

GROSS DOMESTIC PRODUCT 2020

NATIONAL REFERENCE METADATA IN SINGLE INTEGRATED METADATA STRUCTURE (SIMS)

CONCEPT 1 – CONTACT

Sub-Concept 1.1: Contact organisation

National Statistics Office (NSO)

Sub-Concept 1.2: Contact organisation unit

National Accounts

Sub-Concept 1.3: Contact name

Ms. Vanessa Dimech

Sub-Concept 1.4: Contact person function

Head of Unit

Sub-Concept 1.5: Contact mail address

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Sub-Concept 1.6: Contact e-mail address

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Sub-Concept 1.7: Contact phone number

+356 2599 7254

CONCEPT 2 – METADATA UPDATE

Sub-Concept 2.1: Metadata last certified

10th March 2021.

Sub-Concept 2.2: Metadata last posted

25th March 2021.

Sub-Concept 2.3: Metadata last update

25th March 2021.

CONCEPT 3 – STATISTICAL PRESENTATION

Sub-Concept 3.1: Data description

National Accounts data are compiled using an accounting framework that systematically provides economic indicators describing an economy at national level. These data are commonly used for economic analysis, forecasting, and policy making.

The National Accounts data are published on both a quarterly and an annual basis, in accordance with the [European System of Accounts - ESA 2010, Regulation \(EU\) No 549/2013](#) of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts. Sector accounts as well as supply and use tables are published annually and each publication is presented with the associated metadata.

At national level, data are commonly available for:

- Annual and quarterly national accounts: 'main aggregates';
- Annual and quarterly sector accounts;
- Supply and use as well as input-output tables;
- Regional breakdowns of main national accounts variables and household accounts;
- Industry breakdowns of main national accounts variables;
- Industry by asset breakdowns (stocks and transactions).

Sub-Concept 3.2: Classification system

The European System of National Accounts ([ESA 2010](#)) is the internationally harmonized EU framework for National Accounting. The ESA 2010 provides a methodology on common standards, definitions, internationally harmonised classifications and accounting rules that are used for compiling comparable national accounts.

The ESA 2010 defines classifications to be used for:

- Institutional sectors;
- Transactions in products;
- Transactions in non-financial non-produced assets;
- Distributive transactions, transactions in financial assets and liabilities;
- Other changes in assets;
- Balancing and net worth items;
- Balance sheet entries;
- Non-financial assets;
- Financial assets and liabilities.

In addition, for several breakdowns, ESA 2010 makes use of other classifications:

- [NACE Rev. 2](#) for economic activities;
- [CPA 2014](#) for products by economic activities;
- [COFOG](#) for the functions of government;
- [COICOP](#) for individual consumption by purpose;

- [COPNI](#) for classification of the purposes of non-profit institutions serving households;
- [NUTS 2013](#) for regional breakdowns.

A full overview of all classifications is available in:

- ESA 2010 Chapter 23 Classifications
- Eurostat's RAMON classification database.

Compilation of the supply and use tables for Malta is carried out for 128 products and 88 industries. The products are aggregated into the two-digit Classification of Products by Activity (CPA) 2008.

Sub-Concept 3.3: Sector coverage

National accounts describe the total economy of a country, of which several breakdowns can be derived.

The most important of these breakdowns being: The breakdown by institutional sector; and the breakdown by NACE Rev. 2 activity. Exhaustiveness is required for each of these items.

1. ESA 2010 distinguishes five mutually exclusive domestic institutional sectors within the sector breakdown:

- Non-financial corporations;
- Financial corporations;
- General government;
- Households;
- Non-profit institutions serving households.

These five sectors together make up the total domestic economy. Each sector is also divided into subsectors.

2. ESA 2010 applies NACE Rev.2 for the activity breakdown. Activities can be broken down into several levels of detail, for example into 3, 10, 21, 38, 64 or 88 activities.

At the 'highest' level a breakdown can be grouped under the following three categories:

- Agriculture, forestry and fishing;
- Mining and quarrying, manufacturing, electricity gas steam and air conditioning supply, water supply, sewerage, waste management and remediation activities, construction;
- Services.

Sub-Concept 3.4: Statistical concepts and definitions

All statistical concepts and definitions to be used in national accounts are described in Annex A of the ESA 2010 Regulation ([ESA 2010 methodology](#)). The two main sets of tables concern: (a) the institutional sector accounts; (b) the input-output framework (and the accounts by industry).

The sector accounts provide, by institutional sector, a systematic description of the different stages of the economic process, these being: production, generation of income, distribution of income, redistribution of income, use of income and both financial and nonfinancial accumulation. The sector accounts also include balance sheets to describe the stocks of assets, liabilities and net worth at the beginning and the end of the accounting period. The variables/concepts described in the sector accounts include transactions in products, transactions in non-produced non-financial assets, distributive transactions, transactions in financial assets and liabilities, other changes in assets, non-financial and financial assets, and liabilities.

The input-output framework, through the supply and use tables, sets out in more detail the production process (cost structure, income generated and employment) and the flows of goods and services (output, imports, exports, final consumption, intermediate consumption and capital formation by product group). These variables are broken down by industry (NACE Rev. 2) and product (CPA 2008).

ESA 2010 also incorporates population and employment. Such concepts are relevant for the sector accounts, the accounts by industry and the supply and use framework.

Regional accounts provide regional breakdowns for major aggregates such as gross value added by industry, gross fixed capital formation and household income. Regional breakdowns are based on the NUTS (Nomenclature of territorial units for statistics) classification. National accounts concepts are also used for regional accounts.

In addition, Annex A of the ESA 2010 Regulation provides numerous other definitions, such as the definitions of statistical units and their groupings, flows and stocks, and several accounting rules (valuation, time of recording, consolidation and netting). The main features and principles for the compilation of national accounts can be found in Chapter 1 of this regulation.

Sub-Concept 3.5: Statistical unit

Following the ESA 2010 guidelines, national accounts subdivide the economy into two types of units: (a) institutional unit; (b) local kind-of-activity unit (local KAU). Institutional units are used when describing income, expenditure and financial flows, and when compiling balance sheets. Local KAUs are used for the description of production processes, for input-output analysis and for regional analysis.

An institutional unit is an economic entity characterised by decision-making autonomy in the exercise of its principal function. A resident unit is regarded as constituting of an institutional unit

in the economic territory, where it has its centre of predominant economic interest if it has decision making autonomy.

A local KAU groups all the parts of an institutional unit which are located in a single site or in closely located sites, and which contribute to the performance of an activity at the class level (four digits) of the NACE Rev. 2.

An institutional unit comprises one or more local KAUs; a local KAU belongs to one institutional unit.

In Malta, business accounts are generally available for entire enterprises, the enterprise being the smallest legally independent institutional unit. The KAU concept is used in exceptional cases, such as large enterprises which can provide the basic data sources necessary for the compilation of production, intermediate consumption, compensation of employees, operating surplus, employment and gross fixed capital formation. In such cases legal units are split across industries.

The concept of homogeneous units is not applied in Malta.

Sub-Concept 3.6: Statistical population

The national accounts population of a country consists of all resident statistical units (institutional units or local KAUs, see section 3.5).

Sub-Concept 3.7: Reference area

Malta.

Sub-Concept 3.8: Time coverage

National accounts data are usually compiled both yearly and quarterly.

- In general, the ESA 2010 transmission programme requires data starting in 1995 (years) and 1995Q1 (quarters) but some series for main aggregates start later.
- Annual data on non-financial accounts by sector are available from 2005 onwards for all sectors.
- Regional accounts are available from 2000 onwards at current prices. The supply and use tables (SUT) have been calculated for 2000, 2001, 2004, 2008 as per ESA 1995, and 2010 and 2011, 2013-2015 as per ESA 2010. Input-output tables are available for 2010 and 2013-2015 as per ESA 2010. The supply and use tables of 2000, 2001 and 2004 are available in NACE Rev 1.1 and those compiled for later dates are available in NACE Rev 2. Thus, they are not directly comparable.

Sub-Concept 3.9: Base period

For certain national accounts variable the concepts of previous year prices and chain linked volumes are applied. Malta currently uses 2015 as the reference year for the compilation of chain-linked volumes for annual and/or quarterly national accounts.

CONCEPT 4 – UNIT OF MEASURE

Except for some variables concerning population and labour that are usually expressed in number of persons, hours or jobs, the ESA 2010 system shows all flows and stocks in monetary terms: in euros or other national currency. Flows and stocks are measured according to their exchange value, i.e. the value at which flows, and stocks are in fact, or could be, exchanged for cash. Market prices are, thus, the ESA's reference for valuation.

In addition to measurement in current (market) prices, some national accounts variables are also expressed in previous year's prices and chain-linked volumes. From this, it is possible to derive growth rates and indices, and various other measures (e.g. percentages, per capita data, data expressed in purchasing power standards) can be applied as well.

Flows and stocks in Malta are published in Euro. Data for 1995 to 2007 are also published in Euro and may be converted to the former national currency i.e. the Maltese Lira to Euro using the fixed rate [LM1= €0.4293] for all years).

CONCEPT 5 – REFERENCE PERIOD

The usual reference period to be used for presenting national accounts data is the calendar year for annual data and the quarter for quarterly data.

Two basic kinds of information are recorded: flows and stocks. Flows refer to actions and effects of events that take place within a given time period (year or quarter), while stocks refer to positions at a point in time (usually the beginning or end of a year or quarter).

CONCEPT 6 – INSTITUTIONAL MANDATE

Sub-Concept 6.1: Legal acts and other agreements

[The Malta Statistics Authority Act, 2000](#). The Act empowers the NSO to collect, compile, extract and release official statistics related to demographic, social, environment, economic and general activities and conditions of Malta;

As a member of the European Union (EU), Malta has to observe the [Council Regulation \(EC\) No. 223/2009](#) dealing with the collection and dissemination of official statistics. Moreover, all council regulations dealing with the collection of official statistics need to be observed by the NSO.

National accounts are compiled in accordance with the European System of Accounts ([ESA 2010](#)), which was published in the Official Journal as Annex A of Regulation (EU) No 549/2013. The ESA 2010 transmission programme is covered in Annex B

Temporary derogations to the data transmission requirements have been granted to Member States, up to 2020, by the [Commission Implementing Decision 2014/403/EU of 26 June 2014](#) thus allowing national data to deviate temporarily from the ESA 2010 transmission requirements. These derogations have now expired. The office is still in the process of fulfilling some the datasets required in the ESA 2010 transmission programme.

Some other legal acts with relevance for national accounts concern:

- [Commission Decision 98/715](#) of 30 November 1998 and [Commission Decision 2002/990](#) of 17 December 2002 on measurement of price and volumes in national accounts.
- Legal act on the excessive deficit procedure
- Several separate acts, often regarding classifications such as: NACE Rev.2, CPA 2014, COFOG, COICOP, NUTS 2013.

Sub-Concept 6.2: Data sharing

National accounts data are a key instrument for economic analysis. The National Accounts Unit compiles and publishes free online quarterly sets of consistent, reliable and comparable macroeconomic accounts intended to meet the needs of government and private-sector analysts, policy makers and decision takers.

National users include the Central Bank of Malta, Ministry for Finance, Economic Policy Department, researchers, students, and politicians, among others. Foreign users include the European Commission, European Parliament, European Council, IMF, WB, International Agencies, Credit Rating Agencies, researchers, and students.

CONCEPT 7 – CONFIDENTIALITY

Sub-Concept 7.1: Confidentiality – Policy

At National level:

The NSO requests information for the compilation of official statistics according to the articles of the [MSA Act – Cap. 422](#) and the [Data Protection Act – Cap. 586](#) of the Laws of Malta implementing the General Data Protection Regulations (GDPR).

Article 40 of the MSA Act stipulates the restrictions on the use of information while Article 41 stipulates the prohibition of disclosure of information. Furthermore, Section IX of the Act (Offences and Penalties) lays down the measures to be taken in case of unlawful exercise of any officer of statistics regarding confidentiality of data.

Since its inception, the NSO has always assured that all data collected remains confidential and that it is used for statistical purposes only according to the articles and derogations stipulated in the laws quoted above. The Office is obliged to protect the identify of data providers and refrain from divulging any data to third parties that might lead to the identification of persons or entities.

During 2009, the NSO has set up a Statistical Disclosure Committee to ensure that statistical confidentiality is observed, especially when requests for microdata are received.

Upon employment, all NSO employees are informed of the rules and duties pertaining to confidential information and its treatment. In line with stipulations of the MSA Act, before commencing work, every employee is required to take an oath of secrecy whose text is included in the same Act.

An internal policy on anonymisation and pseudo-anonymisation is in place to ascertain that adequate methods are used for the protection of data which the office collects and shares with the public in its capacity as the National Statistics Office. The policy is meant to safeguard confidentiality of both personal and business data entrusted to the NSO. The document provides guidance for all NSO employees who process data on a daily basis as to how anonymisation and pseudo-anonymisation methods should be applied. The policy applies to all confidential, restricted and internal information, regardless of form (paper or electronic documents, applications and databases) that is received, processed, stored and disseminated by the NSO.

At European level:

[Regulation \(EC\) No 223/2009](#) on European statistics (recital 24 and Article 20(4) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

Sub-Concept 7.2: Confidentiality – Data Treatment

Data are flagged subject to a minimum frequency count of 3 enterprises and a dominance rule of (2,80), in terms of turnover, where aggregated data are flagged if there are less than three contributors or the largest two contribute to more than 80% of the NACE division or section level. If data are transmitted to Eurostat with a confidentiality flag, these data are not disseminated until the confidentiality flag is removed in subsequent data transmissions.

CONCEPT 8 – RELEASE POLICY

Sub-Concept 8.1: Release Calendar

An advance release calendar is maintained by the NSO and published on the NSO website. The calendar projects three months of news releases (including the current month and two subsequent months).

Malta is also subscribed to the [SDDS](#) (Special Data Dissemination Standard), a monitored metadata standard, established by the International Monetary Fund (IMF) focusing on economic and financial indicators.

Sub-Concept 8.2: Release Calendar access

https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx

Sub-Concept 8.3: User access

An internal policy on dissemination is in place to govern the dissemination of official statistics in an impartial, independent and timely manner, making them available simultaneously to all users. The NSO's primary channel for the dissemination of official statistics is the NSO website. Tailored requests for statistical information may also be submitted through the said website.

CONCEPT 9 – FREQUENCY OF DISSEMINATION

Quarterly News Releases are disseminated.

CONCEPT 10 – ACCESSIBILITY AND CLARITY

Sub-Concept 10.1: News release

The most important results of national accounts are issued in the following news releases:

- Gross Domestic Product
https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A1/National_Accounts/Pages/Gross-Domestic-Product.aspx
- Non-Financial Accounts by institutional Sector
https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A1/National_Accounts/Pages/Non-Financial-Accounts-by-Institutional-Sector.aspx
- Supply, use and input-output tables
https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A1/National_Accounts/Pages/Supply,-Use-and-Input-Output-Tables.aspx
- Regional Gross Domestic Product
https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_02/Regional_and_Geospatial_Statistics/Pages/Regional-Gross-Domestic-Product.aspx

Sub-Concept 10.2: Publications

In addition to news releases, national accounts data may be disseminated in other publications in which more in-depth analysis is carried out.

- National Accounts:
https://nso.gov.mt/en/publicatons/Publications_by_Unit/Pages/A1-National-Accounts.aspx
- Regional and Geospatial:
https://nso.gov.mt/en/publicatons/Publications_by_Unit/Pages/02-Regional-and-Geospatial-Statistics.aspx

Sources and methods are available in separate documents.

- National Accounts:
https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_A1/National_Accounts/Pages/Gross-Domestic-Product.aspx
- Regional and Geospatial:
https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_02/Regional_and_Geospatial_Statistics/Pages/Regional-Gross-Domestic-Product.aspx

Sub-Concept 10.3: Online Database

Users may download data from the online Statistical Database (StatDB) at:

<https://statdb.nso.gov.mt/start>.

One must however note that the StatDB does not provide access to all the data transmitted to Eurostat, thus users may also refer to the database available on the Eurostat's website:

<http://ec.europa.eu/eurostat/data/database>.

Sub-Concept 10.4: Micro-data access

Not applicable.

Sub-Concept 10.5: Other

There are various publications in which National Accounts data are referred to, including the 'Malta in Figures' and 'Gozo in Figures', which include the GDP at current market prices. These publications are available on the [NSO website](#).

Sub-Concept 10.6: Documentation on methodology

Work processes and procedures for the compilation of the Gross Domestic Product are documented in a standardised reporting template and aligned with the GSBPM model. The model covers all phases of the statistical production process, from the initial stages of identifying what statistics are needed, to the final stages of dissemination and evaluation. GSBPM is only available internally and may be accessed by all NSO employees.

The general methodological framework for the compilation of national accounts in the EU is ESA 2010. In addition, several handbooks have been developed to help compilers to produce national accounts data.

Detailed documentation on methodology is additionally accessible on the NSO's website (refer to sub-concept 10.2).

Sub-Concept 10.6.1: Metadata completeness rate

Information about all required metadata concepts (and sub-concepts thereof) are provided.

Sub-Concept 10.7: Quality Documentation

The NSO has also developed an internal Quality Management Framework (QMF) which is built on common requirements of the ESS Code of Practice (ESS CoP). A document was prepared to include a set of general quality guidelines spanning over all statistical domains. Assuring methodological soundness is an integral part of the QMF, nonetheless, the document spans also on other areas related to institutional aspects.

A quality report on figures for GNI and its components is provided to Eurostat. Moreover, ad-hoc questionnaires on specific issues need to be filled out by Member states from time to time, and as required by Eurostat.

CONCEPT 11 – QUALITY MANAGEMENT

Sub-Concept 11.1: Quality Assurance

Quality is assured through an approach which distinguishes between ex-ante checks (source statistics), ongoing national accounts checks (results), ex-post checks on national accounts (methods used), external checks, and consultations (e.g. Eurostat, European Court of Auditors, IMF). In addition, discussions with user representatives (Central Bank of Malta, Ministry for Finance) take place following each news release.

The national accounting system is based on harmonised European rules that are laid down in a legally binding form in the European System of National and Regional Accounts (ESA 2010). In addition, they are explained in more detail in many international methodology handbooks (e.g. for the compilation of quarterly national accounts or seasonal and calendar adjustment).

A major goal of the Maltese national accounting is to ensure the exhaustiveness of Gross Domestic Product (GDP) and Gross National Income (GNI) statistics. This has also been a main concern of the European Commission and the GNI Committee in the process of harmonising national accounts at European level. To this end, several measures have been adopted: supply and use tables' reconciliation, reconciliation with the business register, and separate exhaustiveness checks in individual areas of national accounts. Based on these exhaustiveness checks, additional amounts are calculated, if required, for the areas affected by under coverage. These additional amounts are an integral part of national accounting; their sole purpose is to ensure exhaustiveness of GDP and GNI.

Sub-Concept 11.2: Quality Assessment

Prior to publication and data transmission, all variables are cross-checked against the original source data. Checks are incorporated in the system such that any incoherence is highlighted and corrected prior to dissemination. These checks ensure coherence between the assessed annual and quarterly statistics, and additivity were applicable. The data validation tools developed by Eurostat are also used prior transmission.

CONCEPT 12 – RELEVANCE

Sub-Concept 12.1: User needs

National accounts data are a key instrument for economic analysis. The National Accounts Unit compiles and publishes free online quarterly sets of consistent, reliable and comparable macroeconomic accounts intended to meet the needs of government and private-sector analysts, policy makers and decision takers.

National users include the Central Bank of Malta, Ministry for Finance, Economic Policy Department, researchers, students, and politicians, among others. Foreign users include the European Commission, European Parliament, European Council, IMF, WB, International Agencies, Credit Rating Agencies, researchers, and students.

Sub-Concept 12.2: User satisfaction

The last User Satisfaction Survey was held in 2014 with the aim to collect information about key users' satisfaction with statistical output. The NSO keeps record of the number of News Releases and publications disseminated on its website, the users to whom statistical products are provided, as well as the number of requests that are processed every year.

News Releases and tailor-made statistical outputs are assessed on account of their quality, timeliness, and on their ability to meet users' needs.

Sub-Concept 12.3: Data Completeness

The ESA 2010 transmission programme, (consisting of 22 tables across all national accounts domains (see sub-concept 10.3)) defines the minimum national accounts data set that must be available in all Member States of the EU.

CONCEPT 13 – ACCURACY AND RELIABILITY

Sub-Concept 13.1: Overall accuracy

Malta regularly sends 4 revisions of its annual series.

Sub-Concept 13.2: Sampling errors

National accounts is compiled from a myriad of data series derived from administrative and external survey sources (Short Term Statistics, Structural Business Statistics, Household Budgetary Survey, etc.), which are subject to sampling and non-sampling errors. Early estimates of the accounts are based on less information than will be available later. Later information relies on more comprehensive and higher quality data sources, which can yield substantial improvements in the quality of the accounts. The process of incorporating these quality improvements inevitable leads to revisions of earlier published figures. Applying estimation methods and extrapolating time series may lead to inaccuracies. However, this is necessary to meet the user requirements regarding timeliness of the national accounts data.

For this reason, a certain degree of inaccuracy is the price to pay for having a high degree of timeliness of the national accounts data. The quality of the national accounting calculations is continuously checked during the calculation process so that possible shortcomings or errors can be detected and eliminated. Major elements of that quality assurance procedure are the following:

- Source statistics, produced as part of official statistics and used by national accounts, are subject to quality control in the relevant specialised departments.
- In national accounts, the source data provided are checked again for completeness and plausibility.
- A major quality assurance element is the far-reaching comparison of the source statistics used in national accounting and of the very results of national accounts with complementary data from other sources.
- The national accounting results are reconciled with the results of supply and use tables.

Also, due to their great importance for financial and economic policies and as they are widely used for administrative purposes in the European Union (e.g. payments to the EU budget, calculation of Maastricht criteria), national accounts are regularly subject to international audits; for example, by Eurostat.

Sub-Concept 13.3: Non-sampling errors

Main sources of non-sampling errors include coverage errors, measurement errors, processing errors, non-response errors, and modelling errors. A brief description of main errors is included below:

- Administrative sources are used in absence of surveys and censuses in a number of NACE Sections, however administrative sources cover only the Non-financial sector and thus estimates have to be done for Household sector increasing thus the non-sampling error.
- A number of producers are not completely covered in the Business Register; these relate mainly to education, health and real estate activities. Similarly, the Business Register may not be exhaustive with respect to accommodation services including short-stay accommodation in apartments and similar units (NACE 55.2), other accommodation activities (NACE 55.9) and the financial sector.
- Quarterly estimation methods are sometimes based on STS indices and import data. The use of these indicators may give rise to revisions following the integration of annual datasets in national accounts.
- Response errors by respondents may arise due to for e.g. definitional differences, misunderstandings, or deliberate misreporting; e.g. deviations of quarterly data provided in questionnaires from the annual audited final accounts.
- Mistakes in recording the data or coding it to standard classifications
- Other errors relate to non-response, processing, or imputation of values for missing or inconsistent data.

Sub-Concept 13.3.1: Coverage error

Main coverage issues are outlined below:

- Administrative sources are used in absence of surveys and censuses in a number of NACE Sections, however administrative sources cover only the Non-financial sector and thus estimates have to be done for Household sector increasing thus the non-sampling error.
- A number of producers are not completely covered in the Business Register; these relate mainly to education, health and real estate activities. Similarly, the Business Register may not be exhaustive with respect to accommodation services including short-stay accommodation in apartments and similar units (NACE 55.2), other accommodation activities (NACE 55.9) and the financial sector.

Sub-Concept 13.3.1.1: Over Coverage

Not applicable.

Sub-Concept 13.3.1.2: Common Units Proportion

Not applicable.

Sub-Concept 13.3.2: Measurement error

Potential errors may arise due to erroneous coding or classification.

Sub-Concept 13.3.3: Non-response error

Not available.

Sub-Concept 13.3.3.1: Unit non-response

Not available.

Sub-Concept 13.3.3.2: Item non-response

Not available.

Sub-Concept 13.3.4: Processing error

Potential errors may arise due to erroneous coding or classification.

Sub-Concept 13.3.5: Model assumption error

Not available.

CONCEPT 14 – TIMELINESS AND PUNCTUALITY**Sub-Concept 14.1: Timeliness**

National accounts data are available to users as timely as possible, accounting for the frequency of the data (annual or quarterly), the character of the data (info on the structure of an economy or on conjuncture developments), and an adequate trade-off between accuracy and timeliness.

The ESA 2010 transmission programme defines the required timeliness for all national accounts' tables. Quarterly tables are available at t+60 days after the quarter-end in case of main aggregates and t+85 days for quarterly institutional sector accounts. The annual tables for main aggregates are available at t+60 days after the quarter-end (main aggregates) even if only required at t+9 months

after the end of the reference year. Annual institutional sector accounts are required by the ESA transmission programme at t+9 month, however, some delays may occur from time to time. Similarly, supply and use tables are required by the ESA transmission programme t+36 months (supply and use tables) after the end of the reference year. These are currently available at t+48 months.

Regional accounts data are available at t+12 rather than t+24 as required by the ESA transmission programme. Data in volume are not yet available (by derogation).

Sub-Concept 14.2: Punctuality

The overall punctuality of the Maltese National Accounts data is high with the exception of SUIOT (Supply, use, input-output).

CONCEPT 15 – COHERENCE AND COMPARABILITY

Sub-Concept 15.1: Comparability – Geographical

The geographical comparability of national accounts in Member States of the EU is ensured by the application of common definitions of the European System of Accounts ([ESA 2010](#)). Worldwide geographical comparison is also possible as most non-European countries apply the SNA 2008 guidelines, which is consistent with ESA 2010.

Sub-Concept 15.2: Comparability – Over Time

As the data for all reference periods are compiled according to the ESA 2010 requirements, national accounts data are fully comparable over time with some exceptions. These exceptions are highlighted in the methodological notes published with each news release. In the data transmission programme of Eurostat, these exceptions also referred to as 'break in series', are marked with a flag. Quarterly and annual data without breaks are provided for Malta as a whole from 1995. The quarterly data are consistently linked with the annual results.

Sub-Concept 15.3: Coherence – Cross Domain

Within the system of national accounts there is consistency between the domains: annual and quarterly national accounts, government accounts, sector accounts, financial accounts, regional accounts, supply and use tables. Vintage differences, however, may result in temporary discrepancies.

Primary statistics like structural business statistics (SBS), short term statistics (STS) and labour force statistics (LFS) are widely used as input for national accounts. However, there is no full consistency between these statistical domains and national accounts, in part due to differences in concepts/definitions and in coverage. Balance of payments is also used as an important source for national accounts. The definitions and coverage of balance of payments, as defined in the BPM6

manual, are fully harmonised with those in ESA 2010. Therefore, balance of payments variables are, in principle, fully coherent with the corresponding national accounts variables.

The cut-off date for quarterly non-financial accounts for S.1 and S.2 is t+70 while that for S.13 is t+85. Consequently, some discrepancies may arise when comparing data across sectors.

Inconsistencies arise between quarterly and annual non-financial sector accounts for S.2. These inconsistencies arise due to lack of co-ordination between national accounts and balance of payments compilers with respect to variables disclosed in the secondary distribution of income account onwards. Moreover, there are issues highlighted which will be solved during a benchmark revision in order not to create a break in series in S.2.

Other inconsistencies arise between quarterly and annual accounts for financial and non-financial sector accounts which issues have not yet been solved.

GDP at NUTS 1 and 2 is coherent with the Regional GDP news release which presents data at NUTS 1, 2, and 3, only as at December of each year. GDP at NUTS 1 and 2 is revised on a quarterly basis thereafter, while Regional GDP news release is only updated in December.

Sub-Concept 15.3.1: Coherence – Sub-Annual and Annual statistics

Annual and sub-annual statistics are generally consistent. Malta belongs to the countries whose GDP at current prices represents less than 1% of the corresponding union totals and thus has limited transmission obligations for T0801. B2A3G (Gross operating surplus and gross mixed income) of S11 and B6G (Gross disposable income) of S1M are thus not mandatory at quarterly level.

Sub-Concept 15.3.2: Coherence – National Accounts

Not applicable.

Sub-Concept 15.4: Coherence – Internal

Within the system of national accounts there is consistency between the domains: annual and quarterly national accounts, government accounts, sector accounts, financial accounts, regional accounts, supply and use tables. Vintage differences, however, may result in temporary discrepancies.

CONCEPT 16 – COST AND BURDEN

Not available.

CONCEPT 17 – DATA REVISION

Sub-Concept 17.1: Data revision – Policy

At the NSO, there is currently no internal policy governing revisions that occur for all statistics produced. Nonetheless, a revisions policy is being drafted to safeguard a coordinated revisions system across statistical domains. This policy will take account of the need and causes for revisions; time and frequency of revisions; data and other statistical products affected by such revisions; and length of periods revised.

National accounts data are subject to continuous revisions as new input data become available. They are called routine revisions and entail regular revisions of country data and of the European aggregates, which are derived from the former.

More rarely, exceptional revisions (called benchmark revisions) will result from major changes in data sources, classifications or methodology. For example, when changing from ESA 95 to ESA 2010, a benchmark revision occurred at country level and at euro area/EU data level.

Two Task Forces developed proposals for a more harmonised approach for benchmark and routine revisions. The one under the auspices of the Directors of Macroeconomic Statistics (DMES) dealt with benchmark revision policy, the other under the auspices of the Committee on Monetary, Financial, and Balance of Payments Statistics (CMFB) on the European Harmonised Revision Policy dealing with routine revisions.

Currently, the National Accounts, Balance of Payments and Public Finance Unit do not have a common revision policy. Important benchmark revisions are however co-ordinated. These included the transition from NACE Rev 1.1 to NACE Rev 2, and the ESA 1995 to ESA 2010 transition.

Public Finance Statistics see an update in the whole time series on a regular basis for EDP purposes. Currently, National Accounts data are open as from 2011 onwards, thus revisions in Public Finance Statistics prior to 2011 are not integrated in the national accounts' series. Similarly Balance of Payments statistics compilers are not obliged to provide the whole time series since 1995 as per ESA 2010 transmission programme in BPM 6.

In the national accounts there are usually three frequencies at which data are revised backwards, namely quarterly, annually and benchmark revisions:

- a) Every quarter: Data are revised for the previous quarters and the depth of the revision depends on the latest finalised supply and use tables (SUTs); all quarterly data are supported by revised annual data.
- b) Every year: The depth of the revision depends on the latest finalised SUTs.
- c) Benchmark revisions: These are major revisions aimed at incorporating major new data sources or methodological changes, or a change in what is being described. These imply a full backward revision of all time periods. These benchmark revisions are ideally carried out every five years,

however, revisions resulting from reservations or other methodological changes may lead to an anticipation of such benchmark revisions.

At present the first annual data are available 70 days following the end of quarter by derogation. These data are revised every quarter the depth of such revision depending on the latest finalised SUTs.

In addition to the SUT balancing process, national accounts revisions may be caused by data re-assessment, as a result of changes to Business Register (BR) classification grossing up, internal methodological review, or changes to international standards. These changes are normally explained to users in news releases and would normally have to be taken back as far as the beginning of the series depending on the type of revision involved. However, these benchmark revisions only take place every five years. Such benchmark revisions are sometimes anticipated due to the implementation of some new methodology e.g. NACE Rev. 22 or European System of Accounts (ESA) 2010.

Sub-Concept 17.2: Data revision – Practice and Data Revision

National accounts data are subject to continuous routine revisions as new information from surveys, censuses, and administrative records become available. This information is integrated annually, usually in December. Routine revisions are not preannounced, but information is published in the methodological notes with each news release. Data transmitted to Eurostat will also include such information in the sender notes.

Benchmark revisions are generally pre-announced to the public in advance.

CONCEPT 18 – STATISTICAL PROCESSING

Sub-Concept 18.1: Source data

National and regional accounts compilation build on statistics that are primarily collected for other purposes (primary statistics).

It relies on a variety of data sources, including administrative data: car and business registers, accounting statements, tax data, budgetary reports, population censuses, statistical surveys of businesses and households, statements of supervising institutions and branch organisations, annual and quarterly reports, trade statistics on goods and services, balance of payments information.

There is no single survey source for national accounts. Sources vary from country to country and provide statistical information on a large set of economic, social, financial and environmental phenomena, which may not be strictly related to national accounts.

Sources and collection methods used in each country vary depending on the specific dataset.

Overall, it is difficult to be exhaustive in the listing of data sources. Inventories provided to Eurostat usually include information on main sources (see section 10.6). Further information on data sources can be found on the national websites.

Information on source data is available in the [GNI Inventory for Malta](#).

Sub-Concept 18.2: Frequency of data collection

Information is available in Chapter 10 of the [GNI Inventory](#).

Sub-Concept 18.3: Data Collection

Information is available in Chapter 10 of the [GNI Inventory](#).

Sub-Concept 18.4: Data Validation

For the validation of national accounts data, Malta applies minimum validation rules agreed with Eurostat and provides metadata to support the validation process with respect to revisions and outliers.

The methodology used to check the data is typically that of comparing past trends, growth rates, and published data. Where possible data at company level are requested from different units in order to be able to cross check figures to ensure consistency within the NSO. Additionally, the supply and use data (SUT) balancing exercise is carried out involving various comparisons, checks and analysis on the detailed product data received. Certain validation checks lead to investigations and subsequent changes affecting either product supply or product demand, and at times, value added.

Output and Income Approach:

The main variables of the output and generation of income accounts are grouped such that a visual analysis of the data for the whole time series being published is clearly visible. Gross value added (GVA) and compensation of employees are compared to past releases at 2-digit NACE and by quarter. Any significant revision is verified with source data and documented. Absolute changes in GVA and compensation of employees of +/- €1 million are cross checked with the basic data source and documented. A similar procedure is done for percentage changes in these variables. The intermediate consumption to output ratio for consecutive quarters and years is analysed at NACE Division level. This is typically consistent across years and thus an increase of +/-2% is generally verified with source data. The output approach is generally finalised one week prior to the release, however further checks are generally done given that the growth rate is derived from the output approach.

Expenditure Approach:

The main variables in the expenditure approach computed by the NA unit are the final consumption expenditure of households and non-profit institutions serving households (NPISHs) and gross capital formation (GCF). Household consumption expenditure is checked at COICOP 4-digit level and any revisions and absolute changes of +/- €2 million are rechecked. GCF is particularly volatile and is therefore difficult to check. The extrapolation method used is generally verified and in case of sharp increases or decreases the import data at company level is checked.

Sub-Concept 18.5: Data Compilation

The leading approach to compile GDP in the framework of annual national accounts in Malta is the production approach. Consistency is obtained via reconciliation. Notably, changes in inventories and valuables or gross operating surplus and mixed income are derived as residuals. The same approach is used for the compilation of quarterly national accounts. Sector accounts are compiled after with main aggregates. A supply-use framework is used on an annual basis at t+54. When resources allow, a supply-use framework is also used for the compilation of quarterly main aggregates, however, this is only used to identify errors between demand and supply and the goal is not to balance the SUT on a quarterly basis.

Sub-Concept 18.5.1: Imputation

Not applicable.

Sub-Concept 18.6: Adjustment

Quarterly GDP time series are cleared from usual seasonal fluctuations and typical calendar effects. National Accounts compiles quarterly seasonally adjusted data in line with ESS guidelines on Seasonal Adjustment. Data are transmitted to Eurostat but are not published nationally. The adjusted data are available on the Eurostat's database.

Details on how seasonal adjustment is handled are provided in sub-concept 18.6.1.

Sub-Concept 18.6.1: Seasonal Adjustment

Seasonal adjustment is performed using the JDemetra+ version 2.2.0 software. NSO applies a model-based method with two linked seasonal adjustment programs TRAMO (Time Series Regression with Arima Noise, Missing Observation and Outliers) and SEAT (Signal Extraction in Arima Time series). More information can be found in the JDemetra+ User Guide, Sylwia Grudkowska, 2015. The models are usually updated on an annual basis, but this may not always be possible due to human resource constraints. Moreover, there is no fixed quarter in which the annual analysis is done.

For Malta's quarterly national accounts, the estimation of seasonally adjusted series generally includes calendar adjustments, but these series are not benchmarked to annual data. Calendar adjustment is based on the Malta's national holiday calendar.

The process of seasonal adjustment follows the recommendations of the ESS Guidelines of seasonal adjustments, Eurostat 2015. Automatic selection of a model and decomposition scheme is applied together with manual model selection for the important and problematic time series.

Seasonally adjusted series are available for:

1. Main aggregates:

- GDP output approach (series in current prices): Total Gross Domestic Products (GDP), Gross Value Added (GVA at A10 NACE rev.2 aggregation), Taxes and Subsidies on products.
- GDP expenditure approach components (series in current and real prices): Households Final Consumption Expenditure, NPISH, Government Collective and Individual Consumption, Export and Imports of Goods and Services, Gross Fixed Capital Formation by Investment Product (Pi6 product aggregation), Acquisition less Disposal of Valuables, Changes in Inventories inclusive of statistical discrepancy, Final consumption expenditure of households by durability.
- GDP Income approach components (series in current prices): Compensation of employees (at A10 NACE rev.2 aggregation), Gross operating surplus and mixed income, Taxes and Subsidies on production and imports, Wages and salaries (at A10 NACE rev.2 aggregation), Final consumption expenditure of households by durability (series in current and real prices).
- Total population, Total employees, Total self-employed, Total Unemployed
- Employees and Self Employed at A10 NACE rev.2 aggregation

The direct approach is performed for the three GDP approaches. To ensure consistency between the aggregate and components the discrepancy is appointed to the components' time series which reveal seasonality for the output GDP approach.

2. Quarterly non-financial accounts:

- Compensation of employees, subsidies, property income, taxes on production and imports, disposable income, savings, capital transfers and net lending and borrowing. The indirect approach for this dataset.

CONCEPT 19 – COMMENT

No further comments.