www.nso.gov.mt. Data on external
balance of payments. However, the	source data are questionable.	detailed to enable checking that data are	reserve assets are published regularly on a
transactions of international trading companies	•	internally consistent. Temporal series	monthly basis and in the CBM's quarterly
(CIBAs) are not recorded in the balance of	Assessment of source data	are consistent within the same	and annual publications. They are also
payments. In addition, no estimates of	Formal checking and vetting of direct	methodological framework. Balance of	available on the CBM's website:
smuggling are made.	reporting survey forms is carried out on a	payments data are consistent with other	http://www.centralbankmalta.com.
,		data sets, notably trade statistics,	
Classification/sectorization		government finance, and monetary	Metadata accessibility
Data compiled by the NSO meet BPM5	Statistical techniques	statistics.	Comprehensive documentation of the
recommendations for classification and	Statistical techniques are used to complete		methodology and sources used in the
sectorization.	or adjust the source data for several items of	Revision policy and practice	preparation of the balance of payments
	the balance of payments, in particular in the	Quarterly balance of payments data are	statement is available on the NSO's official
Basis for recording	current account (adjustments to trade data.	revised on an ongoing basis, but no	
Statistics are generally recorded in conformity		distinction is made between previously	
with BPM5 recommendations. In particular.	adequate.	published and revised data. These data	Assistance to users
transactions are on an accrual basis excent for	I	are subject to revisions for up to one	The hard conv publications and the website
contain cotesceries of private sector revenues	Accommont and walidation of	wear Data are considered final	provide comprehensive information on how
certain categories of private sector revenues	Assessment and vandation of	year. Data are considered initar	provide comprehensive information on now
(interest income of investment companies),	intermediate data and statistical outputs	once published in the annual	users can contact the NSO for assistance. A
which are posted on a cash basis.	Checks are undertaken to ensure	publication of the INSO entitled <i>balance</i>	catalog of publications is available.
Transactions are recorded at current market	consistency between data received from the	of Payments, which is normally	
prices and, where applicable, adjustments are	direct reporting questionnaires and data	published one year after the reporting	
made so as to exclude valuation changes.	received from banking institutions. The	period.	
	magnitude of the errors and omissions is		
	monitored but this information is not used		
	to conduct revision studies.		
	Revision studies		
	No revision studies are carried out. In		
	particular, there are no systematic		
	comparisons between provisional and final		
	balance of payments statistics.		

III. STAFF'S RECOMMENDATIONS

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

Cross-cutting Recommendations

- Strengthen and increase staff resources for developing and improving macroeconomic statistics and for meeting the increasing reporting demands of users.
- Provide detailed and up-to-date metadata to inform the users.
- Disseminate on the official websites all data categories prescribed by the SDDS.

National Accounts

- Prepare and disseminate annual and quarterly volume estimates of GDP by the production approach.
- Put in place an adequate internal work calendar within NSO that would allow timely production of annual national accounts statistics that follow a well-defined and regular revision policy.
- Introduce benchmarking techniques to combine the quarterly estimates with the annual estimates.
- Expand the scope of the annual accounts to include income accounts, the capital account, and the rest of the world accounts.
- Undertake benchmark revisions as far back as reasonably possible.
- Improve the coverage of source data for the service sector as well as the volume estimate measures.

Consumer Price Index

- Include imputed rentals of owner-occupied dwellings in the RPI.
- Price-update weights when the weights and price reference periods do not coincide.

- Publish RPI and HICP datasets with appropriate levels of disaggregation.
- Validate the RPI data against other price indices such as the import/export price index and the implicit deflator for household final consumption.

Government Finance Statistics

- Disseminate GFS to the public in a framework commensurate with users' needs.
- Continue with the plan to develop GFS time series and post them on the NSO's website.
- Continue to expand the scope of GFS to include stocks of nonfinancial assets and financial assets and liabilities.
- Validate and incorporate data obtained from the new survey of government departments that focuses on the adjustments for accrual accounting.

Balance of Payments Statistics

- Treat the CIBAs as residents of Malta and include their transactions in the balance of payments. For analytical purposes, this category of operators should be separately identified in the balance of payments statement.
- Given the size of the errors and omissions item, continue efforts to improve coverage and accuracy of source data; in particular, undertake regular reviews of the scope of the direct reporting system to ensure adequate coverage.
- Undertake revision studies on a regular basis, starting with a systematic comparison between provisional and final data.

Table 4. Malta: Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data

appa p a .	Coverage	Perio	odicity	Time	liness	G
SDDS Data Category	(meets SDDS requirement)	SDDS	Malta	SDDS	Malta	Comments
Real Sector						
National accounts	Yes	Q	Q	Q	70 D	Timeliness exceeds SDDS requirements.
Production index/indices	Yes	M	M	6W (1M	M	Data are only disseminated internally.
F 1 4	37			encouraged)		
Employment	Yes	Q	Q	Q	Q	
Unemployment	Yes Yes	Q	Q	Q	Q	
Wages/Earnings Consumer price index	Yes	Q M	Q M	Q M	Q 2W	Timeliness exceeds SDDS
•	1 68		IVI			requirements.
Producer price index	Being compiled	M	Being compiled	M	Being compiled	Data are not yet available.
Fiscal sector	compilea	I	compilea		compilea	
General government operations	Yes	A	A	A	3M	Timeliness exceeds SDDS requirements, but data are not yet disseminated.
Central government operations	Yes	M	M	M	M	
Central government debt	Yes	Q	М	Q	M	Periodicity and timeliness exceed SDDS requirements.
Financial sector						
Analytical accounts of the banking sector	Yes	M	M	M	M	
Analytical accounts of the central bank	Yes	M (1W recom- mended)	М	2W (1W encouraged)	2W	
Interest rates	Yes	D	D	D	D	
Stock market	Yes	D		D		
External sector						
Balance of payments	Yes	Q	Q	Q	70D	
Official reserve assets	Yes	M (W recom- mended)	W	M	W	
Reserves template	Yes	M	M	M	M	Data are only disseminated internally.
Merchandise trade	Yes	М	M	8W (4-6 W encouraged)	6-8W	
International investment position	Yes	A (Q recom- mended)	A	3Q (1Q encouraged)	3Q	
External debt	Yes	Q	Q	Q	Q	Data are only disseminated internally.
Exchange rates	Yes	D	D			
Addendum: Population		A	•••	A	7M	

Note: Periodicity and timeliness: (D) daily; (W) weekly or with a lag of no more than one week from the reference date 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; (NA) not available; and (...) not applicable.

INTERNATIONAL MONETARY FUND

MALTA

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

Response by the Authorities

August 3, 2006

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I. Introduction

The following is the response by the authorities to the Report on The Observance of Standards and Codes (ROSC)—Data Module mission from the International Monetary Fund (IMF) of June 22–July 5, 2005 based on the comments of the National Statistics Office (NSO).

II. NATIONAL ACCOUNTS

Overall, the IMF Report on the National Accounts Unit following the IMF Mission in June 2005 represents a true and fair view of the situation as at that point in time. Since then there have been various changes. This is by no means an exhaustive list of what has been undertaken since then, but comprises brief points showing the actions taken, actions planned, and some points of clarification on the Report itself.

- The allocation of financial intermediation services indirectly measured (FISIM) is underway. This will be published for the first time in this year's first national accounts news release scheduled for the 10th of March, in line with the Unit's planned timetable.
- Work is also underway in the preparation of the income accounts, the capital account and the rest of the world accounts. However, owing to human resource constraints (mentioned later), this work does not head the Unit's priority list; therefore these accounts by institutional sector will not be available this year. Given the constraints, the Unit deems it more important to have constant GDP from the output approach at this stage. However PPIs are still unavailable to ensure the proper compilation of indices in order to deflate the output approach.
- Paragraph 3.1.3 states: "currently there is no clear internal calendar for the production and delivery of survey data within the NSO. Availability of source data varies according to the sector of activity, most problematic being service area and construction. Source data are incorporated into the national accounts as they become available." Since the IMF Mission, the National Accounts Unit has conducted meetings with various units to inform colleagues of the dates when national accounts news releases are due and to align their survey results with these dates. Furthermore, more cooperation is being envisaged, in the sense that before survey results are published or sent to Eurostat, these are also monitored by the National Accounts Unit so that any corrections or imputations are made at this stage, and not after the results are published, as was done previously.
- Revisions Policy: Since the IMF Mission, the National Accounts Unit has established a revisions policy. This policy states that for the annual figures, these will be revised every quarter up to t+3, when these annual figures will be regarded as final, following the completion of SUT tables for year t. Once the annual figures are considered final,

then automatically the quarterly figures are final too. The NSO is also in the process of computing ESA95 GDP figures back to 1995. Currently, 1998 and 1999 annual figures have already been published and data for the period 1998 to 2002 are to be finalized in June. Data for1997 will be published in June, and 1995 and 1996 figures in September. At the end of 2006, data will be considered final for the period 1995 to 2003.

- Since the IMF Mission, the National Accounts news release has been enhanced, with a user-friendly table showing the breakdown at an A31 industry level of detail for output, intermediate consumption and gross value added, as recommended by IMF itself. Furthermore, GDP per capita figures (in national currency and in Euro) have also been introduced.
- Unfortunately, the staff complement at the National Accounts Unit remains at eight. This is considered too tight to successfully cope with the increasing workload required to comply with the pressing reporting requirements of Eurostat and for the accomplishment of the improvement plans set out for the national accounts statistical domain. Moreover, the vulnerability of the compilation system is increased by its staff composition (half the staff are women of child-bearing age) in the event of their temporary unavailability, as well as by the reduced summer work program. Understaffing also makes it difficult to undertake more research on the data.
- It is planned to integrate the seasonally adjusted GDP figures in the quarterly GDP news release, incorporating them into one. Although this is not possible at the moment due to human resource limitations, as from this year the seasonally adjusted GDP news release is being published two weeks after the GDP quarterly release, and not after three weeks, as was originally undertaken in 2005. This will be further reduced to one week in 2007, with the seasonally adjusted GDP figures being fully integrated in the quarterly GDP news release in 2008.
- Employment: Following the IMF mission, ETC employment figures by 2-digit NACE have drastically improved in the wake of the full adoption of the Business Register (BR) by ETC. An internal process was also started whereby certain enterprises that were misclassified by NACE were corrected, as ultimately the ETC classification is 100 per cent dependent on the BR. More work still needs to be done for the National Accounts Unit to be fully satisfied with the ETC by NACE. Therefore, certain industries that were considered of having 'poor' data can now be classified as 'satisfactory.' However, LFS at a 2-digit NACE level of detail retains a large margin of error and is therefore not considered suitable for national accounts purposes.

III. PRICE STATISTICS (CONSUMER PRICE INDEX)

• On page 12, Part I, it is stated: "Data for the RPI and HICP are generally accessible, but data sets are not published with adequate levels of disaggregation." What is an

"adequate level of disaggregation" is always subjective and depends on the users. The NSO publishes detailed consumer price indices at the elementary aggregate level on a regular basis. Such a low level of detail is publicly available to users on the NSO website. The provision of more detailed information has never been requested by users and will compromise confidentiality.

• With regard to paragraph 2.2.1, Part III, exchange rates were included in the HICP.

IV. GOVERNMENT FINANCE STATISTICS

The IMF Reports are based on information gathered during their mission to the NSO from June 22 till July 5, 2005. Essentially the Reports present a factual state of affairs at the time of the Mission. Since then, some recommendations have already been taken on board, while others are being worked upon.

- Throughout the Report, continuous emphasis has been placed on the compilation of financial accounts for the general government sector. Obviously this is required as a benchmark against which to check the non-financial reports. Owing to limited resources, our Office has been a late starter in this area. That said, we have now achieved considerable progress. Indeed, we expect to have 2003 and 2004 data in place by the time we submit our next EDP submission due on the 31st March 2006.
- Another point made in these Reports concerns the stock of non-financial assets. The
 National Accounts Unit has indeed drawn up a register of plant and building
 belonging to the Central Government. This stock position is updated quarterly with
 data of GFCF for Central Government (as compiled by the Government Finance
 Unit).
- Since the IMF Mission, the Government Finance Unit has introduced two new releases as follows:
- 1. Sector accounts for the General Government: quarterly data released as a component of the 'economic indicators.' This includes the breakdown of the general government debt.
- 2. Annual release on the 'Expenditure of General Government Sector by Function' (COFOG). The first release in this series covered data from 1998–2004. This release includes detailed metadata.
- Revisions Policy: Any major revisions are highlighted in the text of releases issued by the Unit. We should also keep in mind that most central government data are cashbased, and is not normally subject to revision. Revisions to the accruals adjustments are not common

 GFS time series: This is a valid recommendation, which we are planning to take on board later on this year when we shall have the full set of GFS data going back to 1995. A suitable medium for release on the NSO website is currently under discussion within the Unit. Such a publication will of course include detailed metadata.

V. BALANCE OF PAYMENTS STATISTICS

Overall, the report is faithful to the text as agreed on last July. There are, however, some details which need to be rectified and which are being referred to here.

0.2.2 Measures to ensure efficient use of resources are implemented.

There is no specific approach to evaluate costs for compiling the balance of payments, and no evaluation of costs incurred by respondents (enterprises, banks). Also, there is no cost/benefit approach at the national level related to collection and data processing choices. However, it should be noted that, although recent requirements to satisfy BOP reporting at the European level has left no choice in the collection of information, the burden on respondents has been minimized as much as possible. Also, the design of the new direct reporting system, common to the NSO and the CBM, taken together with fully integrated compilation processes, is evidence that decisions are geared toward cost effectiveness.

The CBM also will be participating in any of the ESCB merits and costs exercises that will be carried out in this area. This exercise aims at identifying and quantifying both the merits and the related costs that will be imposed due to the new reporting requirements of the ECB.

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

Statistical techniques are used mainly for the calculation of adjustments for freight and insurance, estimates of travel, and general coverage. It should be noted that there are no estimates made for transactions of the underground economy

Studies are being carried out as to how to estimate these values, taking into consideration also reports in the media.

Improvements registered since time of report:

• The results from the census of some 4,000 CIBAs conducted for the year 2003 (as referred to in point 0.4.1) are now being analyzed. Following this analysis, another survey will be carried out for 2004 for the purpose of comparison. It should, however, be emphasized that human resources do have a bearing on this exercise as the amount of companies involved is huge.

• With regard to the compilation system (refer to points 3.1.1, 1a and 3.2.1), as for the year 2004, the BR has been augmented by the incorporation of a further 2,000 annual questionnaires. All non-financial enterprises employing more than 50 employees, or having an annual turnover exceeding Lm100,000, are being surveyed for any potential BOP transactions. Furthermore, a scientific sample is being taken from those enterprises not on the BOP Business Register so that coverage is being extended to reflect the whole population. With regard to the financial sector, the collective investment schemes, as well as the investment service providers, have started reporting as from the last quarter of 2005.

INTERNATIONAL MONETARY FUND

MALTA

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Michael Deppler

August 3, 2006

This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Malta's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as appendices a summary of the SDDS, the DQAF generic framework, and the results of the users' survey, which take into account questionnaire responses and discussions with users.

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ACRONYMS

1968 SNASystem of National Accounts 19681993 SNASystem of National Accounts 19931995 ESAEuropean System of Accounts 1995

ARC Advance Release Calendar BOP Balance of Payments

BPM5 Balance of Payments Statistics Manual, fifth edition

BR Business Register
CBM Central Bank of Malta

CIBAs Companies undertaking International Business Activities abroad

CISs Collective Investment Schemes

CPI Consumer Price Index

CPIU Consumer Prices and Purchasing Power Parities Unit

COFOG Classification of Functions of Government

COICOP Classification of Individual Consumption by Purpose

COS Central Office of Statistics

DAS Departmental Accounting System

DG Director General DR Direct reporting

DSBB IMF's Dissemination Standards Bulletin Board

EBUs Extrabudgetary Units
EEA European Economic Area
ESS European Statistical System

ETC Employment and Training Corporation

EU European Union

FISIM Financial Intermediation Services Indirectly Measured

GFS Government Finance Statistics

GFSM 1986 Government Finance Statistics Manual, 1986 GFSM 2001 Government Finance Statistics Manual, 2001

GFU Government Finance Unit HBS Household Budgetary Survey

HICP Harmonized Index of Consumer Prices

IPI Industrial Production Index
IRD Inland Revenue Department
ISPs Investment Service Providers

ISWGNA Inter-Secretariat Working Group on National Accounts

LFS Labor Force Survey

MFSA Malta Financial Services Authority

MOF Ministry of Finance
MSA Malta Statistics Authority
MSE Malta Stock Exchange

NACE Statistical Classification of Economic Activities in the European

Communities

NAU National Accounts Unit

NPISHs Nonprofit Institutions Serving Households

NSDP National Summary Data Page NSO National Statistics Office

OECD Organization for Economic and Co-operation and Development

PMP Performance Management Program

PPI Producer Price Index RPI Retail Price Index

SBS Structural Business Statistics

SDDS Special Data Dissemination Standard

STA IMF Statistics Department STBS Short-Term Business Statistics

SUT Supply and Use Tables

UN United Nations
VAT Value Added Tax

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

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

I. NATIONAL ACCOUNTS

0. Prerequisites of quality

0.1 Legal and institutional environment

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

The National Statistics Office (NSO) is Malta's official national statistical agency. The NSO was established by order of the Malta Statistics Authority's (MSA's) Act XXIV of 2000, and it replaced the Central Office of Statistics March 1, 2001. Article 10 of this Act determines the functions and responsibilities of the Office, which include collection, compilation, extraction, and release of official statistics of Malta.

Section X of the Act lists the types of statistics that may be collected, produced, and disseminated by the NSO, covering, in particular, national accounts aggregates ("national income, output and expenditure, and capital formation") and a large part of their source data statistics. An inventory of the statistics released by the agency is presented in more detail in the annual reports, including the work plans of the NSO.

The NSO is headed by a Director General (DG) (Article 9 of the Act) and operates as an independent body, with autonomy over its financial operations (although subject to the central government's budget allocation) and recruitment of staff. In discharging its functions, the NSO is accountable to the MSA, the supervisory body for policies governing the production of official statistics in Malta. The Authority is governed by a Board of eight members, including the chairman as the vested legal authority to represent the MSA in legal and judicial matters. MSA advises on fundamental issues relating to the organization of statistical activities of Malta, such as statistical products and their methodology, liaisons between the NSO and the other public bodies, performance of the organizational structure, yearly reports and statistical program priorities, and budgetary allocations. The chairman reports to the minister responsible for the statistics (Minister of Finance) concerning major decisions made by the Board.

Article 7 of the Act states that the MSA shall examine and submit, for the approval of the Minister of Finance, the report on the activities and the financial accounts drawn up by the DG for the administration of the NSO. This report is to be published after its approval by the Ministry of Finance (MOF). Article 9 of the Act states that the DG shall decide, on the basis of professional and ethical considerations, the scope and purpose of the statistics provided for in the business plan. The DG shall also decide on the methods and procedures for the collection, compilation, storage, presentation, and publication of the data.

As a member of the European Union (EU), Malta has to observe the European law that applies to a large portion of its statistical program. The production of national accounts statistics is not only subject to EU law but also to verification by the European Commission. In this respect, Malta's statistical activities are inspired from the EU and the United Nations (UN) guidelines, which are reflected in its mission statement and its current practices.

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

Part VIII, Article 39, of the Act provides that:

- (1) The DG of the NSO may (a) on delivery of a notice, request any public authority to allow officers of statistics at all reasonable times to access, to inspect, and to take copies of or extracts from any records in its charge; and (b) request any public authority to consult and cooperate with him for the purpose of assessing the potential of the records of the authority as a source of statistical information and, where appropriate and practicable, developing its recording methods and systems for statistical purposes, and the public authority shall comply with any such request, insofar as resources permit.
- (2) If any public authority intends to carry out activities with statistical implications, it shall consult, for coordination, with the Office and accept any recommendations the Office may make.

Formal and informal coordination and agreements between the NSO and other dataproducing agencies are in place. A number of examples of cooperation with agencies include the CBM, the MOF, the Employment and Training Corporation (ETC), the Inland Revenue

¹ 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 EU Member States, as well as Iceland, Liechtenstein, and Norway. The ESS also coordinates its work with international organizations such as the Organization for Economic and Co-operation and Development (OECD), the UN, the IMF, and the World Bank.

Department (IRD), and the Customs Department regarding the timely provision of statistics and/or access to their databases. Cooperative agreement also exists between MSA management and the Union Haddiema Maghqudin; the union represents the majority of employees of the MSA regarding the terms and conditions of employment applicable to the employees of the MSA.

Extensive consultations take place between the NSO and other data-producing agencies during the preparation of the draft annual work plan. The Authority, in reviewing the draft work plan of statistics, takes on board also the views of the agencies represented by the membership of the Authority. On the other hand, the NSO does have overall authority to require other agencies to adopt the statistical standards required by the EU, but for practical reasons this is not enforced. Cooperation appears thus less than optimal in such cases, and inconsistencies arise in classifications used by different agencies. For example, the Value Added Tax (VAT) Department continues to work with its own version of the Statistical Classification of Economic Activities in the European Communities (NACE), thus creating additional work for the NSO to exploit their database.

Informal working arrangements exist among the interdepartmental units of the NSO. For instance, the National Accounts Unit (NAU), the Household Budgetary Survey Unit, the Business Registry Unit, and the Consumer Price Index Unit rely on a calendar or schedule for deliverables from each unit.

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

Confidentiality is one of the principles guiding the activities of the NSO. The annual work plan of the NSO restates these principles, including the reliability, objectivity, relevance, statistical confidentiality, transparency, specificity, and proportionality of statistics.

Section VIII of the Act straightforwardly stipulates in Article 40 the restrictions on the use of information and in Article 41 prohibition of disclosure of information. Furthermore, section IX on Offenses and Penalties lays down the measures to be taken in case of unlawful exercise of any officer of statistics regarding confidentiality of data. No cases of breaches in the law have been recorded.

According to NSO's 2004 Annual Report, since its inception, the NSO has always operated within a culture of strict confidentiality to which it is also bound by the provisions of the Data Protection Act of 2000. This Act, which came fully into effect July 15, 2003, seeks to protect individuals against the violation of their privacy by the processing of personal data. In this respect, the NSO has appointed one of its officials as Data Controller, responsible for ensuring that all NSO processes involving personal data conform fully to the Data Protection Act. In March 2004, the NSO submitted the notification of its work processes involving personal data to the Commission of Data Protection in terms of Article 29 of the Data Protection Act.

In the course of 2004, the NSO carried out numerous bilateral meetings with public and private sector data providers to clarify the duties and obligations of all parties concerned, regarding data collection, the MSA Act, and the Data Protection Act.

The NAU of the NSO takes the necessary precautions to ensure the confidentiality of the data it collects. For instance, a letter requesting data that accompanies each questionnaire contains references to the Acts on data confidentiality. This letter also informs respondents of their rights and obligations in the provision of data.

NAU has established aggregation rules to prevent the identification of respondents, for instance, where there are only two enterprises producing a specific commodity. This is important in an economy of the size of Malta. All computers are password protected, and survey questionnaires are secured in locked cabinets. Access to data is limited to employees needing it because of their work.

Upon employment, staff are informed of the rules and duties pertaining to confidential information and its treatment. According to the MSA Act, before commencing work, every employee is required to take an oath of secrecy whose text is included in the Act.

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

The MSA Act contains specific provisions for the reporting of information needed to compile statistics. Section VII of the Act (*Collection of Information and Access to Records*) provides the NSO with the legal mandate to obtain, maintain, and encourage response from data providers, while section Part IX on *Offences and Penalties* details the offenses and penalties for noncompliance.

These references, included on survey questionnaires, are considered to have contributed to increased responses. The NSO strives to maintain good relations with its data providers as well as to respond to shifts in their needs as users.

NSO considers carefully response burden on survey respondents. These considerations are detailed in the 2004 Annual Report and the 2005 Work Plan. One of the essential components of the framework encompassing the 2005 Work Plan is the awareness of the need to rationalize the response burdens, while one of the strategic objectives of the NSO for 2005 is to visibly reduce response burdens.

0.2 Resources

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

The NSO, employing currently 130 permanent staff,² is organized into four divisions, each of them including functional units. The NAU belongs to the Economic Statistics Division. In addition to the divisions and units, another unit, Research and Methodology, is placed under the direct responsibility of the DG.

The organization structure is strengthened further by the creation of an International Relations Office. This office is responsible for the relationship between the NSO and Eurostat and the other 24 Member States of the EU. It is charged with keeping track of all proposals for new legislation in the statistical field. It also provides the necessary support for the required consultation on statistical matters with third parties both in Malta and abroad.

The allocation of staff resources at the agency level is generally suitable for the work plan, but constraints exist in some areas. Owing to increasing demands to meet the EU prerequisites, including new and timelier statistics, the NSO recognizes the need for additional staff resources, combined with a reallocation of current staff among statistical units to improve staff utilization. The DG hopes to employ 10 to 20 more statisticians in the near future. The agency notes that it normally experiences no difficulty in recruiting new staff, but most may not have relevant working experience. A new Department for Statistics has been created recently at the University of Malta, which could supply the NSO with suitable candidates for its vacant positions.

At the unit level, the NAU consists of eight persons (excluding the Government Finance Unit), of which one is working on a reduced hours program. The majority of staff joined the NSO in the last five years when the need was felt to create a strong team for the adoption of the *European System of Accounts 1995 (1995 ESA)* and compliance with the EU requirements. Qualification of staff is good: all are university graduates and some have a master's degree. Currently, two vacancies exist for the NA staff.

This staff level for the NAU is considered too tight to successfully cope with the increasing workload, which is required to comply with the reporting exercise to the Eurostat and to accomplish the improvement plans set for the national accounts. Moreover, the vulnerability of the compilation system is increased by its staff composition (about half of staff are women of child-bearing age) in the event of their temporary unavailability. In addition, the summer

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² To conduct large-scale surveys, the NSO also employs part-time interviewers.

work program has been reduced. Tight staff also makes it difficult to undertake research on data.

Recommendation: Increase staff resources allocated to work on national accounts in order to accomplish the objectives set in the improvement plan and to facilitate the indicator reporting to the Eurostat.

The NSO's salary level has recently improved, and staff turnover is less a problem than it used to be. The salaries are still below those offered by the CBM but are competitive with other government entities and other private sector organizations with comparable jobs and positions.

The NSO greatly emphasizes maintaining training for its staff. For example, all NAU have participated in traineeship programs organized at international or regional³ levels or offered by European countries (e.g., France, Netherlands, Finland). This was after the Training of the European Statisticians programs were discontinued about one year ago. Malta's agencies also organize workshops on various macroeconomic topics at times. However, this avenue could be further explored, and more internal workshops/courses on topical areas, such as national accounts, government finance or balance of payments (BOP), are to be encouraged. Participation of the other agencies should also be considered.

Computer resources, software, and IT support are adequate. Efficient back-up systems are in place for retrieval of statistical series in the event of natural disasters, accidents, and other unusual events.

Financial resources also appear adequate. Pre-accession grants from Eurostat continue to assist with survey expenses, compilation, and dissemination of newly developed statistics.

0.2.2 Measures to ensure efficient use of resources are implemented

The NSO strives to ensure efficient use of its resources. Staff performances are reviewed quarterly with the aid of the performance management program (PMP). The aim of this program is to assess and evaluate performance and not to set promotions and salary advancement. Mechanisms such as an annual PMP could be adopted for career and salary advancement purposes.

The 2005 Work Plan details efforts to improve the efficient use of all available resources though (1) maximizing asset utilization, (2) assessing resource costs in terms of level and quality of outputs and services delivered, (3) rationalizing amounts of resources consumed by

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³ Training of the European Statisticians programs, MEDSTAT, Eurostat.

overheads, (4) maximizing use of available data and reducing the time gap between data collection and dissemination, (5) deploying staff to core activities that meet client needs, and (6) managing and planning direct expenditure to service and business needs. Actions included in the Work Plan are prioritized according to standard requirements of both the country and the EU.

Outside expert assistance, in particular from the Eurostat, has been largely used to evaluate statistical methods and compilation systems and to provide recommendations for improvement as needed.

0.3 Relevance

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

Occasioned by the implementation of the *1995 ESA* requirements, several committees and working groups were created: For instance, the Government Finance Statistics (GFS) Committee was actively involved in classifying and coding all government transactions according to the international standards. The national accounts staff consult frequently and informally with main users, such as the CBM, MOF, and IRD, on topics of common interest. However, currently no internal technical committee discusses methodological and intersectoral consistency issues or validates the national accounts, BOP, or government statistics. This role is partially undertaken by the Economic Policy Division and also by the CBM.

Feedback from users on the quality standards of the NSO statistics was solicited in 2002/3 through a Users Perception Survey. This survey was conducted to identify users' needs of the NSO statistics. As mentioned in the 2004 Annual Report, the NSO continues to take measures and to act upon the findings of the survey.

Mechanisms are in place to enhance NSO's visibility through increased contact with its data users and the media. For example, in 2004, there were 249 statistical news releases, a number of which concerned the quarterly and annual national accounts.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The MSA Act, Article 9, states that the NSO shall (1) supply the information necessary to evaluate the quality of official statistics, (2) make accessible to the public the methods used for their production, and (3) show it complies with the principles under which such statistics are gathered.

The focus on quality is also evident from the NSO's mission statement prominently placed in its 2004 Annual Report and 2005 Work Plan, which says:

"To serve the statistical information needs of Parliament, Government, and the community by striving for excellence through rigorous protection of confidential data, quality information from respondents and a timely, objective and responsive statistical service."

Management is sensitive to all dimensions of quality. In all areas of its work, it gives increased consideration to the accuracy of data released to the public. For example, a recent request from Eurostat to advance the release calendar of the quarterly national accounts from 70 days to 58 was carefully analyzed, and a decision was taken not to comply with the request, favoring accuracy considerations over timeliness. It must be emphasized that the request falls outside the EU regulations, and therefore, countries are allowed discretion in their response.

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

Processes are in place to monitor adequately the quality of compiled and disseminated statistics. The NSO regularly undertakes data checks for coverage, classification, and missing data. In addition, it monitors the internal consistency of source data and consistency across source datasets. It notes and investigates all unusual movements in the source data received by the NAU. The advance release calendar developed for all NSO units ensures that all deadlines are met, and quality national accounts statistics are compiled and disseminated.

The NSO discusses quality aspects of statistics in its annual planning meetings and follow-up meetings. Moreover, as an EU member country, Malta monitors methodology, quality standards, and outputs through regular reporting.

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

Articles 7 and 9 of the MSA Act stipulate the functions and processes necessary to deal with quality considerations in planning the statistical program of the NSO. Therefore, according to the 2005 Work Plan approved by the MSA, the NSO, and other data-producing agencies, four essential components for the development of the NSO were identified: (1) consolidation of work and output, (2) improved coordination of statistical activities and projects, (3) awareness and rationalization of response burdens, and (4) an overall commitment to quality in statistics.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The NSO has established a tradition of professional independence, particularly after the adoption of the new legislation that extended its prerogatives and authority in producing Malta's official statistics. Other government agencies recognize the importance of the statistical independence of the NSO.

The MSA Act provides NSO with autonomy and professional independence in carrying out its statistical functions. The DG of the NSO decides, on the basis of professional and ethical considerations, the scope and purpose of the statistics produced, as well as the methods and procedures for data collection, production, and publication.

The terms and conditions for the appointment of the DG of the NSO have been amended with the introduction of the MSA Act of 2000. Under the new Act, the DG is appointed by the Authority in consultation with the overseeing Minister for a fixed three-year term, subject to renewal.

Recruitment and promotion of staff depend on the educational background and relevant expertise. The Collective Agreement lists the terms and conditions for employment, promotion and filling the vacancies, and salary structure. Thus, vacancies are filled by an internal call for application, followed by an external call if needed.

Professionalism is promoted through active encouragement of staff participation in training opportunities, workshops, meetings, and seminars, to ensure awareness and understanding of statistical standards and good statistical practices. For example, between October 2003 and September 2004, seven NSO employees participated in international courses conducted primarily in Eurostat's training center. Also at that time, 81 NSO employees attended working groups and meetings primarily concerning Eurostat's statistics, including national accounts topics.

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

There is no evidence that the NSO is subject to outside pressure in its choice of sources and statistical methodologies (see also 1.1.1). However, these decisions are influenced by cost considerations and the resource constraints facing NSO.

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

The NSO's publications and news releases explain the basis for compiling statistics in order to improve user understanding and reduce the likelihood of any misinterpretation. For example, special editions were largely dedicated to methodological issues in topical areas, such as the supply and use tables (SUT), seasonal adjustments of quarterly accounts, etc.

The DG is allowed to respond to public criticism of its indicators or instances of misuse of statistics. A noteworthy example is the *News Release* on the gross domestic product (GDP) compilation in response to suspicious comments on the method followed. However, this practice is not encouraged, so as to minimize debates that may be political in nature.

1.2 Transparency

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

The MSA Act is published in English and Maltese in the official government newspaper and on the NSO's website. Hard copies are also available from the agency's library. The NSO's publications and website include more information about the institution and availability of its products. The publications show the mail address, telephone and facsimile numbers, e-mail address, and the website address of the NSO.

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

No internal access to national accounts statistics is given to government officials prior to their release.

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

All NSO products are clearly identified as such, with the agency's name and logo appearing on the front page of all its publications and on the website. The NSO publications request attribution when its statistics are used or reproduced.

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

Advance notice is provided for major changes in methodology, source data, and statistical techniques. For example, the public was notified in advance of the major revision of the national accounts with the release of estimates based on the 1995 ESA.

1.3 Ethical standards

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

The code of conduct and practice of NSO employees reinforces the provision of the MSA Act. The second schedule, Article 17, of the Act provides the "Form of Oath" that outlines basic duties for statistical officers and contains rules of staff conduct. New staff are made aware of the standards when they join the NSO, and they take the oath of secrecy as provided by the MSA Act. A copy of the code of conduct is also provided to new staff. Through renegotiation of NSO's "Collective Agreement" every three years, employees are reminded of the code of conduct and practice.

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

Malta has compiled annual national accounts since 1954 without, however, fully adopting the *System of National Accounts 1968 (1968 SNA)*. From 1999 onwards, the *1995 ESA* was followed as the general framework for compiling the national accounts statistics, which is consistent with the *System of National Accounts 1993 (1993 SNA)*. However, some work still remains to be done to conform with the *1995 ESA* guidelines, notably completing the identification of the institutional sectors (the nonprofit institutions serving households (NPISHs) and government sectors are already distinguished) and the allocation of financial intermediation services indirectly measured (FISIM) by users. The NSO has made progress in addressing these issues and will introduce the revised data during 2005.

2.2 Scope

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

The national accounts cover some of the accounts and tables that the Inter-Secretariat Working Group on National Accounts (ISWGNA) determined as a minimum requirement for implementing the 1993 SNA/1995 ESA. The accounts and tables covered are the following:

- annual value added at current prices by activity (60 activities grouped into 17 for publication purposes);
- annual expenditures of GDP at current and constant (2000) prices;
- annual production and generation of income accounts for 60 activities (grouped into 17 activities for publication purposes); and
- annual gross national income.

The national accounts do not cover the following accounts and tables that the ISWGNA considers as minimum requirements for implementing the 1993 SNA/1995 ESA:

- annual value added and GDP at constant prices by the production approach, which is an important measure for determining the reliability of the implicit GDP deflator by expenditure;
- income accounts and capital account; and
- annual rest of the world accounts (until net lending).

Recommendation: Expand the scope of the annual accounts to include income accounts, the capital account, and the rest of the world accounts.

Malta also produces quarterly national accounts estimates at current prices by the three approaches, and a SUT (90 products and 60 industries, published 17 by 17). The quarterly GDP expenditure data are also seasonally adjusted.⁴ However, only the expenditure components of GDP are compiled at constant (2000) prices. Work is ongoing to prepare the constant price estimates of annual and quarterly value added by activity.

It should be noted that the NAU also prepares regional accounts, including GDP broken down by region according to the *Nomenclature des Unités Territoriales et Statistiques* (NUTS, level III) and by major sector of activities (i.e., Agriculture, Industry and Services).

Recommendation: Prepare and disseminate annual and quarterly volume estimates of GDP by activity.

The delimitation of the constituent units of the economy accords with the *1995 ESA*. Territorial enclaves in the rest of the world, such as embassies and consulates of Malta, are included as part of the economy. National accounts also cover the Maltese residents working abroad for a period of up to one year, as well as the activities of the Malta Freeport.

The production boundary is broadly in accordance with the 1995 ESA. Final consumption includes the production of goods on own-account, in particular agricultural products inclusive of storage and fishing, as well as goods for own-account fixed capital formation (construction of dwellings by households, machinery and equipment by companies). Services of own-occupied dwellings, mineral exploration (small amounts for oil exploration recorded on government accounts), and some illegal activities (the so-called "soft" illegal activities, such as copies of recorded media and gambling) are also included in the production

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⁴ Seasonally adjusted quarterly GDP data at current and constant prices begin in 2000.

boundary. Production of literary or artistic originals, production of computer software, and research and development are estimated and are included in the production boundary.

It should be noted that estimates for the nonobserved economy by economic activity, including agriculture and fishing, mining, personal services (notably, services by paid domestic staff), trade, construction, etc. have been made since 2000. These adjustments amounted to about 8.9 percent to total output and 5.8 percent to total gross value added in 2000. In addition, several studies have been conducted to identify the research and development undertaken by the government sector (included among the government expenditures) and the illegal production of drugs and prostitution. The results of the latter two activities are not included in the GDP until Eurostat instructs all member states to do so. Shuttle trade in Malta is assumed to be negligible and, therefore, no adjustment was required. However, in light of the recent border liberalization within the EU member countries, a study might be conducted to determine the magnitude of the phenomenon.

The assets boundary is for the most part in accordance with the 1993 SNA/1995 ESA. Specifically, the tangible assets include, among others, agricultural work-in-progress (vineyards and livestock) and valuables (jewelry, nonmonetary gold, and works of art), and the intangible assets cover computer software and databases, entertainment, literary or artistic originals. Mineral exploration is not a regular activity for the Maltese Islands. Test drillings for oil performed several years ago were recorded into the government accounts.

The following items are not currently included in the scope of the assets: the historic monuments and defense-related assets that could be used for civilian purposes. All defense-related assets are currently treated as assets, since they are usually intended for both military and civilian purposes. However, this is an insignificant item for Malta.

These deviations in scope are kept under review.

⁵ Estimates for 2000 have been used as benchmark estimates since then.

⁶ Due to the specific circumstances of the international traffic to/from Malta either by air or by water, the customs elusion is less problematic when compared to other EU Member States.

2.3 Classification/sectorization

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

One of the stepping stones for the implementation of the 1995 ESA in Malta was the adoption of the classifications consistent with internationally accepted guidelines, standards, and good practices. Notably, the adoption of the NACE and the Classification of Products by Activity were considered landmarks for the Maltese statistical system. These were followed by the adoption of the Classification of Individual Consumption by Purpose (COICOP) to classify household consumption, the Classification of Functions of Government (COFOG) to classify government transactions, and the Classification of the Purposes of Nonprofit Institutions serving households to classify the expenditures of nonprofit institutions serving households.

Classification of institutional units, transactions, and flows broadly follow the 1995 ESA. The 1995 ESA guidelines (the 50 percent rule) on the classification of market and nonmarket transactions are applied. However, the identifying of the institutional sectors is not yet completed. Work is underway, and the first annual estimates are expected to be completed by the end of 2005.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The valuation rules used for recording flows and stocks are broadly in accordance with the 1995 ESA. Market output is valued at basic prices before any taxes on products (VAT, import duties, excises, and other taxes on products and imports) are added and before any subsidies on products are deducted, as recommended by the 1993 SNA/1995 ESA. Output for own final use by the institutional units is valued at cost. The recommended valuation by the 1993 SNA/1995 ESA is at equivalent market prices where feasible. Government's nonmarket output is valued at cost by summing up the components of intermediate consumption, compensation of employees, and consumption of fixed capital, which is consistent with the 1993 SNA/1995 ESA.

Changes in inventories of finished goods and changes in inventories of work-in-progress should, in principle, be valued at the prices prevailing at the time they were produced. In practice, they are valued at the prices of the reporting time, i.e., the beginning and the end of the period in question without making any adjustments for holding gains.

Intermediate consumption is valued at purchasers' prices without the necessary adjustments for holding gains on changes in inventories. VAT, excluding the deductible part, is included in the valuation of intermediate consumption. Given the low annual inflation rate (in the range of 2 to 3 percent), the distortion to output and intermediate consumption estimates is limited as a result of not eliminating the holding gains/losses on inventories, and the deviation is kept under review.

Final consumption of households, general government, and NPISHs is valued at purchasers' prices. Those goods and services produced by households for own use and retained in the final consumption of households, according to the *1995 ESA* recommendations, ⁷ are valued at equivalent market prices.

Gross fixed capital formation is also valued at purchasers' prices (including all costs associated with ownership transfer), if it is bought. However, if it is produced for own consumption, the figure is recorded at cost, which is acceptable as a second-best method. Services of owner-occupied dwellings are valued using the user cost method, which includes also consumption of fixed capital and a fixed rate (by Eurostat) of operating surplus. This method was recommended by the Eurostat, due to the specific features of Maltese's rental market

Both imports and exports are valued free on board (f.o.b). Information on insurance and freight of merchandise is available, and the BOP Unit compiles the f.o.b. measures for the imports.

Transactions in foreign currency are converted using the average quarterly exchange rates. There is only one official exchange rate.

2.4.2 Recording is done on an accrual basis

With some exceptions, transactions and flows are recorded on an accrual basis. For changes in inventories, no adjustments are made for holding gains.

Work-in-progress in the form of capital formation is recorded in the period the production takes place.

With regard to the government sector, transactions for central government are reported on a cash basis. The adjustments made by the compiling unit in the NSO are based on aggregated information provided by all departments. More detailed information has been reported in the last few months that would allow backwards revision of central government data to accord with the accrual principle. However it should be noted that accounts of the extrabudgetary units and the local councils are already on an accruals basis.

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⁷ According to the *1995 ESA*, nonagricultural and nonfood industrial products produced by households for own use such as clothing and furniture are not included in gross output.

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

Most transactions between establishments (local types of activity units) within the same enterprise are recorded on a net basis since data are reported at the enterprise level. However, for some large companies, which provide detailed information by establishment and activity, transactions are recorded gross as recommended in the international guidelines.

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

Compilation of Maltese national accounts relies on a number of statistical surveys, censuses, and data prepared within the NSO, as well as administrative data supplied by other agencies.

To support adoption of the 1995 ESA, the NSO has embarked on an extensive program for strengthening its system of statistics that included among other actions the improvement of the data collection system. Thus, new surveys were introduced and the coverage of others was extended.

The **business register** (BR) is used as a common sample frame for all enterprise surveys and is essential in estimating GDP by production. Malta's BR was created in 1997 based on information from the VAT Register and supplemented by secondary sources provided by the Malta Financial Services Authority. It is maintained on an ongoing basis by the NSO Business Statistics Unit. Its updating relies mostly on information from the Structural Business Statistics (SBS), the monthly updates from the VAT Department, and the information on financial and insurance and renting companies provided by the CBM. Currently, the BR includes about 51,000 units consisting of large and small enterprises, as well as self-employed persons/unincorporated enterprises, covering the vast majority of the economic activities of Malta.

The units registered are the enterprises; work is ongoing to identify the legal units and enterprise groups (including registration of multinational groups) with expected results soon. Data for enterprise groups are being compiled in compliance with the Eurostat's regulations. Variables included in the recordings provide information on status, type of activities the unit is engaged in, turnover, investment, and employment data. Enterprises are classified according to the 4-digit level of the NACE.

Statistical surveys

The **SBS** is the major survey, undertaken annually since 2000. Until 2002, a census was conducted covering all units in the BR. The sample design of the SBS is based on a stratified selection of units using the equivalent full-time working persons. For example, the 2003 SBS used a sample of 11,000 units covering all units employing 10 employees or more and a sample of units employing nine or fewer employees. All the units surveyed are also questioned for foreign affiliate purposes (BOP). The information collected refers to the operating accounts and balance sheets of the units. The response rate was about 67–68 percent (number of responding units) but superior in terms of turnover (over 80 percent), which constitutes good source data for national accounts compilation. Information from the Malta Financial Statistical Register is used to impute for nonresponses.

The NSO conducts the **Household Budgetary Survey** (HBS) every five years. The last HBS was carried out between March 1, 2000 and February 28, 2001. It covered a national representative sample of 2,586 households throughout Malta, randomly selected. The initially designed sample was larger. However, due to a low response rate (38 percent), the sample had to be revised, and the NSO found new households to replace some of those that did not respond.

Corrections for sampling error were made, and the standard error on household annual expenditure was estimated to be 1.5 percent.

The **Labor Force Survey** (LFS) is carried out on a quarterly basis with a specific reference week for the quarter using a random sample of 2,500 households¹⁰ spread across the country. The survey methodology follows the recommendations of the International Labor Organization and accords with definitions of employment and unemployment outlined by the Eurostat for EU member countries. The economic activities in which the interviewed persons work¹¹ are classified according to the NACE classification and the reference period is a week. The coefficient of variation in the sampling is about 1.67 percent, and the response rate ranges between 70 and 80 percent. The extrapolation of data is based on the population census of 1995. Because the survey does not provide reliable information at a disaggregated

⁸ In 2000 the coverage was limited to the manufacturing sector; the survey's scope was extended in the following years.

⁹ It was randomly divided into seven batches (subsamples), each batch consisting of about 900 households.

¹⁰ Malta's population was 399,867 persons in 2003.

¹¹ The sample includes persons aged 15 years and over.

level, the NAU uses it in conjunction with the data from the Employment and Training Corporation (ETC).

The **Short-Term Business Statistics** (STBS) survey represents the main source data for compiling quarterly accounts for the manufacturing sector. The collected information includes the employment, wages, local and export sales, and investment covering all activities, similar to the SBS. Timely response is a problem, and the response rate varies by indicator. However, adjustments are made using the trade data and fixed ratios between various indicators (e.g., export sales in total sales), because, for these, reporting is close to 100 percent. Estimated data are replaced in the following quarters with actual reported data.

The NSO Agriculture Unit undertakes the **Agricultural Census** every ten years. The last one was in 2001. However, every two years, a **Farm Structure Survey** is conducted (last one in 2003; the next ones are planned for 2005 and 2007). This survey uses a sample covering about 18 percent of the respective population derived on the basis of the economic size of farms. The response rate is 95 percent. Updates to the sampling frame are based on the monthly returns from the Ministry of Agriculture. The Agriculture Unit also conducts an annual survey on livestock.

In addition, data from a series of surveys, inquiries, and registers from either the NSO or outside agencies are used for national accounts purposes, as appears in the description of source data below.

Main Source Data for the Annual Accounts (for the Final Estimates)

	Production Approach	
Industry	Main source	Assessment of coverage
Agriculture, hunting and forestry	Agriculture Unit, NSO (economic agricultural accounts) Adjustments for rents.	Good
	Trade data—imports of input goods and data from specific surveys (for intermediate consumption) LFS and ETC data	
Fishing	Fish report on organized fish markets Trade data	Good
	Census of fisheries Survey of fish farms 2000 HBS	
	VAT data LFS and ETC data	
Quarrying	LFS and ETC data Benchmark estimates based on 2000 SBS and 2001 Census of industrial production.	Poor
Manufacturing	Financial statements of large enterprises from MFSA SBS BR combined with ETC (employment)	Good
Electricity, gas, and water supply	Financial statements of Enemalta Corporation, Water Services Corporation, and Malta Desalination Services Ltd	Good

	Production Approach	
Industry	Main source	Assessment of coverage
Construction	Financial statements for large companies from MFSA Employment data from the ETC and LFS SBS and VAT data Benchmark estimates for small enterprises Adjustments for unrecorded part-time self-employed	Satisfactory/ Poor
Wholesale and retail trade, repair of motor vehicles, and personal and household goods	Financial statements of large companies from MFSA SBS Employment data from the ETC and LFS Transport Unit	Satisfactory
Hotels and restaurants	Hotels census (annual) HBS (every 5 years) Tourism expenditure survey VAT data SBS (catering) Employment data from the ETC	Good/ Poor for restaurants
Transport, storage, and communications	Census on bus and minibus companies by NAU Licensed stock of vehicles from Licensing Department Trade data (freight transport) Financial statements of large companies from MFSA and benchmark estimates for small ones Post and telecommunication companies BR	Good
Financial intermediation	Financial statements of banks from CBM Insurance enterprises survey by NSO MFSA	Good
Real estate, renting, and business activities	Financial statements of large companies from MFSA LFS and ETC data; SBS—for small enterprises BR Malta Environment and Planning Authority (MEPA) Census of population and housing of 1995 (for imputed rentals)	Satisfactory
Public administration and defense; compulsory social security	Departmental accounting system (DAS) of Treasury to which NSO has access. Survey of extrabudgetary units by NSO Management accounts from Local Councils	Good
Education	DAS from Treasury for public sector Education Unit, NSO for private sector HBS (driving lessons, private tuition)	Good (public)/ Poor (private)
Health and social work	Financial statements of large companies from MFSA DAS from Treasury for public sector HBS Ad-hoc enquiries with private clinics	Good (public)/ Poor (private)
Other community, social and personal service activities	DAS from Treasury for public sector SBS Financial statement of large enterprises from MFSA Annual reports of nongovernment organizations engaged in these activities Employment data from the ETC and LFS	Satisfactory
Private households with employed persons	ETC and LFS employment data (small scale activity)	Poor

	Production Approach	
		Assessment of
Industry Not the second sidiling	Main source	coverage
Net taxes less subsidies	DAS from Treasury	Good
on products Household final	2000 LIDS complemented by rotail trade data	Catiafaatam
	2000 HBS complemented by retail trade data Townist information from Malta Townism Authority	Satisfactory
consumption expenditure	Tourist information from Malta Tourism Authority	
expenditure	Trade Unit, NSO (imports of goods)	
	Industrial report—sales of locally produced goods	
	Department of Agriculture (final consumption of own production)	
T' 1 "	CBM—adjustment for tourist expenditure	C 1
Final consumption	Annual financial statements	Good
expenditure of NPISHs	Nongovernmental organizations survey—by Demographic section,	
	NSO	
	Youth organization survey, Band clubs survey, Museum survey,	
	Church school survey, Sports organization survey, and Radio	
G + C 1	stations survey by Education and culture Unit, NSO	0 1
Government final	DAS from Treasury	Good
consumption	Survey of extrabudgetary units by NSO	
expenditure	Management accounts from Local Councils	0.10
Acquisitions less	Financial statements of large enterprises from MFSA	Satisfactory
disposals of tangible	Survey by NAU on investment data	
fixed assets	Agricultural Census of 2001 (livestock, trees)	
	SBS complemented by VAT returns	
	Trade statistics—asset break down	
	1995 Census of population and housing (dwellings)	
Acquisitions less	Annual reports and financial statements of the Public Broadcasting	Satisfactory/
disposals of intangible	Services ltd.	Poor
fixed assets	LFS (for the number of employees engaged in the production of	(software)
	software)	
	Commodity flow method	
Changes in inventories	Annual reports and financial statements of companies	Satisfactory
	SBS	
	Trade data—production breakdown	0.10
Acquisitions less	Trade data	Satisfactory
disposals of valuables	Annual reports and financial statements of certain companies	
	HBS	
T 1: 0	Commodity flow method	C 1
Exports and imports of	BOP Unit, NSO	Good
goods		
Exports and imports of	Annual international trade in services survey by BOP Unit in	Good
services	collaboration with CBM	Joou
SCI VICES	Conacoration with CDIVI	
Compensation of	DAS by Treasury for central government, extrabudgetary units	Good
employees	survey, and management accounts from local councils	3004
omproyees	Survey on wages, salaries, and fringe benefits in private sector by a	
	private company (Misco)	
		1
	Financial statements of large companies from MFSA	
	Financial statements of large companies from MFSA	
Other taxes on	SBS (small enterprises)	Good
Other taxes on production		Good

	Production Approach	
		Assessment of
Industry	Main source	coverage
Other subsidies on	DAS by Treasury	Good
production		
Operating surplus	Residual	

Sources for quarterly accounts.

In Malta, a number of infra-annual source data support compilation of quarterly accounts. For some, weaknesses exist, particularly with regard to their timeliness, but alternative sources and methods are used to compile the accounts.

Main Source Data for the Quarterly Accounts

	Production Approach	
Industry	Main source	Assessment of coverage
Agriculture, hunting and	Agricultural Unit, NSO (fruits and vegetables)	Good
forestry	Quarterly reports from major companies	
	Trade data—imports of input goods, and exports;	
	Data from specific surveys	
Fishing	Fish report on organized fish markets	Good
	Trade data	
	Quarterly reports from the Aquaculture Center	
Quarrying	LFS and ETC data	Poor
	STBS combined with revisions based on annual data.	
Manufacturing	STBS	Good
	LFS and ETC data	
	DAS from Treasury	
Electricity, gas, and	Quarterly data from Enemalta, Water Services Corporations, and	Good
water supply	Malta Desalination Services	
Construction	STBS	Satisfactory/
	Employment data from ETC and LFS	Weak (STBS)
	VAT data	
	Malta Environment Planning Authority (MEPA)	
	Benchmark estimates for small businesses	
Wholesale and retail	STBS	Satisfactory
trade, repair of motor	Trade data (imports)	
vehicles, and personal	Employment data from the ETC and LFS	
and household goods		
Hotels and restaurants	Quarterly survey by Tourism Unit, NSO	Satisfactory
	Tourism expenditure survey by NSO	
	CBM and ETC data	
Transport, storage, and	Quarterly data from large companies	Good
communications	Employment data from the ETC and LFS	
Financial intermediation	Quarterly data from CBM	Good
	Malta stock exchange report (quarterly)	
Real estate, renting, and	LFS and ETC data	Satisfactory
business activities	Duty on documents (on contracts of sale of property)	
	Malta Environment and Planning Authority (MEPA)	

	Production Approach	
Industry	Main source	Assessment of coverage
Public administration and defense; compulsory social security	Departmental accounting system (DAS) of Treasury to which NSO has access. Survey of extrabudgetary units. Accounts of local councils	Good
Education/	DAS from Treasury for central government Employment data from ETC and LFS	Good/ Satisfactory
Health and social work	DAS from Treasury for central government Data from large companies Employment data from ETC and LFS	Good/ Satisfactory
Other community, social and personal service activities	Quarterly data from large companies engaged in these activities ETC for other community services	Satisfactory
Private households with employed persons	ETC and LFS employment data	Poor
Net taxes less subsidies on products	DAS from Treasury	Good

Administrative data

The CBM provides monetary and banking statistics, covering annual and quarterly financial statements of the CBM and the commercial banks, as well as those of the insurance companies.

BOP data are produced by a unit within the NSO in accordance with the fifth edition of the *Balance of Payments Manual (BPM5)*.

The Treasury Department makes available its database (DAS) to NSO. The local councils provide a copy of their quarterly management accounts.

Quarterly customs statistics on imports and exports of goods are used for compiling trade and BOP statistics by specialized units in NSO.

The VAT Department provides quarterly data to the NSO. The register is organized into Register A, including large companies, and Register B, covering small companies. In spite of its usefulness, several weaknesses can be noted with regard to this register: (1) the classification used is not fully aligned with the NACE codes assigned to enterprises by NSO; (2) an accrual problem exists because of staggering and different periods of reporting; and (3) coverage is weak in timeliness.

ETC, the official employment agency, provides a database that includes all enterprises and their employees, full-time and part-time.

The range of price statistics available at the NSO is limited. For the current compilation of the national accounts, the NSO extensively uses the harmonized index of consumer prices

(HICP) and unit value indices for trade. In view of compilation of GDP volume measures by production, the scope of price and volume indices could be further extended to employing the producer price index (PPI) (currently under development), the industrial production index (IPI), as well as other indices for the activities not covered by the PPI/IPI.

Recommendation: Improve the coverage of source data needed, in particular for the service sector, and extend the range of price and volume measures used to compile volume estimates.

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

For the most part, the source data approximate the definitions, scope, classifications, valuation, and time of recording required. Where feasible, the NAU undertakes the necessary adjustments to approximate the NA concepts. Main areas where adjustments are made concern the following:

- Supplementary source data are sought, and adjustments are made to capture all types of transactions in the economy, such as payments in kind and other nonmonetary transactions, which are important for NA estimation. One notable example is the compensation of employees paid in kind. For this estimate and for other fringe benefits, the NAU uses, as a benchmark, information from the annual *Wages and Salaries Report* conducted by a private survey company.
- In estimating the quarterly accounts, the NAU compilers use alternative sources where accounting data are not available on a quarterly basis or their level of detail is insufficient.
- Classification of the units in the VAT Register is not fully in-line with the NACE used in national accounts. Before using the tax information extracted from the Register, the NAU cross-checks identification/coding against the BR recordings.
- Adjustments are made to customs data to capture transactions recorded by two different databases (Intrastat and Extrastat). This is a follow-up to Malta's joining the EU

The coverage of total economic activities in terms of value added by the data sources is good. The exercise for the estimation of the nonobserved economy, conducted on 2000 data, contributed to the increase of the activity coverage, bringing it closer to exhaustivity (see also 2.2.1).

3.1.3 Source data are timely

Given the ongoing transition phase in setting up a functional system of data collection, production, and dissemination of Malta's statistics, bottlenecks in certain areas exist, preventing a smooth flow of data. Currently, no clear internal calendar for the production and

delivery of survey data is available within the NSO. Availability of source data varies according to the sector of activity, most problematic being service area and construction. Source data are incorporated into the national accounts as they become available. The inadequate timeliness of survey processing adversely affects the timely production of the annual accounts and the accuracy of the first quarterly estimates. Long delays in certain survey processing are associated with weak response rates, for which the NSO has to reiterate the request. SUT are released, for example, three years after the end of the reference period¹² when the annual accounts are considered final. While this complies with the legal dissemination standards, for better accuracy of national accounts estimates, an annual production of SUT is recommended. The annual estimates released are the sum of quarters until annual source data become available, in particular the survey results.

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

Administrative and survey data are regularly assessed to identify errors and inconsistencies. A special research unit also monitors the surveys. For surveys, checks conducted include, among others, the review of annual changes, review of possible errors in classification, and comparison of certain ratios like productivity with similar units. Editing procedures include detecting and analyzing of outliers, and improbable values are confirmed with the source data providers. Administrative data are considered more reliable, but they are also corrected for discrepancies as necessary, just like information from other sources. Consistency checks are made against previous years' information.

For some indicators, comparisons are made with the results of other statistics, such as the LFS with the ETC. In some other cases, redressing of data inconsistencies detected is left to the compilers of the basic statistics.

¹³ The released 2000–2001 series is still considered "provisional" until the NAU completes compilation and distribution of the FISIM as recommended by the Eurostat.

¹² Currently, SUT are compiled for 2000 and 2001.

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3.3 Statistical techniques

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

Before incorporating source data into national accounts, the sectoral specialists treat the data, using sound compilation practices. Using additional external information, they impute for missing units (particularly for small enterprises or self-employed persons) to achieve a full coverage of the sector. For example, where quarterly survey results are found weak, VAT reports or other administrative data are employed (see also 3.1.2). The sectoral specialists also compare the basic data with external information for their assigned industries.

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

Specialist studied on the nonobserved economy for the first time in 2000 and used the results in the following years as benchmark data. Some estimates for the informal sector in areas such as agriculture, personal services (doctor, dentist, lawyers, etc.) were captured in the national accounts previously, a fact that explains the reasonable size of the results of this study (8.9 percent in total output and 5.8 percent in total gross value added). The main types of phenomena covered by the 2000 study related to the (1) underreporting by enterprises and misclassification of activities in survey/censuses, (2) unregistered entrepreneurs (for tax evasion), and (3) estimates for some of the illegal activities (reproduction of media and illegal gambling). The main activities covered by the study included agriculture and fishing, quarrying, manufacturing, construction, trade, hotels and restaurants, transport, other business, and personal services (notably, services by paid domestic staff).

However, at present, drugs are not yet captured, ¹⁴ and no estimates are made by the BOP unit for shuttle trade.

Production approach procedures

The estimates of output and intermediate consumption are compiled at the two- or three-digit level of the NACE, where feasible. Both output and intermediate consumption are compiled for 60 activity groups but aggregated for publication purposes to 17.

Source data used to derive the output and intermediate consumption are different according to the industry particularities (see 3.1.1). In general, estimates are based on enterprise financial statements derived from either surveys or administrative sources. Adjustments are made to the indicators—as recorded in the bookkeeping—to follow national accounts concepts, as well as to ensure a comprehensive coverage by activity. For example, where

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¹⁴ First rough estimates are being analyzed.

survey data do not cover small enterprises or the response rates are low for some activities, benchmark data from previous periods are used to estimate the value added. However, the contribution of activities to overall GDP, estimated using fixed ratios, remains small (below 5 percent).

On the specific issues regarding GDP compilation, the following are noted:

Owner-occupied dwellings: Housing output is valued using the user cost method, owing to specific characteristics of the Maltese Islands' rental market. Output is obtained by summing up the expenditure components (intermediate consumption, consumption of fixed capital, net taxes on dwellings, and net operating surplus on dwellings and underlying land). For some of the cost components, the benchmark data used were derived from the HBS of 2000, complemented by other sources (notably the Census of Population and Housing of 1995 for dwelling stock). Adjustments were made to avoid double counting and to correct the imputed value on empty dwellings. The estimates were moved forward from 2000 levels in a similar fashion to the actual rents (using a dwellings volume index and an adjusted rent price index).

Work in progress: The stocks of fish, livestock reared for food, and large construction projects and equipment (ships) are treated as work-in-progress. Growing crops and standing timber are not significant for the country, and their estimation as work-in-progress is not considered.

Inventory valuation adjustment: Inventories used to estimate output and intermediate consumption are not adjusted for holding gains or losses.

Consumption of fixed capital: The perpetual inventory method is used to estimate consumption of fixed capital for the government sector. For the other sectors, the straight-line depreciation model is used. In the case of residential dwellings and commercial premises, the dwellings stock is first valued at the replacement cost. The consumption of fixed capital is subsequently compiled by assuming an equal depreciation of dwellings over an average period of service life of 75 years used by the OECD. Given the particular nature of buildings in Malta, where a large category of dwellings are built in stone and, thus, increasing significantly their life service, an adjustment may be required.

Cash versus accrual: Taxes and subsidies on products, government revenue, and government expenditure are converted from cash to accrual basis by allocating the transactions to the

¹⁵ The free market rented dwellings represent a small share in total rentals. For a large category of rented dwellings, the rents charged are very low, insignificant as compared to the market ones, since the tenants have contracts for life. (The new Law enacted in 1995 is only applicable to newly constructed dwellings.)

period to which they relate. However, in the case of government transactions, this adjustment is less precise, being done at a very aggregated level (see also 2.4.2).

The NSO is at an advanced stage in its efforts to compile and allocate the *FISIM* by main users for the whole series of accounts (1999–2004). It should be noted that this is the only major revision that will be made to the series of estimates for 1999–2001. The agency plans to release these estimates by the end of 2005.

Volume measures of GDP: Up to the present, no volume estimates of GDP by activity have been compiled. This is a priority project for the NAU, but work has been delayed due to the unavailability of a PPI. In the absence of a GDP estimate by production approach, volume estimates for taxes/subsidies by product and the output volume for trade margins are not produced.

Expenditure approach procedures

All components of GDP by expenditure are derived independently.

Household final consumption expenditure is generally compiled at the one-digit level of the COICOP, with a four-digit breakdown for certain categories. The HICP is used to deflate most of the components of household final consumption expenditure. Expenditures by residents abroad are deflated using the inflation rate of the country visited.

Government final consumption expenditure is compiled at the one-digit level of the COFOG. The volume estimates are derived using an average price index of the two main components of the expenditure—compensation of employees (deflated by an index covering the 20 salary scales weighted by the number of employees in each scale) and expenditures on goods and services (deflated by the implicit price index of the households final consumption) weighted by their share in the nominal value.

Gross fixed capital formation is compiled by type of assets (tangible and intangible) and by industry groups for seven asset types and 60 industries. The volume estimates are derived separately for machinery and construction. Imported machinery is deflated by the respective import unit value indices, while locally produced machinery is deflated by the local inflation rates. NAU compiles an index for construction based on deflated inputs.

Changes in inventories are compiled by activity and types of inventories (work-in-progress, finished goods and materials, and fuel). Volume measures of changes in inventories are derived at an aggregated level by using the implicit deflators of the final consumption expenditure of households and capital formation. This technique was adopted from the Australian Bureau of Statistics, but it is not considered the optimal method.

Valuables are deflated in a similar way as capital formation. Unit value indices for *imports* and *exports* are used to derive volume measures for the imports and exports.

Proper techniques are used to address specifics of expenditure on GDP compilation:

- Government final expenditure excludes incidental sales.
- Expenditure of residents abroad is included in estimates of imports.
- Expenditure of nonresidents in the domestic economy is included in exports.
- Expenditures on valuables are included in gross capital formation for enterprises and households. They are estimated from the supply side as net imports plus domestic production plus a mark-up.

Volume estimates by category of expenditure are derived using annual chain linking with the year 2000 as the reference year.

Currently, only volume estimates for the expenditure categories of the GDP are produced. Thus, the official estimate of GDP growth is derived from the expenditure side only. However, for the nominal GDP, the production approach is considered the most reliable method¹⁶ because the series are compiled using more comprehensive and reliable data. This aspect further strengthens the need to produce the volume estimates by type of activity, as a second measure for the GDP growth rate.

Specific quarterly compilation techniques

Compilation of quarterly GDP estimates started with 1972, but 1995 ESA figures are only available from 2000 onwards. They are compiled using some of the same data sources as the annual estimates plus the infra-annual surveys and administrative data where feasible.

The quarterly estimates are not benchmarked to the annual estimates, limiting the usefulness of the data for temporal comparisons. However, the quarterly estimates are seasonally adjusted using the TRAMO/SEATS ("Demetra"), an ARIMA model-based method, as recommended by the Eurostat. The adjusted series includes GDP estimates by expenditure in current and constant prices. The constant price estimates (same base year as for national accounts—2000) were published in the first quarter of 2005 and covered all the quarters back to 2000. In conformity with international best practice, the source data used to compile the quarterly estimates are not seasonally adjusted.

Recommendation: Introduce benchmark techniques to combine the quarterly estimates with the annual ones. Strengthen the volume measures for both annual and quarterly estimates.

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¹⁶ Estimates by the income approach are not independently compiled, because they are broadly derived from the same sources as the production approach.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The sectoral specialists check the data compiled from the main sources for coverage and consistency against other independent sources. For example, data from the VAT Register are checked against the data provided by the BR; the quarterly reports on tourism provided by the Malta Hotels and Restaurants Association are verified against NAU estimates made from other sources.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Potential discrepancies in major intermediate data are assessed, and adjustments, using data from alternative sources, are undertaken to address discrepancies. On average, the discrepancies by activity are found reasonable (less than 3 percent). In particular, attention is given to the changes from the previous estimate for the same period and to the consistency between different components of an aggregate.

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

For 2000 and 2001, the SUT were used to balance the estimates by industry/product. Since the SUT are prepared with delays, the intermediary versions of the national accounts for the subsequent years incorporate the discrepancy into the expenditure estimates (changes in inventories) without investigating it (if it is less than 3 percent). It is, nevertheless, shown separately in the internal documents.

The estimates of quarterly GDP are compared with the forecasts compiled by the CBM. In cases where major differences are noted between the forecast and the quarterly estimates, the NAU staff would investigate the nature of the differences. However, the quarterly estimates are never changed to conform to available forecasts, since the latter use different modeling techniques and limited source 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)

Revisions occasioned by major changes in methodology or source data are studied. Such a revision study was conducted in the recent years following the adoption of the 1995 ESA. The NSO published the overall result in a special edition of the News Release in December 2003, together with summary explanatory notes to familiarize the public with the new concepts. However, the publication did not include any detailed analysis of major factors and their contribution to the increase in the GDP. Also it did not assess the implications of the revision, although it did state that the conversion will bring about an increase of about

7 percent in the nominal GDP. The NSO considered the matter technical in nature and chose to provide explanations to users upon request.

For regular revisions, their magnitude is observed from one period to another, but no explicit studies are undertaken to identify trends or systematic biases. The differences between the initial estimates and the revised or final estimates could be more usefully studied to learn from these changes. However, key users, such as the Economy Policy Division and CBM, were provided with explanations.

For quarterly accounts, the estimates are revised continuously as more source data, either from annual or previous quarterly surveys, become available. No study of the differences and the impact of these revisions is made to inform the public unless the revisions are major.

Recommendation: Undertake studies to identify long-term trends or systematic biases in revisions, and publicize the major findings.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

NA data are produced and disseminated on a quarterly basis, thus meeting the Special Data Dissemination Standard (SDDS) requirements.

4.1.2 Timeliness follows dissemination standards

The quarterly accounts are disseminated within 70 days of the end of the period, as requested by the Eurostat. The seasonally adjusted series is released in the following weeks, however, within three months of the end of the period. This is in line with the SDDS requirements, whose standards require dissemination of quarterly estimates within three months of the end of the period. The NAU will begin providing a "flash estimate" for the GDP to the Eurostat 45 days after the end of the reference quarter.

At the end of each year, the NAU prepares a detailed year planner for the following year. This planner, for example, indicates when and what data should be asked for, sets publication dates, and points out deadlines for important responses to local and international bodies.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The estimates at current prices are internally consistent. The statistical discrepancies between the estimates by production approach and the expenditure approach are relatively small (see also 3.4.3). However, the quarterly statistical discrepancy between GDP estimates is

fluctuating over time (for the last few quarters, the discrepancies varied between 1 and 7 percent), and consistency of the volume estimates of GDP cannot be checked in the absence of a second measure.

GDP estimates at current prices, volume measures, and deflators are consistent within the "value = volume x price" framework, and totals are the sum of the components. In the case of seasonally adjusted quarterly accounts, the sum of quarters may not add up exactly for all categories to the annual totals, owing to the method used for deseasonalization.

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

A consistent series of annual and quarterly GDP estimates, following the concepts of the *1995 ESA*, is available from 2000. The system is being extended backwards to 1995. The first series of accounts covering 2000–02 was released in December 2003, and it overlapped for a short time with the release of the GDP estimates for the same period according to the old system. ¹⁷ The NAU has prepared methodological notes for internal use, identifying the main breaks and discontinuities in time series and their causes, as well as adjustments made to maintain consistency over time. However, these were not released in the hardcopy publications or on the Internet.

Unusual changes in economic trends are usually explained in the analytical text included in the publication. Such an example is the publication of an article in the "Economic Survey" of the Economic Policy Division on the impact of the substantial investment made by the largest exporting company in Malta in 2000 on the quarterly accounts. The study also explains differences between the seasonally adjusted and nonadjusted series.

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

The NA estimates are consistent and reconcilable with the BOP, the GFS, and the merchandise trade statistics. The balance of payments data are used as inputs into the GDP and gross national product estimates. Differences between the merchandise trade statistics and the balance of payments are reconcilable. The NA staff compile GFS as part of the NA; thus, the concepts and definitions used in compiling the two datasets are similar.

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¹⁷ Last release of the GDP following the old system was in April 2004.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The methodological changes introduced in the last years as a result of the adoption of the *1995 ESA* have created disturbances in the revision cycle to the point that currently there is no clear revision policy for the annual accounts. They are published as "provisional" for three years or more without indicating the differences between the various revised versions. The accounts are generally considered final when the SUT are released (usually about three years after the reference period). However, the NSO may undertake additional revisions to estimates in the following years and, thus, the estimates are never considered final. For example, the implementation of the EU decisions on the compilation and the allocation of FISIM will be put into operation shortly, attracting thus a revision to the 2000–04 series. According to the NSO, a strict and timed revision policy will be adopted as soon as the new system (introduced in December 2003) is considered to have settled down.

On the other hand, quarterly accounts are continuously revised as more source data become available, very often entailing heavy revisions to the first estimates. The annual accounts are adjusted accordingly.

Recommendation: Put in place an adequate internal work calendar within the NSO that would allow timely production of annual national accounts statistics while following a well-defined and regular revision policy. Undertake benchmark revisions as far back as reasonably possible.

4.3.2 Preliminary and/or revised data are clearly identified

A note at the end of the publication indicates the preliminary character of data. However, the revisions are not always indicated unless they are major revisions.

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

The publications do not document revisions, but users are informed about the methodological aspects underlying production of the new data. Analyses of the differences between the revised and preliminary annual data are not published except in exceptional cases (see also 4.2.2).

5. Accessibility

5.1 Data accessibility

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

National accounts are published in a clear manner, but information is released by separate topics. The statistics are disseminated on the NSO's website (http://www.nso.gov.mt) and in hardcopy publications: *News Release* in English on various topics. The regular annual and quarterly publications present a five-year series of GDP estimates with the same coverage: a broad presentation of main GDP aggregates by the three approaches, production and generation of income accounts by industry, as well as the volume estimates of GDP by expenditure. Charts and summary analyses are included in the publications to facilitate analysis. However, SUT and eventual special analyses for annual accounts are released in separate publication numbers, owing to lack of human and time resources. Likewise, seasonally adjusted series are released separately from the nonadjusted series. The NSO intends to issue a comprehensive annual publication on national accounts, but this has been postponed until at least a 10-year series of data becomes available, prepared according to the 1995 ESA.

5.1.2 Dissemination media and format are adequate

Information contained in the *News Release* is disseminated on the NSO's website in an adequate format. The data series are also made available in PDF format. SUT are accessible on the Internet free of charge. Special requests for data in a format different than appears on the website or in publication are honored for a fee.

5.1.3 Statistics are released on a preannounced schedule

Data are released to all users at the same time, based on a preannounced schedule that is available on the NSO's website three months in advance.

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

National accounts are simultaneously released to all users. The data are presented on the NSO's website at the same time as the hard copy release (same content).

5.1.5 Statistics not routinely disseminated are made available upon request

Data that are not routinely disseminated on the website or in the *News Release* are made available to users on 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

Documentation on sources and methods is limited. The updated manual on sources and methods, following the 1995 ESA concepts and methods entitled "Gross National Income Inventory (1995 ESA)," is prepared but not yet published. However, the draft inventory does not address the constant price estimation process or the quarterly GDP estimation process as yet. Metadata on quarterly national accounts are limited to brief notes on the seasonal adjustment included in the regular News Release. A revised detailed methodological description of national accounts (Gross National Income Inventory (1995 ESA) in the standard format, as recommended by the Eurostat, is in preparation.

Recommendation: Finalize and publish the revised source and methods document "Gross National Income Inventory (1995 ESA)," including sections on quarterly GDP and constant price estimation.

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

Various numbers of the *News Release* on regular or special topics, such as the seasonally adjusted accounts, SUT, or the adoption of the *1995 ESA*, include methodological notes on the subject. The quarterly and annual regular *News Release* editions present only a short note on the system. Summary metadata exist to provide, to the casual user, basic information on the compilation system.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The NSO's website and hardcopy publications list the name of the compiling agency, as well as the name, e-mail addresses, telephone, and facsimile number of the Manager of the National Accounts Division. The publication also identifies the NSO's website, where users can obtain more detailed data. The website notifies users on how to obtain additional information about the agency or the dataset.

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

A hardcopy catalog of the NSO's publications exists. The website presents the list of available publications produced by the agency and briefly describes the statistics contained, as well as the price of the publication.

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

Key to symbols: $NA = Not Applicable$: $O = Practice Observed$: $I O = Practice Observed$	ctice Large	ly Observed	V IND = P	(COmputing Agency, National Statistics Office)	elv Not OF	(Computing Agency, Ivanional Sold Sold Application Office) Key to symbols: NA = Not Applicable: O = Practice Observed: LO = Practice I areely Observed: LO = Practice I areely Observed: NO = Practice Not Observed: SDDS = Complies with SDDS Criteria
, I.T.			Asses	Assessment		
Element	NA	0	ГО	ONT	NO	Comments
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources			×			Staff resources are too tight to implement the plan for the
						improvement of annual and quarterly accounts and to undertake research on the data.
0.3 Relevance		×				
0.4 Other quality management		×				
1. Assurances of integrity						
1.1 Professionalism		×				
1.2 Transparency		×				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		×				
2.2 Scope				×		Annual and quarterly GDP at constant prices by type of
						activity are not compiled. Income or higher order accounts are not compiled. Rest-of-the-world accounts are not compiled.
2.3 Classification/sectorization		×				
2.4 Basis for recording			×			Adjustment to accrual basis for government's transactions is done only at aggregated level. There are no adjustments for
						holding gains/losses.

Table 1. Malta: Data Quality Assessment Framework (July 2003): Summary of Results for National Accounts (Commiling Agency: National Statistics Office)

))	Compiling Agency: National Statistics Office)	Agency.	Natio	nal Statı	istics Of	(120 p .: 120 p .: 12
Key to symbols: NA = Not Applicable; U = Practice Observed; LO = Prac	nce Largely C	Joserved; 1	JNO = PT	actice Larg	gely Not Of	Key to symbols: NA = Not Applicable, U = Practice Observed, LO = Practice Largely Observed, LO = Practice Largely Observed, LO = Practice Observed, LO
Element	NA	0	Assessment LO LNG	ment	NO	Comments
3. Accuracy and reliability						
3.1 Source data			X			Data on establishments are not available. Price sources to compile volume measures are weak. Too few details are
						available for certain service activities, notably for QNA. Production of SUT estimates is delayed because of lateness of source data.
3.2 Assessment of source data		×				
3.3 Statistical techniques			×			Quarterly GDP estimates are not benchmarked to the annual estimates. For some of the expenditure components of GDP
						(gross fixed capital formation), volume measures are weak.
3.4 Assessment and validation of intermediate data and			X			Statistical discrepancies are not always investigated.
statistical outputs			;			
3.5 Revision studies			×			Magnitude of regular revisions is observed, but no studies or analyses are undertaken to identify long-term trends or
						systematic biases.
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			×			Consistency of GDP growth rate cannot be checked in the
						absence of an alternative approach for estimation. Quarterly statistical discrepancy between GDP estimates is volatile.
4.3 Revision policy and practice				×		No clear revision policy for annual accounts. No analyses of
						differences between the preliminary and revised data is publicized.
5. Accessibility						
5.1 Data accessibility			X			Dissemination via publications is fragmented.
5.2 Metadata accessibility			×			Updated detailed metadata are not publicized. Metadata on quarterly accounts are limited to seasonally adjusted data.
5.3 Assistance to users		×				

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

The National Statistics Office (NSO) is Malta's official national statistical agency. The NSO was established by virtue of the Malta Statistics Authority's (MSA's) Act XXIV of 2000 (Chapter 422 of Malta's Main Legislation), and it replaced the Central Office of Statistics (COS) March 1, 2001. Article 10 of this Act determines the functions and responsibilities of the NSO, which include the collection, compilation, extraction, and release of official statistics of Malta.

The NSO is accountable to the MSA, a supervisory body, and operates independently. It has its own settlement account and other accounts with banking institutions. A Director General (DG), who is appointed under the Article 9 of the Act, heads the NSO.

Article 7(a) of the Act states that the MSA shall examine and submit, for approval of the Minister of Economic Services, the work or business plan and financial estimates drawn up by the DG for the administration of the NSO. Article 7(f) states that the MSA shall publish the business plan after its approval by the Minister of Finance. Article 9(5)(b) of the Act states that the DG shall decide on the basis of professional and ethical considerations, the scope and purpose of the statistics provided for in the business plan. The DG shall also decide on the methods and procedures for the collection, compilation, storage, presentation, and publication of the data.

Within this umbrella legal framework, the NSO's program for collecting, processing, and disseminating the Retail Price Index (RPI) and Malta's Harmonized Indices of Consumer Prices (HICP) is set out in the 2004 Annual Report and 2005 Work Plan.

Article 32 of the *Constitution of Malta* provides that citizens have the right to receive information on the activities of State bodies, and those bodies shall provide citizens with an opportunity to obtain access to the materials pertaining to their rights and legitimate interests. This Article of the Constitution is endorsed by Article 10(2)(a) of the Act. The extensive publication program of the NSO is consistent with this provision in the Constitution.

Malta, as a member of the European Union (EU), also has to comply with the EU law that specifies obligations for compiling and disseminating statistics.

Within the NSO, the Consumer Prices and Purchasing Power Parities Unit (CPIU) is responsible for compiling the RPI and HICP for Malta.

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

Part VIII, Article 39, of the Act provides that:

- (1) The DG of the NSO may (a) on delivery of a notice, request any public authority to allow officers of statistics at all reasonable times to access, to inspect, and to take copies of or extracts from any records in its charge; and (b) request any public authority to consult and cooperate with him for the purpose of assessing the potential of the records of the authority as a source of statistical information and, where appropriate and practicable, developing its recording methods and systems for statistical purposes, and the public authority shall comply with any such request, insofar as resources permit.
- (2) If any public authority intends to carry out activities with statistical implications, it shall consult, for coordination, with the NSO and accept any recommendations the NSO may make.

Formal and informal coordination and agreements between the NSO and other data-producing agencies are in place. A number of examples of cooperation with agencies include the Central Bank of Malta (CBM), the Ministry of Finance, the Employment and Training Corporation (ETC), the Inland Revenue Department (IRD), and the Customs Department regarding the timely provision of statistics and/or access to their databases. Cooperative agreement also exists between MSA management and the Union Haddiema Maghqudin; the union represents the majority of employees of the MSA regarding the terms and condition of employment applicable to the employees of the MSA.

Informal working arrangements exist among the interdepartmental units of the NSO. For instance, the National Accounts Unit (NAU), the Household Budget Survey Unit, the Business Registry Unit, and the CPIU rely on a calendar or schedule for deliverables from each unit.

Interviewing, compiling, and disseminating the RPI and the HICP involve the efforts of NSO and its field interviewers.

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

Part VIII, *Use of Records of Public Authorities and Protection of Collected Information*, of the Act straightforwardly stipulates in Article 40 the restrictions on the use of the information and in Article 41 the prohibition of disclosure of information.

The 2004 Annual Plan of the NSO states that the NSO shall produce data subject to the principles of reliability, objectivity, relevance, statistical confidentiality, transparency, specificity, and proportionality.

According to NSO's 2004 Annual Plan, since the inception of the COS, now the NSO, the NSO has always operated within a culture of strict confidentiality to which it is also bound by the provisions of the Data Protection Act, 2000. This act, which came fully into effect July 15, 2003, seeks to protect individuals against the violation of their privacy by the processing of personal data. In this respect, the NSO has appointed one of its officials as Data Controller, responsible for ensuring that all NSO processes involving personal data conform fully to the Data Protection Act. In March 2004, the NSO submitted the notification of its work processes involving personal data to the Commission of Data Protection in terms of Article 29 of the Data Protection Act.

In the course of 2004, the NSO carried out numerous bilateral meetings with public and private sector data providers to clarify the duties and obligation of all parties concerned, regarding data collection, the MSA Act, and the Data Protection Act.

The CPIU takes the necessary precautions to ensure the confidentiality of the data it collects. For instance, a letter that accompanies each questionnaire contains references to the Acts concerning data confidentiality. This letter also informs respondents of their rights and obligations with regard to the provision of price data.

When the questionnaires are received in the CPIU, the CPIU designates a number, instead of contact information, to identify each outlet or respondent. The CPIU never disseminates any price information. Only indices are disseminated, and special aggregation rules are employed to prevent the identification of respondent/s.

After two years all price questionnaires are purged. Until that time, questionnaires are secured in locked cabinets. All computers are password protected.

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

The MSA Act, Part VII, *Collection of Information and Access to Records*, Articles 35 through 38, provides the legal mandates to obtain, maintain, and encourage response from data providers. Part IX, *Offences and Penalties*, Articles 43 through 45, on the other hand, details the offenses and penalties for noncompliance. Articles 40 and 41 are printed on all price questionnaires, a feature that has significantly encouraged response.

NSO carefully considers response burden. These considerations are detailed in the 2004 Annual Report and the 2005 Work Plan. One of the essential components of the framework encompassing the 2005 Work Plan is the awareness and rationalization of response burden, while one of the strategic objectives of the NSO for 2005 is the visible reduction in response burden.

0.2 Resources

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

The NSO is organized into four divisions, each of which is organized into functional units. The CPIU is under the auspices of the Economic Statistics Division. The Research and Methodology Unit is placed under the direct responsibility of the Director-General.

The International Relations Office fosters the relationship between the NSO and Eurostat. It is also charged with keeping track of all proposals for new legislation in the statistical field and with providing the necessary support for the required consultation on statistical matters with third parties both in Malta and abroad.

As of June 25, 2005, the NSO employs 133 staff members, six of whom are loaned to other government organizations or are away on long-term leave. The NSO also employs part-time interviewers to conduct large-scale surveys.

Owing to increasing demands and resources allocated for the European Union (EU) prerequisites, including new and timelier statistics, the NSO is confronting increasing resource constraints and hopes to hire 10 to 20 more employees. Staff resources are inadequate to implement the enlarged work program resulting from additional data requirements from Eurostat.

The CPIU employs one manager, one statistician, five clerks, and seven price interviewers. In addition to the compilation and dissemination of the RPI and the HICP, the CPIU also compiles and disseminates the Purchasing Power Parities (PPP), which is very demanding, owing to ongoing surveying.

The CPIU pays particular attention to ensuring there are sufficient staff members to effectively carry out its various operations, while allowing for annual leave, maternity leave, and other staff entitlements. No more than two staff member can take leave at a time. There has never been a case where deadlines were not met due to inadequate staffing in the CPIU.

The NSO's salary level appears adequate for the nature of work and is competitive with the CBM, other government entities, and other private sector organizations with comparable jobs and positions.

Noteworthy provisions of emergency back-up systems exists for retrieval of RPI and HICP statistical series and their updates in the event of natural disasters, accidents, and other unusual events. The RPI has its own server, and two to three back-up systems that are housed in a fireproof room. Computing needs and technology are also noteworthy. The information technology system supporting the RPI and the HICP was updated with a brand-substitution wizard and chain-linking software. The RPI computer system was also optimized with Option Costing functionality.

Funding for compiling both new and old statistics appears adequate. Grants from Eurostat assist with compiling and disseminating new statistics such as the HICP and estate agencies rent survey.

Recommendation: Strengthen and increase staff resources for developing and improving of price statistics and for meeting the increasing reporting demands to Eurostat.

0.2.2 Measures to ensure efficient use of resources are implemented

The NSO strives to ensure efficient use of its resources. Staff performances are reviewed quarterly with the aid of the performance management program (PMP). The aim of this program is to assess and evaluate performance and not to set promotions and salary advancement. Mechanisms such as an annual PMP would be more efficient and should exist for career and salary advancement purposes.

The 2005 Work Plan details efforts to improve the efficient use of all available resources through (1) maximizing of asset utilization, (2) assessing of resource costs in terms of level and quality of outputs and services delivered, (3) rationalizing of amounts of resources consumed by overheads, (4) maximizing use of available data and reducing the time gap between data collection and dissemination, (5) deploying staff to core activities that meet client needs, and (6) managing and planning direct expenditure to service and business needs.

0.3 Relevance

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

A Retail Price Index Advisory Board is made up of representatives of the three social partners, namely the government, private industry, and the trade unions. This Board, led by a government-appointed chairperson, primarily scrutinizes the RPI data as opposed to providing methodological and/or other sound advice. It is composed as follows:

- Chairperson;
- Director, National Statistics Office (ex-officio member);
- two government representatives;
- two representatives of private industry (one from the General Retailers and Traders Union and another one from the Federation of Industry); and
- two workers' union representatives (one from the Confederation of Malta Trade Unions and another one from the General Workers' Union).

During its monthly meetings and prior to the release of the RPI, the Director of Statistics presents the index to this Board and provides answers to questions as well as additional information on the index.

Suitable institutional arrangements exist to provide advice about new and emerging data needs.

The NSO has established user committees and consultation groups that enable it to monitor the main uses to which data and publications are put; to ensure that the statistics produced meet user needs; and to ensure that appropriate data collection methodologies are being employed.

Feedback from users on the quality standards of the NSO statistics was solicited in 2002/2003 through a Users Perception Survey. This survey was conducted to identify users' needs for statistics and statistical products and to seek and gauge users' perspectives of the NSO statistics. According to the 2004 Annual Report, the NSO continues to take measures and act upon the findings of the survey. Currently, user feedback and/or complaints are solicited through the NSO's website, under the "Contact Us" link, http://www.nso.gov.mt/site/contactus.aspx. But so far the NSO has received only two feedbacks from data users.

Mechanisms are in place to enhance NSO visibility through increased contact with its data users and the media. In 2004, there were over 249 statistical news releases, of which 43 concerned the Retail Price Index. In 2003, a seminar on the Housing Price Index was provided to the general public.

The monthly RPI is published with comments in a National Statistics Office News Release, in the *Government Gazette*, and on the NSO's website, http://www.nso.gov.mt/. A detailed analysis is included in the *Economic Survey* published by the Economic Policy Division and in the *Quarterly Review of the Central Bank of Malta*.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The MSA Act, Article 9(c), states that the NSO shall (1) supply the information necessary to evaluate the quality of official statistics, (2) make accessible to the public the methods used for their production, and (3) show how it complies with the principles under which such statistics are gathered.

The focus on quality is also evident from the NSO's mission statement prominently placed in its 2004 Annual Report and 2005 Work Plan, which says:

"To serve the statistical information needs of Parliament, Government, and the community by striving for excellence through rigorous protection of confidential

data, quality information from respondents and a timely, objective and responsive statistical service."

Malta is also a member of the European Economic Area Agreement. Article 7(b) of this agreement gives the basis for common methodology quality standards and monitoring of outputs in many statistical fields.

There are no trade-offs between timeliness and quality. An internal 12-month advance release calendar (ARC), developed for all units of the NSO, ensures that all deadlines are met, while the organization of the data production supports the compilation and dissemination of quality price statistics within these deadlines.

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

Reviews are undertaken of all unusual movements in the price data received at the NSO that are traced back to the reporter, if necessary. To maintain quality of the price statistics and strategies for improving data production, the NSO holds meetings with the price interviewers on an ongoing basis. On many occasions, price interviewers are invited to the NSO to seek answers and to clarify any matters they have.

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

Articles 7(a) and 9(5)(b) of the MSA Act stipulate the functions and processes necessary to deal with quality considerations in planning the statistical program of the NSO. Therefore, according to the 2005 Work Plan approved by the MSA, the NSO and other data-producing agencies settled on four essential components for the development of the NSO: (1) consolidation of work and output, (2) improved coordination of statistical activities and projects, (3) awareness and rationalization of response burdens, and (4) an overall commitment to quality in statistics.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Recruitment and promotion of staff depend on the education background and relevant expertise. The Collective Agreement lists the terms and conditions for employment, promotion and filling the vacancies, and salary structure. Thus, vacancies are filled by an internal call for application, followed by an external call if needed.

Professionalism is promoted through active encouragement of staff participation in training opportunities, workshops, meetings, and seminars, to ensure awareness and understanding of statistical standards and good statistical practices. For example, between October 2004 and

June 2005, six NSO employees participated in international courses conducted primarily in Eurostats's training center. Also at that time, 81 NSO employees attended working groups and meetings primarily concerning Eurostat's statistics, including HICP and other price index-related topics.

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

There is no evidence that the NSO is subject to outside pressure in its sources and statistical methodologies.

However, owing to the political and social nature of the RPI and its use for wages, pensions, and contract negotiations, a retail price index advisory committee, also known as the Retail Price Index Advisory Board, was established in 1990 through an Income Policy Agreement. The purposes of this RPI committee are to discuss and interpret the RPI results, make suggestions on questionnaires, and consider proposals for the inclusion in the statistical work plan. However, this committee tends to operate solely as an administrative committee with no technical expertise in price index compilation.

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

The RPI and HICP publications and news releases produced by the NSO explain the basis for compiling the price indices. They also identify the main factors underlying unusual figures and movements, in order to improve user understanding and reduce the likelihood of any misinterpretation. The DG is entitled to respond to public criticism of the price statistics or instances of misuse of statistics. However, this practice is used only sparingly so as to minimize debates that may be political in nature.

1.2 Transparency

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

The MSA Act is published both in English and Maltese (the equally accepted official languages) in the official government newspapers and statistical publications and on the NSO's website, http://www.nso.gov.mt/. Price statistics publications show information about sources and methods. The publications show the address, telephone and facsimile numbers, e-mail address, and the website address of the NSO.

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

Prior to its release, the RPI is provided to the members of the RPI Advisory Board for their information. The RPI Advisory Board is composed of the following partners: the Director of

Statistics (ex-officio), two members appointed by government, two members appointed by the trade unions, and two members appointed by business organizations.

Before the release of the RPI, the RPI Advisory Board maintains the RPI in strict confidence, and the index is embargoed until the 11 a.m. release. The members of the Board are also barred from disseminating the index prior to its publication by the NSO. After the RPI has been reviewed, discussed, and approved by the Board, it is then disseminated publicly. This information about internal access to the RPI is posted on the NSO's website and on the International Monetary Fund's (IMF) Data Dissemination Standards Bulletin Board (DSBB).

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

All price data releases are clearly identified as produced by the NSO. In the case of joint publications, the NSO data are identified as a product of the statistical office. The NSO publications request attribution when the statistics are used or reproduced, and the NSO reserves the copyright of all the statistical data disseminated.

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

For the RPI, and particularly for the HICP, advance notice is provided for major changes in methodology, source data, and statistical techniques. A detailed news release was issued in 2003 when chain-linking and the Classification of Individual Consumption by Purpose (COICOP) classification was introduced for the compilation of the HICP.

1.3 Ethical standards

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

The code of conduct and practice of NSO employees reinforces the provision of the MSA Act. The second schedule, Article 17, of the Act provides the Form of Oath that outlines basic duties for statistical officers and contains rules of staff conduct. Through the renegotiation of NSO's Collective Agreement, employees are reminded of the code of conduct and practice. Each employee is provided with a copy of the Collective Agreement, and each employee must sign the Form of Oath upon accepting employment with the NSO.

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 RPI was thoroughly revised in 2003 to comply with EU methodologies and recommendations and to estimate the HICP. Annual chain-linking was introduced to link the Laspeyres-type HICP that requires annual revisions of the market basket and its weights. However, the RPI continues to be estimated using a fixed-weight modified Laspeyres formula. There are no plans to stop compiling and disseminating the national RPI and resort to the HICP. The RPI better reflects the domestic conditions of the Maltese economy, while the HICP is compiled to facilitate international price comparisons for EU members. The two indices are derived from the same source data.

The concepts and definitions used in the Maltese RPI and HICP are generally in line with internationally accepted standards as defined by the International Labor Organization, and the IMF and others in the *Consumer Price Index Manual*. The prices and weights of the RPI and HICP broadly follow the national accounts concepts—based on the *1995 ESA*—for all monetary household consumption expenditure. The only departure from accepted practice is the exclusion of illegal activities from the weights. In addition, the level of detail for household residential capital formation expenditure is not sufficient for detailed analysis of price movement.

2.2 Scope

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

The consumer price indices described below are the national RPI of Malta and the HICP. Both indices cover the expenditure of all resident households, including net expenditure by tourists, and refer to the market purchases of consumer goods and services—that is, the final consumption expenditure of the 1995 ESA. The owner-occupancy rate for Malta is estimated to be approximately 80 percent. Currently, an index for owner-occupied housing has not been represented in the RPI and the HICP. Nevertheless, last year Malta enacted the legislation, Immovable Property (Acquisition by Nonresidents) Act (Cap. 246). This legislation stipulates the production of an immovable property price index by the NSO. This index employs the acquisition approach as opposed to the rental equivalence method. According to Malta's 2004 Annual Report, this immovable property index, based on alternative data sources, was computed and is currently disseminated.

According to international best practice, the consumer price index (CPI) should cover owner-occupied housing in one or both of two ways: as consumption of housing services or as

capital formation in (acquisitions less disposals of) housing units. Malta's RPI and HICP do not cover the housing expenditures of owner-occupants from either approach.

Given the lack of information on informal activities, no informal activity is included in the RPI and the HICP weights that cover the expenditures of all resident households in the country.

The Maltese HICP, while covering all the subindices laid down in Council Regulation (EC) No. 1687/98, includes social protection services provided within the home, such as home cleaning, meals, and transport for the disabled. All in-scope urban and rural households are covered, as are households of all income levels and occupation type.

The prices included in the index are those actually paid by purchasers net of reimbursements, subsidies, and discounts. The national RPI does not cover price changes in the health and social protection services sector. As regards financial services, according to the CPIU, to date, only charges imposed on credit card holders, loans, and safe deposits are covered in the RPI and HICP. The CPIU plans to extend the coverage to other financial services. Before extending coverage to other financial services, the CIPU should further study the pricing methodologies, such as Financial Intermediation Services Indirectly Measured, so as to improve the accuracy of the index.

The HICP weights are complemented by expenditure figures from the NAU to make the index more relevant and reliable in certain specific areas, such as tourist expenditure and social protection.

Recommendation: Include imputed rentals of owner-occupied dwellings in the RPI.

2.3 Classification/sectorization

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

The RPI and HICP cover noninstitutionalized Maltese households, consistent with the *1995 ESA* household sector. The items weights for the HICP are classified using the COICOP that is consistent with international guidelines, while the RPI employs a modified COICOP that better represents the Maltese economy.

The Maltese Islands are segmented into six districts according to the *Nomenclature des Unités Territoriales et Statistiques* (NUTS) classification (level 5). This classification is recognized and accepted by Eurostat for the collection and compilation of regional statistics in the Maltese Islands.

The NSO developed a set of four-digit codes specifically for the 2000 Household Budgetary Survey (HBS). These codes permit all purchased items that had adequate representation to be

isolated; and the set of codes complemented the Classification of Product by Activity (CPA), which is the basic coding for the RPI.

Standard Classification of Economic Activities of the European Communities (NACE) rev. 1 is used for classification of retail outlets in the business register.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Market prices are used to value flows and stocks. Specifically:

- Direct taxes and value-added taxes are included in the price being recorded.
- Sale prices are included, provided that the same item was available before the sale period and will continue to be available after the sale period.
- In the case of list prices, shop owners are asked to confirm that the prices are actually those being charged to consumers.

All product specifications are carefully designed for the basket items and their varieties, with guidance provided by the CPIU staff. Price determining characteristics for transactions at market prices generally consider size, color, brand, and quality, etc.

2.4.2 Recording is done on an accrual basis

Market prices of goods and services are recorded in the period they are purchased. The price collection starts in the first week of the month when prices for food are collected. In the second week, prices for other items are collected, and then in the third week, prices for clothing are collected. Seasonal items are collected twice monthly, on Friday for two alternative weeks every month. The seasonal items in the RPI and the HICP are fresh vegetables, fresh fruit, and fresh or chilled fish.

Item monitoring of the seasonal items varies from month to month according to market and weather conditions and hence according to vegetable and fruit availability in each particular month.

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

The RPI and HICP cover purchases of existing goods such as used cars, which are predominantly imported, and so, in practice, netting of these transactions is not required. There is no formal market for used cars sold by households.

A separate property price index, not included in either the RPI or the HICP, calculates a property price index with a secondary market that is defined as acquisition less disposal of such goods.

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

3. Accuracy and reliability

3.1 Source data

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

Data sources are kept under continuous review to ensure that the data collection program is comprehensive.

To estimate the RPI and the HICP, the NSO selects over 350 goods and services representing the structure of consumer expenditure of the population. Registration of the prices is carried out in 11 of the most populated and most representative main localities and in an additional 17 nonmain localities in Malta

Regarding the distinction between main and nonmain localities, the main localities are those in which a considerable and consistent number of transactions occur throughout the year, whereas the nonmain localities are those in which particular goods and services (that are hard to find in the main localities) can be found. The prices for food, clothing, and medicine are collected every month from the main localities.

To supplement the core compilation, price information from other available sources is used, including the Land Registry Department, State-Owned Utility Companies, the National Accounts Unit, Malta Financial Services Authority, Value Added Tax Administration, and Inland Revenue Service.

Sources for RPI and HICP prices: The outlets for price-reading purposes were derived, for the first time, from the business register according to the market share of each outlet. This ensures that the outlets covered represent the entire population.

Following the prescriptions laid out in *Manual of Recommendations on Business Registers*, a business register was compiled going back to 1996. Fieldwork started in 1998 with the mailing of business register questionnaires to about 51,000 business units. The register, maintained on an ongoing basis, is used for compiling business demography statistics and extracting the required representative samples for enterprise-based surveys for the RPI and HICP. The registry is further supplemented by a sample survey of all businesses.

For compiling the price index, there are 409 outlets, for which 8,019 price quotes are collected. The sample information maintained by the NSO contains the name of the outlet, the address, the types of products sold, and whether the outlet is public or private.

Sources for RPI and HICP weights: The NSO conducts the HBS every five years. The last HBS, carried out between March 1, 2000 and February 28, 2001, covered a national representative sample of 2,586 households throughout Malta, randomly selected. The initially designed sample was larger. However, owing to a low response rate (38 percent), the sample had to be revised, and the NSO found new households to replace some of those that did not respond. Response to the survey was voluntary. But the NSO provided monetary payments of twenty liri and conducted three raffles or lotteries as incentives to improve the response rate.

The participant households provided information on household composition, accommodation facilities, and regular household expenditure. Individual household members also provided details of their income and regular expenditure over three consecutive weeks and maintained records of their day-to-day expenditure.

The weighting structure for the new RPI series was derived from the best available estimates of the weekly expenditure on consumer goods and services by a specified number of households in the country. The coverage of the current HBS differed from the previous ones. No selection criteria were attributed. The sample of households was selected so that each household had an equal chance of selection. The target population consisted of all private households in Malta, irrespective of income bracket and of the number of persons in the household.

For each household, weights must be assigned. To obtain the real characteristics of the target population, a post-stratification weighting technique was applied, using the number of households, the distribution of households by district and size, and distribution of the population living in the households by sex and age.

Using estimates from the Census of Population, the NSO constructed the household distribution by size and district to provide a basis for constructing the household weights.

Very few cases occurred where households dropped out of the survey; therefore, mathematical procedures were not applied to compensate for missing data. In cases of incomplete surveys, auxiliary data were used. Households that change addresses were followed to the new address.

Price Statistics (Consumer Price Index)

¹⁸ It was randomly divided into seven batches (subsamples), each batch consisting of about 900 households.

The HBS excluded collective households (such as elderly and nursing homes, student hostels, hotels, soldiers' barracks, hospitals, sanatoria, and prisons).

Corrections for sampling error were done by determining an estimator that depends on the number of responding households. The magnitude of this estimator determines the sampling error. The standard error on household annual expenditure was estimated as 1.5 percent.

Although the NSO conducts the HBS once every five years, the weights deemed to be most critical for reliability and relevance are adjusted annually in light of the provisions manifested in Council Regulation 1749/96. The NSO is currently considering the possibility of embarking on a continuous HBS to improve the quality of the weights.

The HICP endorses the "domestic concept" in the determination of weights, whereas the national RPI takes into account the domestic expenditure by locals and expatriates only. The HICP weights are complemented by expenditure figures from the national accounts to make the index more relevant and reliable in certain specific areas such as tourist expenditure and social protection.

The amount of household expenditure allocated to different goods and services was worked out as a proportion of the total household expenditure.

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

Regarding owner-occupants' consumption of housing services in Malta, weighting information is available from the HBS for the implicit rent of owner-occupants, However, price information from the rental survey is not considered sufficient to produce a reliable estimate of the average change in free market rental prices for housing units that are similar to the units of owner-occupants. Further, no alternative estimates are available about the rental values of owner-occupied housing units constructed from the user cost approach. Hence the implicit rent of owner-occupants is not included in the RPI.

Regarding households' (including owner-occupants') capital formation in housing units in Malta, the quality of data on acquisitions less disposals of housing units, as well as on housing prices, suffers from undercoverage of units completed prior to 1995. The quality of estimates based on these sources is not sufficient to produce a reliable net acquisitions component for the RPI. Hence the RPI does not cover household capital formation in housing units (including for owner-occupants).

3.1.3 Source data are timely

The CPIU data are timely to allow for the compilation of the RPI and HICP data. The price data are supplemented by information from the price interviewers, who collect the price information from outlets. The price data are also supplemented with annual mail surveys, such as the Rent and Garage, Private Tuition, Transportation Services, and Doctors 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 non-sampling error; the results of the assessments are monitored and made available to guide statistical processes

The CPIU routinely checks the information on weights, price relatives, and misclassifications. Nonresponse is a common problem for the HBS. But problems of nonresponse are not common for the outlets sampled, because of the established relationships between the interviewers and the enterprises. The sampling errors are monitored.

If there were a mistake with last month's price, the CPIU would be alerted and the data would be corrected.

Possible response error could occur during the collection of the household expenditure survey. For example, households appear to systematically underreport expenditures on commodity groups such as tobacco and alcoholic beverages. For that reason, the CPIU supplements the data source with data from the NAU. CPIU also obtains data on tourism expenditure from the NAU.

Misclassifications tend not to be problematic for the Business Registry. Classification of businesses according to principal economic activity is in terms of the value added. The computer system in the Business Registry Unit has built-in techniques for validating data. Nonresponse is also not an issue for the Business Registry since it is augmented by the business survey. There is a 70 to 73 percent response rate for small and medium companies and a 90 percent response rate for large companies.

Nevertheless, the means by which closed businesses are purged from the registry is inefficient. It may cause duplication of efforts on the part of the staff in the CPIU, who have to again verify whether or not the outlet is still in business. Businesses are not purged until the registry has checked various administrative sources including the Inland Revenue Service, the labor force survey, etc. It also checks for the receipt of a letter from the outlet stating that it is no longer in business.

Ad hoc surveys are conducted to identify new products and provide source data for weights and prices. First, the NSO determines what goods to investigate; then, the HBS surveys households to determine if adequate amounts are being consumed for that particular good, and if so, interviews are conducted to collect the price for that good.

3.3 Statistical techniques

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

Stratified sampling techniques are used for outlets for both the HICP and the RPI. Outlets are selected by localities and are based on turnover and patterns of retailing. Most prices for items and varieties are collected through personal visits to the enterprises. Interviewers are required to select and precisely specify the most popular variety, for which prices will then be collected on a continuing basis.

Sampling errors are calculated for the HBS and used internally to monitor the accuracy of the estimates. For example, in 2000/2001, consumption expenditure was measured with a 1.5 percent standard error. The HBS data quality is constantly monitored, and efforts are made to reduce nonresponse. The results are continually cross-checked against other data sources and adjusted if required.

A 10 percent coding error threshold is employed to minimize processing errors. If any unusual price values appear, the enterprise is contacted for price verification. These unusual prices can be identified in the datasets and are not removed or modified.

Both the RPI and the HICP price data are collected in outlets throughout Malta and Gozo. The price readings are made from 11 most populated and represented main localities, and from 17 nonmain localities, covering specific items.

The prices are first collected and then passed on to the CPIU where the price indices are then tabulated. All data sets are combined, weighted, and aggregated into the national index and the harmonized price index. The ratio of the arithmetic mean within localities is used for both the RPI and HICP.

Prices for temporarily missing products are carried forward for up to two months using the last reported price. The relatively small number of shops on the island of Malta, and the fact that most of the items (including food items) are imported, makes the availability of particular brands over an extended period more difficult. Therefore, Malta faces problems such as discontinuations of an item, the introduction of new items, and the replacement of an old brand in the market on a regular basis. When an item is discontinued, an alternative popular item is substituted after two months.

The seasonal items in the RPI and the HICP are fresh vegetables, fresh fruit, and fresh or chilled fish. Item monitoring of the seasonal items varies from month to month according to market and weather conditions and, hence, according to vegetable and fruit availability in each particular month. Prices for the mentioned items are collected twice monthly, on Friday for two alternative weeks every month. The Rothwell method is used, with monthly variable weights, where the unknown basket of the current month is estimated by the basket of the same month in the base period.

Generally, the price collectors monitor all prices every month. However, some exceptions include rents, doctors, dentists, consultants and veterinary services, and educational fees that are monitored on an annual basis. In addition, base prices for water and electricity services were calculated on the consumption derived from the HBS for one- to five-person households, plus the rental charges for 120 days. Base prices for local telephone bills were constructed on various time bands during night and day for households of one to five persons. Since most of these services and utilities are monopolistic in nature, it is not the practice of CPIU to record the prices on a monthly basis, especially since price changes are not so frequent.

Quality adjustments for goods are conducted, usually using, where applicable, one of the following methods: explicit quality adjustment or option cost method, direct price, or bridge overlap comparison.

New goods are introduced into the sample as they gain market share. The CPIU coordinates with the HBS to determine when a new product gains sufficient market share and when a good should be introduced into the price indices.

The price indices in Malta—the RPI and the HICP—use two different methodologies. The RPI employs a modified fixed-base Laspeyres formula, while the HICP employs an annually weighted chain-linked Laspeyres method.

For the RPI and HICP, the price ratios are aggregated at the elementary levels for one month's price change of each of the 10-item groups (RPI) and 12-item groups (HICP) in each of the 11 main localities and 17 nonmain localities. For the RPI, the modified Laspeyres formulas for the 10 short-term price indices are aggregated into the national index. For the HICP, the chain-linked Laspeyres formulas for the 12 short-term price indices are aggregated into an overall harmonized price index.

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

Since the weight reference period (March 1, 2000 to February 28, 2001) is different from the price reference period (December 2002) for the RPI, price updating of the weights is necessary. Since the price relative is based on a different period to the corresponding prices in the weights (i.e., 2000/2001), the CPIU needs to use a link factor. The factor is the price ratio of December 2002 and average prices in 2000/2001 to adjust the weights for the calculated index, so that the price reference period corresponds to the period related to the prices in the weights.

According to the CPIU, prices are not collected from parallel markets or underground economies; the HBS and the NAU, though, have derived their own expenditure estimates. If these expenditure weights are significant, the CPIU should consider monitoring prices in the parallel markets.

There are no distinctions in prices if the consumer chooses to pay by credit or by cash. The values recorded for goods and services represent the economic cost to the consumer at the time the good or service is purchased regardless of method of payment.

Goods and services produced for own final consumption are not included in the RPI.

At the elementary level, an arithmetic mean or the ratio of average prices is used to calculate the index. Short-term price change is calculated as month-on-month percent change and 12-month moving average. Long-term price change is calculated as 1995 = 100 and 2002 = 100 for the RPI and 1996 = 100 for the HICP.

For the RPI, the method used to aggregate the elementary indices to higher levels is a modified Laspeyres formula, where the present weights refer to the year 2000/2001. The weights are fixed at the item level and are not adjusted for price change to align them with the appropriate price reference period, December 2002. When new weights are introduced, the new index is linked to the old index using a linking factor. The HICP index weights are updated in January each year, when newly significant goods and services may also be introduced

Recommendation: Price update the weights.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

RPI and the HICP data are not validated against other price indices such as the import/export price index and implicit deflator for household final consumption.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Any unusual movements, such as outliers in item indices, are verified and traced back to the reporting outlet if necessary. The processing software routinely identifies those subindices with a significant contribution to change in the total index. This allows them to be cross-checked for possible errors. It also quickly identifies large individual price changes, which are similarly crosschecked.

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

Discrepancies arising from inconsistent imputation for missing data, seasonal goods, and quality adjusted goods are routinely assessed. A computer program supports a control edit to assess and validate the data. As mentioned previously, the system has a 10 percent threshold for price verification. If a price change is above this threshold, the price is then verified and assessed manually.

The CPIU still verifies the RPI by examining and comparing Excel worksheets with the price changes against the computer calculations.

Recommendation: Validate the RPI data against other price indices.

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 RPI is not frequently revised, but new weights are subject to analysis and validation prior to their incorporation into the index. On the other hand, according to the HICP revision studies guidelines, Commission Regulation (EC) No 1921/2001:

The officially published HICP series may be revised on the grounds of mistakes, new or improved information, and provisional results in order to improve the comparability, reliability, or relevance of the HICP.

For this reason, when necessary, this regulation has been observed in the case of the HICP. Improved price information, particularly in the hotel industry, has led to revising the HICP, the results of which were used to revise the index methodology. The RPI has been revised only once in the past decade—1998. Findings from this revision have been published and continue to be used to achieve improvements and collaboration, particularly with utility companies.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of the statistics follows the Special Data Dissemination Standard (SDDS) requirements. The RPI and the HICP are compiled and disseminated monthly.

4.1.2 Timeliness follows dissemination standards

The target date for release of the RPI and the HICP is two to three weeks after the end of the reference month. This is always met and, accordingly, exceeds SDDS requirements.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The RPI and the HICP are internally consistent and are invariant to the geographical and item or expenditure class. However, users are unable to verify aggregation of the item class or

commodity groups, or to check for internal consistency, since the RPI and HICP datasets are not published with appropriate levels of disaggregation.

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

Consistent time series data for both the RPI and HICP are available for periods over five years. Linked series of the RPI are available, dating back to the early 1970s.

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

Since the RPI and HICP data are not verified with other data sets, such as the national accounts implicit deflator and import/export price data, the CPIU is unable to determine if the RPI and/or the HICP data are consistent with these other data sets.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

According to the NSO's publicized revision policy, the NSO shall:

- (a) provide full and annotated revisions whenever necessary and required; and
- (b) explain fully current methodology and changes in methodology.

In general, revisions to monthly, quarterly, and annual data are normally carried out on a t+1 basis. Revisions to prices data are rare and infrequent.

4.3.2 Preliminary and/or revised data are clearly identified

At the time of price data dissemination, users are informed that the data are either preliminary or re-released. The public is aware that the RPI is final upon release, and the HICP is released in a provisional manner and is subject to revision.

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

Revision policy is known, through aggressive marketing techniques and promotions to educate data users. RPI data are not frequently revised once published. On the other hand, the HICP tends to be revised regularly, since the weights are updated annually. Studies of the annual weight updating are conducted and disseminated.

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 NSO publishes well-designed charts and tables to facilitate analysis. Data for the RPI and HICP are generally accessible, but data sets are not published with adequate levels of disaggregation.

Included in each *News Release* of the RPI and HICP is an assessment or analysis of current period developments. Several hardcopy and electronic publications disseminate the price indices with time-series data. Owing to the nature of the Maltese economy, and the case that most items selected to be priced are invariant to seasonal changes, the price indices are not seasonally adjusted.

Recommendation: Publish RPI and HICP datasets with appropriate levels of disaggregation.

5.1.2 Dissemination media and format are adequate

Both the RPI and the HICP data are disseminated in ways that facilitate redissemination in the media through official press releases and the website. The data are simultaneously disseminated to all interested parties through a monthly press release prepared by the NSO's Library and Information Unit. Data are also simultaneously disseminated on the NSO's website, http://www.nso.gov.mt.

Requests from the public for more comprehensive and/or detailed statistics are granted by the NSO. Requests for these types of data are usually completed in one day (or longer if requests are labor intensive).

Current price statistics and longer timeseries (with link factor) can also be accessed through the NSO's website, maintained by the NSO's library on behalf of the CPIU.

5.1.3 Statistics are released on a pre-announced schedule

An ARC is posted on the NSO's website, http://www.nso.gov.mt, with release dates for the upcoming three months. Internally, there is an ARC for one year. Both the RPI and HICP data are usually released punctually on the last Friday of the month.

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

Data are simultaneously released to all users, with the exception of the RPI Advisory Board, which has to first approve the dissemination of the data. This prerelease to the RPI Advisory Board is known to the public.

The price data are made available at 11 a.m. through an e-mail sent to the press and all other media. The price data are also sent to paid subscribers and to those data users who have a notification service.

5.1.5 Statistics not routinely disseminated are made available upon request

Detailed customized tabulation (detailed breakdowns) of price index data is available upon request, in addition to the tables routinely disseminated. For specific purposes, customized tabulation of data that satisfy the NSO's disclosure requirements are also available for a fee. Data users are aware of the availability of additional statistics and of the procedures for obtaining them. These procedures are explicitly provided on the NSO's website.

5.2 Metadata accessibility

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

News releases of metadata are available on the NSO's website, where limited and outdated RPI and HICP methodology descriptions are provided. There is, however, current information on sources and methods of the RPI and HICP, but this information is not yet published.

The GDDS metadata.

http://dsbb.imf.org/Applications/web/gdds/gddscountrycategorydcreport/?strcode=MLT&strcat=PCPI0 and other related descriptions, are not reviewed and updated regularly. These metadata were last updated in June 2003.

There is, though, published information in official statistical publications on the HBS surveys, such as the response rates, survey monitoring, nonsampling errors, sample frame, sample design, estimation, and imputation techniques. Outlet sample information, however, is not provided.

Recommendation: Provide up-to-date and pertinent metadata to the public.

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

Besides the news releases posted on the NSO's website, there are no brochures, pamphlets, or newsletters about the RPI and the HICP on how to locate the data available. Background papers, working documents, etc. are not available.

Recommendation: Provide general use information about the RPI and HICP to the public.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The NSO's library is the point of contact for the RPI and HICP data users. It provides its email and Internet addresses on the inside of most statistics publications. The library, if it is unable to answer an inquiry, will then refer the user to the CPIU. On most news releases, the CPIU e-mail address, rpi.nso@gov.mt, and telephone number are provided.

Four to five groups of more than 30 students have visited the NSO to learn more about statistics and how to conduct research. Materials to raise awareness on the use of statistics were made available to these students.

Assistance to users is monitored and reviewed periodically though a customer service questionnaire e-mailed to users who have requested data.

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

The NSO publishes a comprehensive print catalog of its publications; it is available either in hardcopy, PDF, or CD-ROM.

This catalog is updated regularly and includes the prices of the statistical products and services.

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

(Compiling Agency: The National Office) (Compiling Agency: The National Office) (Compiling Agency: The National Office)	ling Agency	(Compiling Agency: The National Statistical Office)	Stical Office) scenad: NO = Protion Not Observed: SDDS = Complies with SDDS O	ritorio
Ney to symbols. 147 – 140t Applicable, O – 11actice Observed, EO – 11actice Late	gery Observed, El	Assessment	SSG VCG, INO - 11actice (NOt Observed, SDDs - Complies with SDDs C	Jugura
Element	NA O	LO LNO	NO Comments	
0. Prerequisites of quality				
0.1 Legal and institutional environment	X			
0.2 Resources		×	Staff resources are inadequate to implement additional data requirements from Eurostat.	itional data
0.3 Relevance	×		•	
0.4 Other quality management				
1. Assurances of integrity				
1.1 Professionalism	×			
1.2 Transparency	X			
1.3 Ethical standards	×			
2. Methodological soundness	-			
2.1 Concepts and definitions	×			
2.2 Scope		×	Malta's CPIs do not cover the housing expenditures of owner-	f owner-
			occupants.	
2.3 Classification/sectorization	×			
2.4 Basis for recording	×			
3. Accuracy and reliability				
3.1 Source data	×			
3.2 Assessment of source data	×			
3.3 Statistical techniques		×	Weights are not price updated.	
3.4 Assessment and validation of intermediate data and		×	RPI data are not validated against other price indices such as the	such as the
statistical outputs			import/export price index and implicit deflator for household final consumption.	usehold final
3.5 Revision studies	×			
4. Serviceability				
4.1 Periodicity and timeliness	×			
4.2 Consistency	×			
4.3 Revision policy and practice	×			
5. Accessibility				
5.1 Data accessibility		×	RPI and HICP datasets with adequate levels of disaggregation are not available.	gregation are not
5.2 Metadata accessibility		×	Up-to-date and pertinent metadata are not made available to the public. Brochures, pamphlets, or newsletters about the RPI and HICP	able to the e RPI and HICP
5 3 Assistance to users	*		are not available.	
CO Abbibative to about	¢			

III. GOVERNMENT FINANCE STATISTICS

0. Prerequisites of quality

0.1 Legal and institutional environment

The government finance statistics (GFS) examined in this assessment are those of the general government account prepared in the national accounting framework by the NSO, using the *European System of Accounts 1995 (1995 ESA)*. This classification and sectorization are broadly consistent with the guidelines outlined in the International Monetary Fund's (IMF's) *Government Finance Statistics Manual 2001 (GFSM 2001)*.

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

The National Statistics Office (NSO) is Malta's official national statistical agency. The NSO was established by virtue of the Malta Statistics Authority's (MSA's) Act XXIV of 2000 (Chapter 422 of Malta's Main Legislation), and it replaced the Central Office of Statistics March 1, 2001. Article 10 of this Act determines the functions and responsibilities of the NSO, which include the collection, compilation, extraction, and release of official statistics of Malta. Article 10 provides the NSO with the responsibility for compiling the national accounts, which include the general government account. Within the NSO, the Government Finance Unit (GFU) is responsible for compiling government finance statistics for Malta.

The NSO is headed by a Director General (DG) (Article 9 of the Act) and operates as an independent body, with autonomy over its financial operations and recruitment of staff. In performing its functions, the NSO is accountable to the MSA, the supervisory body for policies governing the production of official statistics in Malta. The MSA is governed by a Board of eight members, including the chairman as the vested legal authority. The MSA advises on fundamental issues relating to the organization of statistical activities of Malta, such as methodology, liaisons between the NSO and the other public bodies, performance of the organization structure, statistical program priorities, and budgetary allocations. The chairman reports to the Minister responsible for statistics about major decisions made by the Board

Article 7 of the Act states that the MSA shall examine and submit, for the approval of the Minister, the report on the activities and the financial accounts drawn up by the DG for the administration of the NSO. This report is published after it is approved by the Minister. Article 9 of the Act states that the DG shall decide, on the basis of professional and ethical considerations, the scope and purpose of the statistics provided for in the business plan. The DG also decides on the methods and procedures for the collection, compilation, storage, presentation, and publication of the data.

As a member of the European Union (EU), Malta has to observe the European law that applies to a large portion of its statistical program. The production of national accounts

statistics is not only subject to EU law but also to verification by the European Commission. ¹⁹ In this respect, Malta's statistical activities are inspired from the EU and the UN guidelines, which are reflected in its mission statement and its current practice.

The Treasury Department of the Ministry of Finance (MOF) compiles and publishes fiscal data on central government operations and on the outstanding debt of the central government. The publication of the annual financial report is done in terms of Article 65 of the *Financial Administration and Audit Act—Act 1 of 1962*.

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

Part VIII, Article 39, of the Act provides that:

- (1) The DG of the NSO may (a) on delivery of a notice, request any public authority to allow officers of statistics at all reasonable times to access, to inspect, and to take copies of or extracts from any records in its charge; and (b) request any public authority to consult and cooperate with him for the purpose of assessing the potential of the records of the authority as a source of statistical information and, where appropriate and practicable, developing its recording methods and systems for statistical purposes, and the public authority shall comply with any such request, insofar as resources permit.
- (2) If any public authority intends to carry out activities with statistical implications, it shall consult, for coordination, with the NSO and accept any recommendations the NSO may make.

Formal and informal coordination and agreements between the NSO and other data-producing agencies are in place. Examples of agencies with which the NSO cooperates are the Central Bank of Malta (CBM), the MOF, the Employment and Training Corporation (ETC), the Inland Revenue Department (IRD), and the Customs Authority about the timely provision of statistics and/or access to their databases. Occasioned by the implementation of the *1995 ESA* requirements, several committees and working groups were created. Such is the case of the GFS Committee, which comprises representatives from the NSO, CBM, and MOF and Treasury. This committee has participated in the classification and coding of

organizations such as the Organisation for Economic and Co-operation and Development (OECD), the United Nations (UN), the IMF, and the World Bank.

¹⁹ 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 also coordinates its work with international

government transactions. Another example is the Committee for the harmonization of NACE codes with the Value Added Tax (VAT) Department.

A cooperative agreement also exists between the MSA management and the Union Haddiema Maghqudin; the union represents most of the MSA employees on the terms and conditions of employment applicable to MSA employees.

Extensive consultation takes place between the NSO and other data-producing agencies during the preparation of the draft annual work plan. The MSA, in reviewing the draft work plan of statistics, takes on board the views of the agencies represented by the membership of the MSA. The Co-operation Agreement between the Central Bank of Malta and the National Statistics Office on compiling and collecting economic and financial statistics states in paragraph 6 that "the CBM and the NSO agree to exchange Government Finance Statistics so that the Bank would be able to meet its requirements in this field imposed by the ECB and the IMF." On the other hand, the NSO does not have overall specific authority to require other agencies to adopt the statistical standards required by the EU. Although a high degree of cooperation exists between the different agencies, some inconsistencies may still appear in the classifications. This situation has been gradually improving, and adequate harmonization should soon be in place.

The NSO, the MOF, and the CBM have also established several specific arrangements for the exchange of data. The agencies transfer data in agreed formats; however, for the supply and use tables the staff of the GFU has to capture and input the necessary data manually. The use of general government statistics in fiscal policy formulation, monitoring, and forecasting is a special reason for the close liaison between NSO and the MOF.

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

Confidentiality of individual responses of government units is not an issue. However, NSO treats its collection and processing of GFS in the same manner as any other source data.

Although since its start the NSO has worked within a culture of strict confidentiality, the NSO is also bound by the provisions of the Data Protection Act, 2000, which came into effect July 2003. This Act provides for the protection of individuals against the violation of their privacy by the processing of their data.

When hired at NSO, employees are informed of the rules and duties pertaining to confidential information and its treatment. Every employee is required to sign an oath of confidentiality before starting to work. This applies to both permanent as well as to temporary staff. This oath of confidentiality is part of the job contract, and upon the employee's signing of the contract, her/his attention is called in particular to this oath.

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

The MSA Act, Part VII, *Collection of Information and Access to Records*, Articles 35 through 38, provides the legal mandates to obtain, maintain, and encourage response from data providers. Part IX, *Offences and Penalties*, Articles 43 through 45, on the other hand, details the offenses and penalties for noncompliance.

NSO carefully considers the response burden on the data providers. These considerations are detailed in the 2004 Annual Report and the 2005 Work Plan. One of the essential components of the framework encompassing the 2005 Work Plan is the awareness and rationalization of response burden, while one of the strategic objectives of the NSO for 2005 is a visible reduction in the burden on respondents. However, response burden is not a major issue for NSO in collecting GFS, mainly because it relies on the accounting records of the different levels of government. NSO provides support to respondents in completing and submitting forms, for example, by providing a point of contact for any queries.

0.2 Resources

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

The NSO is organized into four divisions, each of which is organized into several functional units. The GFU is under the auspices of the Economic Statistics Division. In addition to the divisions and units, another unit, Research and Methodology, is placed under the direct responsibility of the DG.

The organization structure is strengthened further through the creation of an International Relations Office, which fosters the relationship between the NSO and Eurostat and the other 24 Member States of the EU. It is also charged with keeping track of all proposals for new legislation in the statistical field and with providing the necessary support for the required consultation on statistical matters with third parties both in Malta and abroad.

As of June 25, 2005, the NSO employs 133 staff members, six of whom are loaned to other government organizations or who are away on long-term leave. The NSO also employs part-time interviewers to conduct large-scale surveys.

Owing to increasing demands to meet the EU prerequisites, including new and timelier statistics, the NSO recognizes the need for additional staff resources, combined with a reallocation of current staff among statistical units to improve staff utilization. The DG hopes to hire 10 to 20 more employees in the near future. The agency notes that it normally experiences no difficulty in recruiting new staff, but most may not have relevant working experience. Staff turnover is reported to be quite low and not problematic.

In NSO, four employees compile the macroeconomic statistics in the government finance area full-time. Although these employees are currently considered sufficient to carry out the NSO's existing mandate, these limited resources do not allow additional development work. Usually it is not difficult for the MSA to recruit new staff because salaries are seen to be competitive. In June 2005, the four employees in the unit responsible for compiling GFS have on average three years working experience in this area of statistics.

The NSO greatly emphasizes on maintaining training for its staff. For example, all GFU staff have participated in training programs organized at the international or regional²⁰ level or offered by European countries (e.g., France, Netherlands). This was after the TES programs were discontinued about one year ago. GFU staff also receive on-the-job training, especially in IT. However, none of the current staff have attended an IMF course on GFS.

A modern computer system is in place to collect and process data, maintain databases, receive source data automatically, and disseminate compiled statistics. The system stores bridge and derivation tables that define the links between accounting and budgeting source data and the GFS. These tables are stored in a form that facilitates accessing and updating.

Funding for compiling both new and old statistics appears adequate. Grants from Eurostat assist with compiling and disseminating new statistics, such as the harmonized index of consumer prices, an estate agencies rent survey, and social protection data.

Recommendation: Strengthen and increase staff resources for work on GFS. Nominate staff for GFS training at the IMF.

0.2.2 Measures to ensure efficient use of resources are implemented

NSO constantly monitors the collection, compilation, and dissemination processes, searching for ways to improve and set priorities for the efficient use of resources. Staff performances are reviewed quarterly with the aid of the performance management program. The aim of this program is to assess and evaluate performance but not to set promotions and salary advancement.

The 2005 Work Plan details efforts to improve the efficient use of all available resources through (1) maximizing asset utilization, (2) assessing resource costs in terms of level and quality of outputs and services delivered, (3) rationalizing amounts of resources consumed by overheads, (4) maximizing use of available data and reducing the time gap between data collection and dissemination, (5) deploying staff to core activities that meet client needs, and (6) managing and planning direct expenditure to service and business needs.

²⁰ Training of the European Statisticians (TES) programs, MEDSTAT, Eurostat.

0.3 Relevance

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

The national accounts staff frequently consults with main users, such as the CBM, MOF, Economics Policy Division, and IRD on topics of common interest. However, there is no committee to validate the national accounts, balance of payments, or government statistics. This role is undertaken by the two main users of NSO's figures—the Economic Policy Division and the CBM. The validation is done after publication by NSO.

Feedback from users on the quality standards of the NSO statistics was solicited in 2002/2003 through a Users Perception Survey. This survey was conducted to identify users' needs of the NSO statistics. According to the 2004 Annual Report, the NSO continues to take measures and act upon the findings of the survey.

Mechanisms are in place to enhance the NSO's visibility through increased contact with its data users and the media. In 2004, there were over 200 statistical news releases, a number of which concerned the general government account.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

The MSA Act, Article 10(c), states that the NSO shall (1) supply the information necessary to evaluate the quality of official statistics, (2) make accessible to the public the methods used for their production, and (3) show how it complies with the principles under which such statistics are gathered.

The focus on quality is also evident from the NSO's mission statement prominently placed in its 2004 Annual Report and 2005 Work Plan, which says:

"To serve the statistical information needs of Parliament, Government, and the community by striving for excellence through rigorous protection of confidential data, quality information from respondents and a timely, objective and responsive statistical service."

Limited trade-offs between timeliness and quality are allowed. However, if the time constraint has a severe impact on the quality of the statistics, the statistics will not be disseminated by the NSO. Management is sensitive to all dimensions of quality. Throughout its entire work, increased consideration is given to the accuracy of data released to public.

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

Processes are in place to monitor adequately the quality of compiled and disseminated GFS. For example, the NSO regularly monitors the checks of coverage, classification, missing or erroneous recordings, their internal consistency, and the consistency between data coming from alternative or linked data sources (NSO, the MOF, and the CBM). All deviations between data disseminated by the MOF, CBM, and NSO are thoroughly checked and recorded as part of a reconciliation table. The Advance Release Calendar developed for all units of the NSO ensures that all deadlines are met, and quality statistics are compiled and disseminated.

Malta is a member of the European Economic Area (EEA) Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the Contracting Parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at the NSO.

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

Articles 7 and 9 of the MSA Act stipulate the functions and processes necessary to deal with quality considerations in planning the statistical program of the NSO. Therefore, according to the 2005 Work Plan approved by the MSA, the NSO and other data-producing agencies settled on four essential components for the development of the NSO: (1) consolidation of work and output, (2) improved coordination of statistical activities and projects, (3) awareness and rationalization of response burdens, and (4) an overall commitment to quality in statistics.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The NSO has established a tradition of professional independence, particularly after the adoption of the new legislation that extended its prerogatives and authority in producing Malta's official statistics. Other government agencies recognize the importance of the statistical independence of the NSO.

The MSA Act provides NSO with autonomy and professional independence in carrying out its statistical functions. The DG of the NSO shall decide, on the basis of professional and ethical considerations, the scope and purpose of the statistics produced, as well as the methods and procedures for data collection, production, and publication.

The terms and conditions for the appointment of the DG of the NSO have been amended with the introduction of the MSA Act of 2000 but will be enforced for the appointment of the next Director. Under the new Act, the DG is appointed by the Authority in consultation with the overseeing Minister for a fixed three-year term, subject to renewal.

Professionalism is promoted through the active encouragement of staff participation in training opportunities, workshops, meetings, and seminars, to ensure awareness and understanding of statistical standards and good statistical practices. Between October 2003 and September 2004, seven NSO employees participated in international courses conducted primarily in Eurostats's training center. Also during this period NSO employees attended 81 working groups and meetings primarily concerning Eurostat's statistics, including government finance topics. Staff has free, unlimited access to a wide range of international academic journals and research databases through the Internet and in the NSO's library.

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

The DG has the sole authority to make decisions on statistical matters, which he may delegate to staff. The Agency decides on statistical techniques, methodology, and data sources based on the need to implement best international practices; however, these decisions are influenced by cost considerations and the resource constraints facing NSO.

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

The NSO's publications and news releases explain the basis for compiling statistics in order to improve user understanding and reduce the likelihood of any misinterpretation. The DG is entitled to provide feedback to the press on the statistics without having to obtain clearance from an authority outside the agency. However, the NSO prefers not to comment on statistics published in the media or encourage political debates. NSO maintains a cordial working relationship with the media and journalists. Divisions monitor news reports on the statistics following the dissemination of official NSO press releases. The NSO is also planning a "course on official statistics" specifically for journalists.

1.2 Transparency

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

The MSA Act is published in English and Maltese in the official government gazette, statistical publications, and on the NSO's website. In addition, a hardcopy of the legislation is available in the NSO's library. When NSO conducts surveys, it informs respondents of the general purpose of the particular survey and notes that the information received would be used for statistical purposes only.

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

NSO does not provide GFS data to any external person or institution before data are officially released in an NSO press release.

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

All NSO products are clearly identified as such with the agency's name and logo appearing on the front page of all its publications and on the website. The publications also advise users to specify the source of the information when quoting from the agency's publications.

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

NSO provides advance notice of changes in methodology, where appropriate. The last major revision of the general government account was undertaken in 2001 when the methodology of the 1995 ESA was adopted, consistent with the sectorization and classification of international standards. The NSO did provide advance notice of the changes in the framework and methodology to users in a press release prior to the publication of the new data.

1.3 Ethical standards

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

NSO has its own comprehensive ethical guidelines. Staff is guided by the *Code of Conduct and Practice*, which reinforces the provision of the MSA Act. The second schedule, Article 17, of the Act provides the "Form of Oath" that outlines basic duties for statistical officers and contains rules of staff conduct. Through the annual renegotiation of the NSO's "Collective Agreement," staff is reminded of the code of conduct and practice.

The *Code of Conduct and Practice* also provides for the avoidance of a conflict of interest as staff is expected to seek the approval of the DG before undertaking any work outside of the agency.

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 NSO compiles and disseminates data, on a cash basis, for the budgetary central government according to the budgetary framework.

The NSO also compiles general government statistics, on an adjusted cash basis, in the context of the national accounts based on the *European System of Accounts (1995 ESA)*. Therefore, the overall structure of the Maltese GFS in terms of concepts and definitions closely follows international standards and guidelines, as recommended in the *1995 ESA* and the *Manual on Government Deficit and Debt*. In the field of government finance statistics, these definitions and concepts are broadly similar to those of the IMF's *GFSM 2001*, and the divergences are well known.²¹

The CBM compiles annual GFS on a cash basis for the central government according to the concepts and definitions prescribed in *A Manual on Government Finance Statistics*, 1986 (GFSM 1986). It sends these data to the IMF for publication in the GFSY; however, the CBM does not disseminate any GFS data in Malta that follow international guidelines, such as the IMF's GFSM 1986 or GFSM 2001. The latest data provided to the IMF for the GFSY are for the fiscal year 2001. The CBM²² is adopting the methodology as set out in GFSM 2001.

The Treasury, the NSO, and the CBM disseminate central government debt with a breakdown between domestic currency and foreign currency debt.

2.2 Scope

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

The scope of GFS in Malta is consistent with the international accepted standards and guidelines. The central government of Malta comprises the administrative departments of government and the extrabudgetary units, while general government comprises the central government and local councils.

In the compilation of GFS the NSO covers all the general government activities. The NSO compiles data for the transactions of the general government, consisting of the budgetary central government, 50 major extrabudgetary units (EBUs), and 68 local councils. Neither the NSO, nor the MOF, or the CBM compiles a balance sheet for the general government. The NSO is in the process of compiling the financial balance sheet for the general government. The lack of this information hampers fiscal analysis since it makes it very

²¹ The *GFSM 2001* describes, inter alia in an annex, the differences between the *GFSM 2001* and the *System of National Accounts 1993 (1993 SNA)*. That description also applies for *1995 ESA*. Additional information regarding these differences can be found in the supplement to the *Government Finance Statistics Yearbook 2002*.

²² The CBM requested technical assistance in GFS from the IMF.

difficult to compile data on the changes in financial assets and liabilities that are consistent with transactions in revenue and expenses. It should be noted that no data on GFS for the general government are disseminated following the analytical presentation of the *GFSM* 1986 or *GFSM* 2001.

The compilation of government expenditure by function is based on the accounting system of the Treasury, which accords with the one-digit coding of the Classification of Functions of Government (COFOG). NSO is cooperating with the Accountant General at the Treasury and plans to implement the new COFOG classification (i.e., by two-digit) later in 2005.

The NSO and Treasury disseminate monthly data compiled by the National Treasury on the Consolidated Fund of the central government accounts. These data are not presented according to international standards because the presentation required to monitor budget execution is used.

The Treasury, NSO, and CBM disseminate central government debt with a breakdown between domestic currency and foreign currency debt, with a further distinction between short- and long-term debt. The central government guarantees domestic and external debt of some public enterprises and a small amount of private sector debt. The MOF and the CBM compile records of outstanding government guarantees. Data on outstanding government-guaranteed debt positions are released by the CBM and the NSO on a quarterly basis, while the Treasury releases these data on an annual basis in its *Financial Report*.

Recommendation: Expand the scope of government finance statistics to include all economic stocks (nonfinancial assets and financial assets and liabilities) of the central government in order to compile a full set of general government accounts.

2.3 Classification/sectorization

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

NSO compiles the general government statistics in the context of national accounts (1995 ESA). Consequently, the classification of the revenue, expenditure, nonfinancial assets, and financial assets and liabilities, as well as the institutional sector classification of the general government, are consistent with the 1993 SNA.

Data for the general government and its subsectors are compiled for revenue and expenditure by economic type and function and the main financial balances, savings and net lending/borrowing. Financing data distinguish between domestic and foreign financing and between types of instruments.

The analytical framework follows the framework as required by the EU regulations. The revenue and expenditure data by economic type and by function can be related to the international standards as described in the *GFSM 2001*.

The Treasury, NSO, and CBM disseminate central government debt with a breakdown between domestic currency and foreign currency debt. General government debt data distinguish between foreign currency and domestic currency debt, with a further distinction between short- and long-term debt.

The general government account in the context of the national accounts is compiled separately for the central government, the extrabudgetary units, and local authorities.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Most flows are valued at market prices. Transactions in kind are recorded at a market price where possible; for example, free medicine provided by the government to deserving citizens is recorded at the price paid by the government to acquire the medicine. In accordance with EU recommendations, the outstanding government debt is recorded at face value. Domestic central government debt is recorded at face value, but foreign central government debt is revalued for exchange rate changes. Regarding foreign currency assets/liabilities of the governments the midpoint between the buying and selling exchange rates in the market, at the end of each period, are used to convert these liabilities/assets to local currency. As indicated earlier, the Maltese authorities do not compile a balance sheet for the general government. However, as part of the plan to adopt accrual accounting for central government, government is in the process of compiling a nonfinancial asset register.

Recommendation: Value all flows and stocks at market prices.

2.4.2 Recording is done on an accrual basis

Central government transactions are recorded on a cash basis, and the value of in-kind grants is included in the government accounts. No complementary period exists, and no additional transactions are recorded in the accounts after the close of the fiscal year. However, internal clearing of suspense accounts may occur until two months after the end of the fiscal year. To compile government finance statistics, the NSO receives information from the ministries through the Office of the Accountant General, which is used to adjust the cash data to an accrual basis. These adjustments are, however, not accurate because they are based on an annual survey among the major revenue receiving and spending departments only. The exception is the VAT data, where accruals data are made available to the NSO on a monthly basis. In the meantime, the Treasury has started to survey all central government departments and ministries for a full set of accruals data in line with the standing Malta Government Accounting Standards.

Recording of transactions by the extrabudgetary units and the local authorities is done on an accrual basis.

Recommendation: Validate and incorporate the data obtained from the new survey on the adjustments for accrual accounting.

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

Government finance statistics are compiled on a gross basis in line with the 1995 ESA. Financing is compiled on a gross basis but recorded on a net basis (e.g., new loans minus repayments, purchase of shares minus sales of shares, etc.).

3.1 Source data

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

To compile general government statistics in the context of national accounts, the NSO uses data obtained from the Treasury, EBUs, and local authorities. The NSO and CBM obtain source data for the budgetary central government directly from the accounting records managed by the Office of the Accountant General at the Treasury. Through the GFS Committee, the NSO and CBM are provided with read-only shared access to the live accounting data of the budgetary central government at the Treasury.

NSO obtains accounting data from the EBUs by means of a quarterly survey. Local councils have to submit their audited financial accounts to the Department of Local Councils on an annual basis. An agreement exists between the Department of Local Councils and the NSO, which makes provision that these annual statements are also provided to the NSO at the same time. NSO then uses these source data to compile statistics consistent with the *1995 ESA*. Data on intergovernmental transactions and stock positions are available in enough detail to allow NSO to compile a consolidated general government account.

Comprehensive data are collected on government debt from the MOF, the CBM and the Malta Stock Exchange.

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

The accounting systems used by the budgetary ministries, EBUs, and local councils allow for sufficient detail for compiling GFS. Through the work done by the GFS Committee, the chart of accounts used by the budgetary central government was classified according to the classifications prescribed in the 1995 ESA and GFSM 1986 respectively. The chart of accounts is also classified according to the 1-digit COFOG classification. The source data, therefore, allow the NSO access to relatively detailed data on revenue, expenditure, transactions in nonfinancial assets, and transactions in financial assets and liabilities. These source data also allow the MOF to monitor budgeted receipts, expenditure, and financing.

Transactions on the expenditure side are recorded when payments are made and on the revenue side when cash is received (i.e., cash-based).

As mentioned earlier, the accounts of the EBUs and local authorities are based on accrual accounting principles. The data submitted to the NSO includes enough detail to allow the NSO to make the necessary adjustments for GFS compilation.

The source data available on government debt provide enough detail to allow for a breakdown in government debt according to instrument, ownership, maturity, residency, and currency.

3.1.3 Source data are timely

Source data are provided with sufficient timeliness and periodicity from all reporting units of the general government. Source data on the operations of the central government are received ten days after the end of each month, except data for the last month of the fiscal year, which is available three to four months after the end of the fiscal year.

Quarterly data are submitted by the EBUs and local councils within 45 days after the end of the reference quarter. At the end of the financial year, the local authorities submit audited accounting statements to the NSO within three to four months after the end of their respective financial year.

Source data on government debt are available on a monthly basis within one month after the end of the reference period.

3.2 Assessment and validation 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 final source data are based on audited accounts of all general government institutions. However, payments made by one level of government to another level of government are checked against the amount received by the receiving level of government.

Preliminary data obtained from the EBUs and local authorities are assessed against data obtained from the budgetary central government accounting system, for example transfers made by the central government to each EBU and local authority. Preliminary EBU and local authority data are also assessed against the audited annual data, and changes from quarter to quarter are monitored. Any queries or the need for clarification are followed-up directly with the reporting agency.

The changes in financing data are regularly reconciled with the changes in government debt.

3.3 Statistical techniques

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

Data for central government, the EBUs, and local councils are collected from the accounting records and do not require the use of statistical techniques. The consumption of fixed capital for EBUs and for local authorities are obtained from the respective and individual accounting/financial statements. For the central government, the perpetual inventory method is adopted.

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

The use of other statistical procedures is rarely necessary. However, NSO makes adjustments to convert the cash data for central government to accruals. For the time being, these adjustments are based on an annual survey among the major revenue generating and spending departments, with the exception of the VAT data where accruals data are made available to the NSO on a monthly basis. In the case of transfers from the central government to EBUs and local authorities, the amount transferred by the MOF is regarded as more accurate, and an adjustment is made to the grants received by the EBUs and local authorities to ensure consistency. Differences in these amounts are very small, thus requiring very small adjustments. All the adjustments made by NSO to the data obtained from Treasury, EBUs and local authorities are stored on the NSO database and were available to the ROSC mission staff.

In the case where the NSO does not receive a 100 percent response from the EBUs and local councils, adjustments are made to the data based on the transfer from the central government to the institution and the average change over the last three quarters in each expense or revenue item.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The final GFS data that are compiled by NSO use the audited accounts of all levels of government and are based on a full coverage of the general government sector in Malta. Before the submission of these data to Eurostat, all tables are checked for internal consistency.

Comparisons can, however, not be made between net lending/borrowing (derived from the nonfinancial accounts) and changes in net financial assets/liabilities because the NSO has not yet compiled a financial balance sheet. The NSO plans to compile a financial balance sheet in the next few months.

Recommendation: Compile a financial balance sheet for the general government to allow for the validation of the data derived from the nonfinancial accounts.

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 revision practice of general government account statistics is the same as that adopted for all the national accounts. Revisions occasioned by major changes in methodology or source data are studied. Such a revision study was conducted in the recent years following the adoption of the 1995 ESA. The overall result was published by the NSO in a special edition of the News Release in December 2003, together with summary explanatory notes to familiarize the public with the new concepts.

With regard to the quarterly accounts, the estimates are revised continuously as more source data, either from annual or previous quarterly surveys, become available. No study on the differences and the impact of these revisions is made to inform the public unless the revisions are major. However, for government data these are minimal, owing to the extensive use of accounting data as the data source to compile results, even at the preliminary stage.

The reasons for revisions are accounted for and analyzed by the GFU staff.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

Malta meets the periodicity requirements of the Special Data Dissemination Standard (SDDS), as follows:

- Central government operations data, on a cash basis, are compiled and published monthly.
- Central government debt data are compiled and published monthly. These data distinguish between debt instruments, foreign and domestic debt, and short-term and long-term maturity.
- Annual general government operations data are compiled and submitted to Eurostat but not disseminated in Malta. Plans are in hand to start local dissemination later this year.

4.1.2 Timeliness follows dissemination standards

Malta meets the timeliness requirements of the SDDS as follows:

- The annual general government operations data, which are compiled and provided to Eurostat, meet the timeliness requirement of the SDDS. The annual preliminary data for each financial year are published in March of the following year, which is well within the timeliness requirement of two quarters after the end of the financial year. However, final data for the general government are only available in August.
- Central government operation data meet the timeliness requirement of the SDDS of one month after the end of the reference period.
- Central government debt data: Although the SDDS prescribes a quarterly periodicity within one quarter after the reference date, Malta is disseminating monthly data within one month after the reference date.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

General government finances data are internally consistent for the general government account as well as the accounts for the other levels of government. On the revenue and expenditure sides, the aggregates are consistent with their components, and balances are consistent with these aggregates. The sum of the transaction data for the subsectors of the general government, after consolidation, is consistent with data on the consolidated general government.

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

No time series on GFS are currently available for any level of government. The NSO is, however, in the process of creating a time series database, which users will be able to access through the Internet. These time series will initially be available from 2000 onwards, but in due course the NSO plans to provide data starting from 1995.

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

Because NSO compiles the general government account as part of the national accounts, this account is consistent with the national accounts aggregates. This also ensures consistency with related national accounts aggregates such as savings, net lending/borrowing, government consumption, gross fixed capital formation, and consumption of fixed capital.

Although the mission did not assess the consistency between general government and monetary statistics, the definition of the general government sector in GFS is the same as the

definition for general government in the monetary statistics. However, with regard to the central government and the reconciliation of the Public Account held at the CBM with the account at the Treasury, the Treasury runs a semi-automated bank reconciliation system that matches transactions passed through the bank account at the CBM to those generated by the Departmental Accounting System. This allows the Treasury to arrive at the bank balance, identify outstanding transactions, draw up a reconciliation statement, and take action regarding outstanding amounts accordingly.

All foreign grants and other transactions are assumed to be consistent with the balance of payments data, because the same source data are used to compile the balance of payments. Therefore, GFS and balance of payments data are consistent and reconcilable.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The publication of the general government account follows a regular and well-known time table, the same as national accounts, whereby initial data are preliminary and are subsequently replaced by final data. The ordinary revision schedule is predetermined and reasonably stable from year to year, with preliminary data in March subsequently replaced by final data in August/September.

In the case of monthly central government data—operations and debt—revisions are made as soon as new data become available.

4.3.2 Preliminary and/or revised data are clearly identified

Preliminary data are clearly indicated in the publications; however, no distinction is made between previously disseminated data and revised data in the NSO's publications.

Recommendation: Clearly annotate revised data in the publications.

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

Because of the nature of the GFS and the full coverage of the general government sector, no specific studies or analyses of routine revisions are made public. However, if major revisions are undertaken, their results (analyses and descriptions) are made public in the accompanying *News Release*, for example, the 2003 revision of the accrual adjustment for Value Added Tax.

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)

No GFS for the general government, following the analytical presentation recommended in *GFSM 1986* or *GFSM 2001*, are disseminated in Malta. The general government account in the context of the national accounts is submitted to Eurostat. The NSO is disseminating data on the general government in its news release called "General Government Deficit and Debt under the Maastricht Treaty." However, this presentation does not disseminate general government data in a way that allows major GFS aggregates/balancing items to be identified and related to detailed underlying data. The NSO does not disseminate any GFS time-series data.

Data on central government operations and debt are disseminated by the NSO, CBM, and MOF according to the budgetary framework, with a breakdown between domestic currency and foreign currency debt. These data are useful for cash flow analysis and are used for comparisons with the anticipated monthly revenue and expenditure of central government ministries and agencies. However, the disseminated debt data are not accurately classified on a residency basis as Malta Government Stocks, issued domestically, but the data held by nonresidents are considered as domestic debt. Data on the foreign ownership of government debt issued in the domestic market are available to the authorities but not disseminated.

Recommendation: Disseminate general government finance statistics according to the presentation recommended in the GFSM 2001.

5.1.2 Dissemination media and format are adequate

All the data are released in English by the NSO on its websites. This information can also be obtained in a hardcopy format from the NSO. However, no time series data are available in either hardcopy or electronic format.

Recommendation: Continue with the plan to create GFS time series on the NSO's website.

5.1.3 Statistics are released on a preannounced schedule

General government data as compiled by the national accounts are released according to a preannounced schedule that is available on the NSO's website three months in advance.

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

Data are made available to all the users at the same time through the dissemination on the NSO's website.

5.1.5 Statistics not routinely disseminated are made available upon request

Detailed analytical presentations not routinely disseminated in the *News Release* are made available to users on 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

For government data, the NSO provides some notes on the methodology in its press releases. However, no documentation on concepts and definitions, scope, classifications, basis of recording, and statistical techniques is available in hardcopy or on the NSO's website.

Recommendation: Prepare detailed documentation explaining the concepts and definitions, scope, classifications, basis of recording, data sources, and statistical techniques used in compiling GFS, as well as deviations from internationally accepted standards and guidelines. The levels of detail of the metadata should be adapted to the needs of the intended audience.

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

Not applicable (see 5.2.1).

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The hardcopy publications and the website of the NSO provide comprehensive information on how users can contact the NSO.

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

A list of publications and prices and an order form are available on NSO's website.

Table 3. Malta: Data Quality Assessment Framework (July 2003): Summary of Results for Government Finance Statistics (Compiling Agency: National Statistics Office)

(COMPUMS ABUNCAPIC) Not Applicable: $O = Practice Observed I.O = Practice I aroely Observed I.O = Practice I aro$	Computing Agency. Ivational Statistics Office, the I arealy Observed: INO = Practice I arealy Not Observed: NO = Pr	Agency served INC	$\frac{1}{2}$ Ivatice $\frac{1}{2}$	Targely Not	Observed:	JUCE) NO = Practice Not Observed: SDDS = Complies with SDDS Criteria
r	1		Assessment	sment		
Element	NA	0	ГО	CNO	NO	Comments
0. Prerequisites of quality						
0.1 Legal and institutional environment		X				
0.2 Resources			×			Compilation of GFS is vulnerable due to the small number of staff involved in producing the statistics and the additional demands from the EU.
0.3 Relevance 0.4 Other quality management		××				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		×				
1.3 Ethical standards		×				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope			×			GFS does not cover all the economic stocks of the central government; therefore, a full set of general government accounts cannot be compiled.
2.3 Classification/sectorization		×				
2.4 Basis for recording			×			Market prices are not used to value all assets and liabilities, for example
						nonfinancial assets and government debt. Recording of central government transactions is done on a cash basis, and the adjustments for accrual accounting are done on a very aggregated level.
3. Accuracy and reliability						
3.1 Source data		X				
		×				
3.3 Statistical techniques		X				
3.4 Assessment and validation of intermediate data and statistical outputs			×			Due to a lack of a full set of accounts, comparisons cannot be made between data derived from the nonfinancial accounts and changes in net financial assets/liabilities, because the NSO has not vet compiled the
						financial account.
3.5 Revision studies		X				
4. Serviceability		•	•	•		
4.1 Periodicity and timeliness		×				
4.2 Consistency		×				
4.3 Revision policy and practice			X			Revised data are not annotated in the publications.
5. Accessibility						
5.1 Data accessibility				×		There is no analytical publication on general GFS. No time series exist on GFS.
5.2 Metadata accessibility				×		No documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available
5.3 Assistance to users		×				

IV. BALANCE OF PAYMENTS STATISTICS

0. Prerequisites of Quality

0.1 Legal and institutional environment

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

The presentation and compilation of the balance of payments of Malta is a joint responsibility of the NSO and the CBM.

The preparation and presentation of the balance of payments (BOP) statement of Malta has been the responsibility of the National Statistics Office (NSO) since 1954. At present, this responsibility is laid out in Article 10, First Schedule (s) of the Malta Statistics Authority's (MSA's) Act of 2000, which describes the functions of the NSO and the matters in respect of which statistics may be collected, prepared, and published. One of the matters referred to is "banking and finance, including external balance of payments."

In addition, the Central Bank of Malta (CBM) is closely associated with the compilation of the BOP, and this cooperation was formalized by an agreement of July 2003 between the two institutions. Under this agreement, the NSO is responsible for collecting data from reporting agents in the nonfinancial sectors of the economy, as specified in the *European System of Accounts 1995 (1995 ESA)*, while the CBM is responsible for collecting data from reporting agents in the financial sector.

The CBM is authorized to collect data from banks under the Central Bank of Malta Act 1967. In addition, a Parliament Act XVII of 2002 gave the CBM greater operational flexibility and conferred on it more powers regarding the collection of statistical information. Section 24A (3) (g) allows the CBM to collect BOP data from "any person who holds external assets and liabilities or carries out cross border transactions which the (Central) Bank determines relevant to compile BOP statistics." Section 24B (1) of the Act in fact stipulates that the "(Central) Bank may issue directives providing for the definition and imposition of its statistical reporting requirements, establishing the standards for transmission and accuracy of statistical information..." In addition, Section 24A (1) of the Act stipulates that the "...Bank may require a reporting agent... to provide the Bank with such information as the Bank may consider necessary to carry out its functions under this Act, and the Bank may enquire into and ask for clarifications of any information so provided."

The present institutional arrangement between the NSO and the CBM can be described as follows: the BOP Section of the NSO is responsible for collecting, checking, and processing data relating to the nonfinancial sector and the overall consolidation and dissemination of the BOP statements. A similar section at the CBM collects data from the financial sector and actively participates in the overall compilation and vetting process.

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

The two institutions regularly and completely share information with respect to the collection of data. In addition, a working group composed of NSO and CBM staff has been recently set up to discuss issues pertaining to balance of payments statistics. This working group has been meeting regularly since July 2005. Several issues have since been discussed with the objective of improving the compilation of the BOP statement. The business register has also been revamped following these meetings.

The NSO's BOP Section works closely with the National Accounts Section, particularly where gross domestic product and gross national product issues are concerned. The BOP Section also receives merchandise trade data from the NSO Trade Section every month. The CBM's BOP Section provides information about travel earnings and expenditure to the NSO Travel Section, which is responsible for compiling tourism statistics. In addition, the NSO BOP Section receives data in line with specific requests made to the Ministry of Finance (MOF) and the Treasury Department. These data cover debt servicing, the acquisition of immovable property in Malta by nonresidents, and capital grants.

No issues have been reported regarding the collection of data from other agencies such as the Malta Financial Services Authority (MFSA), the Malta Stock Exchange (MSE), the Customs Administration, and the MOF.

Finally, the CBM has set up a Technical Committee for Financial Statistics (TCFS), which brings together key representatives of the financial sector (MFSA, MSE, Bankers' Association and the reporting agents themselves) with the view to informing and providing advice on the latest developments in financial statistics.

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

The MSA Act (Part VIII, Articles 40 and 41) and the CBM Act (Part IIIA 24A) both guarantee the confidentiality of all information collected. This warranty, as well as the statistical purpose of the information collected, is clearly mentioned in all questionnaires sent to respondents.

Only agents involved in compiling data in either of the two institutions have access to individual information collected by the other one. They are forbidden to communicate it to any other unit of their own institution, as well as any other agency. With respect to the CBM, the rules of secrecy apply to all Bank employees, who sign a "Declaration of Secrecy" when joining the CBM. (For the NSO, see corresponding sections on national accounts, price statistics, or government finance statistics).

At the dissemination stage, the NSO applies the standard rules of aggregation, which guarantee the confidentiality of information when there are less than three respondents for a reported item.

The physical security of data is assured on the premises of the NSO and the CBM by the standard IT security procedures: The direct reporting (DR) system is hosted in a separate system from the IT network in each institution, and the common database is stored in a unique server and can only be accessed by the BOP unit in each institution.

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

The obligation to report data is based on the MSA Act, Part VII, Article 36. (For the NSO see corresponding sections on national accounts, price statistics, or GFS.) The CBM Act (Part IIIA, Article 24A) allows the Bank to collect BOP data from "any person who holds external assets and liabilities or carries out cross-border transactions which the bank determines relevant to compile balance of payments statistics." There are no reported or potential conflicts between the legal authorization to collect the necessary data for establishing balance of payments statistics and any other laws or regulations.

The obligation to report data provides for penalties (MSA Act, Part IX) both for failure to meet deadlines and for sending erroneous data. In practice, these provisions have already been enforced. With respect to the CBM, the Legal Notice 75 expressly mentions penalties for nonreporting.

0.2 Resources

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

The compilation of balance of payments statistics is carried out by the BOP units of the NSO (five staff members) and of the CBM (four staff members). Staff resources are generally considered to be adequate to meet objectives, although the new statistical requirements imposed by Eurostat and the ECB, as well as the introduction of a new direct reporting system, have significantly increased the workload of the two units in the recent years. When the new system is fully operational, with the processing of responses to questionnaires on the rest of the financial sector at the beginning of 2006, staffing needs will be better assessed.

The qualification of staff for the required tasks seems also adequate. New recruits have university degrees, and salary levels are adequate for the nature of the work and competitive with public administration conditions in the country. In recent years, CBM staff have participated regularly in the IMF's BOP course in Washington.

The IT resources are considered adequate for the tasks required, the two BOP units having been recently allocated a new software, designed by the NSO and its staff, to process direct reporting surveys.

So far, the allocation of budgetary resources has matched the needs for preparing the balance of payments. In the future, the requirements of the ECB, particularly with respect to security-by-security reporting, might put more budget constraints on the production of balance of payments statistics.

0.2.2 Measures to ensure efficient use of resources are implemented

The approach taken by the NSO and the CBM for the compilation of balance of payments statistics takes both the agencies' and the reporting agents' costs in consideration. Although the exact costs are not quantified, discussions are first held internally within the NSO and within the internal CBM Financial Statistics Committee to assess potential costs. Subsequently, discussions are held with the reporting agents through the TCFS to get feedback before the actual new projects are implemented. A continuous dialogue is held in this forum to get feedback, and assess developments and problems that might arise. Also, in order to save costs and promote effectiveness, the NSO and the CBM together designed a new direct reporting system, with fully integrated compilation processes. In fact, the questionnaires have been designed (and worded) to be easily extractable from enterprises accounting systems following meetings held with them for minimizing burdens.

0.3 Relevance

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

In practice, balance of payments statistical needs are essentially driven by the requirements of economic and monetary policy and, more recently, by international requirements and standards, in particular those of the Eurostat and the ECB. In this connection, the NSO and the CBM participate regularly in the relevant working groups set up at the European level.

No regular mechanism exists for consulting general public users. However, outside users can make specific requests through the NSO websites, and user needs are usually met case by case when the information is available. In this connection, the CBM plans to set up in the future a set of tables, accessible on the CBM website, which will incorporate, within the limits of possibilities, all potential user requests. In addition, a specific BOP users committee will be installed in the near future at the NSO.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

As regards quality, the NSO and the CBM's main aim is to comply with international methodology and to produce a timely balance of payments with an adequate coverage. The focus is on source data collection, especially their exhaustiveness, timeliness being essentially guaranteed by the computerization of the production process. In this respect the NSO and the CBM have embarked in the past few years on a project of creating a new detailed survey system (based on direct reporting) and the supporting software necessary for the processing of data and the presentation of information in the timeliest manner. Also, one indicator of the quality (the dimension of accuracy and reliability) of the balance of payments is the errors and omission item, and the NSO and CBM are constantly trying to identify causes and find ways to reduce it. Moreover, a census of some 4,000 companies undertaking international business activities abroad (CIBAs) has been launched for calendar year 2003.

Recommendation: Given the size of the errors and omissions item, the NSO and the CBM should continue their efforts to improve the coverage and accuracy of source data.

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

Quality management processes include quality checks at the level of the processing of primary information sent by respondents, quality checks at the macro level, and the monitoring of the response rate to questionnaires. Other quality aspects should be managed by the upcoming working group on balance of payments statistics.

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

Quality issues have been addressed at every stage of the introduction of the new direct reporting system. As an example, an external consultant comes regularly to assess how the new system is currently working.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

The statutory provisions under which the NSO and the CBM compile balance of payments statistics are adequate to support its impartiality (for the NSO, see corresponding sections on national accounts, price statistics, or GFS). With regard to the CBM, Article 7 of the CBM Act states that neither the Bank, nor any member of the Board of Directors "shall seek or take instructions from the Government or any other body." Therefore, the CBM enjoys independence in its choices in compiling balance of payments statistics.

The independence of CBM staff is guaranteed by its status, and employees can only be dismissed for serious misconduct. Staff recruitment and promotion is made on the basis of required qualifications. The CBM has recently introduced a target oriented performance management system, which requires review of performance every four months.

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

The choice of data sources and statistical methods is determined solely by the need to produce analytically meaningful data. All collection and aggregation techniques are intended to meet statistical requirements, especially the standards recommended by the fifth edition of the *Balance of Payments Manual (BPM5)*.

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

The NSO and CBM do not usually react publicly to correct any errors of interpretation of the statistics they produce. Comments accompanying the release of statistics are considered sufficient for the information of the public.

1.2 Transparency

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

The terms and conditions under which data are collected are described in general terms in the MSA Act (Part VII—Collection of information and access to records) and in the CBM Act (Part IIIA—Collection of information).

The terms and conditions under which data are processed and disseminated are described in the appendix of the NSO's annual publication *Balance of payments* and on the NSO's website (*Balance of Payments Sources and Methods*).

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

There is no internal government access to data before release by the NSO. The Minister of Finance is given an advance copy of the CBM's *Quarterly Review*, on the day it is sent for printing, in order to be able to respond to the media. However, this access prior to dissemination to the public is mentioned in the metadata published by the GDDS.

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

The balance of payments of Malta is disseminated under the authority of the NSO and bears its own imprint and identification. The same applies for the publications of the CBM.

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

No early announcement is given of the introduction of a new survey or a new statistical technique, but users of balance of payments statistics are advised of new survey data or statistical techniques used in compiling data. This notice has been included in the metadata published within the 2002 BOP publication as well as in relevant news releases. In general, an article is published in the CBM's *Quarterly Review* to inform users about major developments in methodology or conceptual changes.

1.3 Ethical standards

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

NSO's employees are governed by a code of conduct and practice (see corresponding sections on the national accounts, price statistics, and GFS). CBM employees are governed by a Code of Ethics, which gives guidance in matters of professional ethics and serves as a reference with regard to the standard of conduct that third parties are entitled to expect in their dealings with the CBM. On joining the CBM, employees sign a "Declaration of Secrecy" as required by the by-laws of the CBM. All CBM employees are expected to respect the confidential nature of information acquired in the course of their employment. This obligation shall continue to apply notwithstanding that an individual is no longer in employment with the CBM.

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

Concepts and definitions used generally conform to the definitions and guidelines set out in the *BPM5*. Current, capital, and financial accounts of the balance of payments are defined according to the *BPM5* guidelines, and transactions in assets and liabilities are recorded separately. Resident institutional units are defined in conformity with *BPM5* as those that have a center of economic interest in Malta.

2.2 Scope

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

All transactions between residents of Malta and nonresidents are in principle covered in the balance of payments. However, some deviations may occur, such as the transactions of

certain Special Purpose Entities registered in Malta, which are not recorded in the balance of payments. These entities, also referred to as CIBAs, are not considered to have a center of economic interest in Malta, and only transactions relevant to the Maltese economy (such as administrative fees, commissions, rents paid locally, etc.) are accounted for. Also, funds going through the resident banks are recorded as other investment, under currency and deposits.

Another limitation of the scope of BOP transactions is that no estimates are made of the unrecorded transactions of the underground economy.

Recommendation: The CIBAs should be treated as resident institutions of Malta and their transactions with nonresident institutions included in the balance of payments. For analytical purposes, transactions of CIBAs should be separately identified in the balance of payments statement.

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 the *BPM5*. No distortion has been identified. The CBM stands for the monetary authorities; the banking sector comprises the deposit money banks and the international banking institutions; and the government sector comprises the central government, the EBU, and the local councils.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Transactions are recorded at current market prices. With regard to stock data, the questionnaires sent by respondents distinguish between changes due to transactions and changes due to market price and exchange rate variations. However, one deviation concerns transaction estimates that are derived from stock data, for which the actual end-of-period exchange rate for the applicable period is used instead of the average exchange rate.

2.4.2 Recording is done on an accrual basis

Balance of payments transactions are established on an accrual basis, except for certain categories of private sector revenues (interest income of investment service providers), which are posted on a cash basis.

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

The balance of payments comply with the grossing/netting principles established by *BPM5*. Current transactions are declared and recorded on a gross basis, while financial transactions are recorded on a net basis distinguishing between assets and liabilities.

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 compilation system

Until 2003, the data compilation system was a mixed system based on direct reporting, a partial settlement system, and other data sources. Since 2004, the data collection system used to compile BOP statistics is essentially based on direct reporting from both the nonfinancial and financial sectors.

a) DR system

The DR system is based on a stock/flow/income model, covering all the financial instruments (including income) as well as service and transfer transactions of the enterprises. No reporting is asked for goods transactions that are reported through trade statistics compiled by the NSO Trade Section.

The top companies operating in the nonfinancial sector (about 100) are surveyed on a monthly basis, and a larger number of companies (about 700) is surveyed annually. Nine different questionnaires have been designed: a general questionnaire and eight specialized questionnaires to better capture specific transactions, such as those of shipping companies, airline companies, nonprofit organizations, and betting companies.

The financial sector is surveyed in a monthly census conducted for banks (16), domestic insurance companies (9), and exchange bureaus (12). Also, the main insurance agents (12) are surveyed on a monthly basis and the rest (about 40) annually. Two other categories of financial companies—about 60 funds of 12 collective investment schemes (CISs) and 60 investment service providers (ISPs)—will be surveyed as from the last quarter of 2005. The main CISs and ISPs will be surveyed on a quarterly basis and the rest annually. In addition, to make estimates used for the monthly balance of payments, all CISs will be asked to report monthly their net asset value, while all ISPs will have to report monthly their total purchases and sales of securities, with a split between equity and debt securities.

b) Bank settlement reports

At this time, the banks are still providing information to the CBM on a cash settlement basis. This partial settlements system captures cash-based transactions between residents and nonresidents that pass through the local banking system. These data are used essentially to compile service, income, and financial transactions.

The CBM applies four thresholds when collecting data from banking institutions:

- MTL 100,000 for merchandise trade transactions;
- MTL 10,000 for service transactions, excluding travel;
- MTL 25,000 for travel transactions; and
- MTL 10,000 for financial transactions.

For transactions below these thresholds, no information is required concerning the nature of the underlying transaction or the country of the nonresident counterpart.

When the DR system is fully operational, the information from bank settlement reports will no longer be essential for compiling balance of payments. It could however be used—at least partially—to complement surveys for the calculation of estimates on some items. No decision has been made so far on the future of the bank settlement reports.

c) Other sources

In addition, the BOP compilers obtain further information on specific current and financial transactions from various government departments, in particular the Customs Department, the MSE, and the CBM.

Other source data include information on real estate transactions provided by the Acquisition of Immovable Properties Division at the Treasury Department, on aggregated income of the individuals from the Commissioner of Inland Revenue, and on balance sheets of companies provided by the MFSA.

Newspapers and other media sources are also used to get information not obtained from the other sources.

Compilation of the main items of the BOP: brief description

a) Goods

(i) *Merchandise trade data* are collected by the NSO through the Intrastat System (with 80 percent through declarations on the Web and 20 percent through paper forms), while extra-EU trade data are compiled by the Government's Customs Department, with exports reported f.o.b. and imports reported on a c.i.f. basis.

- (ii) *Data on repairs on goods* are collected from the monthly survey of private and public entities. The data essentially include information about income earned and expenditure earned on aircraft and ship repairs carried out locally and abroad.
- (iii) *Goods procured in ports by carriers* are compiled on the basis of the monthly survey of resident airline and shipping companies.

b) Services

- (i) *Transportation*: Data for transportation services are subdivided into three identifiable categories, namely passenger, freight, and other transportation. Data on receipts and payments for passenger transportation are primarily retrieved from the monthly DR survey carried out for both shipping and airline companies (including their representative agencies operating in Malta). Data on revenue from freight are derived from the same survey. For freight payments, however, where shipment data (insurance and freight) are not available separately, an estimate of 10 percent of the c.i.f. value of imports is made (see also 3.3.2). A statistical adjustment is made for freight on imports transported by domestic carriers. Other transportation services are obtained from the monthly DR survey, the monthly BOP settlements-based statement prepared by the CBM, and specific data requests sent to the Malta International Airport and the Maritime Authority.
- (ii) *Travel*: Data on gross earnings from tourism and on gross expenditure by residents traveling abroad are derived mainly from foreign currency transactions reported by banking institutions and other authorized dealers to the CBM on a monthly basis (see also 3.3.2).
- (iii) *Other services*: The primary sources of data for other services are the monthly and annual DR surveys. The data sources for government transactions are the MOF and the CBM's settlements-based system. The latter is also the source of data for transactions of the personal sector.

c) Income

- (i) *Compensation of employees*. Data are obtained from the monthly DR questionnaires and from the CBM's monthly BOP cash statement.
- (ii) *Income on direct investment*. The main source of data on income on direct investment is the DR questionnaires, which provide information on reinvested earnings, dividends, and interest income. Income is classified by type of financial instrument. A limited geographical classification, that is, the EU or the rest of the world, is also provided. Reinvested earnings of all sectors of the economy are reported on an annual basis in the DR FDI questionnaire, while monthly estimates are derived using past data. With regard to income on debt, the DR questionnaires indicate whether the income on loans is derived from a foreign parent company, a subsidiary, or other nonresident sources. Income on debt securities between affiliates is recorded as income on direct investment.

- (iii) *Income on portfolio investment*. The DR questionnaires provide information on interest on bonds, notes and money market instruments, as well as on dividends on equity. The income on portfolio investment is classified according to the type of portfolio investment instrument. Information on the sectoral classification is also available. The monthly DR questionnaire provides for a full country and sectoral breakdown. However, pending the completion of the IT infrastructure, the geographical classification is limited to two regions, that is, the EU and the rest of the world. The criterion applied in this regard is the country of the issuer.
- (iv) *Income on other investment*. Data on income on other investment of financial and nonfinancial enterprises are obtained through the monthly DR survey, which also includes information on income from trade credits. The income of the personal sector is derived from the CBM's monthly BOP settlements-based statement. The MOF provides data on interest payments on the government's external debt. Income on the external reserve assets of the CBM is provided by its Finance Office and is recorded monthly on an accruals basis.

d) Current and capital transfers

- (i) *General government*. Data on official transfers, shown under this account, are obtained from the CBM's monthly BOP settlements-based statement.
- (ii) *Other sectors*. Aggregated data on personal remittances, pensions, and other transfers are also obtained from the CBM's banking data. Also included under this classification are non-life insurance premiums and claims reported by private and public entities in its monthly enterprise survey; additional information is obtained through specific data requests. As from 1995, following the recommendations set out in the *BPM5*, the data related to current and capital transfers were disaggregated. Hence, data on emigrants' capital transfers, debt forgiveness, and government grants are currently included in the capital account.

e) Direct investment

The monthly DR questionnaires are used to collect foreign direct investment (FDI) data from all sectors of the economy with the exception of households. The DR questionnaires are designed in such a way as to identify all intercompany transactions, including loans and trade credits. Information on the acquisition of real estate in Malta by nonresidents is provided by the MOF. Data on the acquisition of real estate by Maltese abroad is derived from statistical forms submitted to the CBM's External Transactions Information Office. Direct investment abroad by households is captured through the CBM's monthly BOP settlements-based statement and statistical forms submitted to the CBM's External Transactions Information Office. To identify companies involved in a direct investment relationship, a business register for the largest companies in Malta has been constructed on the basis of detailed information obtained from the CBM's monthly BOP settlements-based statement. In addition, further information is obtained from the statistical forms submitted to the CBM's External

Transactions Information Office, historical data from the enterprise survey, trade data, annual reports of companies, and newspaper clippings.

f) Portfolio investment and financial derivatives

Data on portfolio investment and financial derivatives are collected on an aggregated basis. The DR questionnaires are used to collect portfolio investment data from the nonfinancial and the financial sectors. Information on the portfolio investment transactions of households is obtained from statistical forms submitted to the CBM's External Transactions Information Office and supplemented by information obtained through the CBM's monthly BOP settlements-based statements. Purchases of domestic equity and debt securities by nonresidents on the MSE are reported directly to the BOP compilers by the MSE. Classifications by country, sector, and instrument are available. No currency breakdown is available. The monthly DR questionnaires are also used to collect financial derivatives data from all sectors of the economy, the DR questionnaire being structured to differentiate between options and derivatives other than options.

g) Other investment

The DR questionnaires are used to record the other investment transactions of all sectors of the economy. The household sector, however, is captured through the settlement system and statistical forms submitted to the CBM's External Transactions Information Office. Breakdowns are available by country, sector, and instrument. No currency breakdown is available.

h) Reserve assets

The CBM compiles external reserve assets on a daily basis and makes them available to the BOP compilers both on a monthly basis and on a quarterly basis. The CBM's Finance Office is the source of data for reserve assets. Reserve assets are available by instrument, and changes are compiled in accordance with the gross concept after being offset against any unrealized gains/losses. The amortization of discount and premium securities includes offsetting entries for accruals. Other instruments do not include such offsetting entries for accruals.

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

As is generally the case for direct reporting, source data correctly approximate the desired definitions, classifications, valuations, and time of recording. With respect to trade data, the information available from customs documents allows for the appropriate adjustments for freight and insurance.

3.1.3 Source data are timely

Source data are generally received in a timely fashion, insofar as the balance of payments statements are always produced within scheduled deadlines. The deadline for submission after the end of the reference period is one month for most questionnaires, except for the main companies and the financial sector, for which the deadline for submission is 21 calendar days.

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

As for all direct reporting systems, the efficiency of the Maltese data compilation system is based on the coverage of questionnaires. For this reason, the NSO is currently trying to improve this coverage through a census of about 4,000 CIBAs. Furthermore, a sample survey covering all economic activities is being developed using the entire Business Register (more than 50,000 entries) as a basis.

In the compilation process, formal checking and vetting of DR survey forms are carried out on a regular and systematic basis. Data are also verified using automated quality and consistency checks incorporated in a software module. These checks include mainly:

- consistency between registered flows and stock positions at end period,
- consistency between end of previous period and beginning of current period (by company, by instrument, and by country),
- consistency of transactions from one time period to another (highlighting of exceptional transactions),
- reporting of interest income on recorded loans, and
- consistency checks with other sources, such as monetary and financial account data.

Annual checking is also carried out manually, using mainly companies' balance sheets obtained from the MFSA website.

On an aggregated level, checks are also undertaken to ensure consistency between data received from the DR questionnaires and data received from the banking sector covering transactions of the various economic sectors. Particular attention is paid to large transactions that significantly depart from past trends.

3.3 Statistical techniques

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

The main source data are from surveys (DR system), designed to fit directly into the BOP framework, and do not normally require specific statistical techniques.

Statistical techniques are mainly used for treating data on imports of goods collected from the Customs Department, to determine the shipment content of imports (see below), for deriving flows from stock positions using the appropriate exchange rate, and for coverage adjustments.

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

Statistical techniques are used mainly for calculating adjustments for freight and insurance, estimates of travel, and general coverage. It should be noted that no estimates are made for transactions of the underground economy.

Adjustment for freight and insurance on imports

For the most part, shipment data are available (from a questionnaire to specific companies, which make up about 60 percent of recorded trade). When they are not, an estimate of 10 percent of the c.i.f. value of imports is made. Of this estimate, 90 percent is allocated to freight and the remainder to insurance. However, this procedure is soon to become obsolete, because the new Intrastat forms will permit the extraction of information directly from customs documents.

Estimates of travel

Data on gross earnings from tourism and on gross expenditures by residents traveling abroad are derived mainly from foreign currency transactions reported by banks (including transactions by credit cards and traveler checks) and foreign exchange bureaus. However, these amounts of travel receipts are deemed to be systematically underestimated, and consequently, following a recommendation by foreign consultants in 1989 (Howarth & Howarth Ltd and P.A. Cambridge Ltd), an upward adjustment of 15 percent is being made to receipts reported by the banking institutions. However, in the near future, as recommended by Eurostat, the estimates of travel will be calculated on the basis of a survey of tourist expenses in Malta.

Adjustments for general coverage

In the quarterly balance of payments, adjustments for coverage are made to account for nonquarterly reporters and nonrespondents to the annual questionnaire.

3.4 Assessment and validation of intermediate results and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Information obtained from the DR survey is checked against other sources of available information. These include data from banks, companies' balance sheets, as well as media reports.

Aggregated data provided by the Commissioner of Inland Revenue on income are checked against information provided by bank settlement reports.

Information provided by direct respondents is checked against data available from the MFSA.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Inconsistencies within data submitted by respondents are immediately investigated directly with respondents.

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

Errors and omissions are closely monitored. However, because of the small size of the Maltese economy, mirror data cannot be used to investigate the source of these errors and omissions.

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)

Although balance of payments statistics are constantly revised, no studies are carried out to determine the pattern of discrepancies between the initial estimates and the revised or final estimates over a given period. Also, no studies are conducted of long-term trends in the revision pattern. However, when significant revisions are made, the NSO provides comments on these revisions

Recommendation: The NSO should undertake regular revision studies, based on bisases identified as a result of systematic comparisons between provisional and final data.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

Balance of payments statistics are disseminated quarterly, which conforms to Special Data Dissemination Standard (SDDS) requirements.

4.1.2 Timeliness follows dissemination standards

With effect from the first quarter of 2005, quarterly balance of payments statistics are disseminated 70 days after the end of the reference period, which exceeds the SDDS requirements.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

Statistical series are sufficiently detailed to check that data are internally consistent.

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

Temporal series are also consistent over time within the same methodological framework.

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

BOP data are consistent with other data sets, notably trade statistics, government finance, and monetary statistics.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Quarterly balance of payments data are revised on an ongoing basis, as more actual and updated data become available. These data are subject to revisions for up to one year. Data are considered final once published in the NSO annual publication *Balance of Payments*, normally published one year after the reporting period.

4.3.2 Preliminary and/or revised data are clearly identified

The data's preliminary status is clearly identified when they are disseminated. The reference "provisional" is included in all documents and tables. However, no distinction is made between previously published and revised data.

Recommendation: The NSO should indicate when previously published data have been revised.

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

Unless the revisions are substantial, no explanation is provided on the nature of the revisions.

5. Accessibility

5.1 Data accessibility

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

Balance of payments statistics are presented in the form of a comprehensive booklet published by the NSO once a year entitled *Balance of Payments* (the most recent edition available is for 2002, with statistics presented back to 1995). This booklet also contains a presentation of the international investment position (IIP), with statistics starting in 1995. This document includes an analysis of developments during the period under review and a commentary on the main items of Malta's balance of payments and IIP. Quarterly balance of payments data are published in a very concise table in the *NSO News Release* and in the CBM's *Quarterly Bulletin*. These two publications are accompanied by comments. All details of the balance of payments are available on the NSO's website, with revisions to past data incorporated at the time the quarterly statement is released. The full statement is available on the website.

5.1.2 Dissemination media and formats are adequate

The dissemination media and formats are appropriate. Besides information disseminated in hard copy, data are also available in full details, and free of charge, on the NSO's website at www.nso.gov.mt and on the CBM's website at www.centralbankmalta.com. The annual publication is available online and on CD-ROM.

5.1.3 Statistics are released on the preannounced schedule

The statistics are released on a regular basis, according to the preannounced schedule. An advance release calendar is available for a three-month period on the NSO's website.

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

Balance of payments statistics published by the NSO are made available to all users at the same time. However, the Minister of Finance is given an advance copy of the CBM's *Quarterly Review* (see also 1.2.2.).

5.1.5 Statistics not routinely disseminated are made available upon request

When available, balance of payments data that are not disseminated and are not confidential can be made available to users by the NSO and the CBM 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

Documentation of the methodology and data sources used in the preparation of the BOP statement is available on the NSO official website: http://www.nso.gov.mt, under "Sources and Methods, Balance of Payments."

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

Different levels of details are made available to the public: NSO's *Balance of Payments: Sources and Methods*, posted on the website, is the most detailed. Also, the NSO's news release includes a succinct presentation of the methodology.

- 5.3 Assistance to users
- 5.3.1 Contact points for each subject field are publicized

There are two contact points: first, the NSO's library, the reference of which is indicated in the NSO's News Release, and second, the NSO's official website, with a specific module where users must fill in a request form, which is then channeled to the relevant unit of the NSO.

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

The balance of payments data are easily accessible through the NSO's official website. The hard copy publications made available to the public and the website provide comprehensive information on how users can contact the NSO for assistance. A catalog of publications is available.

Table 4. Malta: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments (Compiling Agency: National Statistics Office)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS	ctice Largely	Observed	; LNO = Pra	Practice Largely Observed; LNO = Practice Largely Not Observed	Observed; NO = Practice Not Observed; SDDS = Complies with SDDS
			Assessment	nent	
Element	NA		I O I	I NO NO	Comments
0. Prerequisites of quality					
0.1 Legal and institutional environment		×			
0.2 Resources		×			
0.3 Relevance		×			
0.4 Other quality management		×			
1. Assurances of integrity					
1.1 Professionalism		×			
1.2 Transparency		×			
1.3 Ethical standards		×			
2. Methodological soundness					
2.1 Concepts and definitions		×			
2.2 Scope			×		The international transactions of trading companies
					(CIBAs) are not recorded in the balance of payments. No
					estillates ale made 101 sinugging.
2.3 Classification/sectorization		×			
2.4 Basis for recording		×			
3. Accuracy and reliability					
3.1 Source data			X		Given the size of the errors and omissions, the coverage of source data is questionable.
3.2 Assessment of source data		×			
3.3 Statistical techniques		×			
3.4 Assessment and validation of intermediate data and		×			
statistical outputs					
3.5 Revision studies				×	No revision studies are carried out. In particular, no
					Systematic companison is made octween provisional and final data.
	_		_		-

Table 4. Malta: Data Quality Assessment Framework (July 2003): Summary of Results for Balance of Payments (Compiling Agency: National Statistics Office)

Element NA Assessment 4. Serviceability 4.1 Periodicity and timeliness 4.2 Consistency 4.3 Revision policy and practice X X X X X X	NO distinction is made b	Comments
O X X	ON	
× ×		-
x x		
icy and practice		
	roxing data	een previously published and
	16VISCU data	
5. Accessibility		
5.1 Data accessibility X		
5.2 Metadata accessibility X		
5.3 Assistance to users X		

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Summary of the Special Data Dissemination Standard (SDDS)

The SDDS prescribes the following practices under each of the identified dimensions:

Data dimension (coverage, periodicity, and timeliness)

• the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars providing at least one-quarter advance notice of approximate release dates, and at least a one-week advance notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

SDDS subscribers are required to:

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

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• 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

Data Quality Assessment Framework—Generic Framework (July 2003 Framework)

Quality Dimensions	Elements	Indicators				
0. Prerequisites of quality	0.1 Legal and institutional environment —The environment is supportive of statistics	0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified. 0.1.2 Data sharing and coordination among data-producing agencies are adequate. 0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only. 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.				
	0.2 Resources —Resources are commensurate with needs of statistical programs.	0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.0.2.2 Measures to ensure efficient use of resources are implemented.				
	0.3 Relevance —Statistics cover relevant information on the subject field.	0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.				
	0.4 Other quality management —Quality is a cornerstone of statistical work.	 0.4.1 Processes are in place to focus on quality. 0.4.2 Processes are in place to monitor the quality of the statistical program. 0.4.3 Processes are in place to deal with quality considerations in planning the statistical program. 				
1. Assurances of integrity The principle of objectivity in the collection, processing, and	1.1 Professionalism—Statistical policies and practices are guided by professional principles.	1.1.1 Statistics are produced on an impartial basis. 1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations. 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.				
dissemination of statistics is firmly adhered to.	1.2 Transparency —Statistical policies and practices are transparent.	1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public. 1.2.2 Internal governmental access to statistics prior to their release is publicly identified. 1.2.3 Products of statistical agencies/units are clearly identified as such. 1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.				
	1.3 Ethical standards —Policies and practices are guided by ethical standards.	1.3.1 Guidelines for staff behavior are in place and are well known to the staff.				

APPENDIX II

Quality Dimensions	Elements	Indicators
2. Methodological soundness The methodological	2.1 Concepts and definitions— Concepts and definitions used are in accord with internationally accepted	2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.
basis for the statistics follows internationally accepted standards, guidelines, or good practices.	statistical frameworks. 2.2 Scope—The scope is in accord with internationally accepted standards, guidelines, or good practices. 2.3 Classification/	2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices. 2.3.1 Classification/sectorization systems used are
	sectorization—Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.	broadly consistent with internationally accepted standards, guidelines, or good practices.
	2.4 Basis for recording—Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices	2.4.1 Market prices are used to value flows and stocks. 2.4.2 Recording is done on an accrual basis. 2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.
3. Accuracy and reliability Source data and statistical techniques are sound and statistical outputs	3.1 Source data – Source data available provide an adequate basis to compile statistics.	3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions. 3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required. 3.1.3 Source data are timely.
sufficiently portray reality	3.2 Assessment of source data—Source data are regularly assessed.	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.
	3.3 Statistical techniques— Statistical techniques employed conform to sound statistical procedures	3.3.1 Data compilation employs sound statistical techniques to deal with data sources. 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.
	3.4 Assessment and validation of intermediate data and statistical outputs— Intermediate results and statistical outputs are regularly assessed and validated.	 3.4.1 Intermediate results are validated against other information where applicable. 3.4.2 Statistical discrepancies in intermediate data are assessed and investigated. 3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are
	3.5 Revision studies— Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.	investigated. 3.5.1 Studies and analyses of revisions are carried out routinely and used internally to inform statistical processes (see also 4.3.3).

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Quality Dimensions	Elements	Indicators
4. Serviceability Statistics, with adequate periodicity and timeliness, are	4.1 Periodicity and timeliness— Periodicity and timeliness follow internationally accepted dissemination	4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.
consistent and follow a predictable revisions policy.	standards. 4.2 Consistency— Statistics are consistent within the dataset, over time, and with major datasets.	4.2.1 Statistics are consistent within the dataset. 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.2.3 Statistics are consistent or reconcilable with
	4.3 Revision policy and practice—Data revisions follow a regular and publicized procedure.	those obtained through other data sources and/or statistical frameworks. 4.3.1 Revisions follow a regular and transparent schedule. 4.3.2 Preliminary and/or revised data are clearly identified. 4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).
5. Accessibility Data and metadata are easily available and assistance to users is adequate.	5.1 Data accessibility— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 5.1.2 Dissemination media and format are adequate. 5.1.3 Statistics are released on a preannounced schedule. 5.1.4 Statistics are made available to all users at the same time.
	5.2 Metadata accessibility— Up-to-date and pertinent metadata are made available.	5.1.5 Statistics not routinely disseminated are made available upon request. 5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated. 5.2.2 Levels of detail are adapted to the needs of the
	5.3 Assistance to users — Prompt and knowledgeable support service is available.	intended audience. 5.3.1 Contact points for each subject field are publicized. 5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.

Users' Survey

Summary of results of survey of data users

With the assistance of the officials of the National Statistics Office in Malta, and as a complement to the mission's own assessment of the quality of statistics in Malta, a survey was conducted among users of macroeconomic statistics. The survey asked users to evaluate a range of aspects of national accounts, prices (consumer price indices), fiscal, monetary, and balance of payments statistics. Of a total of 55 questionnaires sent out, 15 responses were received, representing a response rate of 27.3 percent. A follow-up meeting was also held with main users who participated in the survey to discuss their responses in greater detail.

The results of the survey and the follow-up discussion with users indicated that, in general, users considered the official statistics to be unbiased and accurate and based on sound methodological principles. They were also satisfied with the overall quality of these statistics, which was considered good and comparable with those of other countries in the region. In particular, users expressed satisfaction with the coverage, periodicity, timeliness, and underlying methodology of the official statistics. In this regard, particular reference was made to the methodological soundness of the price statistics, monetary and financial statistics, and balance of payments statistics.

The datasets that were the subject of dissatisfaction in a number of statistical practices were the national accounts and government finance statistics. A number of users noted that they would appreciate more timely national accounts and government finance statistics, even if these statistics were first disseminated on a preliminary basis. Other requests from users concerned the level of detail of the national accounts and government finance data that were disseminated, which was considered insufficient.

Users were, in large part, familiar with the advance release calendars that were available in all areas, and statistics were generally considered to be easily accessible. Almost all respondents indicated that they used the Internet to obtain data. At the same time, many users also used hardcopy publications and made special data requests by e-mail.

The major deficiencies in Malta's data practices in most users' views related to significant revisions to data. In general, there were no standard policies governing revisions to disseminated data, and many users felt that there was not sufficient information available about revisions (both the reasons for large revisions and explanations of the differences between the original and revised statistics).

Table 5. Results of Malta's User Survey July 4, 2005

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General Information about Uses of Official Macroeconomic Statistics of Malta	•
	Total Number of
	Responses
1. Which official statistics do you use regularly?	<u> </u>
a. National accounts (NA)	13
b. Prices	10
c. Government finance statistics (GFS)	10
d. Monetary statistics (Monetary)	9
e. Balance of payments (BOP)	10
f. Other:	
Production indices	5
Labor market	11
Merchandise trade	8
International reserves and foreign currency liquidity	7
External debt	7
International investment position	9
Other	2
2. Where do you obtain the official statistics?	
a. Official press releases and publications on macroeconomic statistics	14
b. Private sector summaries and analyses	2
c. Official policy papers	5
d. Publications from international organizations about the country	7
e. Other sources	1
3. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?	
• Yes	13
• No	1
No opinion	1
4. For what purposes do you use the official statistics?	
a. Analysis of current developments for short-term decision making	7
b. Analysis of trends for longer-term policy formulation?	9
c. Econometric model building and forecasting	4
d. Economic research	10
e. Comparison with economic developments in other countries	12
f. General economic background	8
g. Other	2

General Information about		Official Ma alta	acroecono	mic Statist	tics of	
	NA	Prices	GFS	Mone- tary	ВОР	Other
5. Coverage and detail						
5.1 In general, are you satisfied with						
the coverage of official statistics?				_	T	
• Yes	11	10	9	8	11	0
• No	1	1	2	0	1	2
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?						
• Yes	8	9	7	8	11	1
• No	4	2	4	0	1	1
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	10	11	9	9	11	1
• No 6.2. In general, do you consider that the	2	0	3	0	0	1
appropriate timeliness (the time lag after the period to which they pertain, e.g., 60 days after the reference period)?				T _		
• Yes	8	10	8	7	9	0
• No	3	0	1	0	0	2
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	8	7	7	3	7	2
• No	2	3	3	5	2	0
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?						
• Yes	8	7	7	3	7	2
• No	2	2	3	2	2	0
7.3 Is there enough information about revisions to official statistics?		T -	T =	T =		
• Yes	3	6	5	5	4	0
•No	6	2	3	1	4	1
8. Accessibility						
8.1 Can you easily access the official						
statistics?	1.0	10	10		1.	1 4
• Yes	10	10	10	8	11	
• No	0	0	1	0	0	0

General Information about			acroecono	mic Statis	tics of	
	Ma	ılta				
	NA	Prices	GFS	Mone- tary	BOP	Other
8.2 Can you easily access information pertaining to official statistics you use (explanatory notes, methodological descriptions, reference concerning concepts, classification, statistical practice)?						
• Yes	7	9	8	6	9	1
• No	2	1	2	1	1	0
					Yes	No
8.3 Is the above information on methodology sufficiently clear and at an adequate level of detail to be useful to you? 8.4 How do you get access to official					10	3
statistics?						
 Official releases Hard copy publications Data specifically requested Official website Other E-mail requests 					6 2 5 14 2 10	
	NA	Prices	GFS	Mone- tary	BOP	Other
9. Overall assessment 9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?						
• Yes	7	9	9	7	9	0
• No	2	0	1	0	0	0
9.2 In general, do you consider the official statistics to be unbiased and accurate?					,	
• Yes	6	10	9	7	7	0
• No	3	0	1	0	2	0
9.3 How would you compare the quality of official statistics of the country with those of other countries in the region?						
• Better	1	2	3	1	1	0
• Same	5	4	2	4	4	0
• Worse	2	1	1	0	1	0
9.4 How do you assess the overall quality of the official statistics? (1 rated as poor and 5 as excellent)	3.3	4.0	3.5	4.0	3.5	2.3

NA = National Accounts; Prices refers to: CPI (Consumer Price Index) and PPI (Producer Price Index); GFS = Government Finance Statistics; Monetary = Monetary Statistics; and BOP = Balance of Payments Statistics

Box 1. Malta: Comments by Users of Macroeconomic Statistics July 4, 2005

Additional comments, including suggested areas for improvement:

Respondent 1

- Balance of payments/Foreign direct investment should be categorized by country.
- More detail on the service sector.
- National Statistics Office staff are very helpful.

Respondent 2

• More detailed information on Foreign direct investment.

Respondent 3

• The Planning & Priorities Co-ordination Division would like to highlight that it is sometimes difficult to have a common year/period base-line for presentation of data (i.e., national accounts statistics, labor market statistics, and production indices) to be included for programming documents.

Respondent 4

 The commentary accompanying the statistical releases could be more comparative between periods and improved in style.

Respondent 5

- More detailed information on revisions to national accounts data would be welcome.
- Faster response to queries would be very helpful.
- The size of inventories/net errors and omissions suggests gaps in data coverage.

Respondent 6

 More information on banks and financial institutions is needed (i.e., metadata explaining the concept of benchmarking).

Respondent 7

- It would be useful to have more specific data about trade by countries, in particular trade data between Malta and Italy.
- It would be useful to have an updated table on Main Macroeconomic Indicators.

Respondent 8

• The NSO website needs improvement.

Source: Questionnaire for Users of Official Macroeconomic Statistics.