Chapter 21: BPM7 Chapter 20 / 2025 SNA Chapter 21 Communicating and Disseminating Macroeconomic Statistics

(New SNA/BPM chapter) 1

A. Introduction

- 21.1 The way in which macroeconomic statistics are communicated and disseminated has a significant impact on users' understanding and utilisation of the data and should be viewed as a key component of the production chain of official statistics. Users benefit from comprehensive, consistent, accurate and reliable information communicated and disseminated on a timely basis in an accessible and understandable manner.
- 21.2 Macroeconomic statistics can be disseminated and communicated in various ways to enhance the full extent of their analytical usefulness, comparability through time and across economies, and to ensure that policy relevance is maximised. In addition, when communicating macroeconomic statistics, the terminology and presentation of the macroeconomic aggregates and concepts should, where sensible, reflect and align with the language of business, governments and the public.
- 21.3 There are various differences between countries when it comes to communicating and disseminating macroeconomic statistics. By developing consistent standards, a high degree of comparability will be achieved, in turn making enabling users to be better aware of the basis of the data (for example, which version of the SNA and BPM is used by the country) before undertaking their own analyses. At the same time, recognising the diverse needs and preferences of different user segments (e.g., policymakers, businesses, researchers and the general public) and tailoring communication strategies accordingly can further improve the relevance of macroeconomic statistics. When communicating with different user segments, different terms can be used for the same content to assist in understanding.
- 21.4 Dissemination covers the technical dimension of providing accessibility to data mainly to the more specialised and expert users. However, statistical dissemination and communication go beyond providing accessibility to numbers and include specific narratives, key messages, visualisations, etc. which improve the user understanding and reduce the risk of misrepresentation by users.
- 21.5 Effective statistical communication will convey a message based on facts collected from data suppliers' explanations, comments and feedback on data movements. This information will help to explain to users readers what happened, when and where something happened as well as contributing to understanding why and how it happened. In some cases, this However, such information may not be always be available from administrative data suppliers. Statistical organisations can use communication to demonstrate the relevance of their data whereby they can justify the public outlay and anticipate greater support for statistical programmes, improve relationships with data providers and gain appropriate visibility for their products.
- 21.6 This chapter aims to provide principles and guidelines for producers of macroeconomic statistics to consider together with some new recommendations to improve the way those statistics are communicated. This is to help improve comparability, understanding and the experience for the users of these statistics.
- 21.7 The chapter includes section B covering dissemination strategy and communication policy; section C covering communication with users; section D covering communication with data suppliers; section E covering statistical confidentiality; section F covering taxonomies and metadata; section G covering a framework for measuring alignment with the international macroeconomic statistical standards; section H covering prominence given to indicators other than GDP and clarification of the use of the term "net"; and section I covering the use of morecasier to understandable terminology for users.

¹ The chapter is drafted as a joint SNA/BPM chapter. After global consultation and approval by the AEG/BOPCOM, only those issues that are relevant from the external sector statistics perspective will be included in BPM7.

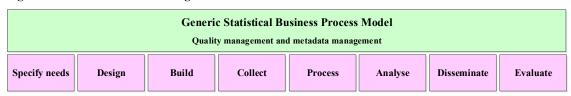
B. Dissemination strategy and communication policy

- The production, analysis and dissemination of official statistics should be undertaken in a transparent and accessible way. To aid all users, information is provided through different channels (e.g., from printed releases to the use of social media) to meet different user needs and uses.
- 21.9 The dissemination policies and strategies designed by official statistics producers form part of the vision, mission, principles and values of their organisations, often available on <u>official statistical producers'</u> national statistical offices' and national central banks' websites and should be consistent with the underlying UN Fundamental Principles of Official Statistics2.
- 21.10 The principal aim of statistical communication is to reveal more of the information contained in statistical data (e.g., about movements in the data) and to make statistical information easier to interpret. Statistical communication is about providing factual explanations of the data in an easily understood and interesting fashion; and encouraging journalists and other users to consider how statistics might aid their analyses. Good dissemination policies support the provision of access to consistent and coherent statistical data to all users. Good dissemination practices ensure transparency and impartiality including the release of consistent and coherent data to all users at the same time according to previously announced release calendars.
- 21.11 Dissemination can be through various channels and formats such as the official statistical producers' websites, printed materials and social media channels as tables, charts or raw datasets. Dissemination of statistical data encompasses the use of a diverse array of channels and formats to reach a wide audience effectively. These channels include official statistical producers' websites, printed materials and social media platforms. Data can be presented in various formats such as tables, charts or raw datasets to cater to different audience preferences and needs. With new technologies, the publishing capability should support digital dissemination. This will require setting appropriate standards and policies; support for mobile devices without undermining conventional release modes; commissioning new processes; and making more data available in an open format such as comma-on-separated value files.

1. Link to the UN Generic Statistical Business Process Model

21.12 The statistical value chain reflects dissemination and communication as key steps with both suppliers and users. The UN Generic Statistical Business Process Model (GSBPM) describes the set of business processes that form the statistical value chain needed to produce official statistics providing a standard framework and harmonised terminology to help statistical organisations. The Level 1 stages form the highest level of the GSBPM framework and are shown in Figure 21.1.

Figure 21.1 GSBPM - Level 1 stages



- 21.13 The dissemination phase manages the release of the statistical products to users. It includes all activities associated with assembling and releasing a range of static and dynamic products via a range of channels. These activities support users to access and use the outputs released by the statistical organisation.
- 21.1421.13 For statistical outputs produced regularly, the dissemination is phase occurs in each iteration.

 The dissemination phase is made up of various processes: updating output systems; producing, managing and promoting dissemination products; and managing user support (including feedback from user

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² Fundamental Principles of Official Statistics

satisfaction surveys). These processes are generally sequential but can also occur in parallel and can be iterative

- 21.1521.14 _______ It is also important to recognise the collection phase. This is critical and relies on effective and relevant communication with suppliers, which will have a different focus than that needed for dissemination to users. This phase collects or gathers all necessary information using different collection modes (including extractions from statistical, administrative and other non-statistical registers and databases) before internal processes take place thereafter. The collection phase is broken down into various processes, from design and creation of the frame (e.g., questionnaire, definitions, notes, etc.) and sample selection to setting up and running the collection processes. The approaches and processes may differ for the different types of source data, for example, administrative data and business survey data.
- 21.15 The dissemination phase incorporates the release of the statistical products to users. It includes all activities associated with assembling and releasing a range of static and dynamic products via a range of channels. These activities support users to access and use the outputs released by the statistical organisation.
- 21.16 More detail on the supplier relationship is covered in **section D**.

2. Organisational structure and the media

- 21.17 The statistical systems of individual countries have a range of approaches when it comes to managing external communication functions. The placement of those functions within the organisational structure will have an impact on their effectiveness. Such The placement should ensure that the communication of statistical data and the associated technological infrastructure receive a high level of attention and investment. Increased supply of data from non-official data producers means that there is an increasing need for the statistical organisations to improve communication in terms of quality, content, timeliness and channels used to reach its different users, in particular the media and policymakers, as well as harder-to-reach groups (for example, students, researchers, etc.).
- 21.18 The link between the economic statistics compiler and the communications team is key. This link will ensure the technical nuances and message(s) are addressed in a way the communications team can effectively communicate and draw out the important messages for the users in an understandable way. The effectiveness of this link can be enhanced through media training for the compilers as well as basic macroeconomic statistics training for the communications personnel.
- 21.19 It is recommended that aAll external communications are should be supported by a close working via a solid relationship with the media team, who tend to be the main distributors of statistics to the broader public. In this way, the information is available to all at the same time without privileged accesses. There may be a limited number of people with time limited pre-release access in a secure setting for specific reasons such as media outlets to prepare their headlines and briefing or to enable officials to prepare for the briefing of government ministers at release time. In this case, the time-limit needs to be defined in such a narrow way that the risk of external interference is minimised and the existence of any such arrangements should be made public by the statistical organisation.
- 21.20 The communications team is usually responsible for the relationship between the statistical producer and the media by organising and coordinating press conferences, interviews with experts, requests from journalists and other requirements such as handling media crisis. Other key aspects that will need to be covered include handling social media, website management, digital design and data visualisation.
- 21.21 In line with the above <u>guidelines</u>requirements, contact with the media, their professionals and representatives, should aim to:
 - Promote an open relationship.
 - Foster mutual professional respect.
 - Meet the needs of media.
 - Treat journalists as legitimate representatives of the public.
 - Provide information as quickly and completely as possible, in a <u>factual truthful</u> and responsible manner <u>supported</u> in line <u>bywith evidence statistical producer interests</u>.

3. Principles and standards

- 21.22 Official statistics should be reliable, objective and relevant for decision making. An appropriate dissemination strategy can be developed in line with the *UN Fundamental Principles of Official Statistics*, whereby Principle 1 states that "...official statistics are to be compiled and made available on an impartial basis by official statistical agencies to honour the entitlement of citizens to public information." Principle 1 sets out a clear steer for dissemination. Therefore, statistical organisations should provide users with maximum access to official statistics in accordance with confidentiality guidelines.
- 21.23 To help establish good dissemination practices, there is a range of information about and good practices already available. For example, the European Commission has maintained the European Statistics Code of Practice (revised 2017), which discusses dissemination practices. Similarly, many countries have likewise developed statistics codes of practice suitable for their purposes, and important to note, these codes serve both users and producers.
- 21.24 **Box 21.1** shows several publications developed by the <u>United Nations Economic Commission for Europe</u> (UNECE) providing guidance to statistical organisations to aid communication and dissemination of statistics. These were prepared within the framework of the UNECE Work Sessions on the Communication and Dissemination of Statistics.

Box 21.1 UNECE guidance to statistical organisations covering communication and dissemination

UNECE Guidance to statistical organisations

The target audience is wide but the guidance is intended as a practical tool to help managers, statisticians and media relations officers, in particular those in the process of developing communication and dissemination strategies, and to aid training for new staff. -The guides also recognise there will be different approaches as well as practical and cultural differences across countries. See: https://unece.org/statistics/making-data-meaningful

- Making Data Meaningful Part 1 A guide to writing stories about numbers
- Making Data Meaningful Part 2 A guide to presenting statistics
- Making Data Meaningful Part 3 A guide to communicating with the media
- Making Data Meaningful Part 4 A guide to statistical literacy
- Getting the Facts Right A guide to presenting metadata (with examples on Millennium Development Goal Indicators)

4. Data Dissemination Standards

- 21.25 In 2001, seven institutions, namely the Bank <u>foref</u> International Settlements, the European Central Bank, Eurostat, IMF, OECD, United Nations and the World Bank launched the Statistical Data and Metadata eXchange (SDMX) initiative and agreed to act as sponsors in order to develop common dissemination standards for the exchange of statistical information between public bodies at national and international levels. The SDMX information model covers various elements: descriptor concepts; packaging structure; dimensions and attributes; keys; code lists; and data structure definitions. The data structure definition is key as it conveys the data classification scheme that specifies the set of concepts required to describe and identify the statistical data items. <u>Statistical compilers are encouraged to use SDMX in disseminating statistics to the international organisations which will improve comparability and ease of accessing data from across countries.</u>
- 21.26 Countries are also encouraged to subscribe to the IMF Special Data Dissemination Standard (SDDS or SDDS Plus) or the Enhanced General Data Dissemination System (e-GDDS) for those agreeing to basic standards. These data standard initiatives encourage member countries to improve data quality. The National Summary Data Page (NSDP) is a "data portal" for economies participating in SDDS Plus, SDDS and e-GDDS, allowing users to access data, view metadata or browse links to online datasets for all available categories for an economy. For economies participating in SDDS Plus and e-GDDS, the

NSDP enables automatic exchange and sharing of statistical data and metadata in SDMX. Similarly, under the G-20 data gaps initiatives, several templates have been developed for the G-20 members to report data for various recommendations, for example, templates on shadow banking and institutional sector accounts.

5. Release calendar

- 21.27 The availability of a release calendar in advance of publication is important for users. Knowing when the information is released and disseminated will inform user expectations and enable them to plan their activities accordingly. For example, they can schedule the preparation of topical analyses of data releases in advance of publication. The compilation and release schedule should be realistic for compilers, as users may become will be frustrated if statistical organisations do not meet previously announced release timings and, at the same time, useful for users.
- 21.28 The release calendar should be published at the beginning of each year, or at least well in advance of the release date, on the websites of the statistical producers responsible for dissemination. This will also help to promote transparency and provide evidence that there has been no political or other inappropriate interference in the production and dissemination of official statistics.

6. Data revision and revision policies

- 21.29 Revisions are an essential part of data compilation in macroeconomic statistics. They will typically reflect new or improved data sources and methodologies but can also address corrections of past errors. Revisions, or alternatively better expressed as updates or improvements, arise as a consequence of the trade-off between the timeliness of published data and their quality, in terms of accuracy and comprehensiveness. Statistical producers may often compile and disseminate provisional data that are then revised when new and more accurate source data become available. Attempting to avoid revisions by producing accurate but very delayed data would fail to meet users' needs for timely statistics. Regular communication with users well in advance of expected updates and improvements to published statistical data will develop better public understanding of why revisions occur and help to ameliorate negative reaction.
- 21.30 Countries are encouraged to develop a well-designed revision policy that is managed and coordinated with related statistical domains and is communicated to users well in advance. Such a policy should aim to enable users to understand revisions in a systematic manner. The absence of coordination and planning of revisions can be perceived as a quality problem by users. An essential feature of a good revision policy is a predetermined schedule. Other features should include: reasonable stability from year to year; openness; advance notice of reasons for the revisions (perhaps also with some indicative size of the revisions); easy access for users to sufficiently analyse long time series of revised data; and adequate documentation on revisions in statistical publications and databases. To help users better understand revisions, the analysis of revisions is considered useful and may be published.
- 21.31 In some cases, the compiling agency may decide to carry out a special revision for the purposes of reassessing the data coverage or data compilation methods, which could lead to significant changes in the historical time series. It is recommended that such revisions be announced in advance and accompanied by explanations the reasons for such revisions, along with an assessment of their possible impact on the available data, could be provided (see also the forthcoming United Nations Handbook on National Accounting Backcasting Methodology).
- As part of the compilation and evaluation process, the published revisions should be evaluated to identify any persistent revisions to the earlier estimates of the aggregates or sub-aggregates in order to understand the potential for any systematic bias. This process will lead to identifying improvements to sources and methods thereby improving the quality of the future published estimates and reduce any revision bias.
- 21.33 Composition of revisions and explanations for users is covered in section **F**.

C. Communication with users

Macroeconomic statistics should be designed to meet the needs of a wide variety of users making different uses of the statistics.

- 21.3421.35 An understanding of the possible user needs is vital in identifying effective ways to communicate statistical information. Knowing who the users are helps to guide the content of the message being conveyed when statistics are released in a language accessible to all. Also, the content and the form of communication needs to be adaptable in responding to rapidly changing user needs, for example, during periods of significant economic change and major economic events (e.g., COVID-19 pandemic).
- 21.3521.36 The user community includes a range of diverse groups such as government, business, academia, analysts, economists, researchers, journalists, international statistical agencies, the media and the public. For macroeconomic statistics, users can be grouped into two main categories. There are general data users (such as general journalists, students, teachers, small businesses or ordinary citizens) who have wide ranging but simple data requirements but from a great range of information and analytical users (such as government departments, local authorities, researchers, economic journalists, central banks and international organisations) with complex data requirements on detailed variables, time series and regional or institutional sector breakdowns.
- 21.36 An understanding of the possible user needs is vital in identifying effective ways to disseminate the statistical information. Knowing who the users are helps to guide the content of the message being conveyed when statistics are released in a language accessible to users.
- 21.37 To meet the different demands, the <u>communication</u> dissemination of macroeconomic statistics can take a variety of forms, for example:
 - Scheduled regular statistical releases, typically made available on-line and sometimes also
 featured as press releases, will be suitable for the media and the general public users, who may
 be particularly focused on the main findings.
 - Special topic-related publications or methodological-type papers may be prepared, including time series and detailed data, accompanied by metadata and, on occasion, a short economic analysis based on these indicators.
 - Highly comprehensive detailed macroeconomic statistics are usually presented in the form of scheduled annual datasets (or yearbooks) and made available online.
 - Social media posts or similar short forms of communication can be used to supplement formal statistical releases and highlight newsworthy features of the published data to broader audiences.
- 21.38 Good standards of data visualisation in the design of tables and charts can have a role in effective dissemination of statistics. There is also a role for independent users of statistical data to develop and maintain innovative or well-designed online data visualisations of official statistics. Statistical producers can encourage innovation of this kind by publishing appropriately extensive definitions and by making datasets available in technically compatible ways, for example, comma-on-separated value files.
- 21.39 Statistical producers can also use online platforms like crowdsourcing which invite the public to share data and information as well as collect data which would be unavailable to data collectors through the usual channels. Other new channels that may be utilised include artificial intelligence providers.
- 21.4021.39 As indicated, it is important to be aware of the user base and for each user bases but also "what" should be communicated to the user and "how" it should be communicated. The relevance of what is being communicated needs to be clearly understood, and in turn, the most appropriate channel form of communication should be considered, for example:
 - Data estimates versus projections. As the release vintages evolve, it would be useful to convey information on the increasing data content, thereby reducing data uncertainty.
 - Current data versus historical (or archived) data.
 - · Level of aggregation.
 - Micro data versus macro data.
 - Metadata.
 - Story or knowledge adding explanations to understanding the data movements.
- 21.4121.40 In terms of the "how" considerations, there are different channels, for example:
 - Printed format (for example, press releases, newsletters, infographics, etc.) versus electronic

(for example, <u>PDF documentspdfs</u>, Excel files, infographics, XML, <u>downloadable datasets</u>, etc.) or available in both forms.

- Different machine-readable formats that better suit users' needs.
- Internet release thereby addressing website design, search facilities, etc.
- Video releases, blogs, podcasts, presentations, live streaming, etc.
- Databases, tables charts, animations, etc.
- Social media.
- 21.42 As different users use a range of different devices, for example, desktop, laptop, tablet or smart phones, statistical producers should seek to ensure that their release modes remain as widely accessible as possible, and not limit their approach to just one design of online format.
- 21.4321.42 Other aspects of statistical dissemination that may require consideration include:
 - Freely available detail versus charged bespoke analyses requested by users.
 - Regular analysis of press coverage and feedback to get early indication of changing user demands.
 - User satisfaction surveys providing feedback to aid continuous improvement.
 - Seminars, webinars, workshops and conferences involving different groups of users (and producers) to increase their awareness and sign-post developments.
 - Providing training and education of macroeconomic statistics for users.

D. Communication with data suppliers

- 21.4421.43 Similar to the engagement between statistical producers and users, various initiatives and engagements between statistical producers and data suppliers are crucialneeded. From the statistical producer perspective, there should be an effective data supplier engagement strategy as the suppliers have a significant stake in helping to produce high-quality official macroeconomic statistics. This strategy will need to reflect the different types of suppliers of information and the different ways the information is supplied, for example, business surveys, administrative data, household surveys, etc.—as well as the different approaches used to collect these statistics.
- 21.4521.44 Historically, suppliers do not enjoy as high a profile as is the case with users, yet cooperation with the different data suppliers is crucial. Minimising the burden and communicating effectively are paramount to maintaining this cooperation as suppliers can feel 'there is nothing in it for them' when completing requests for information. Therefore, it is imperative that suppliers understand how important it is for them to supply their information and trust statistical producers to be fair and maintain the security of their data from the outset. There is an ever-increasing need to improve data suppliers' experience in completing the demands from statistical producers. The strategy should help suppliers understand why their participation is important. With respect to individual entities that serve as important suppliers of statistical data, for example, businesses, major corporations, banks, government departments, etc., statistics producers should promote cooperation by explaining the essential value of the required data; minimising the reporting burden as far as is reasonably practicable; assuring data suppliers that proper standards of security and confidentiality are applied; and acting on their feedback as appropriate.
- 21.46 There is an ever increasing need to improve data suppliers' experience in completing the demands from statistical producers. The strategy should help suppliers understand why their participation is important and what they can expect from the producers as well as the initiatives to reduce the statistical burden on suppliers. In particular, statistical producers should explain how they will keep suppliers' information secure and confidential, value their time by making it as easy as possible to contribute to the business survey questionnaires and improve communication with them, as well as listening and acting upon their feedback.
- 21.4721.45 Some key principles to reflect on:
 - Providing choice to data suppliers (e.g., telephone data entry, secure electronic file transfer, etc. in addition to traditional paper submission) and recognising that their time is valuable.

- Minimising impact or burden on data suppliers (e.g., fair and equitable when it comes to how
 often they are selected in survey samples, only asking for the information once or minimising
 any duplication).
- Having high standards for how statistical producers communicate with data suppliers respondents (e.g., standardised responses, phone call assistance and data collection, timely communication).
- 21.4821.46 Producers of official statistics also need to consider the way they communicate with their data suppliers, who represent a unique set of stakeholders that may or may not be users of official statistics. In particular, the use of the concepts, terms and definitions and understand is essential in collecting data to enable the compilation of statistics in line with the concepts, terms and definitions of the macroeconomic statistical standards, either directly or appropriately adjusted to meet the relevant definitions. Interestingly, this "language" will differ in many respects from that used when communicating with users.
- Data collectors may not be able to use the language, terminology, etc. used within the macroeconomic statistical standards when communicating with data suppliers. Instead, they need to converse with data suppliers using company accounting or administrative terms and definitions. To enable this, for example, the questions and notes on survey questionnaires should be tested with a sample of data suppliers respondents or bridge tables may be needed to link the business survey data or administrative data to concepts and definitions needed to comply with those in the macroeconomic statistical standards. It is important to use common concepts, terminology and classifications when designing business survey questionnaires in a language the supplier will understand as well as applying similar principles when publishing business survey results to aid the users. Comparability is not possible wwithout some uniformity across the published business survey data., then comparability is not possible. In addition, along with published data, some companies may provide more detail than published in the format of financial statements or using bespoke survey questionnaires designed by the producer in conjunction with the company which will require appropriate conversion for macroeconomic statistical purposes.
- Often it is an accountant that responds to official statistical producers' requests. They tend to be more familiar with business accounting concepts, terms and definitions language than those with the language—used in the macroeconomic statistical standards. Building on the links between business accounting standards and macroeconomic statistical standards, the data supplied will then either be used directly or aggregated as necessary or be adjusted appropriately to meet the definitions required, to feed the macroeconomic statistics production process. Data collectors also need to be aware of any changes to the business accounting rules, including changes to terminology, to ensure the data collected remain valid. Sometimes the accountant may not be able to provide all the data needed, for example, labour related information such as hours worked, numbers employed, etc. is supplied by the human resource (personnel) department. Here, it is important to ensure the information provided is consistent, for example, covering the same reference period.
- 21.49 Statistical producers can also use online platforms like crowdsourcing which invite the public to share data and information as well as collect data which would be unavailable to data collectors through the usual channels. Other new channels that may be utilised include artificial intelligence providers.

 However, given the novelty of these data sources, statistical producers would need to ensure that methodological and quality issues are appropriately addressed.
- Data collectors could provide feedback to data suppliers on the quality, including accuracy and reliability, of the data they provide. This feedback loop allows data suppliers to address any issues or errors in their data submissions and helps maintain, or improve, data quality standards. Other examples of effective communication to improve the supplier experience that could be considered include:
 - A survey calendar that gives suppliers an indication of when they can expect to receive a
 questionnaire.
 - Sharing of survey results to which they have contributed.
 - Personalised statistical feedback, including sharing tables with suppliers where they can see their own contributions to the totals.

E. Statistical confidentiality

21.51 In terms of statistical confidentiality, by law, most official statistics producers collect data from businesses, government bodies and households for statistical purposes only and mostly under some form of legislation. Statistics based on these data generally cannot be disseminated, sold, or published in a way that permits the identification of data referring to a particular business or household. Thus, it is important to ensure appropriate data confidentiality policies, anonymisation techniques and disclosure checking procedures are in place as part of the process before publication of any data. There is EU guidance covering the General Data Protection Regulation (GDPR) and the protection of microdata as well as the UNECE Statistical Disclosure Control Committee endorsed book, Statistical Disclosure Control (August 2012, Wiley).

21.52

- 21.5321.52 One of the most important policy concerns relevant to data dissemination is the preservation of statistical confidentiality. Statistical confidentiality is necessary in order to gain and keep the trust of both data suppliers to statistical surveys and users of the statistical information. Principle 6 of the Fundamental Principles of Official Statistics stipulates that individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes. It is therefore important that appropriate disclosure checking procedures are in place as part of the dissemination process. In any case, permissions need to be sought from a business to publish information that would otherwise be considered confidential so as to avoid the loss of fundamental pieces of statistical information. It is also important to clearly communicate confidentiality statements and arrangements to data suppliers and users. In some cases, confidential information may be provided to a specific, limited number of users under strict and agreed conditions for the purposes of validation and quality assurance before its official release. For example, where data validation by an external organisation or a specific expert is necessary or significant benefits as part of data quality assurance are expected or have been previously demonstrated. Such specific cases should be adequately publicised for transparency, for example on the website of the relevant producers.
- As much as statistical confidentiality is very important, it should not be used in itself as a reason not to release information. Instead, the goal should be to maximise the dissemination of information as a public good for the wide range of users while still ensuring confidentiality obligations are met. It should be recognised that as more granular information is collected to meet increasing user demand for more detail, this may lead to more cases of disclosure and suppression or aggregation of cells.
- 21.5521.54 On a global scale, there is a growing challenge to ensure the data covering multi-national enterprise (MNE) groups are properly and adequately covered (see also chapter 23). The various impacts of globalisation (e.g., cross-border flows like intellectual property products, impact of change in economic ownership, merchanting, etc.) imply that domestic only data collection is insufficient to ensure all activities of the MNE group are adequately captured and understood as well as to ensure a reduction of trade and financial account asymmetries to the extent possible. Respecting individual jurisdictions' rules on confidentiality, there is a need for statistical producers to be able to exchange data, share data and reconcile the activities of MNE groups. This requires setting up of appropriate legal agreements and utilising secure channels to enable data exchange. More details are provided in the *UNECE Guide to Sharing Economic Data in Official Statistics (2021)*.
- 21.5621.55 For researchers, alternative approaches allowing access to micro data for statistical purposes or research purposes should be considered, for example:
 - Secure data labs to allow researchers to access and analyse micro data, whereby the research
 published does not reveal any confidential data.
 - Signed data access agreements, which allow access to secure online data areas for specific research or analyses and with limited time.

F. Taxonomies and metadata

- 21.5721.56 When statistics producers publish macroeconomic statistics, they also need to provide information about the product and context of the released statistics in order to enable users to properly use and adequately interpret the data.
- 21.5821.57 This section provides guidelines, including taxonomies, that statistical producers should consider integrating into their current communication practices as appropriate. These practices will assist users and, if standardised, help to improve cross-country comparability.

1. Metadata

- 21.5921.58 Metadata may be understood as "data about data" that can enable and facilitate sharing, querying, understanding and using statistical data across process stages such as collection, compilation and dissemination. Metadata apply to data definitions at different levels of aggregation, from micro data to macro data. Accessible and comprehensive metadata also promotes data literacy by helping users navigate complex statistical concepts and understand the nuances of economic indicators. They encompass administrative facts about the data such as who created them and when, and the definition of the concepts applied along with a description of how the data were collected and processed before they were disseminated or stored in a database. Metadata are important for both producers and users. Common standards and definitions for metadata should be followed to the extent possible throughout all statistical domains, in order to facilitate the linking and integration of statistical information such as the examples covered in paragraphs 21.25 and 21.26.
- 21.6021.59 Metadata dissemination should be an integral part of the dissemination strategy. As metadata are generated and processed during every step of the compilation process, there is a strong need for a metadata management system to ensure that the appropriate metadata retain their links with data. A good practice in this regard is the active linking of metadata to the statistical data that they describe, and vice versa, by implementing a system that allows metadata to be recorded as part of the data infrastructure throughout the various stages of the statistical production process.

2. Releases and vintages of data

- 21.6121.60 National statistics producers have developed a range of practices for communicating statistical outputs, updates and methodological changes to users. These practices have greatly assisted with the interpretation and use of national accounts, external accounts and government finance statistics data as well as various other statistical domains. This national approach to communication has been driven in part by limited guidance provided previously in macroeconomic statistical standards. This variation in nationally determined approaches reflects the historically limited available guidance in macroeconomic statistical standards. For example, countries use phrases such as provisional, first, preliminary, second and final to communicate different vintages of economic statistics. Furthermore, the substance of a given release is communicated using terms such as initial estimates, mature estimates, final estimates, data revisions, benchmark revisions, rebased estimates, improvements to methods and corrections among others and experimental estimates.
- 21.6221.61 Producers of macroeconomic statistics should match the need that users have for timely, high frequency economic data with their need for highly accurate economic data. In addition to balancing this timeliness / accuracy trade-off, producers also need to match the expectations that users have for a long consistent time_series with their desire for agile macroeconomic statistical standards that ensure an exhaustive measure of economic activity.
- Vintages refer to the release of updated economic statistics for the same time period, resulting from the availability or processing of new data such as more detailed or benchmark data surveys as well as methodological improvements. As vintages evolve, they are a regular and anticipated part of the statistical production process. They should be consistently described and their release dates pre-announced in a release calendar. To illustrate this and the type of future releases, consider a national authority who releases [an estimate of GDP]/[current account data] for the first quarter of 2023, on May 30th, 2023. Between 2023 and 2030 several revised estimates may be made for the first quarter of 2023 as illustrated in the example below:
 - June 30th, 2023 2023 Q1 may be revised due to more data becoming available [and seasonal adjustment].
 - September 30th, 2025 2023 Q1 may be revised due to benchmarking to annual estimates [through supply and use tables as well as revised seasonal adjustment analyses].
 - May 2930th, 2026 2023 Q1 may be revised due to the results of an [economic census] /[benchmark survey].
 - September 30th, 2030 2023 Q1 may be revised due to the implementation of the new international standards for macroeconomic statistics [SNA]/[BPM].

- Adherence to standardised definitions to describe different vintages of macroeconomic statistics will improve the use and interpretation of economic data. As well as the title and definition of the data release, the user needs to know the reference period to which it relates, the date of the release, the origin and quality of the sources. Consistent presentation standards can facilitate data comparisons between countries.
- 21.6521.64 Statistical producers should adopt the proposed common approach when communicating different releases or vintages of data to users. The description of the release, at a minimum, should include information about the: (1) substance of the release; (2) timeliness; (3) frequency; (4) the reference period; and (5) the update period. Defining, describing and communicating vintages of data is a complex undertaking. Before outlining this recommendation in detail, it is important to first establish a set of terms and definitions that help frame the recommendation as shown in **Box 21.2**.

Box 21.2 Terms and definitions related to different vintages of economic data releases

- A data <u>noint-item</u> is a discrete unit that can be represented numerically. There are different sources such as data collected, measurement of data based on data collected and model-based estimates.
- A time_series is a series of regular time-ordered data values of a quantitative characteristic of an individual or collective phenomenon taken at successive, in most cases equidistant, periods / points of time.
- A data vintage is a data value or a dataset (sequence of values) for a given reference period that has been released for use at a particular point in time (release period). A new vintage of data is established when the same set of data for the same reference period or some overlapping portion of the reference period is released for use at a different point in time (release period).
- A reference period is the time-period represented by the data.
- The update period is the time-period over which revisions to a data value have been applied.
- A release period represents the calendar date when the data are released to the public.
- An update is a revision which is defined as the numerical difference between two vintages of the same data point.
- A regular (or routine)³ update relates to the incorporation of scheduled, more complete (not necessarily final) source data, improved models, or other iterations of the compilation process. Regular revisions occur for both subannual and annual estimates and can occur throughout the year, at regular (often yearly or quarterly) intervals, or as new information becomes available. Regular revisions may also include for example, the impact of seasonal adjustment, the correction of compilation errors or minor methodological adjustments made outside the benchmark or comprehensive revision process.
- A benchmark estimate is the final vintage of a dataset, whereby there is no further expected improvement. It is compiled using the most comprehensive and highest quality source data and the most advanced methods at that point in time. Benchmark estimates are not expected to be further revised and therefore are often referred to as the "final" estimate. However, a change in the definition of the concepts used or the application of new macroeconomic statistical standard or the use of a new data source can change a benchmark estimate.
- A benchmark update reflects revisions from the incorporation of a benchmark estimate(s) into a given set of
 macroeconomic statistics or accounts.
- A comprehensive update is a special case of benchmark update where the revision to the macroeconomic dataset not only incorporates the final vintages of source data but also integrates new or updated concepts, the application of new accounting treatments, classifications or substantially improved methods or updating a base year. These generally occur when there are major changes to the macroeconomic statistical standards that are used to compile the accounts. These types of revisions often result in a discontinuity in the time series and a need for compilers to consider whether to apply methods such as back-casting to adjust historical data.

21.6621.65 Together the terms, routine updates, benchmark updates, comprehensive updates are the recommended terms to be used when communicating the "extent" or "substance" of revisions. The first two terms mainly reflect the vintage of source data that enter the compilation process. The term comprehensive revision reflects the addition or changes to concepts, methods (substantial changes),

³ A regular / routine update can be referred to as either regular or routine with the same meaning and used interchangeably – we will use routine hereafter.

classifications or presentations. All other terms should be phased out as part of the 2025 SNA implementation.

[The rest of this sub-section may will not be included in BPM7]

21.6721.66 To illustrate the standard format recommended for communicating the notion of "substance", series, reference period, timeliness, frequency, type of revision and update period to users, consider the following example. Assume that on average the first, second and third vintages of quarterly GDP are published 30, 60 and 90 days after the reference period, respectively. Assume further that the estimates are based on incomplete source data (such that each vintage is a result of a routine revision). These vintages could be categorised as shown in **Table 21.1**.

Table 21.1 Naming Convention - Quarterly GDP (successive vintages for the same reference period)

Series	Reference Period	Timeliness	Frequency	Type of Update	Update Period
GDP	First quarter, Year t	30-day	Quarterly		
GDP	First quarter, Year t	60-day	Quarterly	Routine	Year t, Q1
GDP	First quarter, Year t	90-day	Quarterly	Routine	Year t, Q1

21.6821.67 These vintages should be communicated as:

- Quarterly National Accounts release, first quarter Year t_- 30-day
- Quarterly National Accounts release, first quarter Year t Routine update 60-day (Year t-2 Q1 revised)
- Quarterly National Accounts release, first quarter Year t Routine update 90-day (Year t-2 Q1 revised)

21.6921.68 For users' reference, in line with the releases above, the vintages could be recorded using the real-time releases with the information as shown in Table 21.2 where it can be seenby you see how the estimate for each period changes or not in successive releases.

Table 21.2 Recording Vintages of Data in Real-time Tables: Quarterly GDP

Series	Frequency	Release Date	Type of update	Q1 202 <u>4</u> 1	Q4 202 <u>3</u> 0	Q3 202 <u>3</u> 0	Q2 202 <u>3</u> 0	Q1 202 <u>3</u> 0
GDP	Quarterly	June 30th, Year t	Routine	99	95	90	85	80
GDP	Quarterly	May 30th, Year t	Routine	102	95	90	85	80
GDP	Quarterly	April 30 th , Year t	Routine	100	95	90	85	80

Note, the above numbers are for illustrative purposes only.

3. Sources of product updates or revisions

The macroeconomic statistical standards have three basic features. Firstly, they define the concepts to be measured. Secondly, they outline the methods that can be used to "quantify" those concepts and the accounting rules that need to be followed when recording various flows and stocks. Thirdly, they identify the classification systems, accounts, and table structures that should be used to present the data. One or more of these features can be the source of revising datasets or the presentation of datasets.

21.7121.70 Statistical producers should consider categorising and decomposing the source of the updates (revisions) into different categories reflecting the source of the revisions. These can include for example:

· Conceptual changes will cover alignment to an updated set of macroeconomic statistical

standards.

- Methodological changes will encompass for example:
 - coverage adjustments (for example, exhaustiveness);
 - changes to source data (for example, new results based on improved methodology for grossing of survey results response rates, replacing modelling algorithm with a surveybased estimate etc.);
 - quality improvements (for example, data validation, consistency of source data results, seasonal adjustment, etc.); and
 - accounting rules to be followed (for example, changes from cash to accrual accounting).
- Presentational changes will cover new tables, charts, revisions triangles, granular detail, etc.
 The aggregate(s) may not change but the way in which the components are presented are changed.
- 21.7221.71 Such a decomposition should depend on the source and size of the revisions and may be broken down further, if appropriate, for example, if a single revision combines multiple issues or affects multiple accounts, in order to help users' interpretation. Levels and growth rates effects of revisions should be distinguished. Producers may also wish to consider showing all the components of the revision(s) for a single period or across all periods revised.

4. Types of statistical products

- 21.7321.72 Statistics producers seek to disseminate produce established formats and content choices in statistical releases. They also seek to develop new releases or indicators in response to meeting changing user or public priorities or as new data collection projects come on stream. These can include developmental versions of statistical products, sometimes termed experimental statistics (or similar labels) that may not be of the quality required or data assured as existing products.
- Whatever the descriptor, the common theme is to communicate issues of quality such as whether the:
 - estimates comply with nationally or internationally adopted conceptual and methodological standards;
 - source data used to compile the estimates are have been reliably defined and produced; and
 - compiling agency is producing the statistics in an exploration or in a development phase or is otherwise expecting user feedback on the data.
- It would be helpful for users if a consistent taxonomy could be adopted and applied through time and across countries to communicate the quality of the data. It is recommended that a two-leveltier taxonomy for classifying product quality be adopted as shown in **Box 21.3**.

Box 21.3: Statistical product quality: Two-Level Taxonomy

Level 1	Official Statistics: Estimates that incorporate recommended nationally or internationally adopted concepts, methods, accounting rules and classifications and meet all the standards required. Official Provisional Estimates: Provisional estimates incorporate nationally or internationally adopted concepts, methods, accounting rules and classifications but represent an early estimate before more comprehensive data becomes available.
Level 2	Experimental Estimates: Experimental estimates released by a statistical producer relate to statistical products that vary in limited ways from nationally or internationally recommended concepts, methods, accounting rules or classifications in the production of the estimates but where the producer has good confidence in their validity.

- 21.7621.75 The first level of official statistics will include official statistics and official provisional estimates. A key distinguishing feature of provisional estimates is that there is an expectation these early estimates will soon "graduate" to a revised, more mature official statistics status as the methods already meet the standard required. Statistical producers may compile and disseminate provisional data a number of days after the period in question or when a target data content has been achieved. The provisional estimate will mature to the full official estimate once new or more accurate source data become available. It is also possible within the same vintage of release that some data items might be "official" and others "official provisional", for example, the observations for the latest period.
- The second level reflects experimental estimates released by a statistical producer. Often, they may be of a research or indicative nature or based on a range of modelling assumptions. The source data used to compile the estimates may be untested and its quality may not be quantifiable as would be the case with Level 1 official statistics or may be based on indicators / proxies which may not conform to the concepts required. The data are communicated with a "proof of concept" notion and the main motivation for releasing them is to seek feedback so the estimates can be improved upon. However, with a range of improvements to meet Level 1, they may meet the standard to be deemed as an official statistic. These releases tend to be more ad hoc with respect to frequency of updates.

[the following six paragraphs willrest of this sub-section may not be included in BPM7]

21.7821.77 In addition to the need to communicate the quality of a product to users there is also a need to situate the product within the overall framework. **Box 21.4** shows the taxonomy of the different accounts / tables and their relative placement.

Box 21.4 Taxonomy of the different accounts / tables and their relative placement in relation to the SNA

Economic Accounts / Tables	Placement
Sequence of Economic Accounts	Form the core accounts / tables underpinning the main sequence of economic accounts operating within the SNA boundary.
Supplementary Accounts / Tables (e.g., extended SUTs, IOTs, pensions, regional, environmental)	Operate within the SNA boundary and provide additional information that supplement the main sequence of economic accounts.
Thematic Accounts / Tables (e.g., health, tourism, sport, creative sector, etc.)	Operate within the SNA boundary and provide additional detail on a certain aspect or theme.
Extended Accounts / Tables (e.g., unpaid household work)	Operate beyond the SNA boundary and provide additional information beyond the sequence of economic accounts.

21.7921.78 The SNA is a framework covering a set of inter-related accounts that trace economic activity from production to distribution of income, expenditure, saving, capital formation, financing, revaluation and other changes affecting stocks, to balance sheets representing stocks of assets and liabilities. In addition to a "prescribed" list of accounts and tables (i.e., sequence of economic accounts and supply and use tables), the SNA also recommends that countries produce additional information in the form of supplementary accounts / tables, extended accounts / tables and thematic accounts / tables, etc. - all of which have a status different from that of the main sequence of economic accounts and briefly shown in Box 21.4.

<u>21.8021.79</u> Users would benefit if statistical producers followed similar practices and common definitions when referencing the products or statistical outputs associated with a particular statistical standard. Here, users will better understand how the different accounts fit together and how they compare across countries. In addition to defining an account, there is also a need to delineate between those accounts that are part of the sequence of economic accounts and those outside the sequence of economic accounts.

- Accounts as defined by the SNA have an opening and closing item linking resource and use flows (related to a certain group of transactions and other flows) and stocks (levels). Accounts are also related to each other such that the closing balance of one account can be the opening balance of the subsequent account. The term "table" is distinguished from account in that tables do not have a balancing item and are not part of the sequence of economic accounts. Specific tables tend to be extracts from an account or several accounts and illuminate particular aspects.
- 21.8221.81 The macroeconomic statistical standards also offer the flexibility to develop thematic accounts / tables. These types of accounts / tables are covered in more detail in chapter 38 on thematic accounts and provide statistical producers the opportunity to experiment with both the classification, concepts and presentation to provide a fuller, more detailed picture of the activities involved.
- The macroeconomic statistical standards also include recommendations related to the development and dissemination of supplementary tables such as those covering pension entitlements or extended tables like unpaid household activities.

[the following two paragraphs will not be included in the 2025 SNA]

- 21.83 This *Manual* shows a standard presentation, which is designed to be used flexibly and to support many kinds of analysis. However, it is recognized that no single framework can meet all the different analytical interests. Thus, thematic, extended, and other supplementary accounts are encouraged (see also Chapter 21 of the 2025 SNA) for thematic, extended and other supplementary accounts). Such presentations would be based on the circumstances in each economy and are not included in the standard components or memorandum items. They may include data from other sources that are not necessarily obtained from the external accounts compilation system.
- Thematic, extended, and other Ssupplementary accounts presentations provide a framework linked to the <mark>central accounts</mark>standard presentation and that cnable attention to be focused on a certain field or aspect of <mark>economic and social lifeinternational presentations</mark>external linkages. Common examples for the national accounts include the environment, tourism, and nonprofit institutions. Examples include trade and investment income by enterprises characteristics; trade by currency; separate identification of factoryless goods productiondirect investment by ultimate investing economy; by ultimate host economy; etc., which are developed in the context of globalization. In addition, tThe external accounts have more detailed presentations for direct investment, portfolio investment, external debt, remittances, tourism, and reserves. The analytic and monetary presentations are discussed in Chapter 19. Statistics on activities of multinational enterprises (as discussed in Chapter 15) are also a related data set. These presentations use the basic framework as a starting point but differ by adding detail or other information, or by rearranging information, to meet particular needs. Use of the basic framework as a starting point increases the ability to relate the topic to other aspects of the economy while maintaining international comparability. Specific manuals and guides are produced on some of these topics. The range of supplementary data is wide and can be developed according to national circumstances.

5. Presenting the tables and accounts

This sub-section may will not be included in BPM7

- The SNA provides the main sequence of economic accounts and tables, broken down by institutional sector(s) as well as the rest of the world. The full set of transactions, other flows and stocks are broken down into the different accounts from the production account through to the balance sheets. To avoid over-crowding the main accounts / tables, in each of these accounts / tables there may be further breakdowns, for example by institutional sector, by industry, by product, by function, by transaction, by flow, by stock, by asset, by liability, etc.
- 21.8521.86 In the SNA, specific unique codes are shown where applicable as covered in Annex II, for example, S institutional sectors and sub-sectors, B balancing items, P products, D distributive transactions, F financial transactions, etc. Specific suffixes are reflected in the rest of the world accounts functional categories, for example, D direct investment, P portfolio investment, F financial derivatives, etc. Each of these categories may have different levels or types of further breakdowns, some of which are covered below.
- 21.8621.87 To aid cross-country comparisons and to aid the user, statistical producers should "publish" a range of other breakdowns using the agreed international classifications and their respective hierarchies

within those classification. For example:

- In terms of the industry breakdowns. For example, the production and income approaches to measuring GDP, gross fixed capital formation, changes in inventories and labour can all be split by industry using the International Standard Industrial Classification (ISIC) Revision 5. The ISIC Revision 5 splits the economy by industry at the section level (one letter codes, for example, A agriculture, forestry and fishing, B Mining and quarrying, etc.). These sections are further split into divisions using two-digit numeric codes, for example, separating out 01 agriculture, 02 forestry and 03 fishing. These divisions can then be further split into groups, and in turn further split out into classes. Countries can, and do, have greater level of detail depending upon the activity in the economy.
- In terms of a functional link. Household final consumption expenditure is typically published as a whole economy aggregate but can also be published using the two-digit categories known as Divisions of the Classification of Individual Consumption According to Purpose (COICOP) 2018. For example, 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, etc. More detail can be published for each of the two-digit COICOP divisions, split further into groups, in turn split further into classes.
- 21.8721.88 Examples of other additional tables which are useful for a range of users providing variations supporting an aggregate, for example:
 - GVA can be presented by institutional sector, by market and non-market sectors, and by public
 and private sectors.
 - Household final consumption expenditure can be shown split by type of goods characterised by durability (non-durable, semi-durable and durable), services and the link between the national and domestic concepts (i.e., resident's expenditure abroad and non-resident expenditure within the economic territory).
 - Gross fixed capital formation and changes in inventories can be analysed by industry or by institutional sector or by type of asset.
- 21.8821.89 Countries' own classifications may have a greater level of detail and will depend upon the scale or uniqueness of the activity in the economy, resources available for data collection and user needs. Nonetheless, these national classifications for publication and dissemination should preferably align either one-to-one or many-to-one to the international classifications.
- The data collection, compilation or balancing may take place at different levels reflecting, for example, the diversity of the economic activity and resources available to the statistical producer. However, allowing for statistical disclosure, the publication levels should reflect the international classifications. For example, if the ISIC is used as described in **paragraph 21.85**, this would enhance the quality of labour and capital productivity analyses within an economy as well as international comparisons. Also, the use of the correspondence tables linking the different classifications enhances the user linking and analytical capability.
- For further details, see **2025 SNA**, **Annex 2**, Classification and Coding Structure of Accounting Entries which also shows references to other international classifications that may be used. **[to be cross-checked when complete]**

G. A framework for measuring alignment with the international macroeconomic statistical standards

21.9121.92 An important feature of the macroeconomic statistical standards is their ability to develop internationally consistent macroeconomic statistics which in turn facilitate the comparison of estimates across countries. However, when countries use a macroeconomic statistical standard to compile macroeconomic statistics, they have some discretion in implementing the recommendations to accommodate their specific circumstances while maintaining comparability and quality to the extent possible. —These circumstances could range For example, ranging from limited resources and data availability to systems constraints to user needs and meeting policy demands. For pragmatic and resourcing reasons, the macroeconomic statistical standard recommendation may not be implemented, if an activity or concept is economically immaterial for a given economy. This results in varying degrees of 'alignment' to these standards across countries. For users to be confident when making cross-country

comparisons, they need some assurance that the economies' estimates are compiled on the same basis.

- A set of internationally accepted alignment frameworks (e.g., for the SNA, BPM and GFS) have been developed to provide structured, systematic and consistent methods to assess an economy's alignment to these standards. These alignment frameworks draw heavily on existing assessment frameworks and tools available to users. For example, the IMF's Data Quality Assessment Framework (DQAF) and Reports on the Observance of Standards and Codes (ROSCs), the UN's Data Quality Assessment Framework (UN-NAQ), and the ISWGNA's Minimum Required Data Set (MRDS).
- 21.9321.94 The alignment frameworks are stand-alone tools intended for national statistical authorities and international agencies to assess macroeconomic statistical methodologies and processes at country or country-group levels.
- These alignment frameworks are voluntary and based on self-assessment. They allow countries periodically to assess their macroeconomic statistics and development programs. It is important for statistical producers to maintain transparency and document any deviations or adaptations from the macroeconomic statistical standards in their metadata and methodological notes. Thus, they are encouraged to use these common frameworks and make the results publicly available in accessible ways for all users. This section focuses on the alignment framework for the [SNA]/[BPM] domain. The alignment framework is structured around the key building blocks of the statistical standards concepts and definitions, methods, classifications and the resulting accounts tables that are produced and published.

1. Alignment framework for the [2025 SNA]/[BPM7]

- The [2025 SNA]/[BPM7] alignment framework <u>described below</u> reflects a degree of flexibility and is considered after the initial set up investment, to be and is relatively easy to implement, update and communicate <u>after an initial set-up investment</u>. It is structured around four key high-level components:
 - Concepts and definitions reflect the articulation of a macroeconomic activity, interaction, state or ideas. Concepts describe what gets measured.
 - Methods describe how a compiler implements an accounting rule or measures a concept.
 - Classifications— determine the level of detail and its conformity or otherwise with the 2025 SNA / BPM7 classification schemes used by compilers and presented to users, for example, by industry, product, region, or functional categories or instruments.
 - Accounts / tables outline how information is presented to users. The SNA and BPM have a set of accounts or tables that form the basis of the respective standards, which in turn have been used as the basis of the structure of the alignment frameworks.
- These four categories serve as an overarching structure for the alignment frameworks. Given the SNA and BPM have many concepts and definitions, accounting rules, methods, classifications and accounts / tables, to be pragmatic only a subset is expected, in the sense that the individual items to be included in the framework focus on those categories that impact the interpretation and assessment of levels and growth rates. Using these criteria, a brief overview of the [2025 SNA]/[BPM7] alignment framework with a few example questions is shown in Table 21.6 (with fuller detail available in the LINK). Consistent and similar detailed lists have been developed for the [BPM]/[SNA] and future GFSM update. The proposed levels and the categories of alignment provide flexibilities to help economies share details based on the level of development of their national statistical system.
- 21.9621.98 It is worth noting that, the B balance of pPayments data and SNA Rest of World data may need to be reconciled given there could be two potential data sources presenting essentially the same information from two different perspectives. Where reconciliation is not made, differences will exist and these would need to be explained.

Table 21.6a Overview of the SNA Alignment Framework with a few examples of the questions [this version for inclusion in the 2025 SNA]

Metadata Last benchmark year for GDP?

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Latest period for which balanced SUTs are available?	
Latest period for which institutional sector accounts are available?	
Do you have a published revision policy?	

Concepts and definitions, methods, classifications and accounts / tables

	Fully Aligned	Highly aligned	Broadly Aligned	Partially Aligned	Not Aligned	N/A	Comments
Concepts and definitions							
Units of the economy							
Production boundary covers:							
Informal economy							
Underground economy							
Illegal activities							
IPPs							
Methods							
Accounting rules							
Valuation							
Time of Recording							
Sub-annual series are seasonally adjusted							
Output and intermediate consumption are deflated by appropriate price indexes at basic prices or at producer prices consistently							
Volume indexes are chained- weighted							

Classifications

Classifications Standard	Version	Level of Detail	Used for SUTs? (Y/N)
International Standard Industrial Classification (ISIC)			
Central Product Classification (CPC)			
Classification of Individual Consumption by Purpose (COICOP)			
Institutional sector, asset and transaction classifications			

Accounts / Tables

Category	Timeliness (e.g., T+30 days, T+3 months, etc.)	Granularity (Number of industries or number of transaction lines)
Annual value added by industry and GDP in current prices and in volume terms		
Annual GDP by expenditure in current prices and in volume terms		

Annual GDP by income in current prices	
Annual sequence of accounts for the total economy (until net lending / borrowing)	
Annual rest of the world accounts (until net lending / borrowing)	

Table 21.6b Overview of the BPM Alignment Framework with a few examples of the questions [this version for inclusion in BPM7]

Metadata

Do you have a published revision policy?	
Is the external accounts revision policy consistent with the national accounts revision policy?	
If the answer to the above question is no, are there	
reasons why not?	

Concepts and definitions, methods, classifications and accounts / tables

	Fully Aligned	Highly aligned	Broadly Aligned	Partially Aligned	Not Aligned	N/A	Comments
Concepts and definitions							
Units of the economy							
BOP coverage							
IIP coverage							
Structure							
Functional categories							
Sectorization							
Methods							
Accounting rules							
Valuation							
Time of Recording							
Grossing / Netting							
Investment income obtained directly (rather than estimated)							
Direct investment relationships identified by applying the Foreign Direct Investment Relationship (FDIR)							

Classifications

Classifications Standard	Name	Version	Level of Detail
Classification of institutional sectors			
Earned income account, financial account, and IIP classified according to functional categories			

Classification of financial assets and liabilities by instrument		
Classification of services		

Accounts / Tables

Category	Timeliness (e.g., T+30 days, T+3 months, etc.)	Granularity (level of detail)	Limitations (e.g., any missing lines)
BOP standard components and memorandum items			
IIP standard components and memorandum items			
Other flows standard components and memorandum items			
Reserve-related liabilities			
Non-performing loans separately at fair value			
Currency composition of assets and liabilities and institutional sector			

2. Benefits to users and producers

- At any given time, it is likely that different countries may be conforming to different editions of the macroeconomic statistical standards or with varying extents of implementation, for example, 1993 SNA or 2008 SNA or 2025 SNA and BPM5 or BPM6 or BPM7. As a result, cross-country data may not be directly comparable because of variations in aspects of the underlying concepts, methodologies and coverage of the data by the different economies. The proposed alignment framework provides a structure for users to assess national statistical practices in a comparable way.
- 21.9821.100 The alignment frameworks bringprovide several key benefits for national users and the international community. The degree of alignment with the macroeconomic statistical standards provides important signals to users about the quality of cross-country comparisons and the extent to which major revisions should be expected in the future, in cases where an economy is not aligned with the latest macroeconomic statistical standards. The alignment frameworks also provide a mechanism to present and communicate this information to users in a standardised manner.
- To illustrate, consider two countries A and B. Country A indicates it uses the 2025 SNA to compile its national accounts and BPM7 for its balance of payments but does not record some of the smuggling activity, neither the stocks nor the flows. Country B also uses the 2025 SNA and BPM7 and records smuggling activity in its national accounts and balance of payments. When comparing the data on gross value added, balance sheets, productivity and the cross-border flows of the two countries, it is important for the user to understand these differences. Country A may not record smuggling because these activities are it is not material for that economy or it may be material but the compilers may have no data. If it is not material, then Country A should be encouraged to provide this information to users so that they do not attempt to compensate for the different treatment when making the cross-country comparisons.
- 21.10021.102 The alignment information also benefits producers of statistics to identify areas for improvement, prioritise resources and formulate strategic plans to align better to the macroeconomic statistical standards as well as assist users to make appropriate adjustments to achieve comparability in their analyses, among others. In addition, this type of detail will help to giveprovide users assurance as regards of the statistics and increase their capacity to provide feedback on future priorities and demands.
- 21.10121.103 It should be noted that the alignment frameworks do not provide offer a comprehensive evaluation of the quality of an economy's macroeconomic statistics as this would require a more rigorous, and different, type of investigation. It will be expected that the design and application of alignment frameworks will evolve over time.

3. Communicating the alignment framework with users

- 21.10221.104 Having established and completed the alignment framework, it is important how compilers communicate this information to users to ensure it is understood and used appropriately. It should not be used as a form of a scoreboard due to the various flaws in establishing a highly subjective weighting system (e.g., aligning to concepts is, or is not, more important than aligning to accounting rules). Instead, it is recommended that a dashboard approach is taken. Such an approach does not attempt to quantify or summarise the information but will still provide useful information to users in a simple, straightforward and flexible manner.
- 21.10321.105 Many of the items in the alignment framework can be structured to provide a "yes" or "no" response, however this may not deliverprovide the granularity needed by users to properly interpret the results. As the framework is intended to measure the degree of alignment to a standard, it is better to show the notion of "degree" of alignment, for example, for each question or group of questions, the compiler can indicate whether the country is:
 - **Fully aligned** with the standard meaning that between 95-100 per cent of the guidelines and standards are implemented.
 - **Highly aligned** with the standard meaning that between 75-95 per cent of the guidelines and standards are implemented.
 - **Broadly aligned** with the standard– meaning that between 50-75 per cent of the guidelines and standards are implemented.
 - Partially aligned with the standard meaning that between 25-50 per cent of the guidelines and standards are implemented.
 - Not aligned with the standard meaning between 0-25 per cent of the guidelines and standards are implemented.
 - **Not applicable** meaning that for issues of materiality or relevance, the standard is not implemented. Materiality in this context is subjective but a steer would be less than 0.05 per cent (and/or a monetary equivalent) of GDP.
- 21.10421.106 The introduction of the notion of "per cent aligned" does introduce some subjectivity and flexibility into the exercise, thus a range approach is adopted as it is difficult to define (and impossible to measure) what would constitute being 100 per cent aligned to a concept, accounting rule, method, etc.
- 21.10521.107 The fully aligned, partially aligned and not aligned categories are appropriate when considering concepts and definitions, methods, and accounting rules but not when considering classifications used, tables or accounts. It is proposed that the timeliness (days released after the reference period) and granularity (number of detailed classes) be used in "quantifying" the alignment of tables and accounts to a given standard.
- 21.10621.108 It is recommended that the dashboard be presented in digital format and included as a part of the sources and methods documentation for a given macroeconomic statistical standard. The assessment can be done for the entirety of a macroeconomic statistics or it can be completed for individual accounts or tables. It is also recommended that the assessment be colour coded, which avoids spurious precision and allows easy to understand and quick messages to be conveyed such that:
 - Fully aligned = Green
 - Highly aligned = Light green
 - Broadly aligned = Yellow
 - Partially aligned = Light yellow
 - Not aligned = Red
 - Not applicable = Black

H. Prominence given to indicators other than GDP and the clarification of the use of the term "net"

This sub-section will not be included in BPM7

21.10721.109 The role and prominent use of GDP and other gross measures has been well established in the

SNA sequence of economic accounts. However, the role and prominence of other indicators as well as net measures in macroeconomic statistics has increased significantly in recent years as users demand an enhanced set of national accounts that better support well-being and sustainability analysis. For example, net domestic product (NDP), net national income (NNI), household disposable income, consumption, saving and net worth, whereby measures of household income and wealth may be disaggregated by type of household and other characteristics, are already available. As signified in **chapter 2**, in some respects, the net measures are more important than the gross counterparts for capturing (environmental) sustainability considerations. Net measures are conceptually preferred as they are more reflective of the actual costs borne in production. However, the measurement challenges make it more difficult to arrive at comparable aggregates across countries.

- 21.10821.110 Thus, the importance of placing a greater emphasis on net measures and the indicators named above should be reflected in the outputs of the statistical offices. For example, net measures could be presented alongside the gross measures, not replacing but supplementing the gross measures. However, for the purpose of putting greater emphasis on net measures, it is needed to further improve their quality and timeliness.
- 21.10921.111 The 2025 SNA reflects an improved articulation of the differences in the concepts of depreciation (related to produced assets) and the notion of depletion (mainly related to non-produced assets, particularly natural resources). In the 2025 SNA, both are treated as the costs of production. Thereby the conceptual advantage of using nNet measures such as NDP and NNI becomes clearer, requiring greater emphasis than previously needed, although users may still be interested in the gross counterparts.
- 21.11021.112 There are now two components of the gross to net adjustment, for example, from GDP to NDP, i.e., depreciation and depletion. This is a significant change for users to be made fully aware by the way in which the tables are presented. An example to show the distinctions is given in **Table 21.7**. Showing estimates of both components allows users the flexibility to use either version to meet their specific needs.

Table 21.7 Moving from Gross Domestic Product to Net Domestic Product

Transaction / Balancing item	Code	SNA data set
Gross Domestic Product	Blg	1 854
Depreciation (-)	P51c (code to be confirmed)	222
Depletion (-)	K21P51d (code to be confirmed)	14
Net Domestic Product	B1gn_P51c_+K21P51d	1 618

- 21.11121.113 There is also a need to clarify the use of the terms net and gross for both producers and users to avoid confusion. Statistical producers should only use the terms net and gross in the following two areas:
 - Firstly, in conjunction with the balancing items for each account by institutional sector and the
 whole economy, where the difference is due to the costs of depreciation and the costs of
 depletion.
 - Secondly, there are two concepts where the net term is used in financial accounts: (i) aggregating acquisitions less disposals for each financial instrument on the asset side and on the liability side; (ii) aggregating changes in assets and changes in liabilities and showing both on a net basis. Further details covered in paragraphs 4.268-4.276 ([to confirm].
- 21.11221.114 All other uses of the term net tend to be legacies that need to be removed or act as a short-hand description, for example, net exports should be replaced with exports less imports. This has been reflected with the removal of the word net in the examples shown in **Table 21.9**. These and other such terms should be expressed in full to avoid any user confusion or misinterpretation.

I. Use of more easier to understandable terminology for users

- 21.113 The presentation of macroeconomic statistics can have a significant impact on how the statistics are interpreted and used. The macroeconomic statistical standards depend on an extensive use of technically precise terminology and specialised constructs that may not be widely understood outside of the domain of economic statistics. Indeed, there may be situations where current terminologies are used inconsistently even within macroeconomic statistics.
- 21.11421.116 Therefore, macroeconomic statistics should be presented and communicated in such a way that the full extent of their analytical usefulness, quality, scope, comparability and policy applications is maximised and reflects the wide user base. To this end, the terminology and branding of the macroeconomic frameworks need an international communication strategy that aligns with the latest technology and current cultural norms.
- 21.11521.117 The macroeconomic statistical standards have lots of similar technical descriptions of concepts and underlying definitions with explicit inclusions and exclusions. The commonality of the labels and concepts help the producers and facilitate communication across the producers' community. However, they are often not user friendly or understood by users, and it is important that statistical producers target their communication.
- 21.11621.118 ____ To improve the consistency, readability and understandability for non-specialists, a new feature of the 2025 SNA and BPM7 has been the development of a common glossary of terms and definitions used in macroeconomic statistics. This glossary reflects input from across several existing standards and manuals: SNA; BPM; European System of Accounts (ESA); Government Finance Statistics (GFS); Monetary and Financial Statistics (MFS); System of Environmental-Economic Accounting (SEEA); International Public Sector Accounting Standards (IPSAS); and guidance from the Bank for International Settlements (BIS). This glossary thus delivers a further level of harmonisation across macroeconomic statistical standards and provides users with a clearer and more consistent understanding of key economic terms and definitions together with some alternative easier to understand terms. (link to be inserted when available)

1. Other changes reflected within the [2025 SNA]/[BPM7] This section is likely to appear in one of the Annexes to the 2025 SNA and BPM7 and not in this chapter as appropriate

- 21.11721.119 Significant steps have been made to harmonise the concepts and methodologies in the macroeconomic statistical standards, in particular within the body of the 2025 SNA and BPM7 without changing the technical definition(s). This effort has also reflected a new Common Glossary of macroeconomic statistics, the alignment of terminologies (affecting variables, account labels, etc.) and improved the branding of the statistical standards such that comprehension and usability of macroeconomic statistics has been improved.
- 21.11821.120 Examples of other changes agreed affecting the names of the [SNA]/[BPM] accounts are shown in **Table 21.8**.

Table 21.8a Changes to the Names of the SNA Accounts

2008 SNA Terminology	2025 SNA Terminology (Individual economic account)	Economic Accounts Groups
The production account	No change	
The generation of income account	The generation of earned income account	Income and Expenditure
The allocation of primary income account	The allocation of earned income account	Accounts

2008 SNA Terminology	2025 SNA Terminology (Individual economic account)	Economic Accounts Groups
The secondary distribution of income account	Transfer income account	
The use of income account	No change	
The capital account	No change	Accumulation of
The financial account	No change	Economic Assets Accounts
Other changes in assets account	Other changes in assets and liabilities account	
Balance sheets	No change	Balance Sheets

(needs to be cross-checked / amended against final Editorial Team agreement on Glossary Issue Note discussions)

Table 21.8b Changes to the Names of the BPM Accounts [for BPM]

BPM6 Terminology	BPM7 Terminology (Individual economic account)	Economic Accounts Groups	
Goods and services account	Goods account / services account		
Primary income account	Earned income account	Current account	
Secondary income account	Transfer income account		
Capital account	No change	Capital account	
Financial account	No change	Accumulation	
Other changes in financial assets and liabilities account	No change	accounts	
International investment position	No change	Balance sheets	

21.11921.121 Examples of the changes agreed affecting specific terms in the [SNA]/[BPM] are shown in Table 21.9.

Table 21.9 Changes to specific terms [Terms will be included in the SNA / BPM as appropriate]

Terminology SNA 2008 / BPM6	Terminology SNA 2025 / BPM7
Accumulation accounts	Accumulation of economic assets account

Adjusted disposable income	Disposable income adjusted for social transfers in kind
Allocation of (other) primary income account	Allocation of (other) earned income account
Balance on goods/services/goods and services	Balance of international trade in goods/services/goods and services
Balance of primary incomes	Balance of earned incomes
Compensation of employees	Remuneration of employees
Constant prices	In volume terms
Consumption of fixed capital	Depreciation
Distribution of income account	Earned income account
Financial intermediation services indirectly measured (FISIM)	Implicit financial services on loans and deposits
Financial lease	Finance lease
Generation of income account	Generation of earned income account
Imputed rental of owner-occupied dwellings	Owner-occupied housing services
Net errors and omissions	Statistical discrepancy
Net fees	Fees less service charges
Net guarantees	Guarantees less service charges
Net (non-life) insurance premiums	Non-life insurance premiums less service charges
Net re-insurance premiums	Re-insurance premiums less service charges
	The manufactor promises and the changes
Net social contributions	Social contributions less service charges
Net social contributions Other changes in assets account	-
	Social contributions less service charges
Other changes in assets account	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities
Other changes in assets account Other changes in the volume of assets account	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities account
Other changes in assets account Other changes in the volume of assets account Primary income	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities account Earned income
Other changes in assets account Other changes in the volume of assets account Primary income Product balance	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities account Earned income Balance of the supply and use of products Acquisitions less sales of goodwill and marketing
Other changes in assets account Other changes in the volume of assets account Primary income Product balance Purchases less sales of goodwill and marketing assets	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities account Earned income Balance of the supply and use of products Acquisitions less sales of goodwill and marketing assets
Other changes in assets account Other changes in the volume of assets account Primary income Product balance Purchases less sales of goodwill and marketing assets Redistribution of income account	Social contributions less service charges Other changes in assets and liabilities account Other changes in the volume of assets and liabilities account Earned income Balance of the supply and use of products Acquisitions less sales of goodwill and marketing assets Transfer income account

Secondary distribution of income account	Income transfers other than social transfers in kind account
Trade margin	Distribution margin
Use of adjusted disposable income account	Use of disposable income adjusted for social transfers in kind account
Uses	Expenditures